



BOARD MEETING AGENDA
Monday, January 28, 2019
Regular Meeting - 7:00 P.M.

Union Sanitary District
Administration Building
5072 Benson Road
Union City, CA 94587

Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

1. Call to Order.

2. Pledge of Allegiance.

3. Roll Call.

- Motion 4. Approve Minutes of the Regular Meeting of January 14, 2019.

- Motion 5. Approve Minutes of the Special Meeting of January 17, 2019.

- Information 6. December 2018 Monthly Operations Report *(to be reviewed by the Budget & Finance and Legal/Community Affairs Committees)*.

7. Written Communications.

8. Oral Communications.
The public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District office at least one working day prior to the meeting). This portion of the agenda is where a member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction that is not on the agenda. If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. Oral comments are limited to three minutes per individuals, with a maximum of 30 minutes per subject. Speaker's cards will be available in the Boardroom and are to be completed prior to discussion.

- Motion 9. Consider a Resolution Approving the 2019 Conflict of Interest Code *(to be reviewed by the Personnel Committee)*.

- Motion 10. Review and Consider Approval of Policy No. 2030, Investment Policy *(to be reviewed by the Budget & Finance Committee)*.

- Motion 11. Review and Approve Publicly Available Pay Schedule Changes Effective September 1, 2018 *(to be reviewed by the Personnel Committee)*.

- Motion 12. Authorize the General Manager to Execute Amendment No. 1 to Task Order No. 2 with Brown and Caldwell for the Primary Digester No. 7 Project *(to be reviewed by the Engineering and Information Technology Committee)*.

- Information 13. Information Technology Software and Hardware Agreement Summary *(to be reviewed by the Engineering and Information Technology Committee)*.
-
- Information 14. Solar and Cogeneration Facilities Operational Update *(to be reviewed by the Budget & Finance Committee)*.
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- Information 15. Update on the Subsurface Investigation at the Alvarado Wastewater Treatment Plant *(to be reviewed by the Engineering and Information Technology Committee)*.
-
- Information 16. Cal-Card Quarterly Activity Report *(to be reviewed by the Budget & Finance Committee)*.
-
- Information 17. Board Member Expenses, Second Quarter Fiscal Year 2019 *(to be reviewed by the Budget & Finance Committee)*.
-
- Information 18. Check Register.
-
- Information 19. Committee Meeting Reports. *(No Board action is taken at Committee meetings):*
- a. Budget & Finance Committee – Wednesday, January 23, 2019, at 10:00 a.m.
 - Director Kite and Director Handley
 - b. Personnel Committee – Thursday, January 24, 2019, at 9:15 a.m.
 - Director Kite and Director Fernandez
 - c. Engineering and Information Technology Committee – Thursday, January 24, 2019, at 2:30 p.m.
 - Director Handley and Director Lathi
 - d. Legal/Community Affairs Committee – Friday, January 25, 2019, at 10:30 a.m.
 - Director Fernandez and Director Handley
 - e. Legislative Committee – will not meet.
 - f. Audit Committee – will not meet.
-
- Information 20. General Manager’s Report. *(Information on recent issues of interest to the Board)*.
-
21. Other Business:
- a. Comments and questions. *Directors can share information relating to District business and are welcome to request information from staff.*
 - b. Scheduling matters for future consideration.
-
22. Adjournment – The Board will adjourn to the next Regular Meeting in the Boardroom on Monday, February 11, 2019, at 7:00 p.m.

The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting).
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The facilities at the District Offices are wheelchair accessible. Any attendee requiring special accommodations at the meeting should contact the General Manager’s office at (510) 477-7503 at least 24 hours in advance of the meeting. THE PUBLIC IS INVITED TO ATTEND



BUDGET & FINANCE COMMITTEE MEETING
Committee Members: Director Kite and Director Handley

Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

AGENDA
Wednesday, January 23, 2019
10:00 a.m.

Alvarado Conference Room
5072 Benson Road
Union City, CA 94587

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

THIS MEETING WILL BE TELECONFERENCED WITH DIRECTOR KITE FROM THE EXTERIOR OF 35040 NEWARK BOULEVARD, NEWARK, CALIFORNIA. THE TELECONFERENCE LOCATION SHALL BE ACCESSIBLE TO THE PUBLIC.

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of January 28, 2019:

- December 2018 Monthly Operations Report – Financial Report
- Review and Consider Approval of Policy No. 2030, Investment Policy
- Solar and Cogeneration Facilities Operational Update
- Cal-Card Quarterly Activity Report
- Board Member Expenses, Second Quarter Fiscal Year 2019

5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings.

The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting).

If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND



PERSONNEL COMMITTEE MEETING

Committee Members: Director Fernandez and Director Kite

Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

AGENDA

Thursday, January 24, 2019
9:15 A.M.

Niles Conference Room
5072 Benson Road
Union City, CA 94587

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of January 28, 2019:
 - Consider a Resolution Approving the 2019 Conflict of Interest Code
 - Review and Approve the Publicly Available Pay Schedule Changes Effective September 1, 2018

5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings. The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting). If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND



**ENGINEERING AND INFORMATION TECHNOLOGY
COMMITTEE MEETING**

Committee Members: Director Handley and Director Lathi

Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

AGENDA

Thursday, January 24, 2019

2:30 P.M.

**Niles Conference Room
5072 Benson Road
Union City, CA 94587**

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of January 28, 2019:
 - Authorize the General Manager to Execute an Agreement and Task Order No. 2 with Brown and Caldwell for the Primary Digester No. 7 Project
 - Information Technology Software and Hardware Agreement Summary
 - Update on the Subsurface Investigation at the Alvarado Wastewater Treatment Plant

5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings. The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting). If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

LEGAL/COMMUNITY AFFAIRS COMMITTEE MEETING
Committee Members: Director Fernandez and Director Handley

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

AGENDA
Friday, January 25, 2019
10:30 A.M.

Karen W. Murphy
Attorney

Alvarado Conference Room
5072 Benson Road
Union City, CA 94587

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of January 28, 2019:
 - December 2018 Monthly Operations Report – Odor and Work Group Reports_____
5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings.

The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting).

If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND

**MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF
UNION SANITARY DISTRICT
January 14, 2019**

CALL TO ORDER

President Lathi called the meeting to order at 7:00 p.m.

PLEDGE OF ALLEGIANCE

ROLL CALL

PRESENT: Anjali Lathi, President
Manny Fernandez, Vice President
Jennifer Toy, Secretary
Tom Handley, Director
Pat Kite, Director

STAFF: Paul Eldredge, General Manager/District Engineer
Karen Murphy, District Counsel
Armando Lopez, Treatment and Disposal Services Manager
Sami Ghossain, Technical Services Manager
Robert Simonich, Fabrication, Maintenance, and Construction Manager
James Schofield, Collection Services Manager
Laurie Brenner, Business Services Coach
Rollie Arbolante, Customer Service Team Coach
Somporn Boonsalat, Engineer
Michelle Powell, Communications and Intergovernmental Relations Coordinator
Regina McEvoy, Executive Assistant to the General Manager/Board Clerk

VISITORS: Alice Johnson, League of Women Voters
Roelle Balan, Tri-City Voice Newspaper
John Weed, Alameda County Water District Director / Resident

APPROVE MINUTES OF THE SPECIAL MEETING OF DECEMBER 10, 2018

It was moved by Director Kite, seconded by Vice President Fernandez, to Approve the Minutes of the Special Meeting of December 10, 2018. Motion carried unanimously.

APPROVE MINUTES OF THE REGULAR MEETING OF DECEMBER 10, 2018

It was moved by Secretary Toy, seconded by Director Handley, to Approve the Minutes of the Regular Meeting of December 10, 2018. Motion carried unanimously.

OCTOBER 2018 MONTHLY OPERATIONS REPORT

This item was reviewed by the Budget & Finance and Legal and Community Affairs Committees. General Manager Eldredge provided an overview of the Odor Report and work group reports included in the Board meeting packet. Business Services Coach Brenner reviewed the financial reports included in the Board meeting packet.

NOVEMBER 2018 MONTHLY OPERATIONS REPORT

This item was reviewed by the Budget & Finance and Legal and Community Affairs Committees. General Manager Eldredge provided an overview of the Odor Report and work group reports included in the Board meeting packet. Business Services Coach Brenner reviewed the financial reports included in the Board meeting packet.

WRITTEN COMMUNICATIONS

There were no written communications.

ORAL COMMUNICATIONS

There were no oral communications.

CONSIDER A RESOLUTION TO ACCEPT A SANITARY SEWER EASEMENT FOR TRACT 8085 – BAYSHORES PHASE 1, LOCATED ALONG WILLOW STREET BETWEEN SEAWIND WAY AND CENTRAL AVENUE IN THE CITY OF NEWARK

This item was reviewed by the Legal/Community Affairs Committee. Technical Services Manager Ghossain stated William Lyon Homes, Inc. and CDCG Group Holdings Bayshores LP will construct 195 single-family units and 179 multi-family units for Tract 8085, located along Willow Street between Seawind Way and Central Avenue in the City of Newark. According to City of Newark requirements, some of the roadways in the development have been designated as private. The developers have constructed new sewer mains and granted the District sanitary sewer easements to provide for access, maintenance, and service of the new mains located in the private streets. District staff recommended the Board consider a resolution to accept a sanitary sewer easement for Tract 8085 – Bayshores Phase 1, located along Willow Street between Seawind Way and Central Avenue in the City of Newark.

It was moved by Secretary Toy, seconded by Director Kite, to Adopt Resolution No. 2847 Accepting a Sanitary Sewer Easement for Tract 8085 – Bayshores Phase 1, Located along Willow Street between Seawind Way and Central Avenue, in the City of Newark, California. Motion carried unanimously.

CONSIDER A RESOLUTION TO ACCEPT A SANITARY SEWER EASEMENT FOR TRACT 8186 – THE LANDING WEST, LOCATED ON MISSION BOULEVARD AT CATANIA COMMON IN THE CITY OF FREMONT

This item was reviewed by the Legal/Community Affairs Committee. Technical Services Manager Ghossain stated The New Home Company of Northern California, LLC, will construct 25 units for Tract 8186, located on Mission Boulevard at Catania Common in the City of Fremont. The roadway of the development has been designated a private street according to City requirements. The developer has constructed the new sewer main and granted the District a sanitary sewer easement that provides for access, maintenance, and service of the new sewer main in the common private roadway of the development. Staff recommended the Board consider a resolution to accept a sanitary sewer easement for Tract 8186 – The Landing West, located on Mission Boulevard at Catania Common in the City of Fremont.

It was moved by Secretary Fernandez, seconded by Director Handley, to Adopt Resolution No. 2848 Accepting a Sanitary Sewer Easement for Tract 8186 – The Landing West, Located on Mission Boulevard at Catania Common, in the City of Fremont, California. Motion carried unanimously.

AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT AND TASK ORDER NO. 1 WITH AECOM TECHNICAL SERVICES, INC. FOR THE CENTRIFUGE BUILDING IMPROVEMENTS PROJECT

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the District's Centrifuge Building, constructed in 2002, houses four high-speed centrifuges, sludge conveyance system, two sludge storage hoppers, sludge pumps, and a polymer storage and mixing system. The sludge conveyance system and other equipment in the Centrifuge Building are at or near the end of their useful life, and staff have been experiencing operation and maintenance challenges. The sludge conveyance system is due to be evaluated for replacement, and staff have identified other equipment and process issues in the Centrifuge Building that need to be addressed. Task Order No. 1 will be for AECOM to provide preliminary design services including evaluation of different sludge conveyance alternatives. The Project will also include evaluation of other parts of the Centrifuge Building. AECOM is expected to complete preliminary design phase services by Summer 2019, and staff anticipate final design to be complete by early 2020 with construction expected in summer 2020. Staff recommended the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with AECOM Technical Services, Inc. in the amount of \$183,789 for the Centrifuge Building Improvements Project.

It was moved by Director Kite, seconded by Vice President Fernandez, to Authorize the General Manager to Execute an Agreement and Task Order No. 1 with AECOM Technical Services, Inc. in the Amount of \$183,789 for the Centrifuge Building Improvements Project. Motion carried unanimously.

AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT AND TASK ORDER NO. 1 WITH CAROLLO ENGINEERS, INC. FOR THE NEWARK EQUALIZATION STORAGE FACILITIES PROJECT

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the District had begun to conduct an Effluent Management Study as part of the Plant Master Plan. The District is in the process of evaluating alternatives for the management of peak wet weather flows. Construction of an equalization storage facility at Newark would partially offset near-term impacts of increased flows during peak wet weather events and allow the District to manage wastewater flows during Plant shutdowns for future construction and maintenance activities. District Counsel reviewed the Public Contract Code and concluded the District will be able to utilize the Design Build delivery method for this Project. The Project's preliminary scope includes a new equalization storage tank on the one-acre parcel adjacent to the Newark Pump Station, along with the necessary improvements and includes potential for a solar photovoltaic system to generate electricity. Carollo is expected to complete conceptual design phase services by Summer 2019. Staff recommended the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Carollo Engineers, Inc. in the amount of \$346,952 for the Newark Equalization Storage Facilities Project.

It was moved by Vice President Fernandez, seconded by Director Kite, to Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Carollo Engineers, Inc. in the Amount of \$346,952 for the Newark Equalization Storage Facilities Project. Motion carried unanimously.

CONSIDER A RESOLUTION TO ACCEPT THE CONSTRUCTION OF THE CAST IRON/PIPING LINING PROJECT – PHASE VII FROM NOR-CAL PIPELINE SERVICES

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the Board awarded the construction contract for the Cast Iron/Piping Lining Project – Phase VII to Nor-Cal on July 16, 2018. The purpose of the Project was to rehabilitate existing gravity sewer mains that were identified through the District's routine television inspection program and the Basin Masterplan Condition Assessments as having structural defects by cured-in-place pipe liners. The Project included rehabilitation of 13 sewer mains in the cities of Fremont and Union City. Staff recommended the Board consider a resolution to accept construction of the Cast Iron/Piping Lining Project – Phase VII from Nor-Cal Pipeline Services and authorize the recordation of a Notice of Completion.

It was moved by Secretary Toy, seconded by Director Handley, to Adopt Resolution No. 2849 Accepting Construction of the Cast Iron/Piping Lining Project – Phase VII from Nor-Cal Pipeline Services Located in Fremont, California and Union City, California, and Authorize Recordation of a Notice of Completion. Motion carried unanimously.

CONSIDER A SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT BETWEEN UNION SANITARY DISTRICT AND PAUL ELDREDGE

District Counsel Murphy stated the General Manager's performance evaluation took place October 1 and 23, 2018, and the Board met with its designated ad hoc subcommittee on October 1, October 23, October 29, and December 10, 2018. The following amendments were agreed upon: 1) an increase in salary to \$279,595.04, or approximately one and a half percent (\$4,131.95); 2) a one-time payment of \$9,641.21, which will not be subject to PERS; and 3) a one-time contribution of 50 vacation hours. Staff recommended the Board consider approval of the Second Amended and Restated Employment Agreement between Union Sanitary District and Paul Eldredge.

The Board requested a redline of proposed changes to the employment agreement between the District and Paul Eldredge be included in future presentations.

It was moved by Director Kite, seconded by Vice President Fernandez, to Approve the Second Amended and Restated Employment Agreement between Union Sanitary District and Paul Eldredge. Motion carried unanimously.

RECEIVE UPDATE ON CAPACITY CHARGES FOR ACCESSORY DWELLING UNITS AND PROVIDE DIRECTION

This item was reviewed by the Legal/Community Affairs Committee. Customer Service Team Coach Arbolante stated several state laws regarding accessory dwelling units (ADU's) have gone into effect over the last two years. The intent of these laws was to make it easier for homeowners to construct or convert an ADU on their property to create more housing options. The new laws state the District cannot charge a property owner a capacity charge for an interior conversion of an existing single-family unit to create an ADU when no square footage is added, and the capacity charge for an ADU that adds square footage through new construction must be "proportionate to the burden" of the ADU based on size or fixtures. The current District capacity ordinance classifies ADU's as multi-family dwelling units. Developing a separate category for an ADU will require modifying the District's Sewer Capacity Fee Update study and Ordinance 35.22, which the District expects to accomplish in the next year or so. In consideration of increased interest in ADU's, the District has developed an option for applicants to pursue a Review of Capacity Charges under Ordinance 35.22. An applicant would be required to complete an "Accessory Dwelling Unit Review of Capacity Charge Form" that would be submitted for staff review and staff would make a capacity charge adjustment for the ADU as appropriate and process the capacity charge payment. Staff requested the Board provide direction regarding staff's proposal and consider accommodations for those who already paid a capacity charge for an ADU since the law went into effect in 2017.

The Board agreed by consensus that staff should proceed with the proposed "Accessory Dwelling Unit Review of Capacity Charge Form" and the corresponding process outlined in the Board meeting packet. The Board further agreed by consensus that staff should process capacity charge adjustments for those who paid the charge for an ADU since the law went into effect in 2017.

INFORMATION ITEMS:

Legislative Update on State and National Issues of Interest to the Board

This item was reviewed by the Legislative Committee. General Manager Eldredge provided an overview of the state and national legislative summaries included in the Board meeting packet.

Debriefing of the Centennial Open House Held May 19, 2018

This item was reviewed by the Budget & Finance Committee. Executive Assistant to the General Manager/Board Clerk McEvoy provided an overview of the Centennial Open House debriefing report included in the Board meeting packet.

Fiscal Year 2019 – 2022 Strategic Plan

Business Services Coach Brenner presented the Fiscal Year 2019 – 2022 Strategic Plan and reviewed the development timeline for the Strategic Plan included in the Board meeting packet.

Report on the East Bay Dischargers Authority (EBDA) Meeting of December 20, 2018

Director Handley provided an overview of the EBDA meeting summary included in the Board meeting packet.

Check Register

Staff answered Board questions regarding the Check Register.

COMMITTEE MEETING REPORTS:

The Budget & Finance, Legislative, Engineering and Information Technology, and Legal/Community Affairs Committees met.

GENERAL MANAGER'S REPORT:

General Manager Eldredge reported the following:

- The District will host an EBDA Workshop on Friday, January 18, 2019.
- The draft watershed permit that governs the discharge of the 37 wastewater agencies that make up BACWA (Bay Area Clean Water Agencies) was recently released by the San Francisco Bay Regional Water Quality Control Board. Staff will provide an informational report at a future Board meeting.
- District offices will be closed in observance of the Martin Luther King Jr. holiday on Monday, January 21, 2019.

OTHER BUSINESS:

Director Kite stated she attended the Alameda County Special District's Association meeting hosted by Alameda County Water District.

President Lathi stated she attended the Alameda County Water District Financing Authority meeting.

ADJOURNMENT:

The meeting was adjourned at 8:00 p.m. to a Special Meeting in the Boardroom on Thursday, January 17, 2019, at 5:30 p.m.

The Board will then adjourn to the next Regular Meeting in the Boardroom on Monday, January 28, 2019, at 7:00 p.m.

SUBMITTED:

ATTEST:

REGINA McEVOY
BOARD CLERK

JENNIFER TOY
SECRETARY

APPROVED:

ANJALI LATHI
PRESIDENT

Adopted this 28th day of January 2019

**MINUTES OF THE SPECIAL MEETING OF THE
BOARD OF DIRECTORS OF
UNION SANITARY DISTRICT
January 17, 2019**

CALL TO ORDER

President Lathi called the special meeting to order at 5:30 p.m.

ROLL CALL

PRESENT: Anjali Lathi, President
Manny Fernandez, Vice President
Jennifer Toy, Secretary
Tom Handley, Director
Pat Kite, Director

STAFF: Paul Eldredge, General Manager/District Engineer
Gene Boucher, Human Resources Manager
Glenn Berkheimer, Industrial Employers Distributors Association

PUBLIC COMMENT

There was no public comment.

CLOSED SESSION

The Board adjourned to Closed Session for the following:

CONFERENCE WITH LABOR NEGOTIATORS
(Pursuant to Government Code Section 54957.6)

Agency designated representatives:

Paul Eldredge
Glenn Berkheimer
Gene Boucher

Employee Organization:

Service Employees International Union, Local 1021 (SEIU)

The Board reconvened to Open Session. President Lathi reported there was no reportable action.

ADJOURNMENT:

The special meeting was adjourned at approximately 7:00 p.m. to the next Regular Board Meeting in the Boardroom on Monday, January 28, 2019, at 7:00 p.m.

SUBMITTED:

ATTEST:

REGINA McEVOY
BOARD CLERK

JENNIFER TOY
SECRETARY

APPROVED:

ANJALI LATHI
PRESIDENT

Adopted this 28th day of January, 2019



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer

SUBJECT: Agenda Item No. 6 – Regular Meeting of January 28, 2019
Information Item: **Monthly Operations Report for December 2018**

Background

Attached are Monthly Operations Reports for December 2018. Staff is available to answer questions regarding information contained in the report.

Work Group Managers

General Manager/Administration	Paul Eldredge	GM
Collection Services	James Schofield	CS
Technical Support	Sami Ghossain	TS
Treatment and Disposal Services	Armando Lopez	T&D
Fabrication, Maintenance, and Construction	Robert Simonich	FMC

ODOR COMPLAINTS:

During the month of December 2018, there were no odor complaints received by the Collection System.

STAFFING & PERSONNEL:

Completed Recruitments Resulting in Promotions:

- Organizational Performance Coordinator I – Jason Yeates promoted effective 12/1/2018

Other Completed Recruitments:

- Collection Services Mechanic II (replacement for Jose Ledesma retirement) – Michael Dela Rosa started 12/17/18

- Collection System Lead or Acting Pool Worker – (replacement for Matt Lubina promotion) Three internal candidates now qualified to be in the Acting Lead Pool.

Recruitments Opened:

- Receptionist (replacement for Brienne Estrada – probationary termination)
- Environmental Compliance Inspector I/II (replacement for Jason Yeates promotion)

Continuing Recruitments:

- Collection System Worker I (replacement for Steve Novak – Temporary Reassignment) Final candidate in background check process.
- Storekeeper I/II (replacement for Paul Johnson)

Separations:

- Rich Czapkay – Retirement effective 12/21/18

Other Accomplishments:

- Contract negotiations on-going.
- Applications submitted for new 2019 Leadership School cohort – seven employees selected.
- Open enrollment for Supplemental Life, Flexible Spending Accounts (Health and Dependent Care) on-going.

G.M. ACTIVITIES: For the month of December, the General Manager was involved in the following:

- Attended the East Bay Dischargers Authority (EBDA) Managers Advisory Committee meeting
- Attended the East Bay Dischargers Authority Meeting
- Conducted Individual Check-in Meetings with Board of Directors
- Attended the Staff Holiday Potluck

Attachments: Odor Report and Map
Hours Worked and Leave Time by Work Group
Business Services
Technical Services
Collection Services
Fabrication, Maintenance, and Construction
Treatment and Disposal Services



ODOR REPORT December 2018

During the recording period from December 01, 2018 through December 31, 2018, there were no odor related service request received by the District.



Union City

Newark

Fremont

Legend

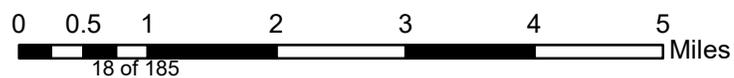
Odor Complaints: December 2018

- ★ Odor found, USD resolved (0)
- Odor found, not related to USD (0)
- ▲ No odor found (0)

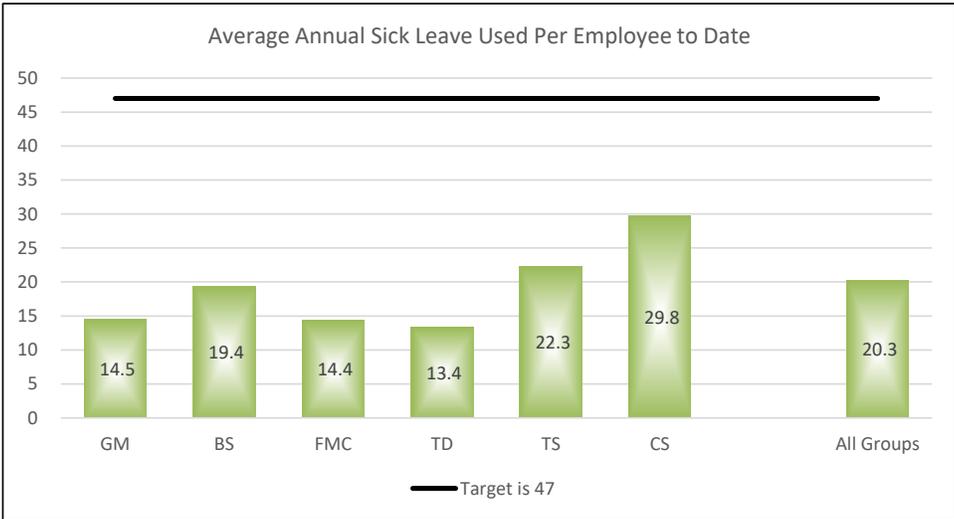
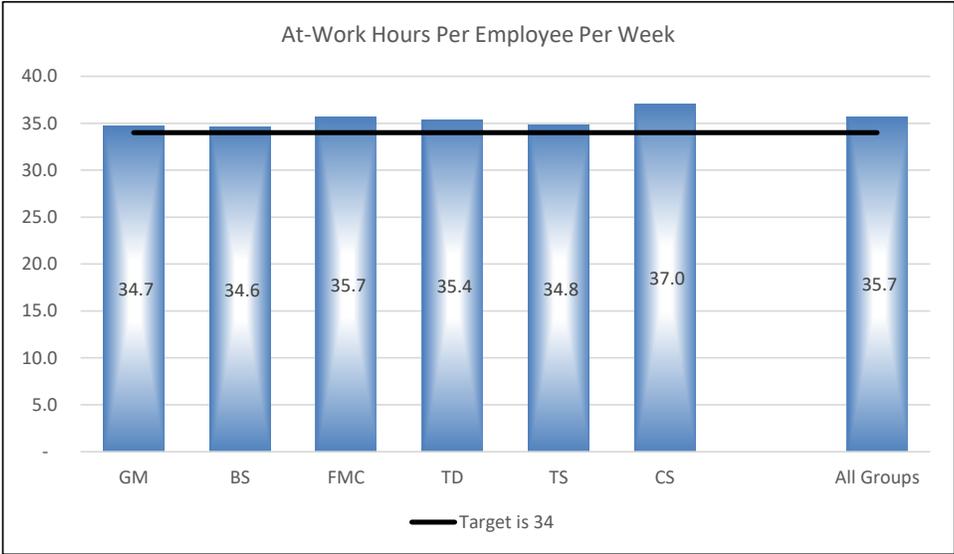
Odor Complaints: Jan. to Nov. 2018

- ★ Odor found, USD resolved (4)
- Odor found, not related to USD (6)
- ▲ No odor found (16)

**Location of Odor Reports
January to December 2018**



HOURS WORKED AND LEAVE TIME BY WORK GROUP
June 24, 2018 through December 22, 2018
Weeks to Date: 26 out of 52 (50.00%)



NOTES

- (1) Regular hours does not include hours worked by part-time or temporary employees.
- (2) Overtime hours includes call outs.
- (3) Discretionary Leave includes Vacation, HEC, Holiday, MAL, FLEX, Funeral, Jury Duty, Military, OT Banked Use, Paid Admin., SLIP, VRIP, Holiday Banked Use leaves.
- (4) Sick Leave includes sick and catastrophic sick leaves as well as protected time off, of which the District has no discretion.

An employee using 15 vacation, 11 holiday, 2 HEC, and 5 sick days will work an average of **34.9** hours per week over the course of a year; with 20 vacation days, **34.2** hours per week.

HOURS WORKED AND LEAVE TIME BY WORK GROUP

June 24, 2018 through December 22, 2018

Weeks to Date: 26 out of 52 (50.00%)

Group	Average Number of Employees	AT-WORK HOURS		At-Work Hours Per Employee Per Week	LEAVE HOURS				Average Annual Sick Leave Used Per Employee To Date	FY18		
		Regular (1)	Overtime (2)		Discretionary (3)	Short Term Disability	Workers Comp	Sick (4)		Average Number of Employees	At-Work Hours Per Week Per Employee	Annual Sick Leave Used
GM	2	1,775.00	19.00	34.7	276.00	-	-	29.00	14.5	2	35.9	18.5
BS	16	14,283.00	24.75	34.6	1,712.67	9.00	-	310.50	19.4	20	35.4	41.0
FMC	28	25,349.25	489.87	35.7	3,347.75	-	18.50	404.50	14.4	23	34.2	43.9
TD	26	23,412.22	380.28	35.4	3,094.38	12.38	-	348.87	13.4	26	35.4	61.5
TS	32	28,683.27	102.48	34.8	3,546.39	-	-	714.34	22.3	31	35.4	48.7
CS	30	26,773.28	1,951.67	37.0	3,714.08	181.34	-	893.55	29.8	31	35.2	56.0
All Groups	134	120,743.52	2,968.05	35.7	15,691.27	202.72	18.50	2,718.26	20.3	133	35.1	50.5

SICK LEAVE INCENTIVE PROGRAM TARGETS

≥34

≤47

The Sick Leave Incentive Program target goals are 47 or less hours of sick leave per employee annually, and 34 or more hours of at-work time per week per employee.

NOTES

(1) Regular hours does not include hours worked by part-time or temporary employees.

(2) Overtime hours includes call outs.

(3) Discretionary Leave includes Vacation, HEC, Holiday, MAL, FLEX, Funeral, Jury Duty, Military, OT Banked Use, Paid Admin., SLIP, VRIP, Holiday Banked Use leaves.

(4) Sick Leave includes sick and catastrophic sick leaves, as well as protected time off, of which the District has no discretion.

An employee using 15 vacation, 11 holiday, 2 HEC, and 5 sick days will work an average of **34.9** hours per week over the course of a year;

with 20 vacation days, **34.2** hours per week.

BUDGET AND FINANCE REPORT

FY 2019

Year-to-date as of 12/31/18

50% of year elapsed

Revenues	Budget	Actual	% of Budget Rec'd	Audited Last Year Actuals 6/30/18
Capacity Fees	\$ 16,211,521	\$ 8,284,932	51%	\$ 23,623,947
Sewer Service Charges	57,016,142	28,778,001	50%	54,260,096
Operating (Work Groups)	1,326,550	517,554	39%	1,512,908
Interest	650,000	1,174,968	181%	1,436,168
Misc. (LAVWMA, Admin Fines, Forfeited Deposits)	250,000	872,361	349%	118,962
Subtotal Revenues	\$ 75,454,213	\$ 39,627,816	53%	\$ 80,952,081
SRF Loan Proceeds	-	-		456,642
Total Revenues + SRF Proceeds	\$ 75,454,213	\$ 39,627,816	53%	\$ 81,408,723
Expenses	Budget	Actual	% of Budget Used	Last Year Actuals
Capital Improvement Program:				
Capacity Proj.	\$ 3,150,000	\$ 562,915	18%	\$ 2,555,801
Renewal & Repl. Proj.	6,142,500	2,003,754	33%	5,149,632
Operating	39,162,656	16,858,949	43%	38,749,578
Special Projects	1,410,000	259,396	18%	914,943
Retiree Medical (ADC)	626,089	440,267	70%	514,807
Vehicle & Equipment	660,201	610,397	92%	552,020
Information Systems	712,300	360,485	51%	154,654
Plant & Pump Stat. R&R	500,000	101,482	20%	219,622
Emerg. Fund	-	-	0%	-
Pretreatment Fund	7,000	1,746	25%	2,076
Cty Fee for SSC Admin.	107,000	54,172	51%	107,581
Debt Servicing:				
SRF Loans	3,902,080	2,842,463	73%	4,282,954
Total Expenses	\$ 56,379,826	\$ 24,096,025	43%	\$ 53,203,669
Total Revenue & Proceeds less Expenses	\$ 19,074,387	\$ 15,531,792		28,205,054

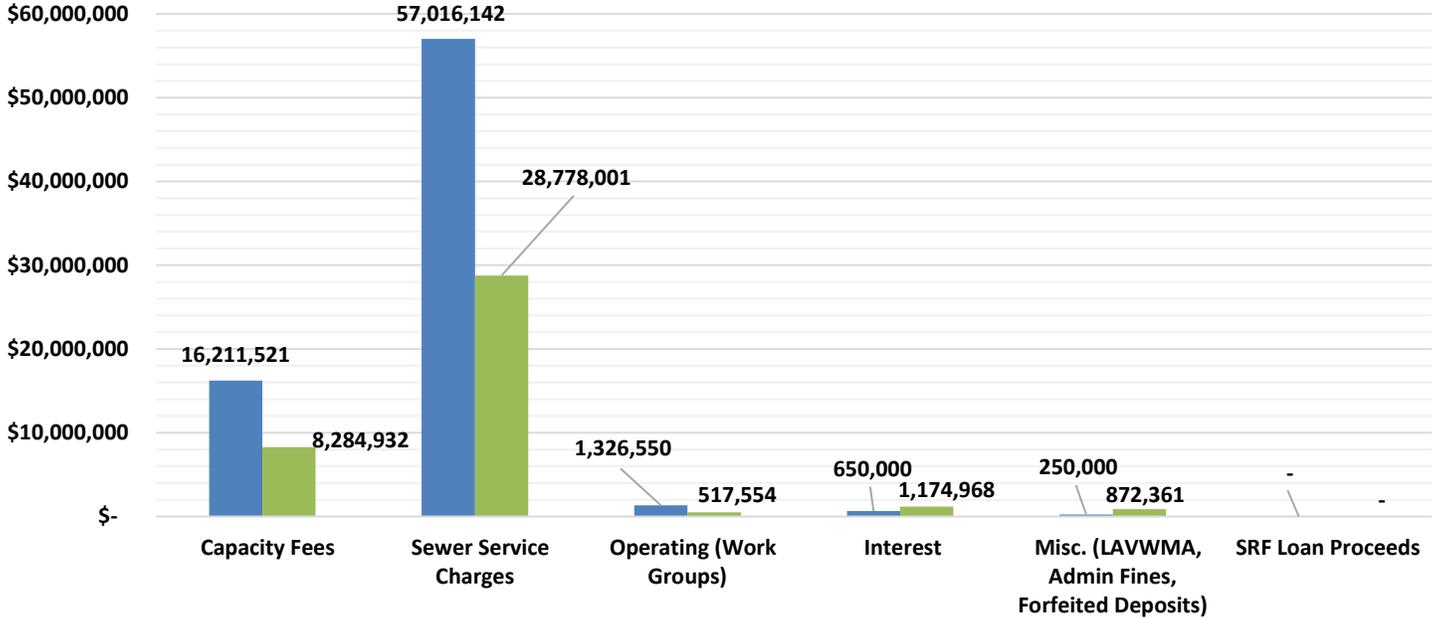
Operating (Work Group) Expenses	Budget	Actual	% of Budget Used	Audited Last Year Actuals
Board of Directors	\$ 179,111	\$ 66,397	37%	\$ 138,798
General Manager/Admin.	1,043,506	389,132	37%	817,042
Business Services	3,762,036	1,481,860	39%	5,039,969
Collection Services	6,888,191	3,050,018	44%	7,208,772
Technical Services	6,347,451	2,958,783	47%	6,690,818
Treatment & Disposal Services	12,025,839	4,955,182	41%	11,569,991
Fabrication, Maint. & Construction	8,264,514	3,715,544	45%	6,753,251
Non-Departmental	652,008	242,031	37%	530,937
Total	\$ 39,162,656	\$ 16,858,949	43%	\$ 38,749,578

Operating (Work Group) Expenses by Type	Budget	Actual	% of Budget Used	Last Year Actuals
Personnel (incl D&E)	\$ 26,614,085	\$ 12,311,746	46%	\$ 28,073,162
Repairs & Maintenance	2,256,450	770,028	34%	2,166,967
Supplies & Matls (chemicals, small tools)	3,182,740	1,163,650	37%	2,398,715
Outside Services (utilities, biosolids, legal)	6,764,691	2,574,001	38%	5,942,890
Fixed Assets	344,690	39,524	11%	167,845
Total	\$ 39,162,656	\$ 16,858,949	43%	\$ 38,749,578

REVENUES AND EXPENSES REPORT
as of 12/31/18

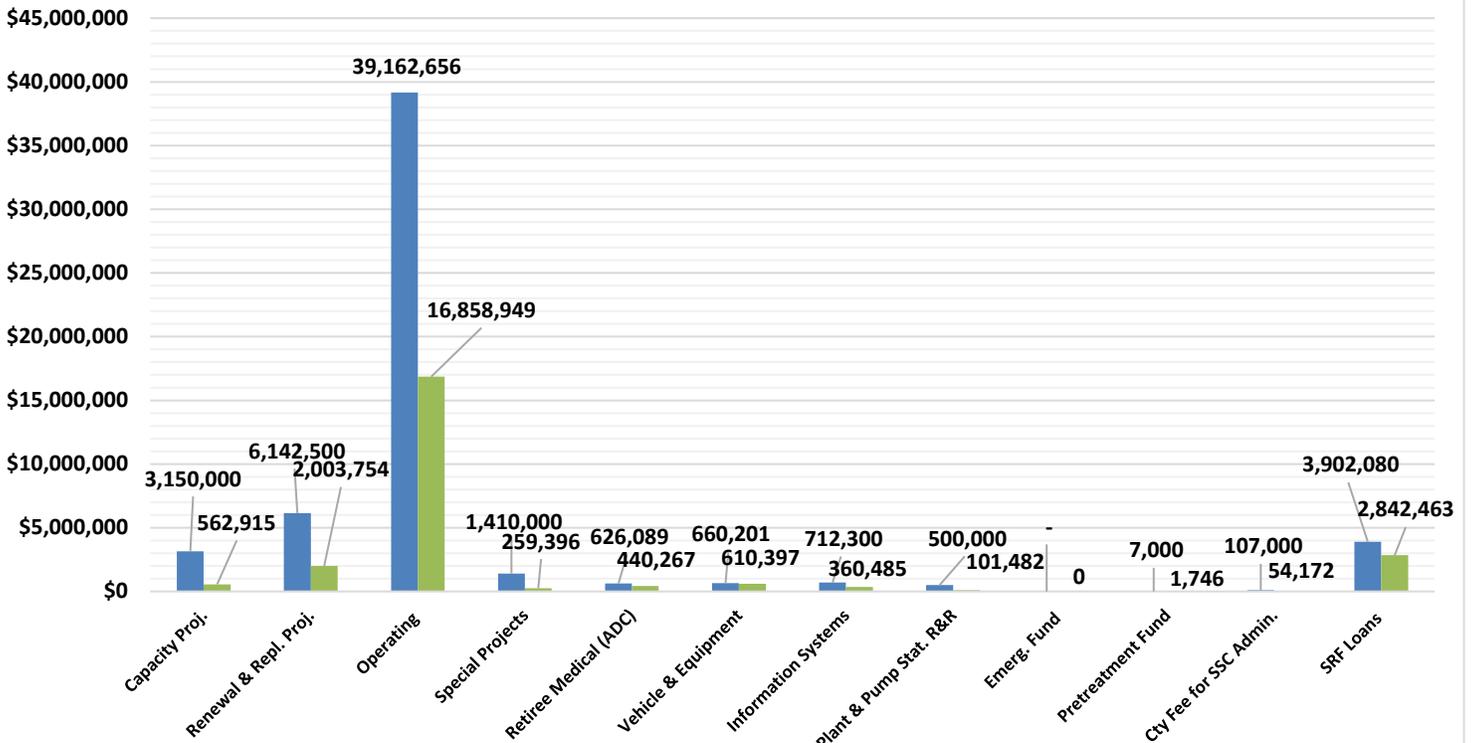
Total Revenues

■ Budget ■ Actual



Total Expenses

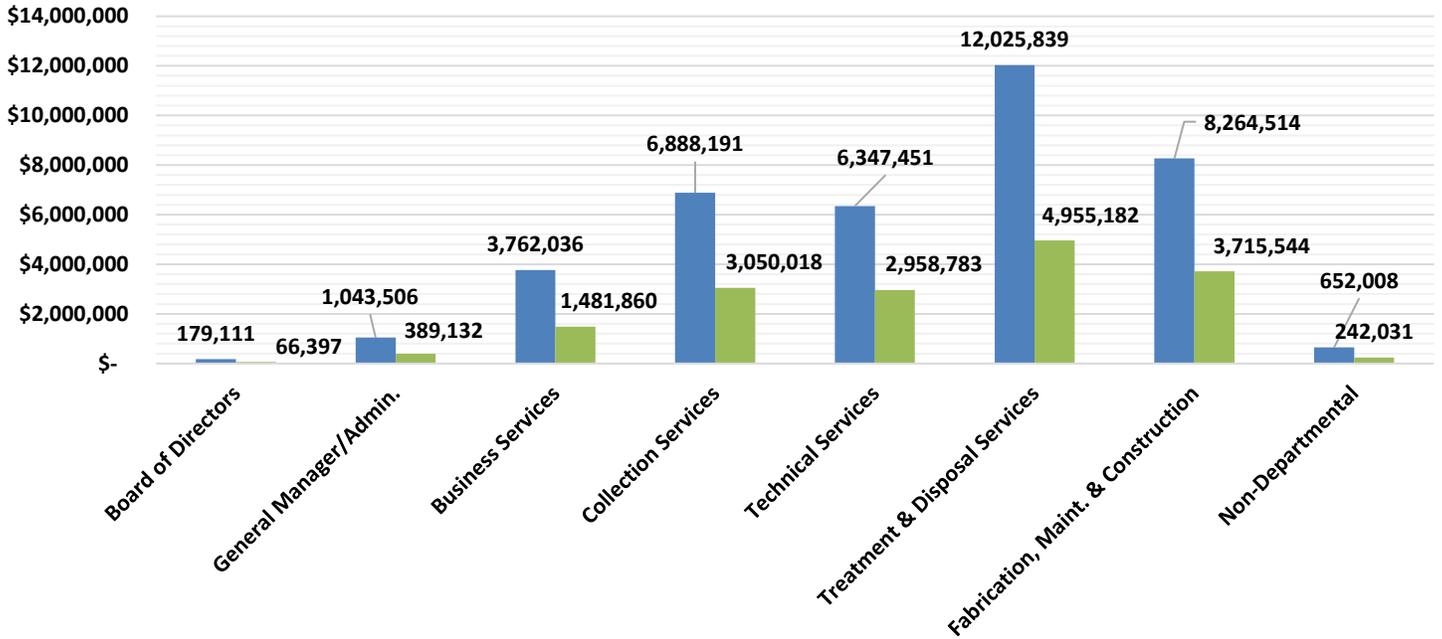
■ Budget ■ Actual



REVENUES AND EXPENSES REPORT
as of 12/31/18

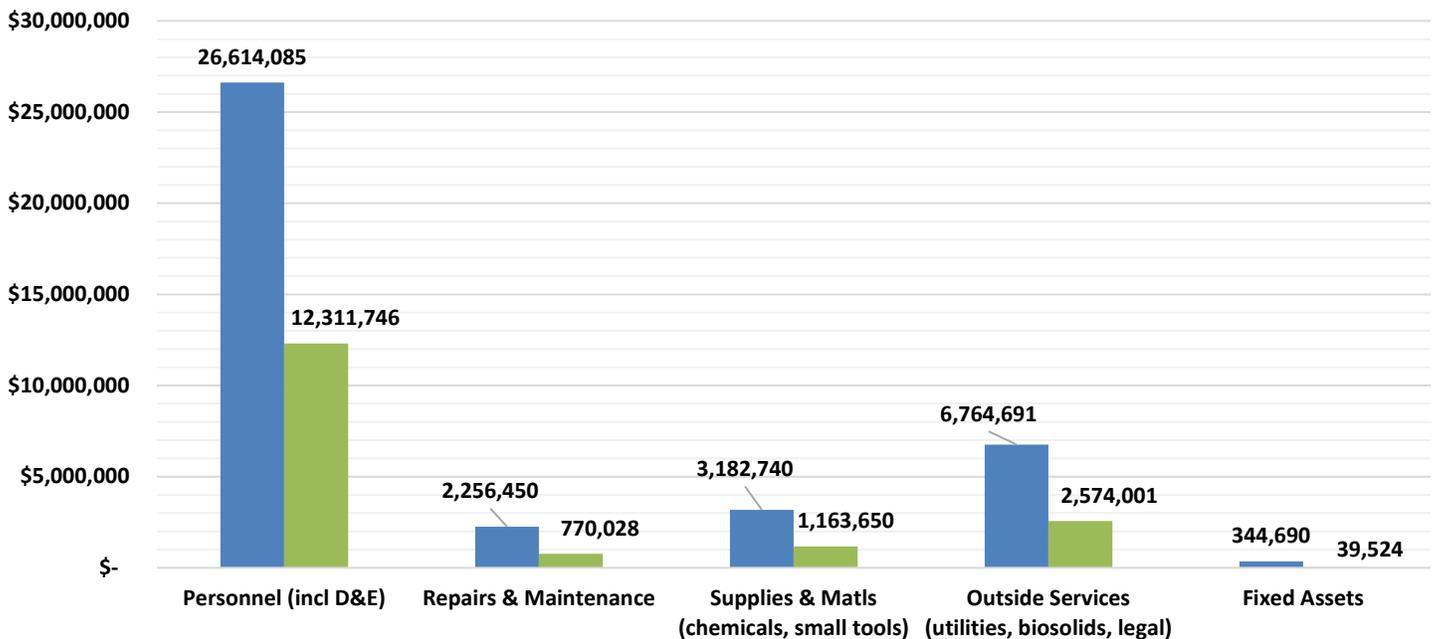
Operating Expenses by Work Group

■ Budget ■ Actual



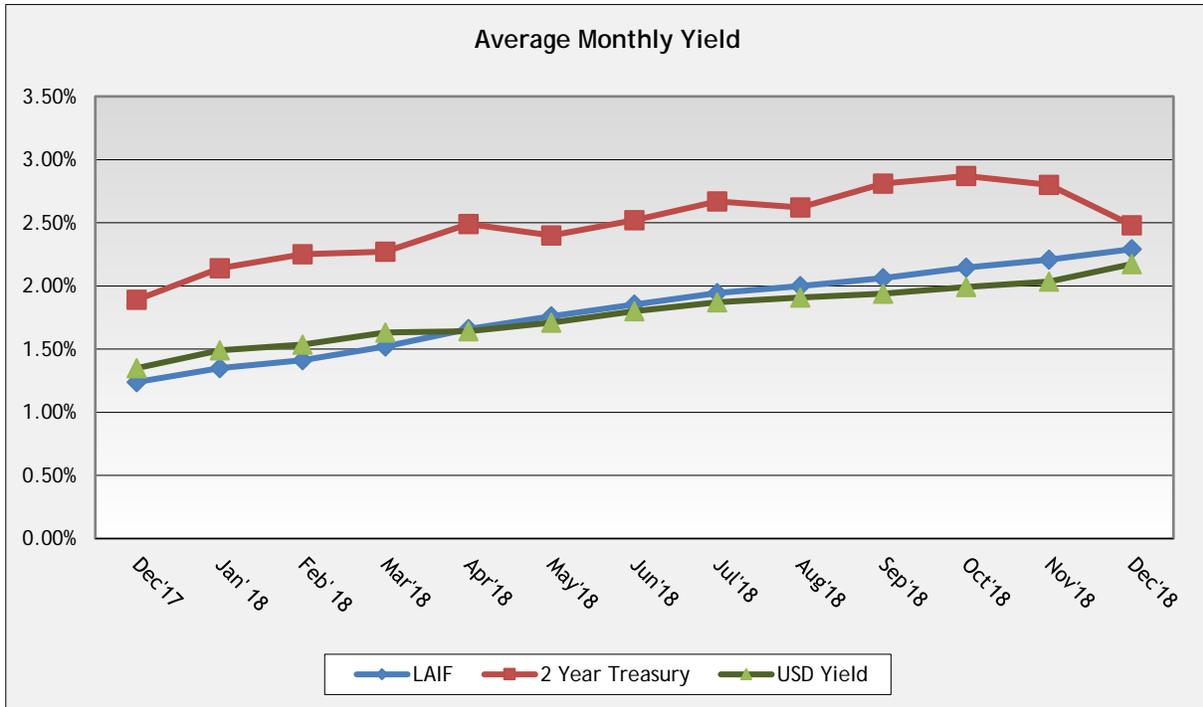
Operating Expenses by Type

■ Budget ■ Actual

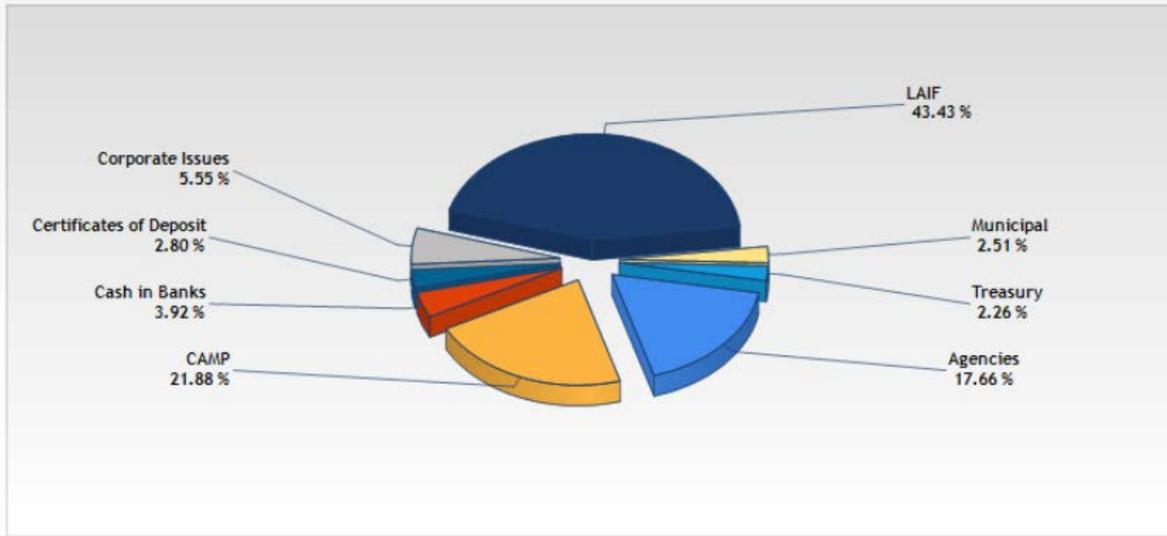


Business Services Group
December 2018

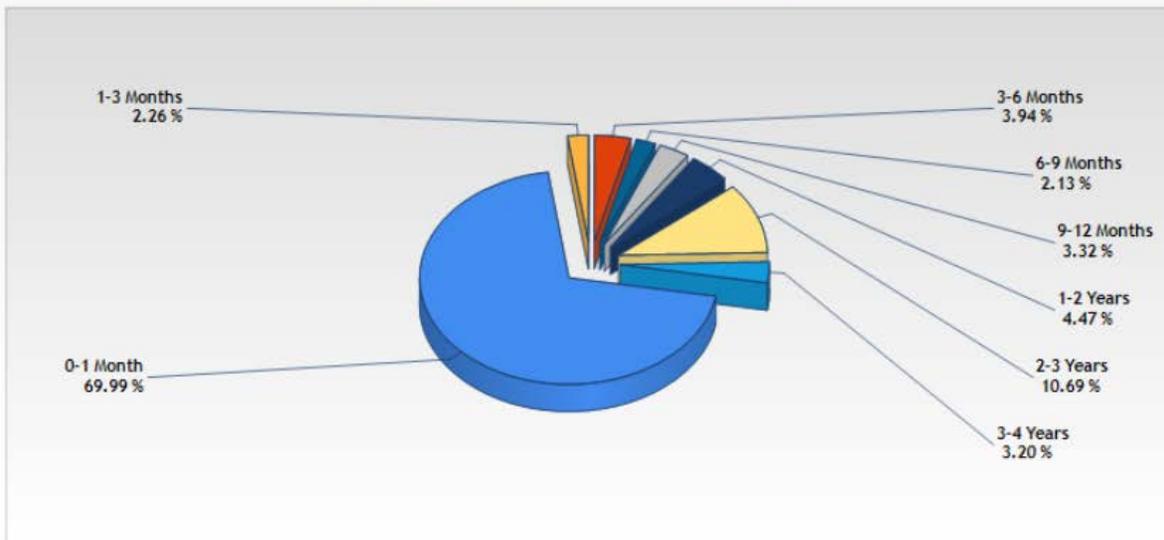
Performance Measures for the USD Investment Portfolio



Portfolio Holdings Distribution by Asset Class



Portfolio Holdings Distribution by Maturity Range



Maturity Range	Face Amount/Shares	YTM @ Cost	Cost Value	Days To Maturity	% of Portfolio	Market Value	Book Value	Duration To Maturity
0-1 Month	93,132,781.14	2.318	93,131,881.14	1	69.99	93,132,051.14	93,132,752.39	0.00
1-3 Months	3,000,000.00	1.228	3,009,920.00	69	2.26	2,994,610.00	3,000,937.17	0.27
3-6 Months	5,248,000.00	1.274	5,244,560.00	143	3.94	5,222,495.12	5,247,553.00	0.39
6-9 Months	2,828,000.00	1.596	2,834,650.00	239	2.13	2,808,978.04	2,829,650.66	0.65
9-12 Months	4,408,000.00	1.537	4,413,756.57	326	3.32	4,364,018.87	4,409,306.47	0.89
1-2 Years	5,746,000.00	2.013	5,947,787.56	606	4.47	5,719,388.28	5,830,404.75	1.62
2-3 Years	14,244,000.00	2.060	14,228,150.00	927	10.69	14,026,132.82	14,235,466.90	2.48
3-4 Years	4,236,000.00	2.414	4,259,279.67	1,178	3.20	4,182,988.17	4,251,366.75	3.10
TOTAL / AVERAGE	132,842,781.14	2.173	133,069,984.94	188	100	132,450,662.44	132,937,438.09	0.50

Union Sanitary District
 Portfolio Holdings
 Board Report - Holdings
 Report Format: By Transaction
 Group By: Asset Class
 Average By: Cost Value
 Portfolio / Report Group: All Portfolios
 As of 12/31/2018

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
Agencies											
FFCB 1.17 5/16/2019-17	3133EF7L5	Moodys-Aaa	5/16/2016	1,000,000.00	1,000,000.00	1.170	994,900.00	1.170		5/16/2019	0.75
FFCB 1.3 11/25/2019-16	3133EGBK0	Moodys-Aaa	5/25/2016	1,000,000.00	997,950.00	1.300	987,540.00	1.360		11/25/2019	0.75
FFCB 1.35 6/24/2019	3133EEZ60	Moodys-Aaa	5/24/2017	1,000,000.00	1,003,480.00	1.350	995,080.00	1.180		6/24/2019	0.75
FFCB 1.59 3/23/2020-17	3133EFR25	Moodys-Aaa	3/23/2016	1,000,000.00	1,000,000.00	1.590	988,730.00	1.590		3/23/2020	0.75
FFCB 1.7 5/3/2021-17	3133EF5T0	Moodys-Aaa	5/3/2016	1,000,000.00	1,000,000.00	1.700	980,450.00	1.700		5/3/2021	0.75
FHLB 1.24 1/23/2019-18	3130AAN20	Moodys-Aaa	2/2/2017	1,000,000.00	999,100.00	1.240	999,270.00	1.286		1/23/2019	0.75
FHLB 1.375 2/28/2019-17	3130ABEH5	Moodys-Aaa	5/30/2017	1,000,000.00	1,000,000.00	1.375	998,300.00	1.375		2/28/2019	0.75
FHLB 1.93 12/21/2020-17	3130AADQ8	None	12/21/2016	1,000,000.00	1,000,000.00	1.930	984,290.00	1.930		12/21/2020	0.75
FHLB 2 10/26/2021-19	3130AB3D6	None	4/26/2017	1,000,000.00	1,000,000.00	2.000	980,070.00	2.000	4/26/2019	10/26/2021	0.75
FHLB 2.05 12/29/2021-17	3130AAET1	Moodys-Aaa	12/29/2016	1,000,000.00	1,000,000.00	2.050	983,500.00	2.050	3/29/2019	12/29/2021	0.75
FHLB 2.4 12/22/2021-17	3130AAHC5	None	12/22/2016	1,000,000.00	1,000,000.00	2.400	989,880.00	2.400		12/22/2021	0.75
FHLB Step 4/28/2021-16	3130A7PR0	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.500	994,870.00	2.114	1/28/2019	4/28/2021	0.75
FHLB Step 4/28/2021-16	3130A7QX6	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.500	989,610.00	2.021		4/28/2021	0.75
FHLMC 1.25 10/28/2019-17	3134G8XQ7	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.250	988,520.00	1.250		10/28/2019	0.75
FHLMC 1.4 6/14/2019-17	3134GBRH7	Moodys-Aaa	6/14/2017	1,000,000.00	1,000,000.00	1.400	994,760.00	1.400		6/14/2019	0.75
FHLMC 1.41 4/26/2019-18	3134GBEG3	None	4/26/2017	1,000,000.00	1,000,000.00	1.410	996,680.00	1.410		4/26/2019	0.75

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
FHLMC 1.5 12/30/2019-17	3134GAYY4	S&P-AA+	12/30/2016	1,000,000.00	1,000,000.00	1.500	988,850.00	1.500	3/30/2019	12/30/2019	0.75
FHLMC 1.5 9/9/2019-18	3134GA7A6	Moodys-Aaa	5/10/2017	1,000,000.00	1,000,000.00	1.500	992,010.00	1.500		9/9/2019	0.75
FHLMC 2 12/30/2021-17	3134GAYV0	None	12/30/2016	1,000,000.00	1,000,000.00	2.000	984,030.00	2.000	3/30/2019	12/30/2021	0.75
FHLMC Step 4/28/2021-16	3134G8VZ9	Moodys-Aaa	4/28/2016	2,500,000.00	2,500,000.00	1.500	2,468,300.00	2.116		4/28/2021	1.88
FHLMC Step 4/28/2021-16	3134G8Z28	Moodys-Aaa	5/10/2016	1,000,000.00	999,500.00	1.500	989,950.00	2.044	1/28/2019	4/28/2021	0.75
FNMA 1.5 6/16/2021-16	3136G3QX6	Moodys-Aaa	6/16/2016	1,000,000.00	995,000.00	1.500	970,910.00	1.604	3/16/2019	6/16/2021	0.75
Sub Total / Average				23,500,000.00	23,495,030.00	1.571	23,240,500.00	1.710			17.66

CAMP

CAMP LGIP	LGIP4000	None	5/31/2011	29,116,431.59	29,116,431.59	2.460	29,116,431.59	2.460	N/A	N/A	21.88
Sub Total / Average				29,116,431.59	29,116,431.59	2.460	29,116,431.59	2.460			21.88

Cash in Banks

Union Bank Cash	LGIPUNIONBANK	None	12/31/2016	5,222,938.69	5,222,938.69	2.020	5,222,938.69	2.020	N/A	N/A	3.92
Sub Total / Average				5,222,938.69	5,222,938.69	2.020	5,222,938.69	2.020			3.92

Certificates of Deposit

Ally Bank 1.35 10/28/2019	02006LQ48	None	10/27/2016	248,000.00	248,000.00	1.350	244,758.07	1.350		10/28/2019	0.19
American Expr Centurion 2.45 4/5/2022	02587DN38	None	4/5/2017	247,000.00	247,000.00	2.450	245,931.35	2.450		4/5/2022	0.19
Belmont Savings Bank 2.15 3/22/2022	080515BV0	None	3/20/2017	248,000.00	248,000.00	2.150	244,609.34	2.150		3/22/2022	0.19
BMW Bank 2.15 3/10/2022	05580AGR9	None	3/10/2017	247,000.00	247,000.00	2.150	243,653.62	2.150		3/10/2022	0.19
Capital One Bank 1.5 10/26/2020	140420L99	None	10/26/2016	248,000.00	248,000.00	1.500	242,450.31	1.500		10/26/2020	0.19
Comenity Capital 1.25 4/11/2019	20033ASR8	None	10/25/2016	248,000.00	248,000.00	1.250	246,975.12	1.250		4/11/2019	0.19
Discover Bank 2.25 12/29/2021	254672Y36	None	12/29/2016	247,000.00	247,000.00	2.250	244,510.83	2.250		12/29/2021	0.19
JP Morgan Chase Bank 1.1 7/15/2019	48125Y5L4	None	7/15/2016	249,000.00	249,000.00	1.100	246,599.74	1.100		7/15/2019	0.19
Lakeside Bank 1.75 5/29/2020	51210SMU8	None	5/30/2017	249,000.00	249,000.00	1.750	245,023.25	1.750		5/29/2020	0.19

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
Landmark Bank 2.1 3/29/2021-17	51506VCA9	None	3/29/2017	248,000.00	248,000.00	2.100	244,992.73	2.100	3/27/2019	3/29/2021	0.19
Ponce De Leon Federal Bank 1.85 5/28/2021	732333AJ8	None	5/31/2017	249,000.00	249,000.00	1.850	244,359.26	1.850		5/28/2021	0.19
State Bank of India 2.25 1/26/2022	8562846A7	None	1/26/2017	247,000.00	247,000.00	2.250	244,489.02	2.250		1/26/2022	0.19
Summit Community Bank 1.65 5/29/2020	86604XLT1	None	5/31/2017	249,000.00	249,000.00	1.650	244,674.72	1.650		5/29/2020	0.19
Synchrony Bank 2.3 2/24/2022	87165ELT2	None	2/28/2017	247,000.00	247,000.00	2.300	244,814.84	2.300		2/24/2022	0.19
Wells Fargo Bank 1.15 7/22/2019	9497486R3	None	7/20/2016	249,000.00	249,000.00	1.150	246,579.40	1.150		7/22/2019	0.19
Sub Total / Average				3,720,000.00	3,720,000.00	1.816	3,674,421.60	1.816			2.80

Corporate Issues

American Express Credit 2.7 3/3/2022	0258M0EG0	Moodys-A2	5/15/2017	1,000,000.00	1,013,279.67	2.700	980,200.00	2.406		3/3/2022	0.76
Barclays Bank PLC Step 4/26/2022-17	06741VR95	Moodys-A1	4/26/2017	1,000,000.00	1,000,000.00	2.750	993,900.00	3.093	4/26/2019	4/26/2022	0.75
Chevron Corp 2.1 5/16/2021	166764BG4	Moodys- Aa2	5/10/2017	1,000,000.00	999,500.00	2.100	980,700.00	2.113		5/16/2021	0.75
Chevron Corp 2.193 11/15/2019	166764AN0	Moodys- Aa2	2/26/2016	1,160,000.00	1,167,806.57	2.193	1,154,350.80	2.004		11/15/2019	0.88
GE Capital International 2.04 11/15/2020	36164QMS4	S&P-AA	3/10/2017	1,000,000.00	1,010,642.28	2.040	965,060.00	1.738		11/15/2020	0.76
HSBC 4.875 8/24/2020	4042Q1AE7	Moodys-A1	5/17/2016	2,000,000.00	2,191,145.28	4.875	2,049,160.00	2.500		8/24/2020	1.65
Sub Total / Average				7,160,000.00	7,382,373.80	3.101	7,123,370.80	2.332			5.55

LAIF

LAIF LGIP	LGIP1002	None	4/30/2011	57,793,410.86	57,793,410.86	2.291	57,793,410.86	2.291	N/A	N/A	43.43
Sub Total / Average				57,793,410.86	57,793,410.86	2.291	57,793,410.86	2.291			43.43

Municipal

City of Riverside CA 2.125 6/1/2021	769036BA1	S&P-AA-	6/1/2017	500,000.00	500,000.00	2.125	491,250.00	2.125		6/1/2021	0.38
La Quinta Redev Agency 2.034 9/1/2019	50420BCH3	S&P-AA-	12/22/2016	1,330,000.00	1,336,650.00	2.034	1,323,788.90	1.843		9/1/2019	1.00
State of California 2.152 4/1/2022	13063DAD0	Moodys- Aa3	4/27/2017	1,000,000.00	1,010,000.00	2.152	985,390.00	1.938		4/1/2022	0.76
	92603PER9	Moodys- Aa2	12/28/2016	500,000.00	490,150.00	2.350	488,750.00	2.811		8/1/2021	0.37

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
Victor Valley College General Obligation Bond 2.35											
Sub Total / Average				3,330,000.00	3,336,800.00	2.130	3,289,178.90	2.056			2.51
Treasury											
T-Note 0.875 5/15/2019	912828R44	None	4/26/2017	1,000,000.00	993,080.00	0.875	994,100.00	1.217		5/15/2019	0.75
T-Note 1.283 3/31/2019	912828SN1	None	2/22/2017	1,000,000.00	1,004,480.00	1.283	997,740.00	1.067		3/31/2019	0.75
T-Note 1.5 2/28/2019	912828C24	None	1/9/2017	1,000,000.00	1,005,440.00	1.500	998,570.00	1.241		2/28/2019	0.76
Sub Total / Average				3,000,000.00	3,003,000.00	1.221	2,990,410.00	1.175			2.26
Total / Average				132,842,781.14	133,069,984.94	2.194	132,450,662.44	2.173			100

All investment actions executed since the last report have been made in full compliance with the District's Investment Policy. The District will meet its expenditure obligations for the next six months. Market value sources are the LAIF, CAMP, and BNY Mellon monthly statements. Broker/Dealers: BOSCO, Inc.; Cantella & Co.; First Empire Securities; Ladenburg, Thalman & Co, Inc.; UBS Financial Services; Wells Fargo Securities.

Reviewer:

Approver:

Union Sanitary District
 Transactions Summary
 Board Report - Activity
 Group By: Action
 Portfolio / Report Group: All Portfolios
 Begin Date: 11/30/2018, End Date: 12/31/2018

Description	CUSIP/Ticker	Face Amount/Shares	Principal	Interest/Dividends	Coupon Rate	YTM @ Cost	Settlement Date	Total
Deposit								
CAMP LGIP	LGIP4000	28,162.89	28,162.89	0.00	N/A	0.000	12/31/2018	28,162.89
CAMP LGIP	LGIP4000	26,000,000.00	26,000,000.00	0.00	N/A	0.000	12/20/2018	26,000,000.00
Union Bank Cash	LGIPUNIONBANK	5,222,938.69	5,222,938.69	0.00	N/A	0.000	12/31/2018	5,222,938.69
Sub Total / Average		31,251,101.58	31,251,101.58	0.00				31,251,101.58
Interest								
CAMP LGIP	LGIP4000	0.00	0.00	28,162.89	N/A	0.000	12/31/2018	28,162.89
City of Riverside CA 2.125 6/1/2021	769036BA1	0.00	0.00	5,312.50	2.125	0.000	12/3/2018	5,312.50
Comenity Capital 1.25 4/11/2019	20033ASR8	0.00	0.00	254.79	1.250	0.000	12/11/2018	254.79
Discover Bank 2.25 12/29/2021	254672Y36	0.00	0.00	2,786.36	2.250	0.000	12/31/2018	2,786.36
FFCB 1.35 6/24/2019	3133EEZ60	0.00	0.00	7,600.00	1.350	0.000	12/24/2018	7,600.00
FFCB 1.37 12/27/2018-17	3133EGZ24	0.00	0.00	6,850.00	1.370	0.000	12/27/2018	6,850.00
FHLB 1.93 12/21/2020-17	3130AADQ8	0.00	0.00	9,650.00	1.930	0.000	12/21/2018	9,650.00
FHLB 2.05 12/29/2021-17	3130AAET1	0.00	0.00	10,250.00	2.050	0.000	12/31/2018	10,250.00
FHLB 2.4 12/22/2021-17	3130AAHC5	0.00	0.00	12,000.00	2.400	0.000	12/24/2018	12,000.00
FHLMC 1.2 12/14/2018-17	3134GAZU1	0.00	0.00	6,000.00	1.200	0.000	12/14/2018	6,000.00
FHLMC 1.4 6/14/2019-17	3134GBRH7	0.00	0.00	7,000.00	1.400	0.000	12/14/2018	7,000.00
FHLMC 1.5 12/30/2019-17	3134GAYY4	0.00	0.00	7,500.00	1.500	0.000	12/31/2018	7,500.00
FHLMC 2 12/30/2021-17	3134GAYV0	0.00	0.00	10,000.00	2.000	0.000	12/31/2018	10,000.00
FNMA 1.5 6/16/2021-16	3136G3QX6	0.00	0.00	7,500.00	1.500	0.000	12/17/2018	7,500.00
Lakeside Bank 1.75 5/29/2020	51210SMU8	0.00	0.00	358.15	1.750	0.000	12/31/2018	358.15
Landmark Bank 2.1 3/29/2021-17	51506VCA9	0.00	0.00	1,298.43	2.100	0.000	12/31/2018	1,298.43
Ponce De Leon Federal Bank 1.85 5/28/2021	732333AJ8	0.00	0.00	391.24	1.850	0.000	12/31/2018	391.24
Summit Community Bank 1.65 5/29/2020	86604XLT1	0.00	0.00	348.94	1.650	0.000	12/31/2018	348.94
Wells Fargo Bank 1.15 7/22/2019	9497486R3	0.00	0.00	235.36	1.150	0.000	12/20/2018	235.36
Sub Total / Average		0.00	0.00	123,498.66				123,498.66

Description	CUSIP/Ticker	Face Amount/Shares	Principal	Interest/Dividends	Coupon Rate	YTM @ Cost	Settlement Date	Total
Matured								
FFCB 1.37 12/27/2018-17	3133EGZ24	1,000,000.00	1,000,000.00	0.00	1.370	0.000	12/27/2018	1,000,000.00
FHLMC 1.2 12/14/2018-17	3134GAZU1	1,000,000.00	1,000,000.00	0.00	1.200	0.000	12/14/2018	1,000,000.00
Sub Total / Average		2,000,000.00	2,000,000.00	0.00				2,000,000.00
Withdraw								
Union Bank Cash	LGIPUNIONBANK	4,594,857.85	4,594,857.85	0.00	N/A	0.000	12/30/2018	4,594,857.85
Sub Total / Average		4,594,857.85	4,594,857.85	0.00				4,594,857.85

**Union Sanitary District's Internal Retiree Medical Fund
Quarterly Report**

For Period Ended 9/30/18

Fund Balance 6/30/18:		(\$21,764.12)
Revenues:		
Expenses:		
	Quarterly Net Medical Reimbursements	(110,740.03)
Transfers Out:		
	9/14/18 CalPERS OPEB Trust Actuarially Determined Contrib. (ADC) (payment #1 of 4)	(220,133.25)
Ending Fund Balance 9/30/18:		(\$352,637.40)



Market Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Balance	\$5,786,838.94	\$5,786,838.94
Contribution	220,133.25	220,133.25
Disbursement	0.00	0.00
Transfer In	0.00	0.00
Transfer Out	0.00	0.00
Investment Earnings	79,649.30	79,649.30
Administrative Expenses	(727.86)	(727.86)
Investment Expense	(532.19)	(532.19)
Other	0.00	0.00
Ending Balance	\$6,085,361.44	\$6,085,361.44
FY End Contrib per GASB 74 Para 22	0.00	0.00
FY End Disbursement Accrual	0.00	0.00
Grand Total	\$6,085,361.44	\$6,085,361.44

Unit Value Summary:

	QTD Current Period	Fiscal Year to Date
Beginning Units	360,093.033	360,093.033
Unit Purchases from Contributions	13,550.273	13,550.273
Unit Sales for Withdrawals	0.000	0.000
Unit Transfer In	0.000	0.000
Unit Transfer Out	0.000	0.000
Ending Units	373,643.306	373,643.306
Period Beginning Unit Value	16.070400	16.070400
Period Ending Unit Value	16.286553	16.286553

Please note the Grand Total is your actual fund account balance at the end of the period, including all contributions per GASB 74 paragraph 22 and accrued disbursements. Please review your statement promptly. All information contained in your statement will be considered true and accurate unless you contact us within 30 days of receipt of this statement. If you have questions about the validity of this information, please contact CERBT4U@calpers.ca.gov.

Statement of Transaction Detail for the Quarter Ending 09/30/2018

Union Sanitary District

Entity #: SKB7-6011550262



Date	Description	Amount	Unit Value	Units	Check/Wire	Notes
09/14/2018	Contribution	\$220,133.25	\$16.245669	13,550.273	WIRE 2018091400120 807	

Client Contact:
CERBT4U@CalPERS.ca.gov

MONTHLY OPERATIONS REPORT FOR THE MONTH OF DECEMBER 2018
TECHNICAL SUPPORT WORK GROUP SUMMARY

Capital Improvement Program

Fremont and Paseo Padre Lift Stations Improvements Project – Project closeout in progress.

Sludge Degritter System Project – Fabrication of the Slurry cup replacement in progress.

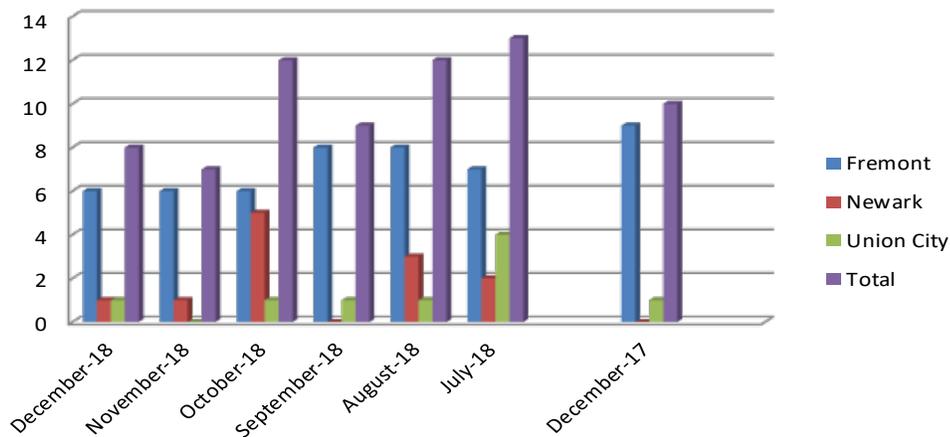
Primary Digester No. 3 Rehabilitation Project – Contractor has begun mixing piping installation inside the digester.

Cast Iron/Piping Lining Project Phase 7 – Project closeout in progress.

Customer Service

Trouble Calls dispatched from the Front Desk during business hours:

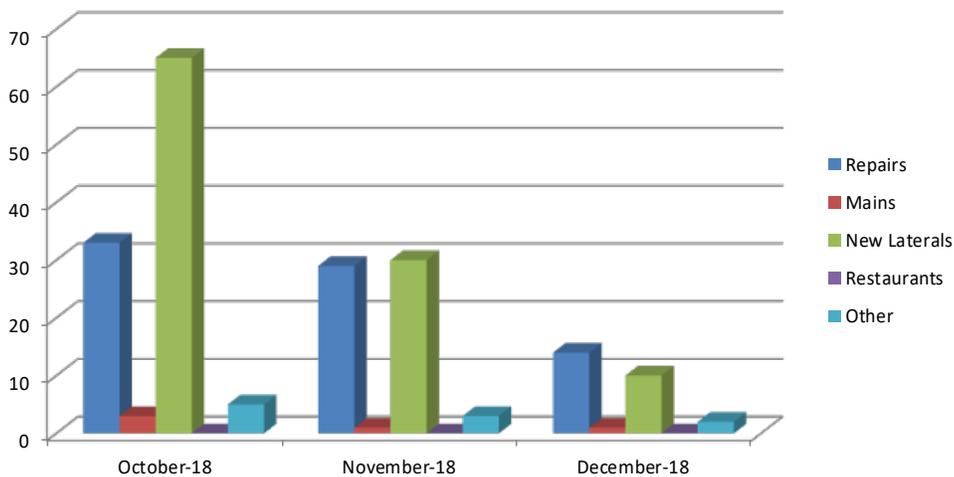
Month	Fremont	Newark	Union City	Total
December-18	6	1	1	8
November-18	6	1	0	7
October-18	6	5	1	12
September-18	8	0	1	9
August-18	8	3	1	12
July-18	7	2	4	13
December-17	9	0	1	10
6-Month Total				61



Sewer Permits Issued

Month	Repairs	Mains	New Laterals	Restaurants	Other
December-18	14	1	10	0	2
November-18	29	1	30	0	3
October-18	33	3	65	0	5

New Laterals - New residential lateral connections
 Other - Non-residential construction (except restaurants)



Communication

- Social Media posts:
 - National Handwashing Awareness Week
 - Environmental Compliance Inspector recruitment
 - Less-toxic home and garden message
 - Receptionist recruitment
 - Household Hazardous Waste information
 - East Alameda County flushable wipes article share
 - Christmas FOG message
 - “We’re here on the holidays” message
 - Holiday closures – December 24 & 25
 - Eco-friendly wrapping paper recycling tips
 - “Out with the Old” medicine disposal information
 - Holiday closures – December 31 & January 1
- Developed two Centennial Stories articles and photos for the Tri-City Voice newspaper
- Continued activities regarding District Branding initiative
- Continued development activities for Homeowner Lateral video
- Participated in Chamber of Commerce Board activities and community events as Director and Past-President

Environmental Compliance

Pollution Prevention/Stormwater Programs

USD’s Environmental Compliance (EC) team conducts pollution prevention inspections at restaurants, car wash businesses, and other commercial facilities. EC also conducts inspections and enforcement for the City of Fremont’s Environmental Services group. Over 600 Stormwater compliance inspections are conducted every year to ensure that commercial facilities, including restaurants and auto shops, comply with City Ordinance requirements, and do not discharge pollutants to the creeks and bay.

During the past month, the EC team conducted 75 Stormwater (Urban Runoff), and 71 FOG (restaurant) inspections. During this reporting period, Inspectors identified 4 Stormwater and 10 FOG enforcement actions. Three (3) of the Stormwater enforcements resulted in administrative fines ranging from \$100 to \$500. One (1) of the administrative fines was for an illicit discharge and two were for repeated violations.

Urban Runoff Inspections and Enforcements

December 2018	No. of UR Inspections	VW	WL	NOV	AF	LA	Total Enforcements	No. of Illicit Discharge/s	1
	75	0	0	1	3	0	4	% enforcement	5%

FOG Inspections and Enforcements

December 2018	No. of FOG Inspections	VW	WL	NOV	AF	LA	Total Enforcements	% Enforcement	14%
	71	3	6	1	0	0	10		

Enforcements:

VW – Verbal Warning

AF – Administrative Fine

AO – Administrative Order

WL – Warning Letter

LA – Legal Action

C&D – Cease & Desist Order

NOV – Notices of Violation

NOD – Notice of Deficiency

SNC – Significant Non-Compliance

Dental Inspections, School Outreach, and Plant Tours

# of Dental Inspections	# of School Outreach Events	# of Plant Tours
1	8	None

Industrial Pretreatment

The Industrial Pretreatment program has pending permits as shown in the table below. USD inspectors are working with each of these companies to establish permitted industrial discharges.

Pending Permits

New Industrial/Groundwater Permits	Groundwater/Temporary
N7K Neurolink	McGuire and Hester (GW-0104)
Silicon Valley RO/DI	

Permits Issued

Company Name	Date Permit Issued
None	

Industrial Permit Closures

Company Name	Date of Closure
None	

Reports (Annual & Semi-Annual Pretreatment Report, Union City Report, etc.)

Report Name	Date Report Completed and Submitted
None	

Enforcement Action

IU Name & Nature of Business	Comments	City	Parameter Violated	Discharge concentration (mg/L)	USD/Fed Limit Violated(mg/L)	Enforcement (1)
United States Pipe & Foundry (ductile iron pressure pipe manufacturing)	Excess solids discharge from pretreatment to USD main sewer line	UC	N.A.	N.A.	N.A.	NOV
Safety-Kleen of California (waste oil recycling, treatment, and disposal facility)	Self-reported Oil & Grease exceedance	N	Oil & Grease	256 mg/L	Local Limit = 100 mg/L	NOV
FMC Corporation #2 (Groundwater)	Groundwater violation	N	Arsenic	0.80 mg/L	Local Limit = 0.35 mg/L	NOV

(1) WL – Warning Letter

C&D – Cease and Desist Order

NOV – Notices of Violation

SNC – Significant Non-Compliance

AO – Administrative Order

EM – Enforcement Meeting

Other - Training, Special Meetings, Conferences, IAC (topics)

Activity	Date of Event	Attendees
BAPPG Steering Committee and General Committee Meeting	12-5-18	Doug Dattawalker
MEDS Coalition	12-17-18	Doug Dattawalker
4 th Quarter Industrial Advisory Council Meeting	12-20-18	Industrial User Representatives and USD Environmental Compliance Team Staff

Engineering/Construction

No. of projects under construction: 4

	Construction Projects	Capital (\$1000)	Scheduled Completion	Completed Scope	Completed Time	Comments for December 2018 Activities
1.	Fremont and Paseo Padre LS Improvement – Derek	\$2,801	10/16	100%	100%	Project closeout in progress.
2.	Sludge Degritter System Project – Kevin	\$1,436	06/19	95%	100%	Fabrication of the slurry cup replacement in progress.
3.	Primary Digester No. 3 Rehabilitation – Derek	\$1,956	03/19	76%	82%	Mixing pipe installation inside the digester has begun.
4.	Cast Iron/Piping Lining Phase VII – Andrew	\$291	11/18	95%	100%	Project closeout in progress.

Design/Study

No. of projects in design/study phase: 14

	Design/Study Projects	Capital (\$1000)	Scheduled Completion	Completed Scope	Completed Time	Comments for December 2018 Activities
1.	Cathodic Protection System Project – Thomas	\$79	08/18	98%	100%	100% design submittal under review.
2.	Newark Basin Masterplan – Andrew	\$318	08/19	72%	60%	Flow monitors and rain gauges installed. Met with the Cities of Fremont and Newark regarding their plans for future developments.
3.	Standby Power Generation System Upgrade Project – Raymond/Kevin	\$1,976	8/19	20%	20%	50% design submittal and generator supply specifications in progress.
4.	Force Main Condition Assessment – Andrew	\$121	10/20	60%	53%	Next round of inspection will be scheduled with the next phase of Force Main Corrosion Repairs.
5.	Emergency Outfall Improvements Project – Andrew	\$356	04/19	82%	84%	Received final draft of lease agreement with the State Lands Commission for staff review. Purchased mitigation credits.
6.	Primary Digester No. 7 Project – Curtis	\$1,476	09/18	85%	100%	Progress design workshop took place on December 11 th . Incorporation of design modifications from value engineering effort and design of 2.4-million-gallon tank in progress. 90% design submittal to be completed in February.
7.	Plant Master Plan – Raymond/Curtis	\$304	03/18	85%	100%	Evaluation of the building alternatives in progress. Planning level cost estimates to be completed in January.
8.	Effluent Management Study – Curtis	\$155	03/18	92%	100%	Study to incorporate results from Secondary Treatment Process Improvements.
9.	Odor Control Alternatives Study – Kevin	\$465	04/19	60%	60%	Preparation of draft odor study report in progress. Plant assessment and calculation of pump station emissions in progress.

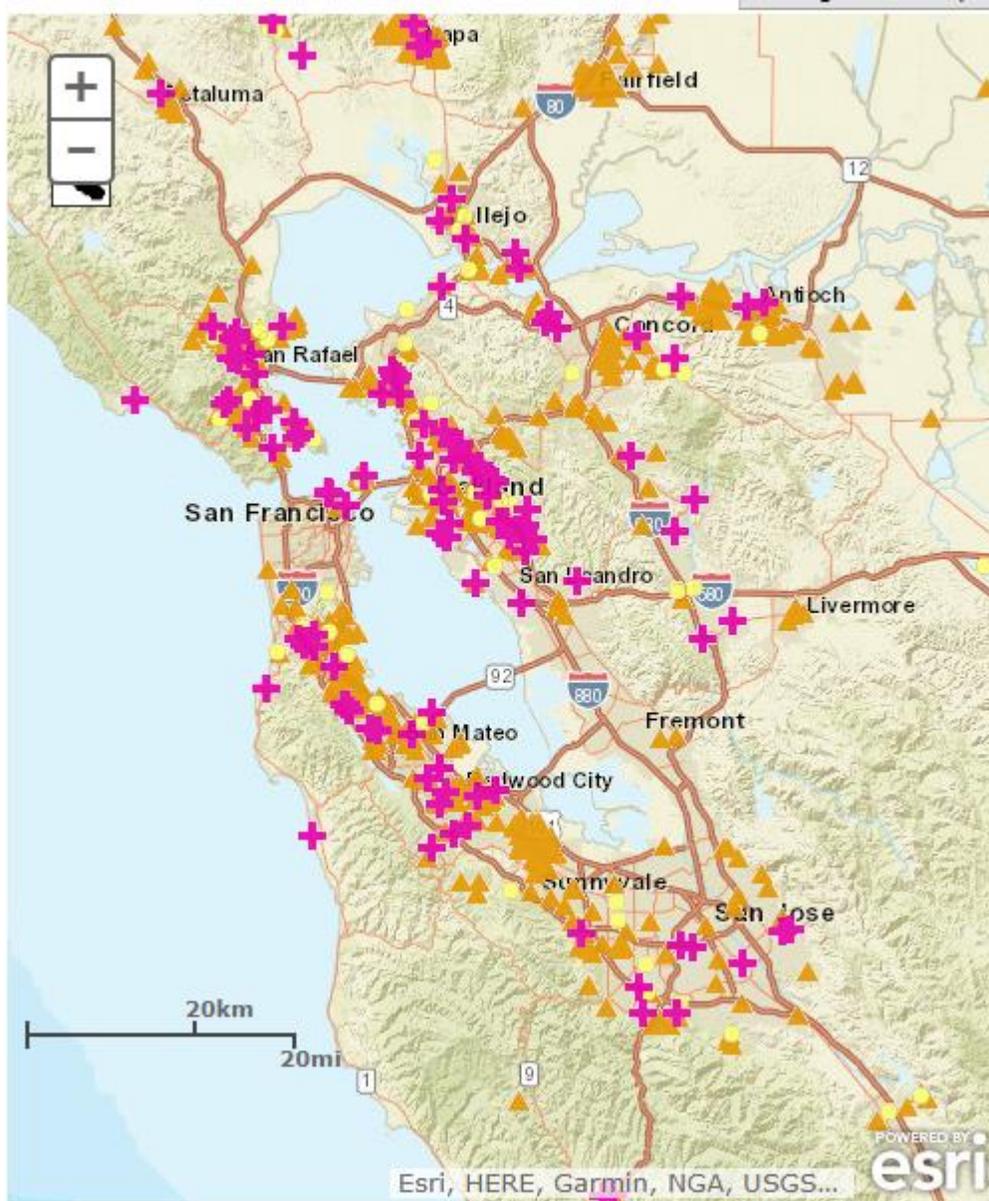
	Design/Study Projects	Capital (\$1000)	Scheduled Completion	Completed Scope	Completed Time	Comments for December 2018 Activities
10.	Headworks Screen No. 3 Project – Thomas	\$215	3/19	90%	77%	90% design review workshop held on December 10 th . 90% design submittal under review.
11.	Alvarado Influent Pump Station Improvements Project – Thomas	\$479	04/19	50%	55%	50% design review workshop held on December 3 rd . 50% design submittal under review.
12.	Force Main Corrosion Repairs Project Phase 3 – Andrew	\$60	02/19	50%	58%	Review of 90% design submittal complete. 100% design submittal and specifications in progress.
13.	Control Box No. 1 Improvements Project – Kevin	\$229	05/19	15%	15%	Kickoff meeting completed. Condition assessment of CB1 in progress.
14.	WAS Thickener Replacement Project – Curtis	\$284	05/19	18%	24%	Preliminary design in progress. Alternative Selection Workshop to take place in January.

**COLLECTION SERVICES
ACTIVITIES REPORT
December 2018**

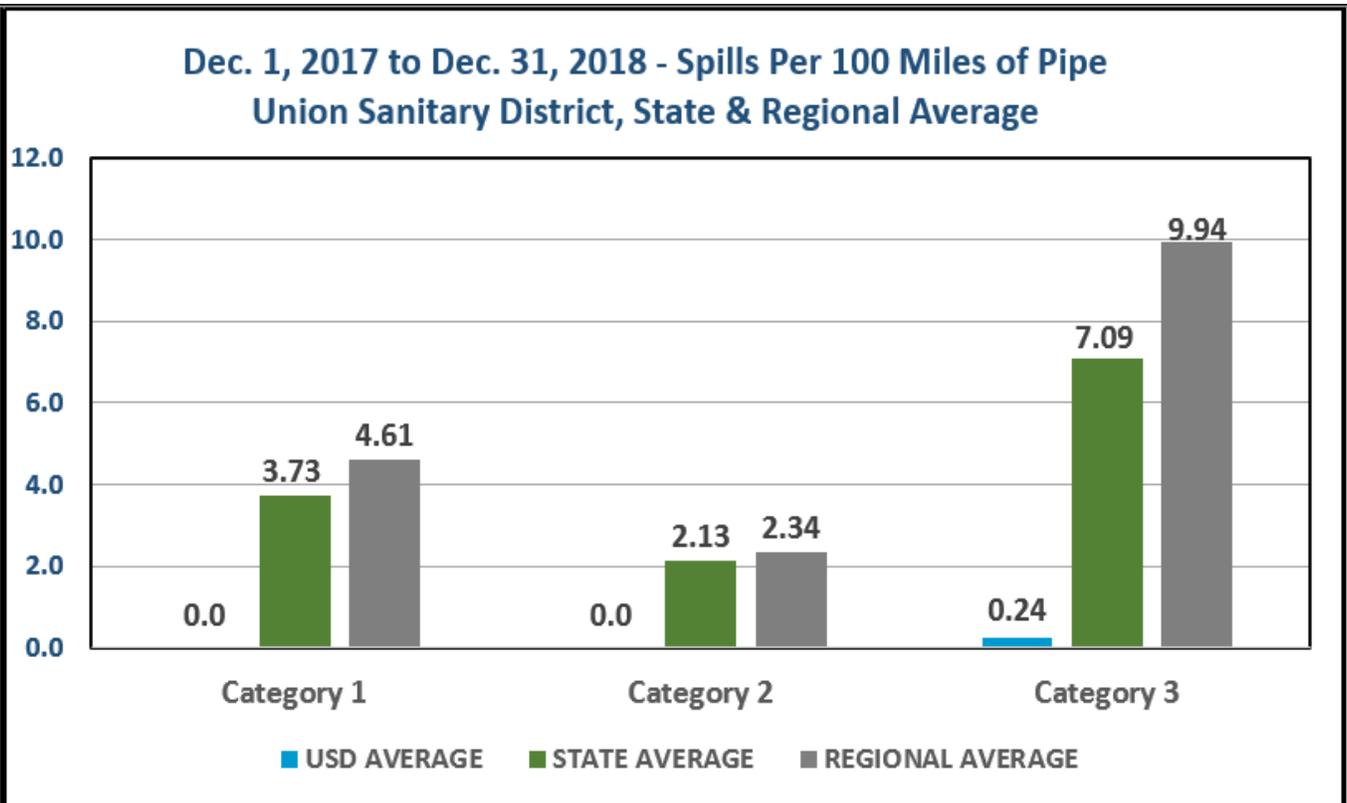
Progress/Accomplishments

- Zero Spills in December
- Completed 18.4 miles of sewer main cleaning in December.
- Completed 6.0 miles of sewer main inspection in December.
- Responded to 11 service request calls in December.
- Completed a total of 11 sewer main repairs in December.

Reported Bay Area Spills Dec. 1, 2017 Thru Dec. 31, 2018



Dec. 1, 2017 to Dec. 31, 2018 Spills Per 100 Miles of Pipe Union Sanitary District, State & Regional Average



Spill Rate Statistics - December 1, 2017 to December 31, 2018

Spills per 100 Miles of Pipe

	Category 1	Category 2	Category 3
USD AVERAGE	0.0	0.0	0.24
STATE AVERAGE	3.73	2.13	7.09
REGIONAL AVERAGE	4.61	2.34	9.94

Category 1 - 1,000 gallons or more. Discharges to surface water, not fully captured

Category 2 - 1,000 gallons or more. Does not reach surface waters, not fully captured

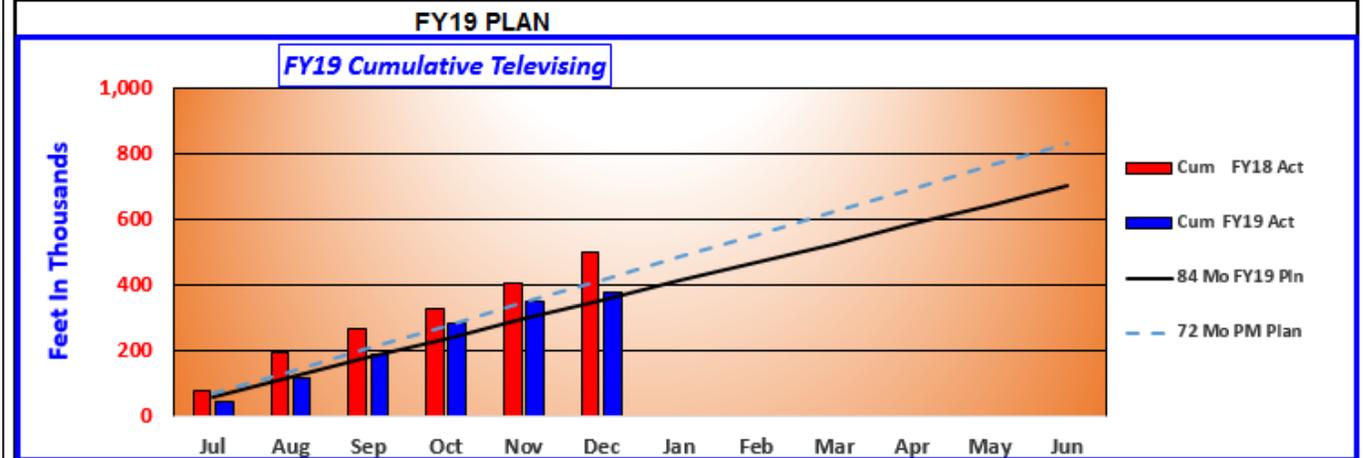
Category 3 - 1,000 gallons or less, does not reach surface waters, full captured

Performance Measures



Dec-18 Clean Cost/Ft = \$0.99

Description	FY19 Q1 Footage	Oct-18 Footages	Nov-18 Footages	Dec-18 Footages	FY19 Q2 Footage	FY19 YTD Footage	FY19 YE Goal	% Cmpl To Plan
84 Month Hydro-jet Clean	193,266	44,385	45,779	29,787	119,951	313,217	611,160	51.25%
Selective Line Cleaning	32,664	3,671	886	47,634	52,191	84,855	118,938	71.34%
Special Condition Clean	4,593	644	1,714	1,902	4,260	8,853	24,461	36.19%
Root Control/Chemical Cln	25,725	64,475	65,270	18,052	147,797	173,522	283,972	61.11%
Cast Iron Proj/Other (not included in Cost Per Foot)	0	0	0	0	0	0	0	0.00%
Totals	256,248	113,175	113,649	97,375	324,199	580,447	1,038,531	55.89%

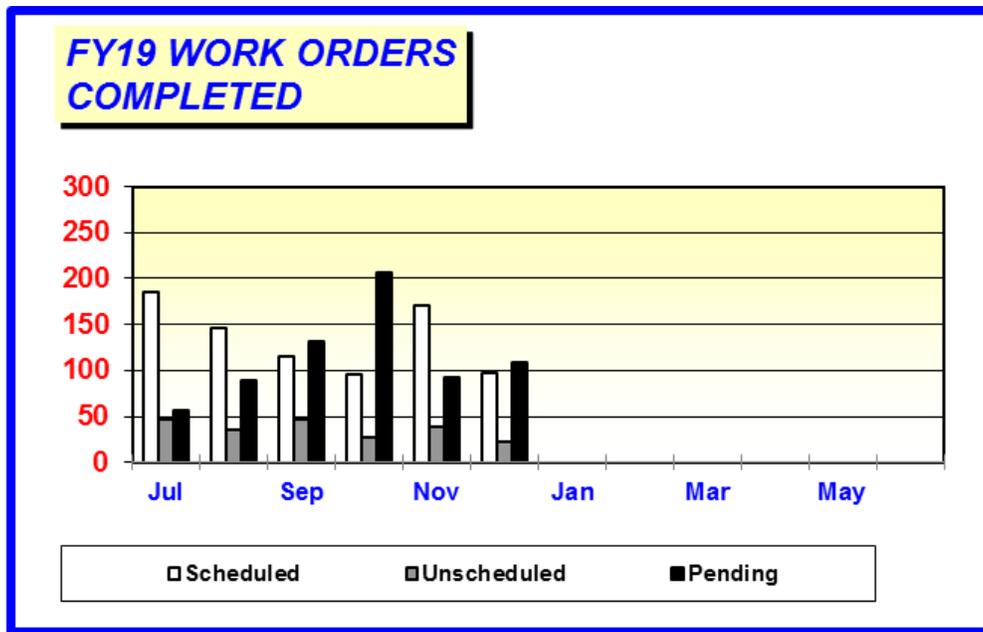


Dec-18 TV Cost/Ft = \$1.43

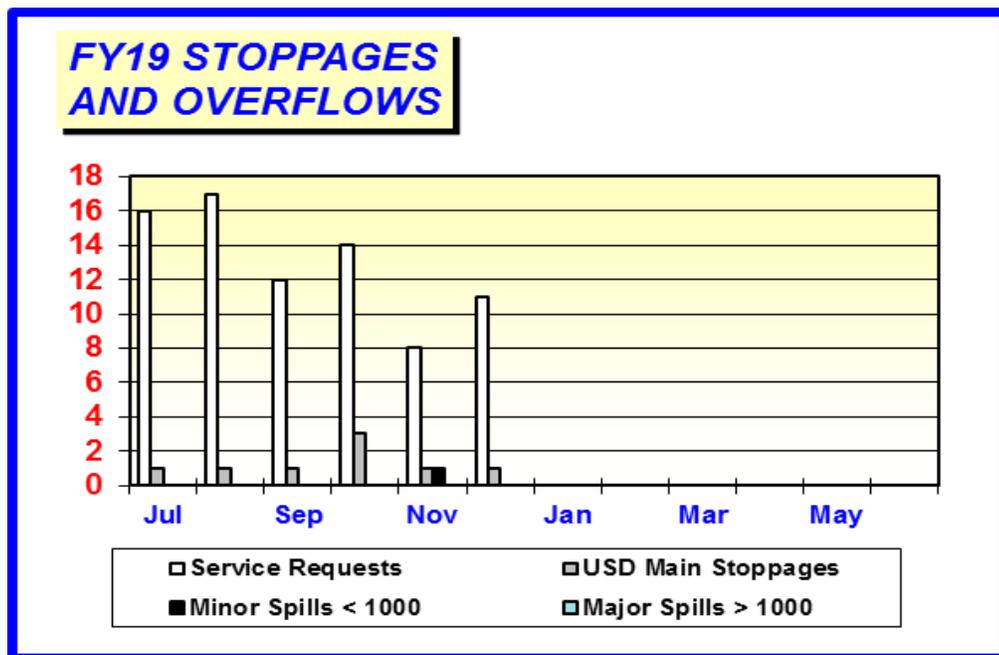
Description	FY19 Q1 Footage	Oct-18 Footages	Nov-18 Footages	Dec-18 Footages	FY19 Q2 Footage	FY19 YTD Footage	FY19 YE Goal	% Cmpl To Plan
84 Month TV Inspection	171,349	79,067	39,897	27,495	146,459	317,808	611,160	52.00%
Visual/Condition, Pre/Post Cnst TV	9,996	0	3,802	0	3,802	13,798	20,027	68.90%
New Development, CIP, Misc.	8,544	6,752	9,192	3,718	19,662	28,206	43,034	65.54%
QA/QC Line Condition	0	0	6,522	380	6,902	6,902	11,894	58.03%
QA/QC Root Control	0	6,752	7,508	0	14,260	14,260	14,199	100.43%
Totals	189,889	92,571	66,921	31,593	191,085	380,974	700,312	54.40%

Other Collection Services Status Data:

Support Team Work Order Status:



C/S Maintenance Status:



Fabrication, Maintenance and Construction Activities Report December 2018

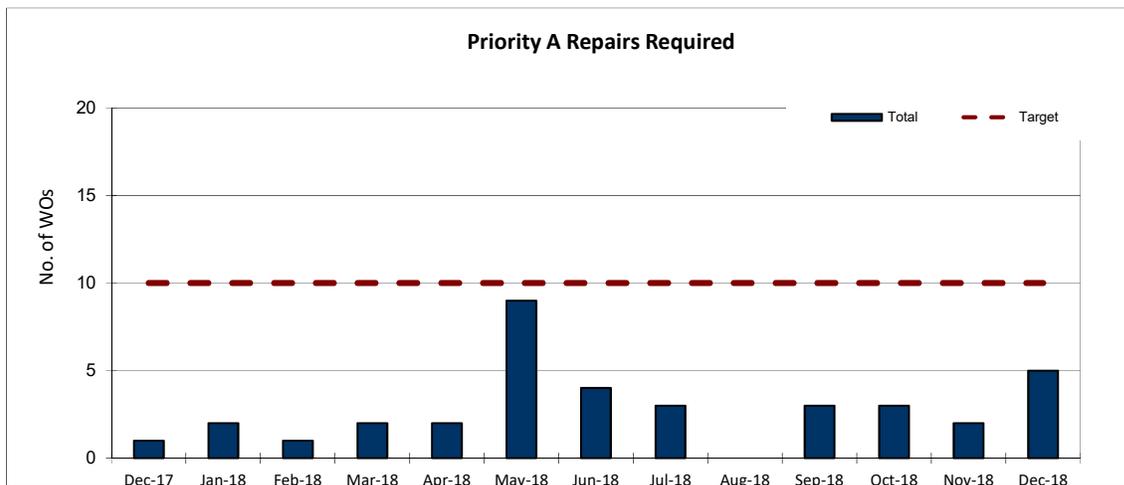
Progress/Accomplishments

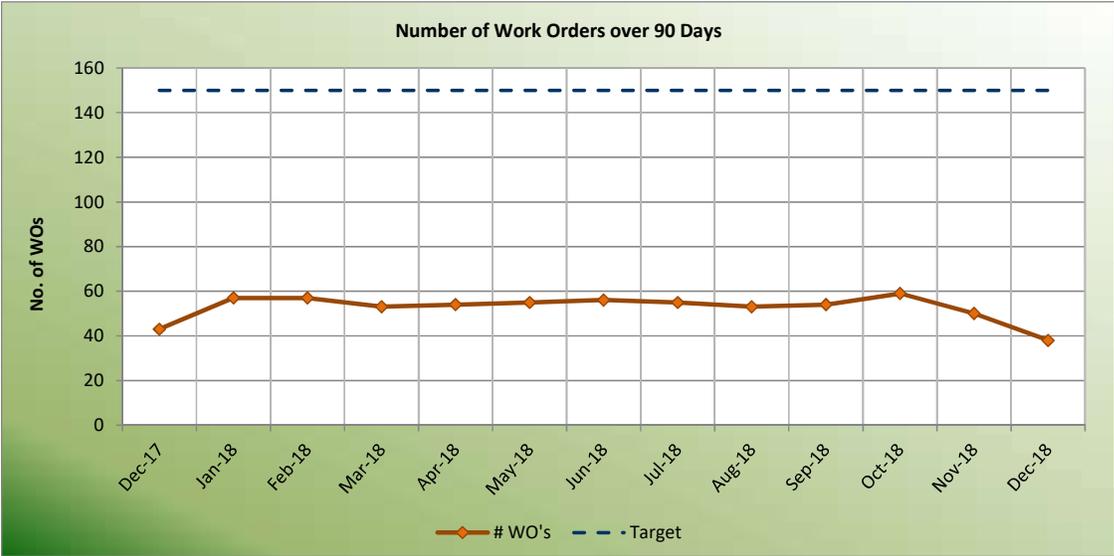
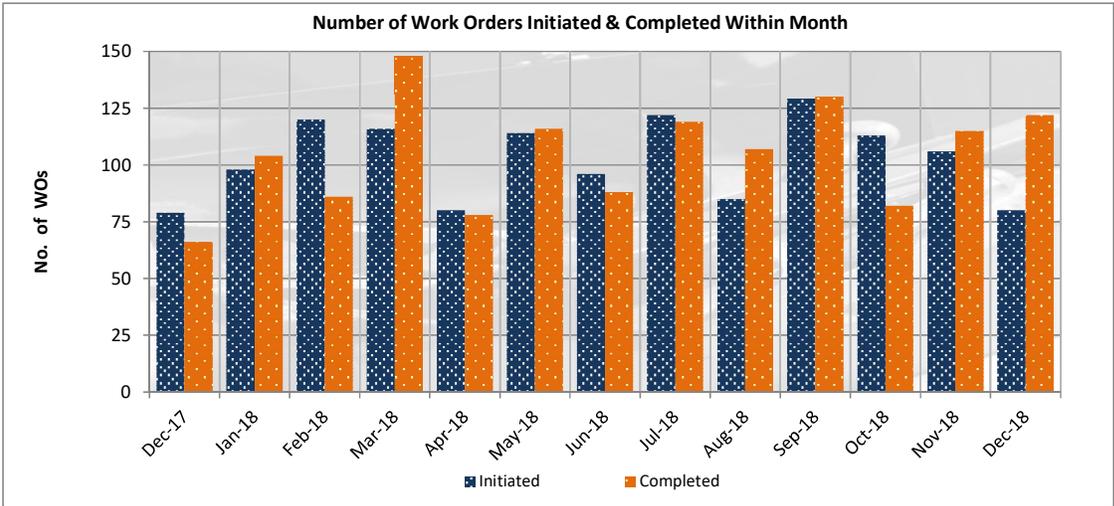
- Completed 92.45% of preventive maintenance activities for the month of December
- Completed 122 corrective maintenance work orders for the month of December
- Removal of old Cogen 1 (Waukesha)
- Overhaul EBDA Pump 2
- Aeration Basin 6 tubing replacement for acid cleaning
- Cogen 1 generator installation and bring back online

Future Planning

- Permanent Piian system installation
- ARV's
- Retubing of boiler
- Co-gen 1 2K service
- Secondary digester swap of crossover and distrubution tube due to struvite

Performance Measurements





**Treatment & Disposal
Activities Report
December 2018**

Progress/Accomplishments

- Maintained 100% compliance with NPDES permits.
- Completed 94% preventive maintenance activities for the month of December.
- Conducted competency testing of Plant Operator III Trainees.
- Supported Hazen and Sawyer's Secondary Treatment Improvements Predesign Converge Phase Plant Research.
- Attended IT Master Plan kickoff meeting.
- Attended Headworks 90% Design Workshop.
- Attended Digester No. 7 Design Modifications Workshop.
- Submitted data for health risk assessments for the Irvington and Newark pump stations to Jacobs.
- Attended demonstrations of two Laboratory Information Management System (LIMS) Software Packages and selected X-lims by Ethosoft for the LIMS implementation project.
- Purchased and installed a replacement muffle furnace for the laboratory.

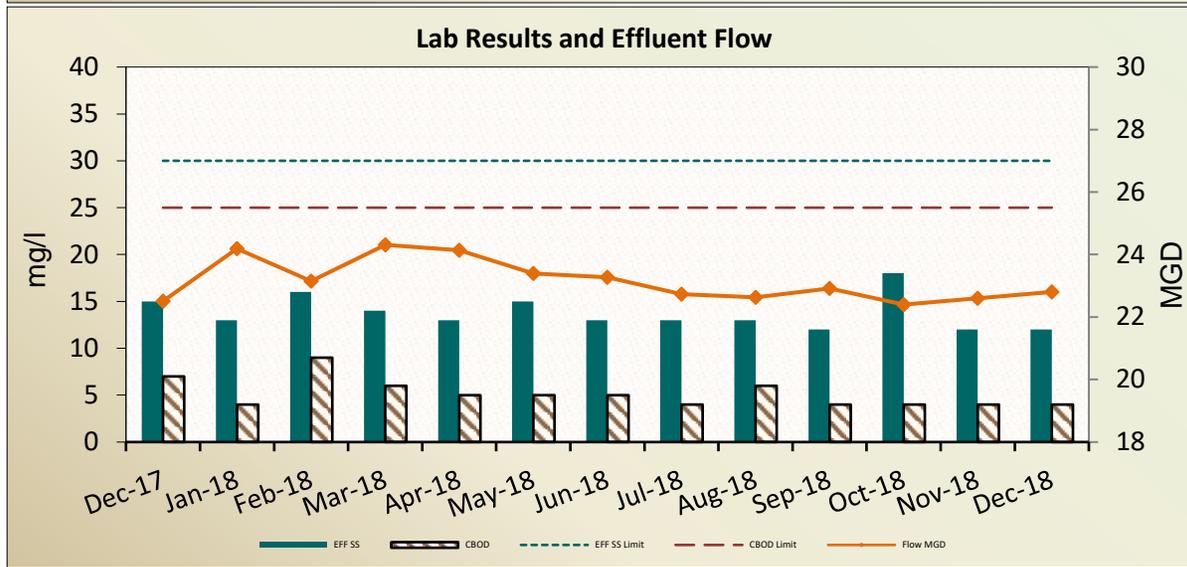
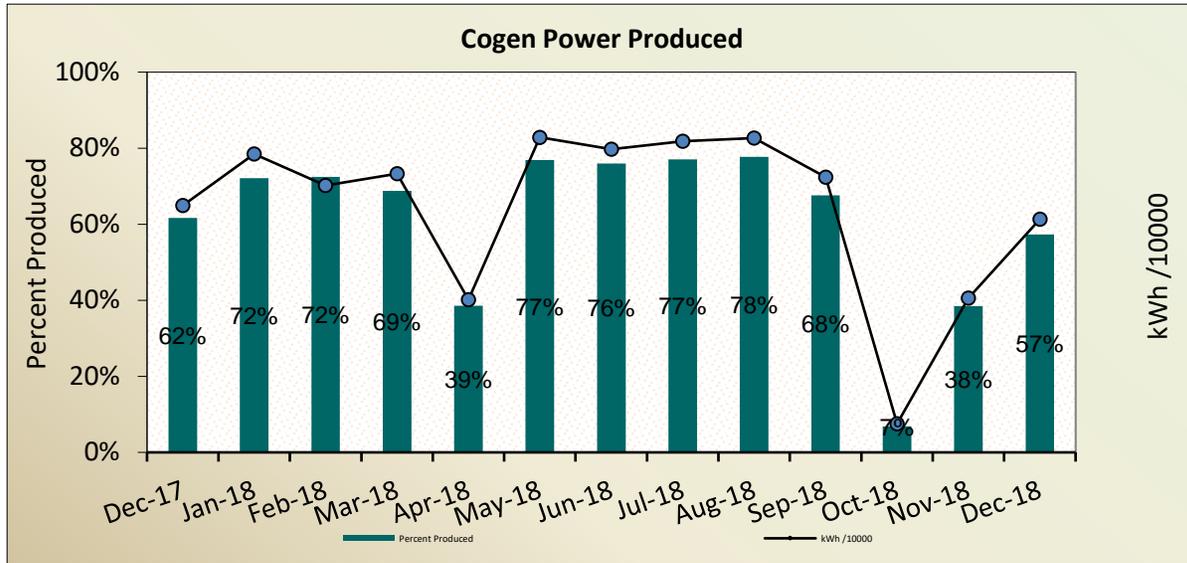
Future Planning

- Continue to test Operator III Trainees on competencies.
- Submit the Annual Biosolids report for 2018 as required by 40CFR Part 503.
- Review administrative draft of the second San Francisco nutrient watershed permit and attend a workshop by BACWA.
- Begin work on Invitation for Bid for Primary Digester No. 2 Cleaning.
- Visit SRCSD's Wastewater Treatment Plant to learn about their Safety Program and upcoming Plant Improvements Project.
- Provide information for the IT Master Plan.
- Assist DSRSD with hiring a Plant Operator I-II and Plant Operator III by joining their interview panel.
- Attend the BACWA Annual Meeting.

Other

- Cogen system produced 57% of power consumed for the month of December.

Performance Measurements



USD's Final Effluent Monthly Monitoring Results				
Parameter	EBDA Limit	Oct-18	Nov-18	Dec-18
Copper, µg/l	78	5.8	4.4	4.6
Mercury, µg/l	0.066	0.0024	0.0015	0.0024
Cyanide, µg/l	42	E 1.1	< 0.9	< 0.9
Ammonia- N, mg/L (Range)	130	40.7 - 43.5	36.6 - 43.7	41.7 - 47.1
Fecal Coliform, MPN/100ml (Range)				
• 5-Day Geometric Mean	500	6 - 37	39 - 69	14 - 37
• 11-Sample 90th Percentile	1100	36 - 64	64 - 79	47 - 79
Enterococci				
• Monthly Geometric Mean	240	10	11.9	11.9

E = Estimated value, concentration outside calibration range. For SIP, E = DNQ, estimated concentration.



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Karen W. Murphy, General Counsel
Regina McEvoy, Executive Assistant to the General Manager/Board Clerk

SUBJECT: Agenda Item No. 9 - Meeting of January 28, 2019
Consider Resolution Approving the Updated Conflict of Interest Code

Recommendation

It is recommended that the Board adopt a resolution approving the updated Conflict of Interest Code.

Background

The Political Reform Act, Government Code Section 87200, et seq., requires that the District review its Conflict of Interest Code every two years. The Conflict of Interest Code incorporates the Political Reform Act and sets forth the positions of officials that are required to submit a Form 700, Statement of Economic Interests, as well as the categories of interests that must be disclosed. The last review took place in late 2016.

The Conflict of Interest Code of the Union Sanitary District that was approved in December 2016 ("2016 Conflict of Interest Code") has been reviewed and found to require modification to include the position of the Human Resources Manager, as well as correct some updated code sections. The other designated positions and the disclosure categories will remain the same as those incorporated in the 2016 Conflict of Interest Code. Upon adoption of the attached resolution, District staff will submit the updated Conflict of Interest Code to Alameda County, the District's code reviewing body.

Attachments: Proposed resolution with Updated Conflict of Interest Code
Redline indicating changes from the 2016 Conflict of Interest Code

**UNION SANITARY DISTRICT
RESOLUTION NO. ____**

A RESOLUTION APPROVING A REVISED CONFLICT OF INTEREST CODE

WHEREAS, Government Code Section 87200, et seq. requires a biennial review of the District's Conflict of Interest Code; and

WHEREAS, the Conflict of Interest Code of the Union Sanitary District approved on December 12, 2016 ("2016 Conflict of Interest Code"), has been reviewed and found to require modification to add a new position – Human Resources Manager; and

WHEREAS, the remainder of the Conflict of Interest Code remains substantially the same as the 2016 Conflict of Interest Code.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE UNION SANITARY DISTRICT, AS FOLLOWS:

1. The revised Conflict of Interest Code is hereby approved, in the form attached hereto and incorporated herein by reference.
2. District staff is authorized to submit the revised Conflict of Interest Code to Alameda County, the code reviewing body, and to make any minor or technical revisions required by Alameda County.

The foregoing Resolution was duly and regularly adopted and passed by the Board of Directors of Union Sanitary District, Alameda County, California, at a meeting held on the 28th day of January, 2019.

AYES:
NOES:
ABSENT:
ABSTAIN:

Anjali Lathi
President, Board of Directors
UNION SANITARY DISTRICT

Attest:

Jennifer Toy
Secretary, Board of Directors
UNION SANITARY DISTRICT

CONFLICT OF INTEREST CODE

UNION SANITARY DISTRICT

Updated January 28, 2019

A. PURPOSE

The purposes of this Code are to provide for the disclosure of assets, investments, interests in real property, income, and business positions of designated District employees which may be materially affected by their official actions and to provide for the disqualification of designated employees from participation in District decisions in which they may have a financial interest.

B. BACKGROUND

The Political Reform Act of 1974, Government Code Sections 81000 *et seq.*, requires state and local agencies to adopt and promulgate Conflict of Interest Codes.

The California Fair Political Practices Commission has, pursuant to its authority under Section 83112 of the Government Code, adopted a regulation which contains the terms of a standard Conflict of Interest Code. This regulation is codified at Title 2 California Code of Regulations Section 18730. This regulation may be incorporated by reference by local agencies and, together with the designation of employees and disclosure categories, meets the requirements of the Political Reform Act.

C. ADOPTION OF CONFLICT OF INTEREST CODE

1. The terms of Title 2 California Code of Regulations Section 18730 are hereby incorporated by reference and, together with the attached Appendix in which officials and employees are designated and disclosure categories are set forth, constitute the Conflict of Interest Code of Union Sanitary District (“District”).

2. Designed positions are set forth in the attached Appendix and are those positions whose duties entail the making or participating in the making of decisions which may foreseeably have a material impact on financial interests. Each person filling a designated position, and any person filling a designated position on a temporary or acting basis, shall

disclose all of the information required under Section C(3) of this Code, on forms provided by the District.

3. No person holding a position listed in Section C(2), immediately above, shall make or participate in the making of a decision when he or she has a financial interest, as defined in Section 87103 of the California Government Code, when it is reasonably foreseeable that the interest may be affected materially by the decision.

4. Designated employees shall file their Statements of Economic Interests with the District, which will make the statements available for public inspection and reproduction (Government Code Section 81800). Statements of designated employees will be retained by the District. Elected officials and the General Manager/District Engineer shall file their Statements of Economic Interests with the District and the District shall then transmit the statements to Alameda County.

5. As provided in Government Code Section 82011, the code reviewing body is the Alameda County Board of Supervisors. Pursuant to Title 2 California Code of Regulations Section 18227, the Alameda County Clerk shall be the official responsible for receiving and retaining statements of economic interests filed with the Board of Supervisors.

6. The General Manager/District Engineer shall have the power to designate positions for disclosure required by this code on an interim basis pending Board review. Such designations shall be made if the General Manager/District Engineer determines that the position entails the making or participating in the making of decisions which may foreseeably have a material effect on financial interests.

7. Subsequent amendments to Title 2 California Code of Regulations Section 18730 duly adopted by the Fair Political Practices Commission, after public notice and hearings, are also hereby incorporated by reference unless the Board of Directors of the District, within 90

days after the date on which an amendment to Section 18730 becomes effective, adopts a resolution providing that the amendment is not to be incorporated into this Code.

8. This Conflict of Interest Code supersedes any Conflict of Interest Code previously adopted by the District.

9. Nothing contained herein is intended to modify or abridge the provisions of the Political Reform Act of 1974 (Government Code section 81000, *et seq.*). The provisions of this code are in addition to Government Code Section 87100 and other laws pertaining to conflicts of interest, including, but not limited to, Government Code Section 1090, *et seq.*

APPENDIX

EXHIBIT 1 UNION SANITARY DISTRICT LIST OF DESIGNATED EMPLOYEES AND DISCLOSURE CATEGORIES FOR CONFLICT OF INTEREST CODE

Each person holding any position listed below must file statements disclosing the kinds of financial interests shown for the employee's position. Statements must be filed at the times and on the forms prescribed by law. Failure to file statements on time may result in penalties, including but not limited to late fines.

<u>Designated Positions</u>	<u>Disclosure Category</u>
Work Group Manager – Technical Services	1,2,3,4
Work Group Manager – Collection Services	1,2,3,4
Work Group Manager – Treatment & Disposal Services	1,2,3,4
Work Group Manager – Fabrication, Maintenance & Construction	1,2,3,4
Human Resources Manager	1,2,3,4
Purchasing Agent	1,2,3,4
Consultants**	1,2,3,4

It has been determined that the positions listed below must automatically file a statement of economic interests pursuant to Government Code Section 87200:

Directors
General Manager/District Engineer
General Counsel
Work Group Manager – Business Services

** 2 California Code of Regulations Section 18700.3(a) defines "consultant" as an individual who, pursuant to a contract with a state or local government agency:

- (1) Makes a Governmental decision whether to:
 - (A) Approve a rate, rule, or regulation;
 - (B) Adopt or enforce a law;
 - (C) Issue, deny, suspend, or revoke any permit license, application, certificate, approval, order, or similar authorization or entitlement;
 - (D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract which requires agency approval;
 - (E) Grant agency approval to a contract which requires agency approval and in which the agency is a party or to the specifications for such a contract;
 - (F) Grant agency approval to a plan, design, report, study, or similar item;
 - (G) Adopt, or grant agency approval of policies, standards, or guidelines for the agency, or for any subdivision thereof; OR
- (2) Serves in a staff capacity with the agency and in that capacity participates in making a governmental decision as defined in Regulation 18704(a) and (b) or

performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code.

Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The General Manager/District Engineer may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements described in this section. (See Government Code § 82019 and FPPC Regulations § 18219 and 18734.) Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The General Manager/District Engineer's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict of interest code. (See Government Code § 81008.)

Nothing herein excuses any consultant from any other provisions of this Conflict of Interest Code, specifically those dealing with disqualification.

EXHIBIT 2
DESCRIPTION OF DISCLOSURE CATEGORIES

An investment, interest in real property, or income is reportable if the business entity in which the investment is held, the interest in real property, or the income or source of income may likely be affected materially by any decision made or participated in by the designated person because of his or her position.

Category 1. Investments

A designated employee assigned to Category 1 is required to disclose investments that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for investments.

Category 2. Interests in Real Property

A designated employee assigned to Category 2 is required to disclose interests in real property that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for interests in real property.

Category 3. Income

A designated employee assigned to Category 3 is required to disclose income that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for income.

Category 4. Business Positions

A designated employee assigned to Category 4 is required to disclose any business entity in which the designated employee is a director, officer, partner, trustee, employee or holds any position of management that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for business positions.

CONFLICT OF INTEREST CODE

UNION SANITARY DISTRICT

Updated ~~December 12~~ January 28, 2016 2019

A. PURPOSE

The purposes of this Code are to provide for the disclosure of assets, investments, interests in real property, income, and business positions of designated District employees which may be materially affected by their official actions and to provide for the disqualification of designated employees from participation in District decisions in which they may have a financial interest.

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1. The terms of Title 2 California Code of Regulations Section 18730 are hereby incorporated by reference and, together with the attached Appendix in which officials and employees are designated and disclosure categories are set forth, constitute the Conflict of Interest Code of Union Sanitary District (“District”).

2. Designed positions are set forth in the attached Appendix and are those positions whose duties entail the making or participating in the making of decisions which may foreseeably have a material impact on financial interests. Each person filling a designated position, and any person filling a designated position on a temporary or acting basis, shall

disclose all of the information required under Section ~~3-C(3)~~ of this Code, on forms provided by the District.

3. No person holding a position listed in ~~section 2~~ Section C(2), immediately above, shall make or participate in the making of a decision when he or she has a financial interest, as defined in Section 87103 of the California Government Code, when it is reasonably foreseeable that the interest may be affected materially by the decision.

4. Designated employees shall file their Statements of Economic Interests with the District, which will make the statements available for public inspection and reproduction (Government Code Section 81800). Statements of designated employees will be retained by the District. Elected officials and the General Manager/District Engineer shall file their Statements of Economic Interests with the District, ~~however~~ and the District shall then transmit the statements to Alameda County.

5. As provided in Government Code Section 82011, the code reviewing body is the Alameda County Board of Supervisors. Pursuant to Title 2 California Code of Regulations Section 18227, the Alameda County Clerk shall be the official responsible for receiving and retaining statements of economic interests filed with the Board of Supervisors.

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7. Subsequent amendments to Title 2 California Code of Regulations Section 18730 duly adopted by the Fair Political Practices Commission, after public notice and hearings, are also hereby incorporated by reference unless the Board of Directors of the District, within 90

days after the date on which an amendment to Section 18730 becomes effective, adopts a resolution providing that the amendment is not to be incorporated into this Code.

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9. Nothing contained herein is intended to modify or abridge the provisions of the Political Reform Act of 1974 (Government Code section 81000, *et seq.*). The provisions of this code are in addition to Government Code Section 87100 and other laws pertaining to conflicts of interest, including, but not limited to, Government Code Section 1090, *et seq.*

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It has been determined that the positions listed below must automatically file a statement of economic interests pursuant to Government Code Section 87200:

Directors
General Manager/District Engineer
General Counsel
Work Group Manager – Business Services

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- (1) Makes a Governmental decision whether to:
 - ~~(i)~~(A) Approve a rate, rule, or regulation;
 - ~~(ii)~~(B) Adopt or enforce a law;
 - ~~(iii)~~(C) Issue, deny, suspend, or revoke any permit license, application, certificate, approval, order, or similar authorization or entitlement;
 - ~~(iv)~~(D) Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract which requires agency approval;
 - ~~(v)~~(E) Grant agency approval to a contract which requires agency approval and in which the agency is a party or to the specifications for such a contract;
 - ~~(vi)~~(F) Grant agency approval to a plan, design, report, study, or similar item;
 - ~~(vii)~~(G) Adopt, or grant agency approval of policies, standards, or guidelines for the agency, or for any subdivision thereof; OR

- (2) Serves in a staff capacity with the agency and in that capacity [participates in making a governmental decision as defined in Regulation 18704\(a\) and \(b\)](#) or performs the same or substantially all the same duties for the agency that would otherwise be performed by an individual holding a position specified in the agency's Conflict of Interest Code.

Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The General Manager/District Engineer may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements described in this section. (See Government Code § 82019 and FPPC Regulations § 18219 and 18734.) Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The General Manager/District Engineer's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict of interest code. (See Government Code § 81008.)

Nothing herein excuses any consultant from any other provisions of this Conflict of Interest Code, specifically those dealing with disqualification.

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Category 3. Income

A designated employee assigned to Category 3 is required to disclose income that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for income.

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A designated employee assigned to Category 4 is required to disclose any business entity in which the designated employee is a director, officer, partner, trustee, employee or holds any position of management that may be materially affected by any decision made or participated in by the designated employee. The employee should complete the appropriate schedules of Form 700 for business positions.



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 28, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Laurie Brenner, Business Services Coach

SUBJECT: Agenda Item No. 10 - Meeting of January 28, 2019
Review and Consider Approval of Policy No. 2030 - Investment Policy

Recommendation

Review and consider approval of the District's Investment Policy (No. 2030) and renewal of delegation of authority of Treasurer to the Business Services Coach for a one-year period, per CA Govt. Code Section 53607 (cited below).

Section 53607. (Amended by Stats. 1996, Ch. 749, Sec. 6.)
Cite as: Cal. Gov't. Code §53607.

The authority of the legislative body to invest or to reinvest funds of a local agency, or to sell or exchange securities so purchased, may be delegated for a one-year period by the legislative body to the treasurer of the local agency, who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires, and shall make a monthly report of those transactions to the legislative body. Subject to review, the legislative body may renew the delegation of authority pursuant to this section each year.

Background

The District Investment Policy (No. 2030) requires review and approval by the Board of Directors on an annual basis. The Policy was last presented in February 2017. No investments have been made on behalf of the District since June 2017.

In December 2018, the District retained the services of PFM Asset Management LLC to serve as the District's investment advisory agent. Staff and PFM have been collaborating on updating the Investment Policy to more accurately reflect language in current government code, including adding additional categories of financial instruments authorized for acquisition by government agencies, including supernationals and asset backed securities. This provides the District with additional authorized investment opportunities. An example of a supernational investment would be the purchase of a bond from the World Bank and an example of an asset backed security would be a bond or note to a company collateralized by assets, such as a note issued by a John Deere equipment trust backed by an equipment lease or leases.

Staff and PFM representatives will be available to answer questions.

Attachments:

Investment Policy No. 2030 - redline version

Investment Policy No. 2030 - changes incorporated

Union Sanitary District Policy

Effective: 1/28/19	Investment Policy	Policy Number 2030 Page 1 of 17
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I. INVESTMENT POLICY

A. Purpose

The purpose of ~~the Union~~the Union Sanitary District's ("USD") Investment Policy is to establish clear guidelines, objectives, policies and understanding for the Board of Directors, USD management, responsible employees, citizens and third parties for the investment of ~~all~~ certain USD funds. USD funds invested shall provide sufficient cash flow to meet current and expected operating expenses and to fund capital requirements as described in USD's ~~10-year~~ Capital Improvement Program and ~~10-year~~ Financial Plan; ~~and enhance the economic status of USD while protecting its cash.~~ USD shall review this policy as least once annually, and may change its policies as investment objectives change.

Commented [MS1]: Used certain instead of all to avoid conflict in "Scope."

B. Objectives

The objectives of this investment policy are, in order of priority:

1. To assure ongoing compliance with all Federal, State and local laws governing the investment of public funds;
2. To ensure safety of invested funds;
3. To maintain sufficient liquidity to meet cash flow needs for all operating requirements which might be reasonably anticipated without requiring a sale of securities;
4. Maintain a diversified investment portfolio to avoid incurring unreasonable risks regarding specific security types or individual financial institutes; and
5. To maximize the~~attain a "market average rate of return consistent with the primary objectives of safety and liquidity.~~
4. ~~To attain a "market average rate of return" consistent t with the primary objectives of safety and liquidity. The expected rate of return on USD's portfolio is more specifically defined in Section IV.~~

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C. Prudence

1. The Prudent Investor Standard shall be used by investment officials, and shall be applied in the context of managing an overall portfolio. The prudent investor standard states:

When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency.

Investment Staff acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported within 30 days and appropriate action is taken to control adverse developments.

~~1. The Prudent Investor Standard: When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency. Within the limitations of this section and considering individual investments as part of an overall strategy, a trustee is authorized to acquire investments as authorized by law.~~

D. Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

II. OPERATIONS AND PROCEDURAL MATTERS

A. Scope

This investment policy applies to all financial assets and investment activities of USD except [proceeds of debt issued under an indenture](#) and USD's Deferred Compensation Plan managed by a third party administrator and invested by individual participants; and USD's retiree medical trust held with CalPERS (the CERBT Trust) and pension assets held with CalPERS since the assets of both plans are managed by CalPERS.

Proceeds of debt issuance shall be invested in accordance with the general investment philosophy of USD as set forth in this policy; however, such proceeds are invested in accordance with permitted investment provisions of their specific bond indentures.

B. Delegation of Authority

1. Authority to manage USD's investment program is derived from the California Government Code Sections 53600 et seq., and USD's Charter.
2. With the approval of the Board of Directors, USD may engage the services of an external investment advisor to assist in the management of USD's investment portfolio in a manner consistent with USD's objectives. Such external investment advisors may be granted discretion to purchase and sell investment securities in accordance with this Investment Policy. Such discretion will be subject to oversight and other restrictions which are to be described in a written agreement. Such advisor must be registered under the Investment Advisers Act of 1940.
3. In accordance with Government Code Section 53607, the Board of Directors delegates to the General Manager/Treasurer, or ~~their~~ designee, the authority to invest, sell or exchange securities. This delegation of authority must be reviewed, and if still applicable, renewed on an annual basis. The Board shall receive a monthly report of the transactions conducted on its behalf.

C. Internal Controls

The General Manager/Treasurer is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the entity are protected from loss, theft or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

As part of the annual financial audit, USD's external auditor will perform a review of investment transactions to verify compliance with policies and procedures.

D. Delivery vs. Payment

All investment transactions of USD shall be conducted using standard delivery-vs.-payment procedures.

E. Safekeeping of Securities

To protect against potential losses by collapse of individual securities dealers, and to enhance access to securities, interest payments and maturity proceeds, all securities owned by USD shall be held in safekeeping by a third-party bank

trust department, acting as agent for USD under the terms of a custody agreement executed by the bank and by USD. The only exception to the foregoing shall be depository accounts and securities purchases made with: (i) local government investment pools; (ii) time certificates of deposit, and, (iii) money market mutual funds, since the purchased securities are not deliverable. Evidence of each of these investments will be held by USD.

F. Qualifications and Selection of Broker/Dealers

USD shall purchase investments with security broker/dealers based on their reliability; trustworthiness; and their expertise in public cash management. Brokers/dealers must be registered with the state and provide upon request other information to determine their creditworthiness and trustworthiness such as proof of Financial Industry Regulatory Authority (FINRA) registration. A list of security brokers/dealers USD is doing business with will be provided to the Board of Directors with the monthly investment report. A copy of the current USD investment policy will be provided to all security broker/dealers doing business with USD. It shall be the policy of USD to purchase securities only from authorized institutions or firms.

For transactions initiated through an external investment advisor, the investment advisor may use their own list of approved broker/dealers and financial institutions, which it will maintain and review periodically.

III. PERMITTED INVESTMENT AND PORTFOLIO RISK MANAGEMENT

A. Authorized Investments

All investments shall be made in accordance with Sections 53600 et seq. of the Government Code of California and as described within this Investment Policy. Within the investments permitted by the Government Code, USD seeks to further restrict eligible investment to the investments listed below. In the event an apparent discrepancy is found between this Investment Policy and the Government Code, the more restrictive parameters will take precedence. Percentage holding limits listed in this section apply at the time the security is purchased.

1. United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest~~U.S. Treasury securities not exceeding five (5) years to final maturity.~~ There is no limitation as to the percentage of the portfolio that may be invested in this category.
- ~~2.~~ Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued

~~3.~~

~~4.2. by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. With the exception of federal agency mortgage-backed securities which are limited to twenty percent (20%) of the total portfolio there is no limitation as to the percentage of the portfolio that may be invested in this category, provided that there shall be no maximum allowable investment in such securities. Purchases of Federal Agency mortgage-backed securities issued by or fully guaranteed as to principal and interest by government agencies are limited to a maximum of 20 % of the portfolio.~~

~~3. Eligible Bankers' acceptances, otherwise known as bills of exchange or time drafts, that are drawn on and accepted by a commercial bank with a final maturity not exceeding 180 days from the date of trade settlement, rated at least "A-1" or the equivalent by a nationally recognized statistical-rating organization (NRSRO). The aggregate investment in banker's acceptances shall not exceed forty percent (40%) of USD's total portfolio, highest letter and numerical short term debt ratings by a National Recognized Standard Rating Organization (NRSRO) and an A1 or P1 or equivalent rating, if any, of other debt, shall have a maximum duration of one hundred eighty (180) days. The aggregate investment in banker's acceptances shall not exceed forty percent (40%) of USD's total portfolio, and no more than five percent (5%) of the District's total portfolio shall be invested in banker's acceptances of any one bank.~~

~~4. Bank Deposits. Federally insured or collateralized time deposits (Non-negotiable certificates of deposit) provided that the certificates of deposit meet the conditions in either paragraph (a) or paragraph (b):~~

- ~~a) FDIC insured or fully collateralized demand deposit accounts, savings accounts, market rate accounts, time certificates of deposits ("TCDs") and other types of bank deposits in financial institutions located in California. Bank Certificates of deposits shall meet the requirements for deposit under Government Code Section 53630 et. seq. To be eligible to receive USD deposits, the financial institution must have received a minimum overall satisfactory rating for meeting the credit needs of California Communities in its most recent evaluation, as provided in Government Code Section 53635.2. Deposits are required to be collateralized as specified under Government Code Section 53630 et. seq. The General Manager/Treasurer, at his or her discretion, may waive the collateralization requirements for any portion that is covered by federal deposit insurance. USD shall have a signed agreement with all depositories receiving USD deposits per Government Code Section 53649. The maturity of time deposits may not exceed five years. There is no limit on the percentage of the portfolio that may be invested in bank deposits. However, a maximum of 20 percent of the portfolio may be invested in time deposits.~~

b) Certificates of deposit placed through a deposit placement service shall meet the requirements under Government Code Section 53601.8. The full amount of the principal and the interest that may be accrued during the maximum term of each certificate of deposit shall at all times be insured by federal deposit insurance. The maximum term for placement service certificates of deposit shall be five years.

The combined amount invested in placement service certificates of deposit and negotiable certificates of deposit shall not exceed twenty percent (20%) of the portfolio

5. ~~Negotiable certificates of deposit~~ Negotiable certificates of deposit (NCD)s issued by a nationally or state- chartered bank, a savings association or a federal association (as defined by Section 5102 by the Financial Code), a state or federal credit union, or by a federally licensed or state-licensed branch of a foreign bank. Purchases of NCDs shall not exceed thirty percent (30%) of the total portfolio ~~and will have a maturity date not to exceed five (5) years.~~
6. Repurchase agreements with a final termination date not exceeding 360/90 days from the date of trade settlement collateralized solely by United States Treasury, federal agency, or United States government sponsored enterprises permitted by this Investment Policy. The purchased securities (the "collateral") shall have a minimum market value of one hundred and two percent (102%) of the dollar value of the funds invested. The market value of the collateral securities shall be marked-to-the-market daily and the value shall be adjusted no less frequently than weekly. No substitution of collateral shall be allowed without the prior approval of the General Manager /Treasurer. All collateral securing repurchase agreements must be delivered to USD's custodian bank or handled under a tri-party repurchase agreement. USD or its trustee shall have a perfected first security interest under the Uniform Commercial Code in all securities subject to repurchase agreement.

Approved repurchase agreement counterparties shall have a repurchase agreement counterparty credit rating of at least "A-1" or the equivalent and a long-term credit rating of at least "A" or the equivalent by a NRSRO. Repurchase agreement counterparties shall execute a USD approved master repurchase agreement with USD. No more than ten percent (10%) of USD's total portfolio shall be invested in repurchase agreements.

6. Repurchase agreements, provided that:

- a. ~~The maximum maturity of repurchase agreements shall be 90 days;~~
- b. ~~No more than 10% of the portfolio shall be invested in repurchase agreements;~~
- c. ~~Repurchase agreements shall be fully secured by deliverable U.S. Treasury and Federal Agency obligations as described under Sections III (A1-2) of this policy (without limit to maturity) having a market value at all times of at least one hundred two percent (102%) of the amount of the contract. If additional collateral is required then that collateral must be delivered within one business day (if a collateral deficiency is not corrected within this time frame, the collateral securities will be liquidated);~~
- d. ~~Securities used as collateral for repurchase agreements, shall be free and clear of any lien and be held by USD's custodian bank or an independent third party custodian acting solely as agent for the USD,~~

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~~provided such third party is not the seller under the repurchase agreement;~~

~~e. The repurchase agreements are the subject of a master repurchase agreement or a specific written repurchase agreement between USD and the provider of the repurchase agreement; and~~

~~f. The counterparty meets the following criteria:~~

~~(i) The counterparty must be a primary government securities dealer who reports daily to the Federal Reserve Bank of New York, or a bank, savings and loan association, or diversified securities broker dealer having \$5 billion in assets and \$500 million in capital and subject to regulation of capital standards by any state or federal regulatory agency;~~

- ~~(ii) Has a long term credit rating of at least 'AA' or the equivalent from a NRSRO;~~
- ~~(iii) Has been in operation for at least 5 years; and~~
- ~~(iv) Is reputable among market participants.~~

7. Commercial Paper with the highest letter and numerical rating as provided for by a NRSRO. Eligible commercial paper shall have a final maturity not exceeding 270 days from the date of trade settlement. The aggregate investment in commercial paper shall not exceed twenty five percent (25%) of USD's total portfolio. Furthermore, USD may purchase no more than 10 percent of the outstanding commercial paper of any single issuer. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph 1 or paragraph 2 below:

(1) The entity meets the following criteria:

- is organized and operating in the United States as a general corporation;
- has total assets in excess of five hundred million dollars (\$500,000,000); and
- has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by an NRSRO.

(2) The entity meets the following criteria:

- is organized within the United States as a special purpose corporation, trust, or limited liability company;
- has program wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or surety bond; and
- has commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

~~7. with the highest letter and numerical short term debt ratings by a NRSRO and A1 or P1 or equivalent rating with a corporation organized and operating in the United States and has assets in excess of five hundred million dollars (\$500,000,000). No more than twenty five percent (25%) of the portfolio shall be invested in commercial paper and no more than five percent (5%) of USD's total portfolio shall be invested in the commercial paper of any one issuer. Maximum maturity shall not exceed two hundred seventy (270) days~~

- 8. State of California's Local Agency Investment Fund ("LAIF"), pursuant to California Code Section 16429.1. A maximum of seventy percent (70%) of USD's funds or the limit permitted by the State may be invested in LAIF, whichever is less;
- 9. Corporate medium-term notes, defined as all corporate and depository

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institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Notes eligible for investment under this subdivision shall be rated in a rating category of "A" or its equivalent or better by an NRSRO. A or better by a NRSRO. Purchases may not exceed thirty percent (30%) of invested funds, ~~and five percent (5%) of the total portfolio of any one issuer's securities.~~

10. Municipal Obligations. USD may purchase municipal obligations in the following categories.

- a. USD Bonds – Bonds issued by USD, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by USD or by a department, board, agency, or authority of USD.
- b. California State Obligations – Registered state warrants or treasury notes or bonds of the State of California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the State or by a department, board, agency, or authority of the State.

- c. Local Agency Bonds – Bonds, notes, warrants, or other evidences of indebtedness of any local agency within the State of California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency.

With the exception of obligations issued by USD, purchases of municipal obligations are limited to securities rated at least in the “A” (long-term) or “A-1” (short-term), or their equivalents, by a NRSRO. Obligations shall have a maximum maturity of five years. A maximum of thirty percent (30%) of the portfolio may be invested in this category. ~~The amount invested with any one issuer shall not exceed ten percent (10%) of the portfolio.~~

11. Money market mutual funds, provided that such funds

- a. Are registered with the Securities and Exchange Commission and are rated “AAAm” or its equivalent by not less than two NRSROs; or have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience managing money market mutual funds with assets under management in excess of five hundred million dollars (\$500,000,000); and
- b. The purchase price of shares shall not exceed twenty percent (20%) of USD’s portfolio; and
- c. If USD has funds invested in a money market fund, a copy of fund’s information statement shall be maintained on file for due diligence. In addition, the General Manager/Treasurer should review the fund’s summary holdings on a quarterly basis.

12. Shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (o) as provided, provided that

- a. A maximum of fifty percent (50%) of USD’s funds may be invested in the shares of any one investment pool;
- b. The pool’s investment advisor meets the requirements of 53601(p);
- c. The pool seeks to maintain a stable Net Asset Value (“NAV”);

- d. The pool is rated "AAAm" or its equivalent by a NRSRO; and
- e. If USD has funds invested in a pool, a copy of pool's information statement shall be maintained on file for due diligence. In addition, the General Manager/Treasurer should review the pool's summary holdings on a quarterly basis.

13. A mortgage passthrough security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable passthrough certificate, or consumer receivable-backed bond of a maximum of five years' maturity. Securities eligible for investment under this subdivision shall be issued by an issuer rated in a rating category of "A" or its equivalent or better for the issuer's debt as provided by an NRSRO and rated in a rating category of "AA" or its equivalent or better by an NRSRO. Purchases may not exceed twenty percent (20%) of invested funds.

13-14. United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or the Inter-American Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AA" or better by an NRSRO and shall not exceed thirty percent (30%) of the agency's total portfolio that may be invested pursuant to this section.

B. Prohibited Investment Vehicles and Practices

1. State law notwithstanding, any investments not specifically described herein are prohibited, including, but not limited to, mutual funds.
2. In accordance with Government Code Section 53601.6, investment in inverse floaters, range notes, or mortgage derived interest-only strips is prohibited.
3. In accordance with Government Code Section 53601.6, investment in any security that could result in a zero interest accrual if held to maturity is prohibited.
4. Trading securities for the sole purpose of speculating on the future direction of interest rates is prohibited.
5. Purchasing or selling securities on margin is prohibited.
6. The use of reverse repurchase agreements, securities lending or any other form of borrowing or leverage is prohibited.

7. USD is not permitted to deposit funds into any state or federal credit union, if a member of the Board of Directors, or any person with investment decision making authority also serves on the Board of Directors, or any committee appointed by the Board of Directors, or the credit committee or supervisory committee, of the state or federal credit union.

C. Mitigating Credit Risk in the Portfolio

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. USD shall mitigate credit risk by adopting the following strategies:

- 1. The diversification requirements included in Section III (A) are designed to mitigate credit risk in the portfolio;
- 2. No more than five percent (~~105%~~) of the total portfolio may be invested in securities of any single issuer, other than LAIF, local government investment pools, all U.S. Government, its agencies and instrumentalities. ~~In regards to commercial paper and medium term notes no more than five percent (5%) of the total two combined shall be with the same issuing company; and~~
- 3. USD may elect to sell a security prior to its maturity and record a capital gain or loss in order to improve the quality, liquidity, return, or yield of the portfolio in response to market conditions or USD’s risk preferences.

~~3.4.~~ If securities owned by USD are downgraded by a NRSRO to a level below the quality required by this Investment Policy, it shall be USD’s policy to review the credit situation and make a determination as to whether to sell or retain such securities in the portfolio. ~~Please see Appendix A for credit ratings.~~

~~If a security is downgraded two rating categories below the level required by USD (A, depending on the rating Agency), the security shall be sold immediately.~~

~~If a security is downgraded one rating category below the level required by this policy, USD will use discretion in determining whether to sell or hold the security based on its current maturity, the loss in value, the economic outlook for the issuer, and other relevant factors.~~

If a decision is made to retain a downgraded security in the portfolio, its presence in the portfolio will be monitored and reported ~~monthly~~ to USD’s Board of Directors. USD will use discretion in determining whether to sell or hold the security based on its current maturity, the loss in value, the economic outlook for the issuer, and other relevant factors.

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IV. INVESTMENT PERFORMANCE OBJECTIVES

To maximize the attain a “market average rate of return consistent with the primary objectives of safety and liquidity. USD staff will establish a performance benchmark for its portfolio consistent with agency needs and will periodically review the benchmark for continued applicability.

~~A 12-month rolling average of the 1-year U.S. Treasury yield may serve as a reasonable benchmark for the total current portfolio.~~

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V. INVESTMENT GUIDELINES

A. Liquidity

~~To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities to ensure adequate cash reserves to pay current expenses.~~

~~A minimum of ten percent (10%) of USD’s funds shall be invested in liquid investments such as LAIF or CAMP to ensure adequate cash reserves to pay current expenses. Any changes to investments or new investments approved by the state shall require an amendment to the policy approval by the Board.~~

If USD uses an investment advisor, USD’s General Manager/Treasurer, or designee, shall communicate periodically with the investment adviser in order to keep the adviser informed as to USD’s specific short-term liquidity requirements.

A.B. Maximum Maturities

~~To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities.~~ USD will not invest in securities maturing more than five (5) years from the date of trade settlement, unless the Board of Directors has by resolution granted authority to make such an investment at least three months prior to the date of investment.

VI. REPORTING, DISCLOSURE AND PROGRAM EVALUATION

A. Monthly Reports

Monthly investment reports shall be submitted by USD finance staff to USD’s Board of Directors and the General Manager. These reports shall disclose, at a minimum, the following information about the risk characteristics of USD’s portfolio:

- 1. As asset listing showing par value, cost and ~~accurate and complete~~ market value of each security, type of investment, issuer name, credit quality, coupon rate and yield to maturity at cost;

Commented [MS2]: Market value could be subjective

2. A one or two-page summary report which shows:

- a. Weighted average maturity of the portfolio;
 - b. Maturity distribution of the portfolio;
 - ~~c. Average monthly yield to maturity at cost for the portfolio for the prior twelve months compared to the Benchmark Index returns for the same periods;~~
 - ~~d. c.~~ A list of portfolio transactions;
3. A statement of compliance with the investment policy, including a schedule of any transactions or holdings which do not comply with this policy or with the California Government Code, if any, including a justification for their presence in the portfolio and a timetable for resolution; and
 4. A statement that USD has adequate funds to meet its cash flow requirements for the next six months.
 5. A list of broker/dealers the District is currently using.

B. Annual Reports

1. The investment policy shall be reviewed at least two months before the current investment policy's "next review date" and adopted before the current investment policy expires to ensure its consistency with the overall objectives of preservation of principal, liquidity and return, and its relevance to current law and financial and economic trends.
2. The investment program shall be included in the scope of USD's annual audit.

C. Periodic Investment Program Review

USD shall retain the services of an expert investment manager/consultant to perform a thorough review of the investment program a minimum of once every four years.

This revision supersedes the versions listed below, which are no longer effective.

Title	Policy #	Effective Date
Investment Policy	2030	11/27/95
Investment Policy	2030	10/11/11
Investment Policy	2030	9/24/12

Investment Policy	2030	9/22/14
Investment Policy	2030	1/1/15
Investment Policy	2030	1/16/16
Investment Policy	2030	1/1/17

Approved by: Board of Directors
Author/owner: Business Services Manager/Chief Financial Officer
Reviewers: General Manager, Finance and Acquisition Services Coach
Notify Person: Business Services Manager/Chief Financial Officer
Revision frequency: Annually
Next Review: ~~11/1/17~~ 1/28/20 (review typically begins 2 months prior to this date)

GLOSSARY OF INVESTMENT TERMS

Asset-backed security. A security supported by assets such as automobile loans or other consumer receivables which are placed with a trustee for the benefit of the owners of the security.

Banker's acceptance. A high quality, short term money market instrument used to finance international trade. There has never been an instance of a failure to pay a banker's acceptance in full at its maturity date.

Benchmark. A segment of the securities market with characteristics similar to the subject portfolio. It is used to compare portfolio performance to the performance of the appropriate segment of the market.

Callable Security. Callable securities are those which contain an option allowing the issuer to retire the security prior to its final maturity date. If the level of interest rates falls sufficiently, the issuer of the bond will exercise the option and call the bond away from the investor. The issuer can save money by issuing new bonds at lower rates. Types of callable bonds can range from "one-time" to "quarterly" to "continuous" calls.

California Asset Management Program (CAMP). A pooled investment vehicle and Joint Powers Authority for local agencies in California which manages the California Asset Management Trust.

Commercial paper. Short term, negotiable unsecured promissory notes of corporations.

Delivery vs. payment. A securities industry procedure in which payment for a security is not released until the security is delivered to the customer's bank custodial account.

Inverse floaters. A security with an interest rate which changes periodically in the opposite direction to the change in the general level of interest rates.

Investment Official. An individual who is authorized to make investment decisions and execute investments of funds on behalf of USD.

Leverage. An investment practice in which the investor borrows money in order to increase the amount invested.

Local Agency Investment Fund (LAIF). A pooled investment vehicle for local agencies in California sponsored by the State of California and administered by the State Treasurer.

Market cycle. A market cycle is defined as a period of time which includes a minimum of two consecutive quarters of falling interest rates followed by a minimum of two consecutive quarters of rising interest rates.

Money market mutual fund. A mutual fund which invests in short term money market instruments only, and which has as an investment objective.

Nationally Recognized Statistical Rating Organization (NRSRO). A credit rating agency which issues credit ratings that the US Securities and Exchange Commission (SEC) permits other financial firms to use for certain regulatory purposes. Commonly used NRSROs are Moody's Investor Service, Standard & Poor's, and Fitch Ratings.

Negotiable certificate of deposit. A large denomination certificate of deposit which can be sold in the open market prior to maturity.

Range notes. Fixed income securities which pay interest only under certain conditions which are defined in the bond's indenture.

Repurchase agreement. An investment transaction wherein an investor agrees to purchase securities at an agreed upon price, and simultaneously agrees to sell the securities back to the counterparty on an agreed upon future date at an agreed upon price.

Time certificate of deposit. A non-negotiable certificate of deposit which cannot be sold prior to maturity.

Total rate of return. Annual return on an investment including appreciation and dividends or interest. For bonds held to maturity, total return is yield to maturity.

Weighted Average Maturity. The weighted average of the remaining terms of the underlying securities, using the current balance of each security as the weighting factor.

Appendix A – Credit Ratings for Corporate Notes

Equivalent Credit Ratings				
Credit Risk	Moody's*	Standard & Poor's*	Fitch IBCA**	Duff & Phelps**
INVESTMENT GRADE				
Highest quality	Aaa	AAA	AAA	AAA
High quality (very strong)	Aa	AA	AA	AA
Upper medium grade (strong)	A	A	A	A
Medium grade	Baa	BBB	BBB	BBB
NOT INVESTMENT GRADE				
Lower medium grade (somewhat speculative)	Ba	BB	BB	BB
Low grade (speculative)	B	B	B	B
Poor quality (may default)	Caa	CCC	CCC	CCC
Most speculative	Ca	CC	CC	CC
No interest being paid or bankruptcy petition filed	C	C	C	C
In default	C	D	D	D

Source: The Bond Market Association

* The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2 or 3 to show relative standing within the category.

**The ratings from AA to CC by Standard & Poor's, Fitch IBCA and Duff & Phelps may be modified by the addition of a plus or minus sign to show relative standing within the category.

Effective: 1/28/19	Investment Policy	Policy Number 2030 Page 1 of 17
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I. INVESTMENT POLICY

A. Purpose

The purpose of the Union Sanitary District’s (“USD”) Investment Policy is to establish clear guidelines, objectives, policies and understanding for the Board of Directors, USD management, responsible employees, citizens and third parties for the investment of certain USD funds. USD funds invested shall provide sufficient cash flow to meet current and expected operating expenses and to fund capital requirements as described in USD’s Capital Improvement Program and Financial Plan USD shall review this policy as least once annually and may change its policies as investment objectives change.

B. Objectives

The objectives of this investment policy are, in order of priority:

1. To assure ongoing compliance with all Federal, State and local laws governing the investment of public funds;
2. To ensure safety of invested funds;
3. To maintain sufficient liquidity to meet cash flow needs for all operating requirements which might be reasonably anticipated without requiring a sale of securities;
4. Maintain a diversified investment portfolio to avoid incurring unreasonable risks regarding specific security types or individual financial institutes; and
5. To maximize the average rate of return consistent with the primary objectives of safety and liquidity.

C. Prudence

1. The Prudent Investor Standard shall be used by investment officials and shall be applied in the context of managing an overall portfolio. The prudent investor standard states:

When investing, reinvesting, purchasing, acquiring, exchanging, selling, and managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency.

Staff acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported within 30 days and appropriate action is taken to control adverse developments.

D. Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

II. OPERATIONS AND PROCEDURAL MATTERS**A. Scope**

This investment policy applies to all financial assets and investment activities of USD except proceeds of debt issued under an indenture and USD's Deferred Compensation Plan managed by a third-party administrator and invested by individual participants; and USD's retiree medical trust held with CalPERS (the CERBT Trust) and pension assets held with CalPERS since the assets of both plans are managed by CalPERS.

Proceeds of debt issuance shall be invested in accordance with the general investment philosophy of USD as set forth in this policy; however, such proceeds are invested in accordance with permitted investment provisions of their specific bond indentures.

B. Delegation of Authority

1. Authority to manage USD's investment program is derived from the California Government Code Sections 53600 et seq., and USD's Charter.
2. With the approval of the Board of Directors, USD may engage the services of an external investment advisor to assist in the management of USD's investment portfolio in a manner consistent with USD's objectives. Such external investment advisors may be granted discretion to purchase and sell investment securities in accordance with this Investment Policy. Such discretion will be subject to oversight and other restrictions which are to be described in a written agreement. Such advisor must be registered under the Investment Advisers Act of 1940.
3. In accordance with Government Code Section 53607, the Board of Directors delegates to the General Manager/Treasurer, or their designee, the authority to invest, sell or exchange securities. This delegation of authority must be reviewed, and if still applicable, renewed on an annual basis. The Board shall receive a monthly report of the transactions conducted on its behalf.

C. Internal Controls

The General Manager/Treasurer is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the entity are protected from loss, theft or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

As part of the annual financial audit, USD's external auditor will perform a review of investment transactions to verify compliance with policies and procedures.

D. Delivery vs. Payment

All investment transactions of USD shall be conducted using standard delivery-vs.-payment procedures.

E. Safekeeping of Securities

To protect against potential losses by collapse of individual securities dealers, and to enhance access to securities, interest payments and maturity proceeds, all securities owned by USD shall be held in safekeeping by a third-party bank

trust department, acting as agent for USD under the terms of a custody agreement executed by the bank and by USD. The only exception to the foregoing shall be depository accounts and securities purchases made with: (i) local government investment pools; (ii) time certificates of deposit, and, (iii) money market mutual funds, since the purchased securities are not deliverable. Evidence of each of these investments will be held by USD.

F. Qualifications and Selection of Broker/Dealers

USD shall purchase investments with security broker/dealers based on their reliability; trustworthiness; and their expertise in public cash management. Brokers/dealers must be registered with the state and provide upon request other information to determine their creditworthiness and trustworthiness such as proof of Financial Industry Regulatory Authority (FINRA) registration. A list of security brokers/dealers USD is doing business with will be provided to the Board of Directors with the monthly investment report. A copy of the current USD investment policy will be provided to all security broker/dealers doing business with USD. It shall be the policy of USD to purchase securities only from authorized institutions or firms.

For transactions initiated through an external investment advisor, the investment advisor may use their own list of approved broker/dealers and financial institutions, which it will maintain and review periodically.

III. PERMITTED INVESTMENT AND PORTFOLIO RISK MANAGEMENT

A. Authorized Investments

All investments shall be made in accordance with Sections 53600 et seq. of the Government Code of California and as described within this Investment Policy. Within the investments permitted by the Government Code, USD seeks to further restrict eligible investment to the investments listed below. In the event an apparent discrepancy is found between this Investment Policy and the Government Code, the more restrictive parameters will take precedence. Percentage holding limits listed in this section apply at the time the security is purchased.

1. United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest. There is no limitation as to the percentage of the portfolio that may be invested in this category.

2. Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. With the exception of federal agency mortgage-backed securities which are limited to twenty percent (20%) of the total portfolio there is no limitation as to the percentage of the portfolio that may be invested in this category.
3. Bankers' acceptances, otherwise known as bills of exchange or time drafts, that are drawn on and accepted by a commercial bank with a final maturity not exceeding 180 days from the date of trade settlement, rated at least "A-1" or the equivalent by a nationally recognized statistical-rating organization (NRSRO). The aggregate investment in banker's acceptances shall not exceed forty percent (40%) of USD's total portfolio.
4. Federally insured or collateralized time deposits (Non-negotiable certificates of deposit) provided that the certificates of deposit meet the conditions in either paragraph (a) or paragraph (b):
 - a) Certificates of deposits shall meet the requirements for deposit under Government Code Section 53630 et. seq. To be eligible to receive USD deposits, the financial institution must have received a minimum overall satisfactory rating for meeting the credit needs of California Communities in its most recent evaluation, as provided in Government Code Section 53635.2. Deposits are required to be collateralized as specified under Government Code Section 53630 et. seq. The General Manager/Treasurer, at his or her discretion, may waive the collateralization requirements for any portion that is covered by federal deposit insurance. USD shall have a signed agreement with all depositories receiving USD deposits per Government Code Section 53649. The maturity of time deposits may not exceed five years.
 - b) Certificates of deposit placed through a deposit placement service shall meet the requirements under Government Code Section 53601.8. The full amount of the principal and the interest that may be accrued during the maximum term of each certificate of deposit shall at all times be insured by federal deposit insurance. The maximum term for placement service certificates of deposit shall be five years.

The combined amount invested in placement service certificates of deposit and negotiable certificates of deposit shall not exceed twenty percent (20%) of the portfolio

5. Negotiable certificates of deposit (NCD) issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 by the Financial Code), a state or federal credit union, or by a federally licensed or state-licensed branch of a foreign bank. Purchases of NCDs shall not exceed thirty percent (30%) of the total portfolio.
6. Repurchase agreements with a final termination date not exceeding 90 days from the date of trade settlement collateralized solely by United States Treasury, federal agency, or United States government sponsored enterprises permitted by this Investment Policy. The purchased securities (the "collateral") shall have a minimum market value of one hundred and two percent (102%) of the dollar value of the funds invested. The market value of the collateral securities shall be marked-to-the-market daily and the value shall be adjusted no less frequently than weekly. No substitution of collateral shall be allowed without the prior approval of the General Manager /Treasurer. All collateral securing repurchase agreements must be delivered to USD's custodian bank or handled under a tri-party repurchase agreement. USD or its trustee shall have a perfected first security interest under the Uniform Commercial Code in all securities subject to repurchase agreement.

Approved repurchase agreement counterparties shall have a repurchase agreement counterparty credit rating of at least "A-1" or the equivalent and a long-term credit rating of at least "A" or the equivalent by a NRSRO. Repurchase agreement counterparties shall execute a USD approved master repurchase agreement with USD. No more than ten percent (10%) of USD's total portfolio shall be invested in repurchase agreements.

7. Commercial Paper with the highest letter and numerical rating as provided for by a NRSRO. Eligible commercial paper shall have a final maturity not exceeding 270 days from the date of trade settlement. The aggregate investment in commercial paper shall not exceed twenty five percent (25%) of USD's total portfolio. Furthermore, USD may purchase no more than 10 percent of the outstanding commercial paper of any single issuer. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph 1 or paragraph 2 below:

- (1) The entity meets the following criteria:
 - is organized and operating in the United States as a general corporation;
 - has total assets in excess of five hundred million dollars (\$500,000,000); and
 - has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by an NRSRO.

(2) The entity meets the following criteria:

- is organized within the United States as a special purpose corporation, trust, or limited liability company;
- has program wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or surety bond; and
- has commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

8. State of California's Local Agency Investment Fund ("LAIF"), pursuant to California Code Section 16429.1. A maximum of seventy percent (70%) of USD's funds or the limit permitted by the State may be invested in LAIF, whichever is less;

9. Corporate medium-term notes, defined as all corporate and depository

institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Notes eligible for investment under this subdivision shall be rated in a rating category of "A" or its equivalent or better by an NRSRO. Purchases may not exceed thirty percent (30%) of invested funds.

10. Municipal Obligations. USD may purchase municipal obligations in the following categories.

- a. USD Bonds – Bonds issued by USD, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by USD or by a department, board, agency, or authority of USD.
- b. California State Obligations – Registered state warrants or treasury notes or bonds of the State of California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the State or by a department, board, agency, or authority of the State.

- c. Local Agency Bonds – Bonds, notes, warrants, or other evidences of indebtedness of any local agency within the State of California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency.

With the exception of obligations issued by USD, purchases of municipal obligations are limited to securities rated at least in the “A” (long-term) or “A-1” (short-term), or their equivalents, by a NRSRO. Obligations shall have a maximum maturity of five years. A maximum of thirty percent (30%) of the portfolio may be invested in this category.

11. Money market mutual funds, provided that such funds

- a. Are registered with the Securities and Exchange Commission and are rated “AAAm” or its equivalent by not less than two NRSROs; or have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience managing money market mutual funds with assets under management in excess of five hundred million dollars (\$500,000,000); and
- b. The purchase price of shares shall not exceed twenty percent (20%) of USD’s portfolio; and
- c. If USD has funds invested in a money market fund, a copy of fund’s information statement shall be maintained on file for due diligence. In addition, the General Manager/Treasurer should review the fund’s summary holdings on a quarterly basis.

12. Shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (o) as provided, provided that

- a. A maximum of fifty percent (50%) of USD’s funds may be invested in the shares of any one investment pool;
- b. The pool’s investment advisor meets the requirements of 53601(p);
- c. The pool seeks to maintain a stable Net Asset Value (“NAV”);

- d. The pool is rated "AAAm" or its equivalent by a NRSRO; and
 - e. If USD has funds invested in a pool, a copy of pool's information statement shall be maintained on file for due diligence. In addition, the General Manager/Treasurer should review the pool's summary holdings on a quarterly basis.
13. A mortgage passthrough security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable passthrough certificate, or consumer receivable-backed bond of a maximum of five years' maturity. Securities eligible for investment under this subdivision shall be issued by an issuer rated in a rating category of "A" or its equivalent or better for the issuer's debt as provided by an NRSRO and rated in a rating category of "AA" or its equivalent or better by an NRSRO. Purchases may not exceed twenty percent (20%) of invested funds.
 14. United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or the Inter-American Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AA" or better by an NRSRO and shall not exceed thirty percent (30%) of the agency's total portfolio that may be invested pursuant to this section.

B. Prohibited Investment Vehicles and Practices

1. State law notwithstanding, any investments not specifically described herein are prohibited, including, but not limited to, mutual funds.
2. In accordance with Government Code Section 53601.6, investment in inverse floaters, range notes, or mortgage derived interest-only strips is prohibited.
3. In accordance with Government Code Section 53601.6, investment in any security that could result in a zero-interest accrual if held to maturity is prohibited.
4. Trading securities for the sole purpose of speculating on the future direction of interest rates is prohibited.
5. Purchasing or selling securities on margin is prohibited.
6. The use of reverse repurchase agreements, securities lending or any other form of borrowing or leverage is prohibited.

7. USD is not permitted to deposit funds into any state or federal credit union, if a member of the Board of Directors, or any person with investment decision making authority also serves on the Board of Directors, or any committee appointed by the Board of Directors, or the credit committee or supervisory committee, of the state or federal credit union.

C. Mitigating Credit Risk in the Portfolio

Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. USD shall mitigate credit risk by adopting the following strategies:

1. The diversification requirements included in Section III (A) are designed to mitigate credit risk in the portfolio;
2. No more than five percent (5%) of the total portfolio may be invested in securities of any single issuer, other than LAIF, local government investment pools, all U.S. Government, its agencies and instrumentalities.
3. USD may elect to sell a security prior to its maturity and record a capital gain or loss in order to improve the quality, liquidity, return, or yield of the portfolio in response to market conditions or USD's risk preferences.
4. If securities owned by USD are downgraded by a NRSRO to a level below the quality required by this Investment Policy, it shall be USD's policy to review the credit situation and make a determination as to whether to sell or retain such securities in the portfolio.

If a decision is made to retain a downgraded security in the portfolio, its presence in the portfolio will be monitored and reported to USD's Board of Directors. USD will use discretion in determining whether to sell or hold the security based on its current maturity, the loss in value, the economic outlook for the issuer, and other relevant factors.

IV. INVESTMENT PERFORMANCE OBJECTIVES

To maximize the average rate of return consistent with the primary objectives of safety and liquidity. USD staff will establish a performance benchmark for its portfolio consistent with agency needs and will periodically review the benchmark for continued applicability.

V. INVESTMENT GUIDELINES

A. Liquidity

To the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities to ensure adequate cash reserves to pay current expenses.

If USD uses an investment advisor, USD's General Manager/Treasurer, or designee, shall communicate periodically with the investment advisor in order to keep the adviser informed as to USD's specific short-term liquidity requirements.

B. Maximum Maturities

USD will not invest in securities maturing more than five (5) years from the date of trade settlement, unless the Board of Directors has by resolution granted authority to make such an investment at least three months prior to the date of investment.

VI. REPORTING, DISCLOSURE AND PROGRAM EVALUATION

A. Monthly Reports

Monthly investment reports shall be submitted by USD finance staff to USD's Board of Directors and the General Manager. These reports shall disclose, at a minimum, the following information about the risk characteristics of USD's portfolio:

1. As asset listing showing par value, cost and market value of each security, type of investment, issuer name, credit quality, coupon rate and yield to maturity at cost;
2. A one or two-page summary report which shows:

- a. Weighted average maturity of the portfolio;
 - b. Maturity distribution of the portfolio;
 - c. A list of portfolio transactions;
3. A statement of compliance with the investment policy, including a schedule of any transactions or holdings which do not comply with this policy or with the California Government Code, if any, including a justification for their presence in the portfolio and a timetable for resolution; and
 4. A statement that USD has adequate funds to meet its cash flow requirements for the next six months.
 5. A list of broker/dealers the District is currently using.

B. Annual Reports

1. The investment policy shall be reviewed at least two months before the published “next review date” reflected on the current investment policy and adopted before the current investment policy expires to ensure its consistency with the overall objectives of preservation of principal, liquidity and return, and its relevance to current law and financial and economic trends.
2. The investment program shall be included in the scope of USD’s annual audit.

C. Periodic Investment Program Review

USD shall retain the services of an expert investment manager/consultant to perform a thorough review of the investment program a minimum of once every four years.

This revision supersedes the versions listed below, which are no longer effective.

Title	Policy #	Effective Date
Investment Policy	2030	11/27/95
Investment Policy	2030	10/11/11
Investment Policy	2030	9/24/12

Investment Policy	2030	9/22/14
Investment Policy	2030	1/1/15
Investment Policy	2030	1/16/16
Investment Policy	2030	1/1/17

Approved by: Board of Directors
Author/owner: Business Services Manager/Chief Financial Officer
Reviewers: General Manager, Finance and Acquisition Services Coach
Notify Person: Business Services Manager/Chief Financial Officer
Revision frequency: Annually
Next Review: 1/28/20 (review typically begins 2 months prior to this date)

GLOSSARY OF INVESTMENT TERMS

Asset-backed security. A security supported by assets such as automobile loans or other consumer receivables which are placed with a trustee for the benefit of the owners of the security.

Banker's acceptance. A high quality, short term money market instrument used to finance international trade. There has never been an instance of a failure to pay a banker's acceptance in full at its maturity date.

Benchmark. A segment of the securities market with characteristics similar to the subject portfolio. It is used to compare portfolio performance to the performance of the appropriate segment of the market.

Callable Security. Callable securities are those which contain an option allowing the issuer to retire the security prior to its final maturity date. If the level of interest rates falls sufficiently, the issuer of the bond will exercise the option and call the bond away from the investor. The issuer can save money by issuing new bonds at lower rates. Types of callable bonds can range from "one-time" to "quarterly" to "continuous" calls.

California Asset Management Program (CAMP). A pooled investment vehicle and Joint Powers Authority for local agencies in California which manages the California Asset Management Trust.

Commercial paper. Short term, negotiable unsecured promissory notes of corporations.

Delivery vs. payment. A securities industry procedure in which payment for a security is not released until the security is delivered to the customer's bank custodial account.

Inverse floaters. A security with an interest rate which changes periodically in the opposite direction to the change in the general level of interest rates.

Investment Official. An individual who is authorized to make investment decisions and execute investments of funds on behalf of USD.

Leverage. An investment practice in which the investor borrows money in order to increase the amount invested.

Local Agency Investment Fund (LAIF). A pooled investment vehicle for local agencies in California sponsored by the State of California and administered by the State Treasurer.

Market cycle. A market cycle is defined as a period of time which includes a minimum of two consecutive quarters of falling interest rates followed by a minimum of two consecutive quarters of rising interest rates.

Money market mutual fund. A mutual fund which invests in short term money market instruments only, and which has as an investment objective.

Nationally Recognized Statistical Rating Organization (NRSRO). A credit rating agency which issues credit ratings that the US Securities and Exchange Commission (SEC) permits other financial firms to use for certain regulatory purposes. Commonly used NRSROs are Moody's Investor Service, Standard & Poor's, and Fitch Ratings.

Negotiable certificate of deposit. A large denomination certificate of deposit which can be sold in the open market prior to maturity.

Range notes. Fixed income securities which pay interest only under certain conditions which are defined in the bond's indenture.

Repurchase agreement. An investment transaction wherein an investor agrees to purchase securities at an agreed upon price, and simultaneously agrees to sell the securities back to the counterparty on an agreed upon future date at an agreed upon price.

Time certificate of deposit. A non-negotiable certificate of deposit which cannot be sold prior to maturity.

Total rate of return. Annual return on an investment including appreciation and dividends or interest. For bonds held to maturity, total return is yield to maturity.

Weighted Average Maturity. The weighted average of the remaining terms of the underlying securities, using the current balance of each security as the weighting factor.

Appendix A – Credit Ratings for Corporate Notes

Equivalent Credit Ratings				
Credit Risk	Moody's*	Standard & Poor's*	Fitch IBCA**	Duff & Phelps**
INVESTMENT GRADE				
Highest quality	Aaa	AAA	AAA	AAA
High quality (very strong)	Aa	AA	AA	AA
Upper medium grade (strong)	A	A	A	A
Medium grade	Baa	BBB	BBB	BBB
NOT INVESTMENT GRADE				
Lower medium grade (somewhat speculative)	Ba	BB	BB	BB
Low grade (speculative)	B	B	B	B
Poor quality (may default)	Caa	CCC	CCC	CCC
Most speculative	Ca	CC	CC	CC
No interest being paid or bankruptcy petition filed	C	C	C	C
In default	C	D	D	D

Source: The Bond Market Association

* The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2 or 3 to show relative standing within the category.

**The ratings from AA to CC by Standard & Poor's, Fitch IBCA and Duff & Phelps may be modified by the addition of a plus or minus sign to show relative standing within the category.



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 28, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Gene Boucher, Human Resources Manager

SUBJECT: Agenda Item No. 11 - Meeting of January 29, 2018
Review and consider approval of Publicly Available Pay Schedule

Recommendation

The President, USD Board of Directors, sign the September 1, 2018 Pay Schedule which will be posted and retained in accordance with CalPERS requirements.

Background

The Publicly Available Pay Schedule, mandated by CalPERS in August 2011, is designed to: 1) ensure consistency between CalPERS employers; and, 2) enhance the disclosure and transparency of public employee compensation.

The "Publicly Available Pay Schedule" (CCR 570.5) must:

- be duly approved and adopted by the employer's governing body in accordance with requirements of applicable public meetings laws;
- identify the position title for every employee position;
- show the pay rate for each identified position as a single amount or as multiple amounts within a range;
- indicate the time base (i.e., bi-weekly, monthly, etc.);
- be posted at the office of the employer or immediately accessible and available for public review from the employer during normal business hours or posted on the employer's internet website;
- indicate an effective date and date of any revisions;

- be retained by the employer and available for public inspection for not less than 5 years.

The salary changes contained in the September 1, 2018 document reflect:

- 1) The adjustments made to the Unclassified employee pay ranges as the result of the August 2018 MSA adjustments and Performance Appraisals.
- 2) The addition of the previously approved Organizational Performance Manager and Organizational Performance Coordinator I and II positions.
- 3) Update to General Manager's salary based on current contract.

UNION SANITARY DISTRICT PAY SCHEDULE

Effective September 1, 2018		
Position Title	Minimum Bi-Weekly Pay Rate	Maximum Bi-Weekly Pay Rate
Accounting and Financial Analyst I	\$3,302.00	\$4,333.88
Accounting and Financial Analyst II	\$3,758.81	\$4,933.44
Accounting Tech Specialist	\$3,371.86	\$4,098.53
Accounting Technician I	\$2,724.76	\$3,311.96
Accounting Technician II	\$2,997.21	\$3,643.13
Administrative Specialist I	\$2,663.31	\$3,237.27
Administrative Specialist II	\$2,803.48	\$3,407.64
Assistant Engineer	\$3,930.55	\$5,158.85
Assistant Storekeeper	\$2,589.76	\$3,147.86
Associate Engineer	\$4,410.30	\$5,788.52
Buyer I	\$3,014.36	\$3,956.35
Buyer II	\$3,349.29	\$4,395.94
Chemist I	\$3,664.54	\$4,454.27
Chemist II	\$3,847.78	\$4,676.99
Coach, Capital Improvement Projects	\$5,842.79	\$7,668.66
Coach, Collection Services	\$4,699.18	\$6,167.68
Coach, Customer Service	\$5,842.79	\$7,668.66
Coach, Electrical & Technology	\$5,129.72	\$6,732.76
Coach, Environmental Compliance	\$5,054.43	\$6,633.94
Coach, Finance & Acquisition Services	\$5,513.86	\$7,236.94
Coach, Mechanical Maintenance	\$4,740.14	\$6,221.43
Coach, Research & Support/Sr. Process Engineer	\$5,236.01	\$6,872.27
Coach, Wastewater Plant Operations	\$4,765.12	\$6,254.22
Collection System Worker I	\$2,751.59	\$3,344.58
Collection System Worker II	\$3,026.77	\$3,679.06
Collection Services Trainer	\$3,495.91	\$4,249.30
Communications & Intergovernmental Relations Coordinator	\$3,953.62	\$4,805.63
Construction Inspector I	\$3,201.65	\$3,891.62
Construction Inspector II	\$3,521.81	\$4,280.78
Construction Inspector III	\$3,662.69	\$4,452.02
Customer Service Fee Analyst	\$3,043.39	\$3,699.26
Engineering Assistant/Plan Checker	\$3,926.74	\$4,772.98
Engineering Technician I	\$3,089.19	\$3,754.94
Engineering Technician II	\$3,398.11	\$4,130.42
Engineering Technician III	\$3,737.93	\$4,543.47
Environmental Compliance (EC) Inspector I	\$3,024.57	\$3,676.38
Environmental Compliance (EC) Inspector II	\$3,402.70	\$4,136.01
Environmental Compliance (EC) Inspector III	\$3,777.01	\$4,590.98

UNION SANITARY DISTRICT PAY SCHEDULE

Effective September 1, 2018		
Position Title	Minimum Bi-Weekly Pay Rate	Maximum Bi-Weekly Pay Rate
Environmental Compliance (EC) Inspector IV	\$4,041.39	\$4,912.34
EC Outreach Representative	\$3,777.01	\$4,590.98
Environmental Health and Safety Program Manager	\$4,280.73	\$5,618.46
Environmental Program Coordinator	\$4,573.05	\$6,002.13
Executive Assistant to the General Manager/Board Secretary	\$3,613.67	\$4,742.94
Fleet Mechanic I	\$3,050.82	\$3,708.30
Fleet Mechanic II	\$3,416.93	\$4,153.30
General Manager	\$8,193.26	\$10,753.66
Human Resources Manager	\$5,337.30	\$7,005.20
Human Resources Analyst II	\$3,874.39	\$5,085.14
Information Technology Administrator	\$5,222.76	\$6,854.87
Information Technology Analyst	\$3,544.11	\$4,651.65
Instrument Tech/Electrician	\$3,757.98	\$4,567.86
Janitor	\$2,040.48	\$2,480.22
Laboratory Director	\$4,557.99	\$5,540.26
Lead Collection System Worker	\$3,329.44	\$4,046.95
Maintenance Assistant	\$1,311.03	\$1,593.57
Manager, Business Services / Chief Financial Officer	\$7,503.41	\$9,848.22
Manager, Collection Services	\$6,305.61	\$8,276.12
Manager, Maintenance and Technology Services	\$6,620.89	\$8,689.92
Manager, Technical Services	\$7,141.87	\$9,373.70
Manager, Treatment & Disposal Services	\$6,305.61	\$8,276.12
Mechanic I	\$3,086.42	\$3,751.56
Mechanic II	\$3,456.80	\$4,201.76
Organizational Performance Coordinator I	\$3,458.80	\$4,539.68
Organizational Performance Coordinator II	\$3,994.92	\$5,243.33
Organizational Performance Manager	\$4,614.13	\$6,056.04
Painter	\$3,172.05	\$3,855.64
Planner/Scheduler I	\$3,543.55	\$4,307.22
Planner/Scheduler II	\$3,810.53	\$4,631.72
Plant Operations Trainer	\$4,186.04	\$5,088.15
Plant Operator I	\$2,944.53	\$3,579.09
Plant Operator II	\$3,268.44	\$3,972.81
Plant Operator III	\$3,737.52	\$4,542.98
Principal Engineer	\$5,286.33	\$6,938.31
Purchasing Agent	\$4,108.25	\$5,392.08
Receptionist	\$2,328.79	\$2,830.66

UNION SANITARY DISTRICT PAY SCHEDULE

Effective September 1, 2018		
Position Title	Minimum Bi-Weekly Pay Rate	Maximum Bi-Weekly Pay Rate
Senior Accounting and Financial Analyst	\$3,913.90	\$5,136.99
Senior Database Administrator / Developer	\$4,540.68	\$5,959.64
Senior Engineer	\$4,737.35	\$6,217.77
Senior Geographic Information System (GIS)/Database Administrator	\$4,540.68	\$5,959.64
Senior Information Technology Analyst	\$3,937.90	\$5,168.49
Senior Network Administrator	\$4,343.34	\$5,700.64
Senior Process Engineer	\$4,737.35	\$6,217.77
Storekeeper I	\$3,274.65	\$3,980.36
Storekeeper II	\$3,438.38	\$4,179.37
Utility Worker	\$2,513.82	\$3,055.57

Board of Directors: Directors meet or serve in their official capacity 3 – 12 times per month with a maximum of six paid meetings/month at a rate of \$212.10 per meeting and are paid for a maximum of one meeting per day.

Approved by:

President, Board of Directors



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Senior Engineer

SUBJECT: Agenda Item No. 12 - Meeting of January 28, 2019
Authorize the General Manager to Execute Amendment No. 1 to Task Order No. 2 with Brown and Caldwell for the Primary Digester No. 7 Project

Recommendation

Staff recommends the Board authorize the General Manager to execute Amendment No. 1 to Task Order No. 2 with Brown and Caldwell in the amount of \$428,143 for the Primary Digester No. 7 Project.

Background

The Primary Digester No. 7 Project (Project) was one of the outcomes of the Plant Solids System/ Capacity Assessment – Phase 1 that was completed in November 2016. The assessment concluded that the plant’s anaerobic digestion process was at or nearing capacity and Primary Digester No. 6, the largest existing digester, could not reliably be taken out of service for cleaning and maintenance until additional digestion capacity is provided.

On December 18, 2017, the Board authorized the General Manager to execute Task Order No. 2 with Brown and Caldwell (BC) in the amount of \$1,476,301 for the final design services associated with the Project. At that time, the construction costs were estimated to be approximately \$13.0 million and included the following major scope items:

- Construction of a new anaerobic digester, Primary Digester No. 7, with an effective volume of approximately 1.8 million gallons.
- Installation of new heating, mixing, and conveyance equipment and piping within or adjacent to existing Heating and Mixing Building No. 4.
- Integration of new digester equipment and piping with existing digester feed, withdrawal, transfer, heating and gas systems.
- Improvements to the existing sludge conveyance and transfer systems.
- Improvements to existing digester heat generation and conveyance systems.
- Installation of electrical and instrumentation equipment for interfacing with existing electrical systems and controls.
- Replacement of Boiler No. 6 and related plant hot water loop improvements.
- Installation of a new chemical storage and pump facility for the purposes of hydrogen sulfide and struvite management.

As the design progressed, staff was informed that the engineer's construction cost estimate had increased due to various factors, such as: additional or modified scope, the bidding environment, inflation, tariffs and increased structural design implications due primarily to extremely poor soil conditions and a high groundwater table. At 90 percent design, the construction costs for the Project were estimated to be approximately \$22.0 million. In addition, staff was informed that the Bay Area Air Quality Management District (BAAQMD) air permit application process was going to take longer than originally estimated.

Staff believed it was prudent to have BC perform a value engineering (VE) effort aimed at prioritizing project scope, revisiting design assumptions, and ultimately reducing the construction cost of the project. Given the operational necessity of the new digester, staff was initially reluctant to cause any delays in the forward progress of this project. However, the delay to the air permitting process provided an opportunity for BC and staff to conduct a VE study.

BC submitted a technical memorandum presenting the results of the VE study performed for the Project. This technical memorandum identified four concepts that could provide the District with savings of approximately \$3.8 million. These concepts were previously shared with the Board during the regularly scheduled Board meeting of October 8, 2018 and are summarized below.

Description	Cost Savings	Considerations
Change Digester Mixing to Draft Tubes (Gas Lance)	\$1.9 M	<p>Changing the digester mixing system from pump mixing to a gas lance draft tube system would eliminate a significant amount of 24-inch and 18-inch piping, valves, and pipe supports. The three large mixing pumps currently in the design would be replaced with internal draft tubes, gas lance assemblies, and two gas compressors. This mixing scheme was considered in preliminary design as it is significantly more efficient than pump mixing and produces three times the mixing energy. However, all the other wastewater plants that were visited operated with a superior screening process. Therefore, staff was not comfortable proceeding with a gas lance draft tube system at that time. Currently, staff no longer has this concern with the decision to install three new mechanical screens with narrower spacing at the Headworks Building.</p>
Relocated New Boiler to Exterior of Heating and Mixing Building No. 4	\$0.4 M	<p>Changing the digester mixing system unlocks additional space to facilitate relocating the new boiler from its current planned location at Generator Building No. 1 (old Cogen Building) to the exterior of Heating and Mixing Building No. 4. This modification eliminates the need to install new underground hot water loop and natural gas piping/connections and eliminates the need to install new electrical gear solely for the boiler.</p>
Eliminate Bid Alternate	\$1.3 M	<p>This bid alternate was originally included because it would provide additional operational flexibility for dosing iron salts at the Headworks Building. However, staff decided to defer this project due to the high price tag and that the current project only requires dosing to control hydrogen sulfide levels and struvite formation within the digesters.</p>

Description	Cost Savings	Considerations
Replace Double-walled FRP Tank with a Single-walled FRP Tank	\$0.2 M	The original location identified for the new Iron Salts Facility was space limited and therefore relied on the need for a double-walled tank. The new location has adequate space for a single-walled tank with a concrete secondary containment.

Concurrent with the VE study, staff also requested that BC re-evaluate the recommended digester size of 1.8 million gallons (MG) given the revised cost estimates. The project estimate had already exceeded the CIP budget, so it seemed reasonable to re-evaluate costs on a per gallon basis. The digester sizes evaluated were based on the largest volumes that do not significantly impact the structural design, which would have substantial cost implications. Thus, three additional volumes were evaluated: 2.0 MG, 2.4 MG, and 2.7 MG. Below is summary of the construction costs, corresponding volumes, and cost per gallon.

Volume (MG)	Construction Cost ¹	\$/gallon
1.8	\$15.7 M	\$8.72
2.0	\$16.4 M	\$8.20
2.4	\$18.2 M	\$7.58
2.7	\$20.1 M	\$7.44

1. Construction cost assumes gas lance draft tube mixing and does not include costs associated with new boiler, iron salts facility, or electrical ductbank.

Previous analyses concluded that a digester size larger than 1.8 million gallons was not cost effective. The assumption was that a larger volume would require more structural support and significant improvements to the pump mixing system. However, as shown above, this assumption is no longer valid as the gas lance draft tube mixing system is more cost effective at larger volumes and a more robust structure has become unavoidable based on the results of the geotechnical evaluation.

Taking this into consideration, there are operational pros and cons with a larger digester. The pros are that larger digesters cost less per gallon, provide more capacity when all tanks are in service, and allow for multiple smaller digesters to be taken out of service at the same time without sacrificing capacity. For example, the total volume of Primary Digesters No. 3, 4, and 5 is approximately 2.4 million gallons. The cons are that there is a higher upfront construction cost and when it comes time to take Primary Digester No. 7 out of service, it will place a larger burden on the other digesters due to the additional volume.

Based on the above information, staff recommended proceeding with modifying the design for the Project to incorporate both the cost saving concepts identified in the VE study and enlarge the volume to 2.4 million gallons. The updated construction cost is estimated to be \$20.7 million; however, the digester will have 33 percent more capacity than the current design, for only an additional \$2.5 million. Staff believes that this will provide the most flexibility for cleaning, rehabilitating, and replacing existing digesters in the future and therefore results in the best overall value for the District.

Please refer to Figure 1 for the location of the future Primary Digester No. 7.

Amendment No. 1 to Task Order No. 2

The purpose of Amendment No. 1 to Task Order No. 2 is to modify the design for the Project as described above. This amendment also includes additional project support services that exceed the original scope of work, such as potholing services to locate existing underground utilities and additional California Environmental Quality Act (CEQA) assistance. The design modifications associated with this amendment include the following:

- Enlarge the volume for Primary Digester No. 7 from 1.8 MG to 2.4 MG.
- Change the digester mixing system and bottom configuration from a pump mixing system with a cone bottom to a gas-lance draft tube system with a waffle bottom.
- Relocate the hot water boiler from Generator Building No. 1 to Heating and Mixing Building No. 4.
- Delete the bid alternate for an iron salts dosing location at the Headworks Building.
- Change the iron salts tank from a double-walled tank to single-walled tank with a concrete secondary containment.
- Replace the roof and add lighting at Heating and Mixing Building No. 4.
- Add a horizontal flame arrestor to the gas piping for Primary Digester No. 7.
- Add pavement improvements for the west access road.
- Add an 8-inch potable water pipe to the utility trench along the west access road.
- Add bid alternate for a new canopy on west side of Heating and Mixing Building No. 4.

The scope of services and fees for Amendment No. 1 are summarized below:

Task No.	Task Description	Fee
6	Additional Project Support Services	\$92,655
7	Design Modifications	\$335,488
	Total Not-to-Exceed Fee	\$428,143

The amended design fee of \$1,904,444 is 9.2 percent of the updated construction estimate of \$20.7 million. The fee percentage is not unusual for projects that require significant design modifications and include extensive subtasks such as the geotechnical, environmental, permitting, potholing, and surveying efforts. For example, the Cogeneration Project that was constructed in 2014 had a 12% design-to-construction estimate rate. The Cogeneration Project required significant permitting, PG&E coordination, and grant fund application efforts during the design phase.

Staff has reviewed the scope and fee and found the proposal to be reasonable given the level of effort required to design the structural, mechanical, and electrical elements of the Project. Staff anticipates the design to be completed with construction to begin by summer 2019.

The total fees for the Project’s agreement with BC are summarized in the table below:

Description	Fee
Task Order No. 1 – Preliminary Design Services	\$127,577
Amendment No. 1 to Task Order No. 1 – Air Permitting Support	\$18,969
Task Order No. 2 – Final Design Services	\$1,476,301
Amendment No. 1 to Task Order No. 2 – Additional Final Design Services	\$428,143
Total Not-to-Exceed Fee for this Agreement	\$2,050,990

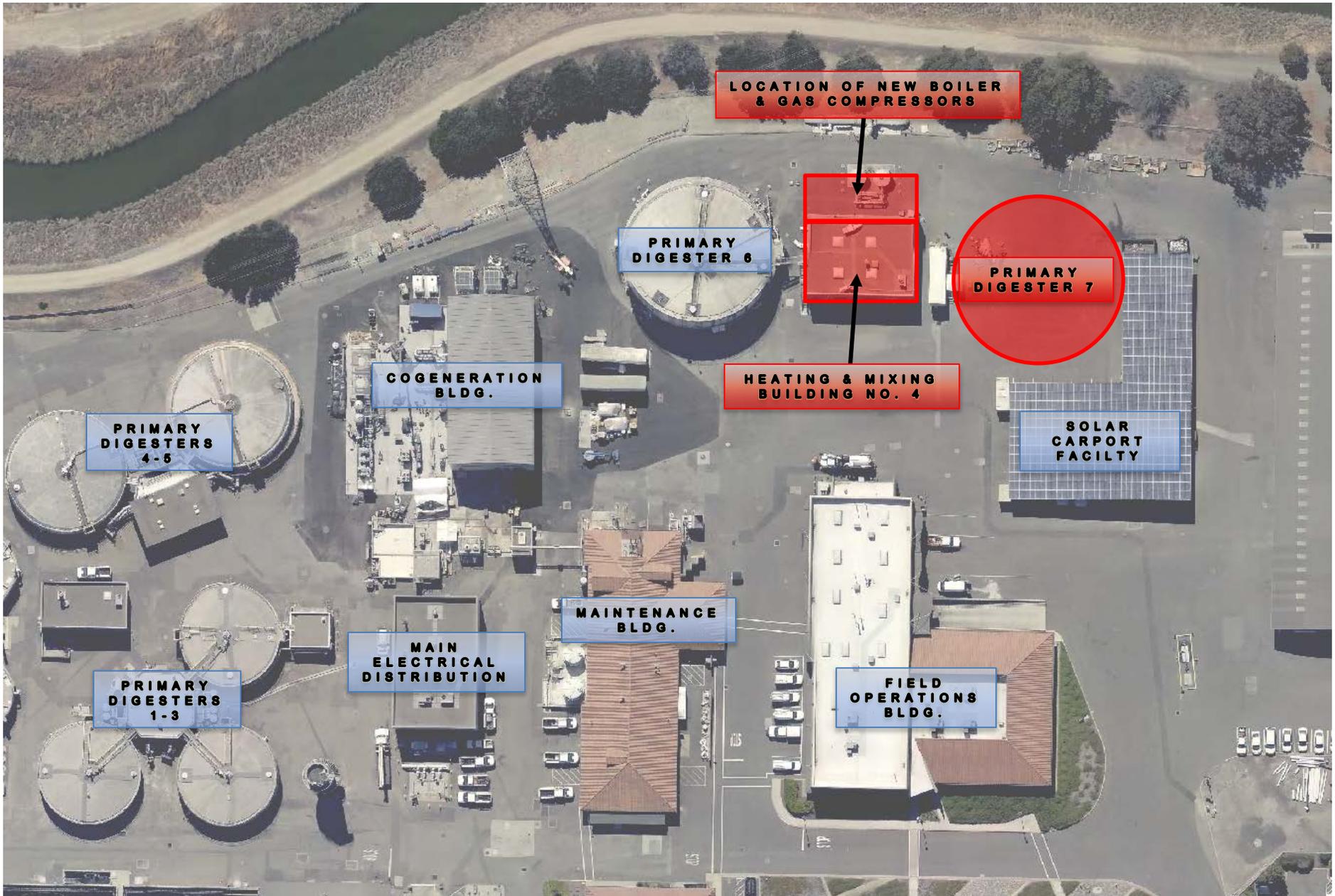
In parallel with the design, staff has prepared an application package for financial assistance through the Clean Water State Revolving Fund program administered by the State Water Resources Control Board (“SWRCB”). The application package for the Project was submitted to the SWRCB on December 26, 2018.

Staff recommends the Board authorize the General Manager to execute Amendment No. 1 to Task Order No. 2 with Brown and Caldwell in the amount of \$428,143 for the Primary Digester No. 7 Project.

PRE/SEG/RC/CB/dl

Attachment: Figure 1 – Site Plan
 Amendment No. 1 to Task Order No. 2

FIGURE 1 – PRIMARY DIGESTER NO. 7 PROJECT



PRIMARY DIGESTER NO.7 PROJECT

AMENDMENT NO. 1

TO

TASK ORDER NO. 2

TO

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

BROWN AND CALDWELL

FOR

PROFESSIONAL SERVICES

Dated November 15, 2016

1. PURPOSE

The purpose of this Amendment No. 1 to Task Order No. 2 is to authorize Brown and Caldwell (BC) to perform additional design services for the Primary Digester No. 7 Project (Project). These services include modifying the design for the Project to incorporate both cost saving concepts identified in the internal value engineering effort performed by BC and enlarging the volume of Digester No. 7 to be 2.4 million gallons (MG).

2. PROJECT COORDINATION

All work related to this task order shall be coordinated through the Union Sanitary District's (District's) Project Manager, Curtis Bosick.

3. SCOPE OF SERVICES

The Scope of Services for Task Order No. 1 are amended as follows:

Task 6: Additional Project Support Services

Task 6.1 – Potholing Services

Task Order No. 2 assumed that the District would self-perform subsurface utility location (potholing) in support of the design. However, due to limited resources, the District directed the Engineer to perform this work.

Task 6.2 – Additional California Environmental Quality Act (CEQA) Assistance

Task Order No. 2 assumed that the CEQA evaluation would not require a detailed emissions estimate. Based on initial calculations, a detailed construction-period emissions estimate was triggered. Therefore, the Engineer performed these estimates in support of the CEQA application.

After the Engineer prepared the CEQA documentation in accordance with the scope of Task Order No. 2, the District directed the Engineer to perform a “CEQA-Plus” report to support the District’s Clean Water State Revolving Fund application. Additional CEQA-Plus requirements included a Phase 1 cultural resources report and biological resource assessment.

Task 7: Design Modifications

The District’s 90% review comments have initiated design changes beyond the scope of the original Task Order No. 2. Additionally, BC performed an internal value engineering effort that identified various design modification concepts aimed at reducing construction/operational costs. In parallel to this effort, the recommended digester volume was re-evaluated and it was determined that a volume of 2.4 million gallons (MG) provided the most flexibility for cleaning, rehabilitating, and replacing existing digesters in the future. Therefore, the District has directed the Engineer to modify the design as follows:

- Change the digester volume from 1.8 MG to 2.4 MG
- Change the digester mixing system technology from pump mixing to a gas-lance draft tube system
- Change digester bottom configuration from cone to waffle bottom

- Relocate the hot water boiler from Generator Building No. 1 to Heating and Mixing Building (HMB) No. 4
- Addition/deletion of alternate iron salts dosing location (Headworks)
- Change the iron salts tank from a double-walled tank to single-walled tank with a concrete secondary containment
- Replace roof and add lighting at HMB No. 4
- Add horizontal flame arrestor to Digester No. 7 gas piping
- Add paving improvements to the west access road
- Add 8-inch potable water pipe to the utility trench along the west access road
- Add canopy on west side of HMB No. 4 (bid alternate)

Task Order No. 2 includes 50%, 90% and final design deliverables. The Engineer prepared and submitted the 50% and 90% deliverables prior to this Amendment and the magnitude of requested design changes will require additional design deliverables and workshops to facilitate District input and review. The additional design deliverables/workshops to be prepared and submitted are as follows:

- Revised Preliminary Design Report (PDR) – PDR shall be revised to reflect scope modifications associated with this Amendment.
- Progress Design Submittal/Workshop – The Engineer shall provide a progress design submittal showing the updated structural and mechanical design. The Engineer shall facilitate a review workshop with District staff and respond to District comments.
- Revised 90% Design Submittal – The Engineer shall prepare and resubmit the 90% design submittal including the scope modifications associated with this Amendment and incorporating the District's review comments from the progress design submittal. The Engineer shall facilitate a review workshop with District staff and respond to District comments. The Engineer shall provide an updated estimate of probable construction cost.

4. DELIVERABLES

Task 6: Additional Project Support Services

Task 6.1 – Potholing Services

- Potholing surveying information and report

Task 6.2 – Additional CEQA Assistance

- CEQA-Plus report including detailed emissions estimate

Task 7: Design Modifications

- Revised Preliminary Design Report
- Progress Design Submittal/Workshop Meeting Minutes
- Revised 90% Design Submittal/Workshop Meeting Minutes

5. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. The Multiplier for this work shall be 3.22, the profit shall be 13 percent, and the not-to-exceed amount shall be \$428,143. A summary of the anticipated distribution of cost and manpower between tasks is shown in Exhibit A.

The following table summarizes the previously-executed and proposed task orders and amendments under the Agreement:

Task Order / Amendment	Not to Exceed Amount	Board Authorization Required?	District Staff Approval
Task Order No. 1 – Predesign Services	\$127,577	Yes	Paul Eldredge
Amendment No. 1 to Task Order No. 1 – Air Permitting Support	\$18,969	No	Sami Ghossain
Task Order No. 2 – Final Design Services	\$1,476,301	Yes	Paul Eldredge
Amendment No. 1 to Task Order No. 2 – Additional Final Design Services	\$428,143	Yes	Paul Eldredge
Total	\$2,050,990		

8. TIME OF COMPLETION

All work defined in this Amendment shall be complete in 124 calendar days after the execution of this Amendment and subject to the conditions of Article 3 of this Agreement. The anticipated milestone dates are as follows:

<u>Deliverable/Workshop</u>	<u>Anticipated Date</u>
Progress Design Workshop/Submittal	December 2018
Revised 90% Design Submittal	February 2019
Final Design Submittal	March 2019

IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment No. 1 to Task Order No. 2 as of January ____, 2019 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

Brown and Caldwell

By: _____
Paul R. Eldredge, P.E.
General Manager/District Engineer

By: _____
Grace Chow, P.E.
Vice President

Date: _____

Date: _____

Exhibit A - Primary Digester No. 7 Project - Amendment No. 1 to Task Order No. 2 - Fee Estimate

Phase /Task	Phase Description	Ross, Adam D	Subblefield, Kimberly D	Chapman, Thomas M	Nojima, Allison C	Ramanathan, Mallika	Romero Urbina, Mary Lou	Slezak, Lloyd A	Trueblood, Donald C	Burke, Fred	Gerbert, Lynette K	Lambert, Tail R	Dummer, Chatherine A	Pagendam, Matthew R	Glushko, Maksim	Klittich, Kenneth D	Schrupp, William R	Total Labor Hours	Total Labor Effort	APC	Subtronics	Scheidegger	Gannett Fleming	Total Subs	Total Expense Effort	Total Effort
		Project Manager	Project Analyst	Process	Staff Engineer	Project Engineer	Staff Engineer	Overall QC	Air Permitting	CAD	Air Permitting	Civil CAD	Estimator	Electrical	Structural CAD	Mechanical	Electrical CAD									
		\$269.85	\$107.74	\$265.31	\$175.41	\$301.82	\$140.24	\$321.20	\$253.33	\$193.82	\$213.06	\$154.48	\$193.89	\$264.14	\$129.83	\$215.58	\$111.43									
006	Additional Project Support Services	8	8	0	0	16	100	0	36	0	80	12	0	0	0	0	0	260	49,892	2,080	18,662	22,021	0	40,683	42,763	92,655
001	Potholing Services	4	4	0	0	8	60	0	0	0	0	12	0	0	0	0	0	88	14,193	704	18,662	0	0	18,662	19,366	33,559
002	Additional CEQA Assistance	4	4	0	0	8	40	0	36	0	80	0	0	0	0	0	0	172	35,699	1,376	0	22,021	0	22,021	23,397	59,096
007	Design Modifications	55	2	6	30	29	105	60	0	142	0	30	30	139	188	30	47	893	175,464	7,144	0	0	152,880	152,880	160,024	335,488
001	Digester Volume and Mixing	15	0	6	30	0	20	20	0	70	0	0	0	59	100	10	25	355	67,207	2,840	0	0	123,480	123,480	126,320	193,527
002	Boiler Relocation	5	0	0	0	0	14	0	0	30	0	0	0	40	30	20	20	159	30,128	1,272	0	0	10,500	10,500	11,772	41,900
003	Iron Salts Tank and Bid Alternate	2	0	0	0	0	8	0	0	10	0	0	0	0	0	0	0	20	3,600	160	0	0	0	0	160	3,760
004	HMB No. 4 Improvements	0	0	0	0	0	5	0	0	10	0	0	0	40	50	0	0	105	19,697	840	0	0	15,750	15,750	16,590	36,287
005	Misc. Improvements (Flame arrestor, paving, 8-inch water line)	2	0	0	0	12	10	0	0	2	0	30	0	0	0	0	2	58	10,809	464	0	0	0	0	464	11,273
006	PDR Revisions	6	2	0	0	2	8	4	0	0	0	0	0	0	0	0	0	22	4,845	176	0	0	0	0	176	5,021
007	Interim Design Submittal	10	0	0	0	10	20	6	0	5	0	0	10	0	8	0	0	69	14,395	552	0	0	3,150	3,150	3,702	18,097
008	90% Design Resubmittal	15	0	0	0	5	20	30	0	15	0	0	20	0	0	0	0	105	24,783	840	0	0	0	0	840	25,623
	GRAND TOTAL	63	10	6	30	45	205	60	36	142	80	42	30	139	188	30	47	1,153	225,356	9,224	18,662	22,021	152,880	193,563	202,787	428,143



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 17, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Robert Simonich, Manager Maintenance & Technology Services
Chris Pachmayer, Electrical and Technology Coach

SUBJECT: Agenda Item No. 13 - Meeting of January 28, 2019
Information Item: **Information Technology Software & Hardware Agreement
Summary**

Recommendation

Information only.

Background

The District's information technology (IT) team currently procures licenses for and supports 69 different IT systems. These systems are a combination of hardware and software.

The Board of Directors requested Staff provide a summary of the District's software and hardware annual licensing and maintenance costs. A table summarizing the name of the software or hardware, a description of what each respective software or hardware does, and the annual cost is attached for review.

Information Technology Software & Hardware Agreement Summary

Software or Hardware Name	Description	Annual Cost
Milestone XProtect Software Upgrade Plan	Closed circuit TV security camera server software maintenance (entry and secure area cameras).	\$413.87
Security & CCTV System	Closed circuit TV security camera system annual support (entry and secure area cameras).	\$9,991.00
OpenText - RightFax Business Edition	Business electronic fax software	\$1,295.00
DocAve (SP)	Backup software for on premise Microsoft SharePoint system	\$1,238.00
ProjectMates	CIP's Construction Project Management Software	\$8,300.00
Knowbe4/Optiv	Computer based security training subscription (safe computer practices training)	\$1,650.00
WebEx Account	Web conferencing and online meeting software	\$228.00
Formula Design Website Maintenance	Public Website hosting, design, and maintenance	\$12,600.00
Optimum Solution	Human resources employee records software (payroll, employee records, ESS, etc.)	\$3,523.82
Cyfin Wavecrest Web Report Software	Employee website monitoring program	\$1,350.00
Aspen Mtell	Maintenance program enhancement that links run time hours in SCADA to Hansen equipment for work order generation based on actual usage rather than time period	\$12,861.00
Hyena Enterprise Edition Software	Active Directory and Windows system management software (manage users of Windows systems)	\$378.00
Bamboo Solutions Pwd Chg & Pwd Expire WPs	Password Management Software that integrates with Microsoft SharePoint	\$876.00
Flexidata System	Collections maintenance video software (televised sewer line software)	\$3,000.00

SingleWire Cisco Phone System Paging)	Web and office paging system and software	\$1,562.50
ER/Studio	Data architecture and data design software (used by IT Staff only)	\$1,303.00
Lenel OnGuard	Access control system software (keypad/card readers used to enter District buildings)	\$167.00
enfoTech iPACS	Environmental Compliance inspection and permitting software	\$12,300.00
DocAve (O365)	Backup software for Microsoft Office 365 cloud tenant	\$2,995.00
KEMP Loadbalancer Enterprise Plus	Proxy used for secure remote access to SharePoint Portal and Hansen	\$1,327.00
NEOGOV Job Posting Subscription	Human resources employee recruiting software (ability to post jobs and process applications)	\$1,275.00
ESRI - ArcGIS Desktop and Server Software	Geographic Information Systems mapping software	\$19,500.00
TabletMedia radio to email gateway	Software used to transfer SCADA alarm emails into text messages on radios	\$790.00
Network and Phone Support (on call)	Consultant used to assist District with network troubleshooting and phone system issues	\$14,700.00
KWIZCOM Calendar Webpart	SharePoint Calendar enhancement	\$125.00
Kiwi CatTools Pro	Automatic backup software (used to backup configuration for District routers, switches, firewalls, and gateways)	\$206.00
Bamboo Solutions Alert Plus Webpart	SharePoint alert software (reminders, notices, etc.). For both internal and external contacts	\$602.00
Shavlik	Patch management software used to update servers and PCs	\$1,974.31
Veeam	Software used to backup Virtual Machines. See VMWare below for a description of a virtual machine	\$7,829.52
Vault Source Control - SCADA	Version control software that locks down the source code of the SCADA system. This prevents unwanted changes to the District's SCADA system.	\$630.00

AutoCAD Subscriptions	Computerized aided drafting software	\$3,136.00
NGS Squirrel	Security auditing software for SQL servers	\$1,855.00
IpSwitch - What's Up Gold Premium	Network monitoring software. Allows IT to view and trouble shoot the District's networks or equipment associated with the network.	\$2,500.00
FuelMaster Controller and Software	Automobile fuel system management software.	\$1,275.00
Cradlepoint Routers	Wireless routers for remote site cellular backup	\$900.00
Palo Alto Edge Firewall	District Internet firewall	\$2,800.00
Quantum iSCSI NAS	Short-term onsite disk-based backup storage	\$770.00
VMWare	Virtual Machine hypervisor software. A virtual machine is a computer file that behaves like an actual computer. Allows for many computers to be served by one physical computer or server.	\$17,349.00
FootPrints Helpdesk	IT's helpdesk software. This software is used by employees to alert IT that they are having a problem with a piece of software or hardware.	\$1,702.33
RSA Two Factor Authentication	RSA tokens are used to provide a code to an employee to gain access to the District's network while working on a mobile device	\$1,621
HACH Wims	Operational data management system. Used by TPO, Lab, and Engineering to collect and store Plant data.	\$2,843
Rockwell Automation Tech Connect	Programmable Logic controller (PLC) support	\$2,074
MetroScan Online	Property Information software subscription (parcel numbers, ownership data, etc.)	\$2,039.40
GE Proficy SCADA Software	Supervisory control and data acquisition software (SCADA). Used by TPO and FMC to monitor the status of Plant and Pump Stations (current flow rates, level of wet wells, etc.)	\$31,809
SCADA Server Rm UPS w/Annual PM	Universal Power supply maintenance. This device is used to condition power and provide a battery backup of the District's critical network devices during a power outage	\$965

Server Room UPS with Annual PM	Universal Power supply maintenance. This device is used to condition power and provide a battery backup of the District's critical network devices during a power outage	\$4,225
Telog Enterprise (for manhole monitors)	Remote manhole level monitoring. These devices are used to determine how high the water levels in the collection system are.	\$823
Cisco Equipment (consolidated)	Network device support used to monitor how data is routed at the District. Used for both Administrative and Plant Networks	\$23,000
Kronos Maintenance Support	District's time recording/keeping system - Annual maintenance and upkeep	\$6,685
Kronos Cloud Hosting Fee	District's time recording/keeping system - Hosting charges in Kronos' cloud.	\$13,800
Cloudberry Backup and Explorer	Software used to upload data to Amazon Web Services (cloud based data storage).	\$68
LizardTech GeoExpress - GIS Software	GIS software that compresses and manipulates high resolution images.	\$710
Brady Link360 LOTO cloud solution	Lock Out Tag Out standard operating procedures software. These SOP's are used to safely take any piece of equipment in the Plant out of service.	\$3,800
AirWatch Green MDM	Mobile Device Management software subscription used to secure mobile devices	\$1,861
NEOGOV Subscription	Human resources employee recruiting software	\$4,110
WIN-911 Enterprise	SCADA alarm notification software. Tells operators when a pump has failed or turned off, etc.	\$695
Geocortex Essentials	Geographic information system (GIS) application development software	\$5,000
OpenText - Alchemy Gold	Electronic record of project drawings (design/construction drawings for CIP and private development projects)	\$2,000
Microsoft Licensing	Microsoft Office 365, Microsoft servers (SQL, Windows), etc.	\$60,729
Tyler Technologies (includes Crystal site lic.)	Eden system. Used for accounting, product acquisition and financial record keeping (AR, AP, GL, inventory control)	\$31,452

RealVNC Enterprise Edition Software	Remote access software for desktop computer support	\$1,400
Alienvault	IT security (SEIM) Security Information and Event Management	\$4,000
Hansen System (includes Nezteck & Mobile)	Computerized maintenance management system (CMMS).	\$31,676
Calero VeraSmart Call Accounting	Phone monitoring system (monitors which numbers and length of calls to USD phone numbers)	\$832
GoDaddy Wildcard Cert unionsanitary.com	USD public website authenticity certification	\$300
Sophos Endpoint Protection	IT security (virus and malware protection)	\$3,628
Unionsanitary.com Domain Name	USD public website	\$32
Meraki	Cisco product. Used for cloud controlled WIFI, routing and security.	\$920
DR Cabinet UPS	Universal Power supply. This device is used to condition power and provide a battery backup of the District's critical network devices during a power outage	\$2,000

Total Annual Cost

\$402,377.49



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Senior Engineer

SUBJECT: Agenda Item No. 14 - Meeting of January 28, 2019
Information Item: **Solar and Cogeneration Facilities Operational Update**

Recommendation

Information only.

Alvarado Wastewater Treatment Plant Solar Carport

The District completed construction of the solar carport facility located at the Alvarado Wastewater Treatment Plant at a cost of \$884,000 and began operation in September 2011. The system consists of 637 solar panels and is rated at 125 kilowatt (kW). The system rating is based on the California Energy Commission's calculation that takes into account the number of panels, the rating of each panel and the inverter efficiency.

The District applied for the California Solar Initiative (CSI) incentive that would rebate \$0.2568 per kilowatt-hour (kWh) of power generated by the system for a period of five years from September 2011 through August 2016. PG&E, the administrator of the CSI program, approved an estimated incentive amount of \$252,850. In September 2016, the District received its final CSI incentive disbursement.

Through December 31, 2018, the Solar Carport facility has generated a total of 1,707,250 kWh of power, which equates to \$306,657 in energy savings at the Plant. Additionally, the District has received \$276,030 or approximately 109% of the estimated CSI incentive rebate from

PG&E. The total benefit of the Solar Carport is \$582,687, which represents 65.8% of simple payback for the initial construction and maintenance costs of the facility.

Irvington Pump Station Solar Facility

The District completed construction of the solar facility located at the Irvington Pump Station at a cost of \$2.85 million and began operation in April 2012. The system consists of 1,680 solar panels and is rated at 408 kW.

The District applied for the CSI incentive that would rebate \$0.15 per kWh of power generated by the system for a period of five years from June 2012 through May 2017. PG&E approved an estimated incentive amount of \$623,370. In February 2017, the District received its final CSI incentive disbursement.

Through January 3, 2019, the solar facility has generated a total of 5,763,248 kWh of power, which equates to \$1,882,682 in energy savings at the Irvington Pump Station. Additionally, the District has received \$680,632 or 109% of the estimated CSI incentive rebate from PG&E. The total benefit of the solar facility is \$2,563,314, which represents 89.8% of simple payback for the initial construction and maintenance costs of the facility.

Cogeneration Facility

The District completed construction of the Cogeneration Facility located at the Alvarado Wastewater Treatment Plant at a construction cost of \$11.8 million and the facility was fully operational in late November 2014. The facility consists of two 850-kW biogas-fueled engine generators and a packaged biogas conditioning system.

The District applied for the Self-Generation Incentive Program (SGIP) that provides financial incentives for the installation of new, qualifying self-generation equipment installed to meet all or a portion of the electric energy needs of a facility. PG&E, the administrator of the SGIP in Northern California, approved the District's application for a maximum rebate of \$3.38 million. The District received half of the total rebate from PG&E in 2015 upon successful operational testing of the facility. The other half will be paid to the District annually over the next five years and will depend on the actual electric energy generated by the facility and the actual amount of engine and exhaust heat recovered and utilized to heat the biosolids in the primary digesters.

Through December 31, 2018, the facility has generated a total of 46,342,461 kWh of power, which equates to approximately \$4,457,869 in energy savings at the plant. Additionally, the District has received \$2,583,441 or 76% of the SGIP incentive rebate from PG&E. The total benefit of the cogeneration facility is \$7,041,310, which represents 55.9% of simple payback for the initial construction and maintenance costs of the facility.

USD labor and equipment costs have not been factored into the maintenance costs of these facilities. The rationale is that no personnel or equipment has been acquired specifically for the maintenance and the work has been accommodated to date with existing resources.

Staff will provide the Board with an operational update of the solar and cogeneration facilities on a semi-annual basis. The attached Table 1 summarizes the operational data that was discussed in this update.

PRE/SEG/RC/CB/dl

Attachment: Table 1 – Solar and Cogeneration Facilities Operational Data

Union Sanitary District
Table 1 - Solar and Cogeneration Facilities Operational Data

Facility	System Rating ¹ (kW)	Energy Generated This Period ² (kWh)	Total Energy Generated To Date (kWh)	Value of Energy Generated To Date (\$)	Rebates Received To Date (\$)	Total Received or Generated (\$)	Construction Cost (\$)	Maintenance Costs To Date ⁴ (\$)	Total Costs Incurred To Date (\$)	Simple Payback To Date (%)	Simple Payback Term (Years)	Original Payback Term ⁵ (Years)	Comments
Alvarado WWTP Solar Carport	125	100,759	1,707,250	306,657	276,030	582,687	884,000	1,000	885,000	65.8%	14.8		System began operation in September 2011. Values are current through December 31, 2018.
Irvington Pump Station Solar Facility	408	307,481	5,763,248	1,882,682	680,632	2,563,314	2,850,000	3,820	2,853,820	89.8%	8.0	10.0	System began operation in April 2012. Values are current through January 3, 2019.
Cogeneration Facility ³	1,700	4,828,979	46,342,461	4,457,869	2,583,441	7,041,310	11,800,000	789,195	12,589,195	55.9%	9.8	8.9	System began operation in late November 2014. Values are current through December 31, 2018.

1) System Rating for the solar facilities is based on the number of panels, the rating of each panel, and the inverter efficiency.

2) Period is from July 2018 through December 2018.

3) The cogeneration equipment consists of two 850-kW engine generators.

4) Maintenance costs do not include USD labor or equipment costs.

5) Original payback terms for the Irvington Pump Station Solar Facility and Cogeneration Facility were calculated during the design phase. A payback period was not calculated for the Alvarado WWTP Solar Carport at the time the project was designed.



Directors

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Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Derek Chiu, Assistant Engineer

SUBJECT: Agenda Item No. 15 - Meeting of January 28, 2019
Information Item: **Update on the Subsurface Investigation at the Alvarado Wastewater Treatment Plant**

Recommendation

Information only.

Background

The Alameda County Water District (ACWD) is responsible for regulating the groundwater supply within our service area, most of which is underlain by aquifers that provide drinking water for the three cities. In 1999, pursuant to ACWD's request to investigate potential releases of petroleum hydrocarbons into soil and groundwater beneath the treatment plant property, the District initiated environmental investigation activities in three areas of the plant. These areas are shown in Figure 1 and are summarized as follows:

- Former Boneyard Area – The District conducted an environmental investigation and remediation in this area (Figure 2), which was previously used for equipment storage and maintenance. The investigation indicated a subsurface petroleum impact of primarily diesel-range hydrocarbons. In the summer of 1999, a source removal operation was conducted with approximately 5,000 cubic yards of impacted soil excavated and disposed offsite. Upon completing the soil removal, the District

backfilled the excavation with clean fill, installed three groundwater monitoring wells (MW-1 through MW-3) and initiated monitoring these wells.

- Former 550-Gallon Gasoline Underground Storage Tank (UST) Area – In August 1999, a subsurface investigation was initiated in this area (Figure 3) after the observation of hydrocarbon odors emanating from an excavation performed during construction at the facility. In September 2000, the District removed this UST under the oversight of the Union City Environmental Program Department (UCEPD) and the ACWD. Observations made during the UST removal indicated that the subsurface petroleum hydrocarbons likely originated from a leak in an underground fuel line beneath a fuel dispenser. The District over-excavated impacted soil in the suspected source area.

In 2000, another subsurface investigation was conducted at the Site to assess whether petroleum hydrocarbons were present in soil near a 10,000-gallon diesel UST and a 1,000-gallon waste oil UST. This investigation was conducted at the request of the UCEPD after pressure testing indicated potential failures of the secondary containment systems of these USTs. The investigation included collecting soil and grab groundwater samples from borings advanced throughout the area. The laboratory results indicated the presence of hydrocarbons associated with gasoline, primarily methyl tertiary butyl ether (MTBE), and not diesel or waste oil. It was concluded that these hydrocarbons were likely from the former 550-gallon gasoline UST.

In 2003, the District installed and initiated monitoring of five groundwater monitoring wells (MW-5 through MW-9) in this area. Well MW-4 was an existing well in the area and was included in the groundwater monitoring program.

- Closed-in-place 6,000-gallon Diesel UST Area – The subsequent investigation conducted in 2000 also included sampling the subsurface in the vicinity of a 6,000-gallon diesel UST located in the southwest corner of the plant (Figure 4). The soil and grab groundwater samples collected adjacent to this UST contained detectable concentrations of petroleum hydrocarbons in the diesel range. The 6,000-gallon diesel UST was closed-in-place by the District in June 2005 under oversight from UCEPD and the ACWD.

In 2003, the District installed and initiated monitoring of one groundwater well (MW-10) in this area.

Groundwater Monitoring Program

The purpose of the plant's groundwater monitoring program is to document groundwater conditions in the areas of concern. The monitoring is performed to evaluate changes in water levels and groundwater flow direction and gradient, establish water quality conditions, and

assess hydrocarbon concentration trends. The ten groundwater monitoring wells were initially monitored quarterly but upon approval of the ACWD, the frequency was reduced to semi-annual or annual in subsequent years. Due to the analytical results at wells MW-4, MW-9, and MW-10, the ACWD approved the removal of these wells from the monitoring program and the District closed the wells in 2008.

The current sampling schedule of the remaining seven wells is summarized in Table 1 below:

Table 1 – Summary of Sampling Schedule

Well	Sampling Frequency	Sampling Constituents
MW-1	Annual	TPH-D, TPH-MO, Monthly Purging
MW-2	Annual	TPH-D, TPH-MO
MW-3	Annual	TPH-D, TPH-MO
MW-5	Annual	MTBE, TBA
MW-6	Removed from Sampling	Groundwater Level Measurement Only
MW-7	Removed from Sampling	Groundwater Level Measurement Only
MW-8	Annual	MTBE, TBA

Legend

TBA = tertiary-butyl alcohol

MTBE = methyl tertiary-butyl ether

TPH-D = total petroleum hydrocarbons as diesel

TPH-MO = total petroleum hydrocarbons as motor oil

Since 2007, staff has conducted monthly purging of the light, non-aqueous phase liquid (LNAPL) present in well MW-1. The objective of this purging is to eliminate the LNAPL layer observed in this monitoring well and mitigate the elevated dissolved petroleum hydrocarbons present in the groundwater in its vicinity.

Following the 2015 annual monitoring event, and in consultation with ACWD, staff switched to placing a hydrocarbon absorbent sock in MW-1 to remove LNAPL in place of the monthly purging. It was expected to be more efficient in removing the hydrocarbons than the monthly purging. However, the results of the 2016 annual monitoring event indicated otherwise. Staff has discontinued the use of the hydrocarbon absorbent sock and resumed monthly purging of MW-1.

Annual 2018 Groundwater Monitoring Event

In September 2018, staff hired Brown and Caldwell to sample the groundwater from the wells, analyze the test results, and prepare a report. The conclusions from the annual 2018 groundwater monitoring event are as follows:

1. Groundwater elevations in the Former Boneyard Area and the Former 550-Gallon UST Area have remained consistent throughout the year with previous years, with the groundwater flow direction corresponding with the results from the previous monitoring events.
2. Two of five monitoring wells (MW-2 and MW-5) measured groundwater with an electrical conductivity that exceeded the State Water Resources Control Board's (SWRCB's) acceptable limits for a groundwater source to be considered suitable, or potentially suitable, for domestic or municipal drinking water supply. Electrical conductivity in water is a measurement to determine the concentration of total dissolved solids.
3. A less than 0.1-foot thick layer of LNAPL was encountered in well MW-1 during the Annual 2018 event. This layer of LNAPL increased from 2017 but is within the range encountered for the past four years.
4. From August 2007 to September 2015 and November 2016 to August 2018, the District has conducted 113 monthly purging events on MW-1 removing a total of 650 gallons of groundwater/LNAPL mixture and removing approximately 4.8 gallons of LNAPL.
5. Drinking water environmental screen levels (ESLs) were exceeded in the groundwater samples collected from monitoring well MW-5 for MTBE and TBA and wells MW-1, MW-2, and MW-3 for TPH-D and TPH-MO. Non-drinking water ESLs were not exceeded in the monitoring wells for any constituent of concern, with the exception of MW-1 for TPH-D and TPH-MO.

The overall sampling results did not improve from 2017's results. While there were significant increases in the levels of TPH-D and TPH-MO recorded in MW-1, the LNAPL thickness has remained consistent since monitoring was initiated in 2000. Therefore, the apparent increase in the levels of TPH-D and TPH-MO in MW-1 is not indicative of an increasing trend and instead, is likely the result of expected inconsistency in water sampling due to the LNAPL layer. The levels of TPH-D and TPH-MO remained consistent for MW-2 and decreased in MW-3, indicating that the hydrocarbon plume is not increasing and is likely stable to decreasing in aerial extent.

The analytical test results are included in Table 2.

Next Steps

The last requirement in the Path to Closure Plan is to remove free product to the maximum extent practicable. The sampling results from the 2018 groundwater monitoring event does not support the District's case for closure. Staff will continue the monthly purging of MW-1 and will perform the next sampling during the 2019 groundwater monitoring event.

PRE/SEG/RC/DC/dl

Attachments: Figures 1 through 4
 Table 2

Figure 1 Alvarado WWTP Site Plan

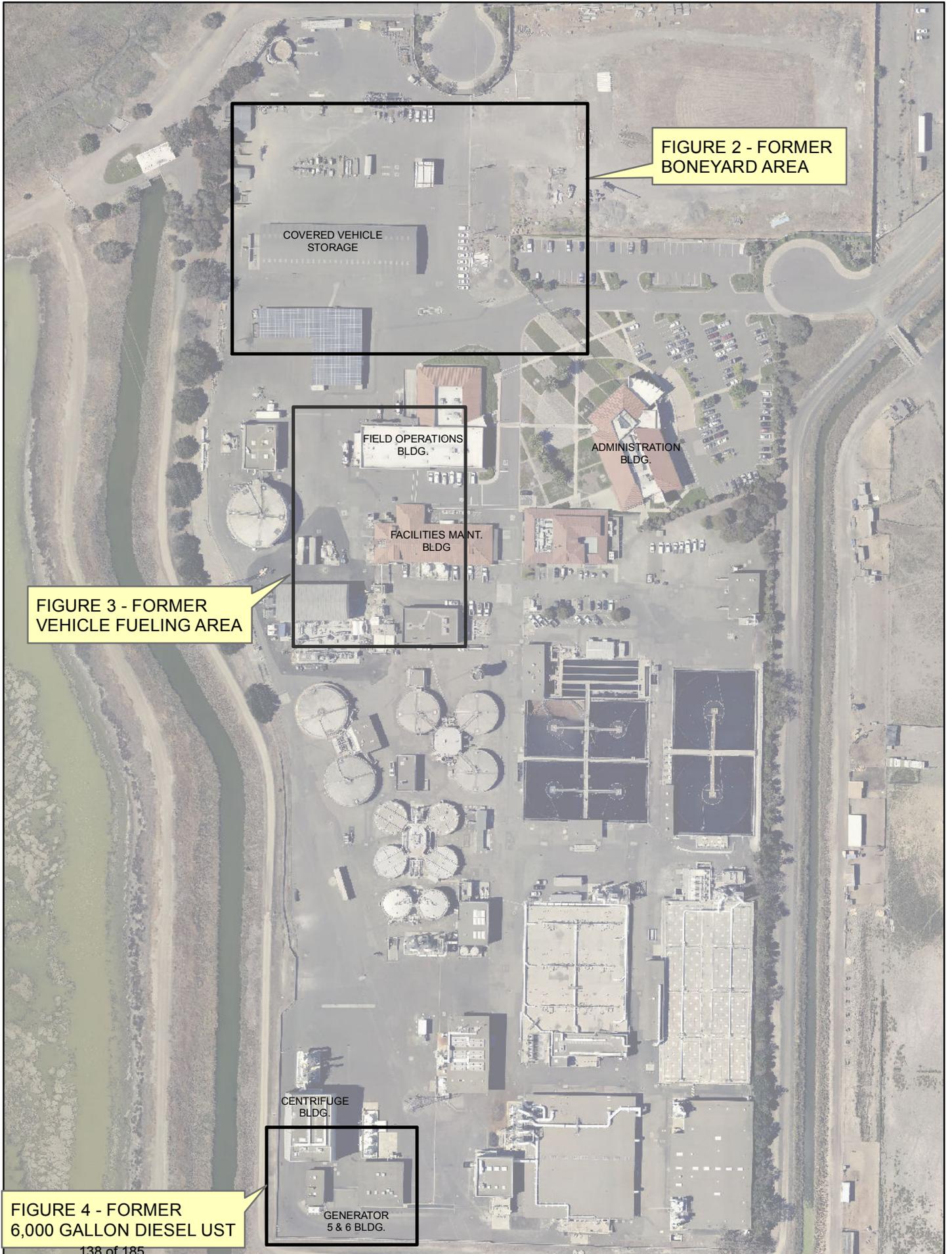


Figure 2 Former Boneyard Area



LEGEND

⊙ EXISTING UNDERGROUND MONITORING WELL



Figure 3 Former Vehicle Fueling Area



Figure 4
Closed-in-Place 6,000 Gallon Diesel UST

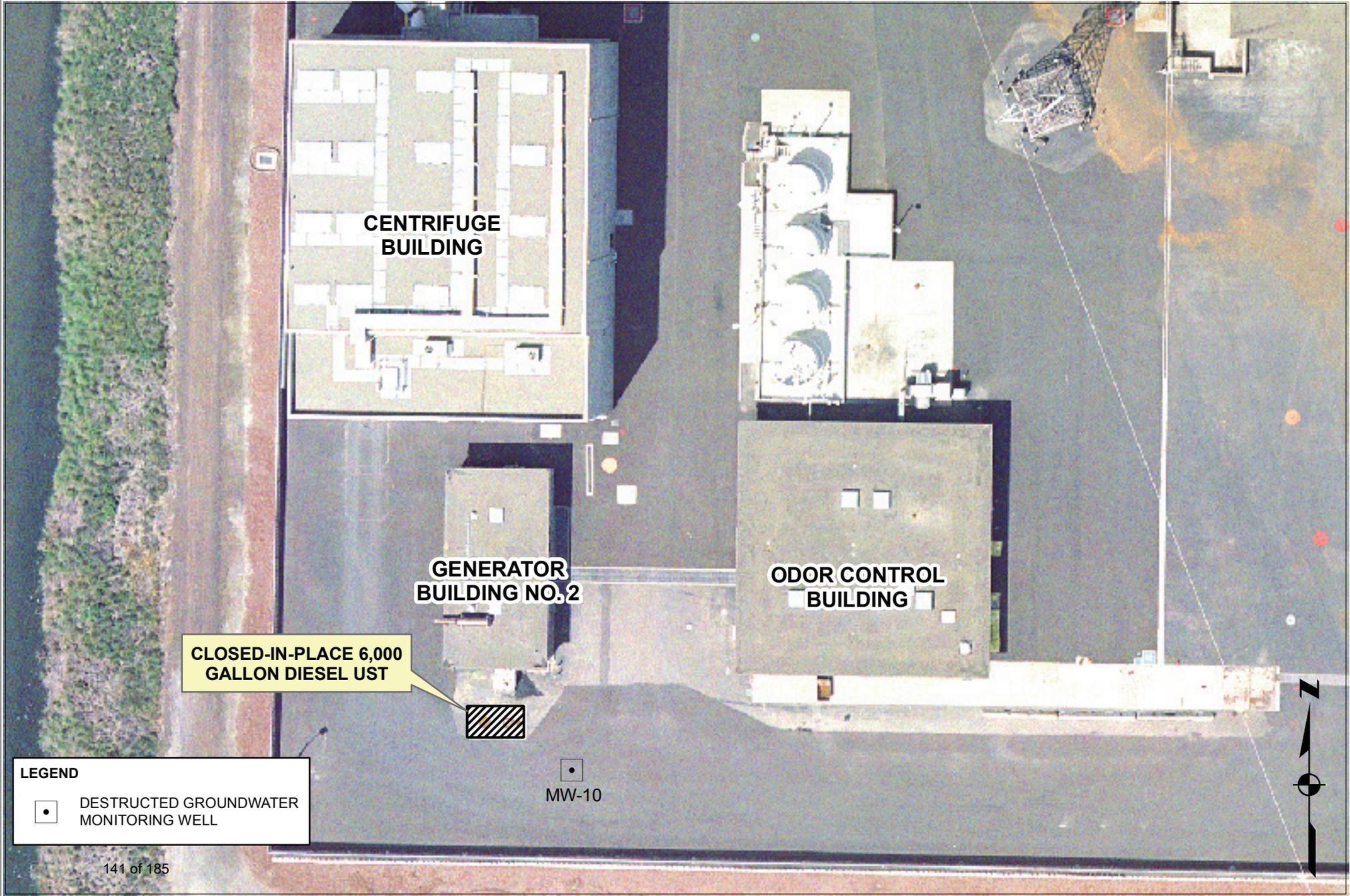


Table 2. Analytical Results - Petroleum Hydrocarbons
Alvarado Wastewater Treatment Plant

Well ID	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	1,2,4-THA (ug/L)	DIPE (ug/L)	EIBE (ug/L)	1,2,4-THA (ug/L)	MIBE (ug/L)	TPH-G (ug/L)	TPH-D (ug/L)	TPH-MO (ug/L)	PNAS (ug/L)
MW-1	11/8/1999	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<5.0	61 ⁿ	150 ^v	<250	ND
	6/8/2000 ^{re}	---	---	---	---	---	---	---	---	---	---	---	---	---
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<1.0	<50	570 ^{ndp}	700	ND
	12/21/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	51 ^{ndp}	<500	ND
	2/27/2001	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	ND
	12/15/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	1,500 ⁿ	1,300 ^l	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	960 ⁿ	1,000 ^l	---
	3/21/2006 Dup	---	---	---	---	---	---	---	---	---	---	3,100 ⁿ	3,600 ^l	---
	6/28/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	160 ^{ny}	19,000 ⁿ	16,000 ^l	---
	6/28/2006 Dup	---	---	---	---	---	---	---	---	---	---	18,000 ⁿ	14,000 ^l	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	17,000 ⁿ	13,000 ^l	---
	9/11/2006 Dup	---	---	---	---	---	---	---	---	---	---	13,000 ⁿ	10,000 ^l	---
	4/10/2007	---	---	---	---	---	---	---	---	---	---	1,600 ^{ny}	1,200 ^{nl}	---
	4/10/2007 Dup	---	---	---	---	---	---	---	---	---	---	4,700 ^{ny}	3,800 ^{nl}	---
	9/24/2007	---	---	---	---	---	---	---	---	---	---	390 ⁿ	340 ^{nl}	---
	3/7/2008	---	---	---	---	---	---	---	---	---	---	450	<300	---
	9/9/2008	---	---	---	---	---	---	---	---	---	---	300 ^l	<300	---
	3/17/2009	---	---	---	---	---	---	---	---	---	---	540 ^l	<300	---
	9/30/2009	---	---	---	---	---	---	---	---	---	---	120 ^l	<300	---
	4/21/2010	---	---	---	---	---	---	---	---	---	---	890 ^l	550	---
	4/21/2010 Dup	---	---	---	---	---	---	---	---	---	---	210 ^l	<300	---
	9/17/2010	---	---	---	---	---	---	---	---	---	---	350 ^l	<300	---
	10/28/2011	---	---	---	---	---	---	---	---	---	---	510	360	---
	10/28/2011 Dup	---	---	---	---	---	---	---	---	---	---	320	150	---
	9/14/2012	---	---	---	---	---	---	---	---	---	---	<55	<110	---
	9/14/2012 Dup	---	---	---	---	---	---	---	---	---	---	210	140	---
9/24/2013	---	---	---	---	---	---	---	---	---	---	1300	1300	---	
9/24/2013 Dup	---	---	---	---	---	---	---	---	---	---	320	330	---	
9/29/2014	---	---	---	---	---	---	---	---	---	---	1300	1400	---	
9/23/2015	---	---	---	---	---	---	---	---	---	---	86	<100	---	
10/4/2016	---	---	---	---	---	---	---	---	---	---	6100	5500	---	
10/10/2017	---	---	---	---	---	---	---	---	---	---	6700	6300	---	
9/26/2018	---	---	---	---	---	---	---	---	---	---	20000	22000	---	
MW-2 **	11/8/1999	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<5.0	<50	<50	<250	ND
	11/8/99 Dup	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<5.0	<50	---	---	---
	6/8/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	170 ^{ndp}	<500	ND
	6/8/2000 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	ND
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.0	<50	<50	<500	ND
	9/18/2000 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.1	<50	<50	<500	ND
	12/21/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	240 ^{ndp}	3,700	---
	12/21/2000 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	200 ^{ndp}	4,000	---
	2/27/2001	<0.50	<0.50 (0.86*)	<0.50	<0.50	---	---	---	---	<5.0	<50	56 nd	1,100	---
	2/27/2001 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	71 nd	1,400	---
	12/13/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	2.2	<50	61 nd	<300	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.2	<50	65 ⁿ	650	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.2	<50	<50	<300	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.0	<50	<50	<300	---
	4/10/2007	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/24/2007	---	---	---	---	---	---	---	---	---	---	<50	430 ⁿ	---
	9/24/2007 Dup	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/7/2008	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/7/2008 Dup	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/8/2008	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/17/2009	---	---	---	---	---	---	---	---	---	---	<50	350	---
	3/17/2009 Dup	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/29/2009	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/29/2009 Dup	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/17/2010	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/17/2010 Dup	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	10/28/2011	---	---	---	---	---	---	---	---	---	---	69	430	---
	9/14/2012	---	---	---	---	---	---	---	---	---	---	<53	<110	---
	9/24/2013	---	---	---	---	---	---	---	---	---	---	<54	370	---
	9/29/2014	---	---	---	---	---	---	---	---	---	---	<52	<100	---
9/29/2014 Dup	---	---	---	---	---	---	---	---	---	---	<53	<110	---	
9/23/2015	---	---	---	---	---	---	---	---	---	---	<52	<100	---	
10/4/2016	---	---	---	---	---	---	---	---	---	---	140	230	---	
10/10/2017	---	---	---	---	---	---	---	---	---	---	680	2700	---	
9/26/2018	---	---	---	---	---	---	---	---	---	---	150	270	---	
9/26/2018 Dup	---	---	---	---	---	---	---	---	---	---	200	810	---	

Table 2. Analytical Results - Petroleum Hydrocarbons
Alvarado Wastewater Treatment Plant

Well ID	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	1,2,4-THA (ug/L)	DIPE (ug/L)	EIBE (ug/L)	1,2,4,5-THA (ug/L)	MIBE (ug/L)	TPH-G (ug/L)	TPH-D (ug/L)	TPH-MO (ug/L)	PNAS (ug/L)
MW-3 **	11/8/1999	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<5.0	<50	110 ⁶	<250	ND
	6/8/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	ND
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	2.1	<50	<50	<500	ND
	12/21/2000	<0.50	<0.50	<0.50 (0.97*)	<0.50	---	---	---	---	<5.0	<50	<50	<500	---
	2/27/2001	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	---
	12/13/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	1.9	<50	<50	<300	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	<50	<300	---
	6/28/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	<50	<300	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	<50	<300	---
	4/11/2007	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/25/2007	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/8/2008	---	---	---	---	---	---	---	---	---	---	72 ⁷	<300	---
	9/9/2008	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/17/2009	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/30/2009	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/17/2010	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	10/28/2011	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/14/2012	---	---	---	---	---	---	---	---	---	---	<54	<110	---
	9/24/2013	---	---	---	---	---	---	---	---	---	---	<55	<110	---
	9/29/2014	---	---	---	---	---	---	---	---	---	---	<51	<100	---
9/25/2015	---	---	---	---	---	---	---	---	---	---	<50	<100	---	
10/4/2016	---	---	---	---	---	---	---	---	---	---	160	270	---	
10/10/2017	---	---	---	---	---	---	---	---	---	---	790	1100	---	
9/26/2018	---	---	---	---	---	---	---	---	---	---	230	340	---	
MW-4*	9/3/1999	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.5	<50	100	---	---
	6/8/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	80 ⁸	<50	<500	5.2 ⁹
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<1.0	<50	<50	<500	ND
	12/21/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	---
	2/27/2001	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	<50	<500	---
	12/14/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	<50	---	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	<50	<300	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	<50	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.5	<50	<50	---	---
	4/11/2007	---	---	---	---	---	---	---	---	<0.5	---	---	---	---
9/24/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	
MW-5	12/14/2005	<0.83	<0.83	<0.83	<0.83	<17	<0.83	<0.83	<0.83	180	<83	<50	---	---
	12/14/2005 Dup	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	0.52	180	<50	<50	---	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	910	<50	78	<300	---
	3/21/2006 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	870	<50	---	---	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	320	<50	210 ¹⁰	---	---
	6/27/2006 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	690	<50	---	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	430	<50	<50	---	---
	9/11/2006 Dup	<0.50	<0.50	<0.50	<0.50	---	---	---	---	510	<50	---	---	---
	4/11/2007	---	---	---	---	---	---	---	---	110	---	---	---	---
	4/11/2007 Dup	---	---	---	---	---	---	---	---	100	---	---	---	---
	9/25/2007	---	---	---	---	<14	---	---	---	200	---	---	---	---
	9/25/2007 Dup	---	---	---	---	<14	---	---	---	130	---	---	---	---
	3/7/2008	---	---	---	---	32	---	---	---	460	---	---	---	---
	3/7/2008 Dup	---	---	---	---	<170	---	---	---	960	---	---	---	---
	9/8/2008	---	---	---	---	<25	---	---	---	290	---	---	---	---
	9/8/2008 Dup	---	---	---	---	<25	---	---	---	390	---	---	---	---
	9/30/2009	---	---	---	---	<25	---	---	---	130	---	---	---	---
	9/30/09 Dup	---	---	---	---	<33	---	---	---	200	---	---	---	---
	9/17/2010	<0.50	<0.50	<0.50	<0.50	<83	---	---	---	470	---	---	---	---
	9/17/2010 Dup	<0.50	<0.50	<0.50	<0.50	<100	---	---	---	680	---	---	---	---
	10/28/2011	---	---	---	---	<100	---	---	---	130	---	---	---	---
	10/28/2011 Dup	---	---	---	---	<100	---	---	---	40	---	---	---	---
	9/14/2012	---	---	---	---	63	---	---	---	570	---	---	---	---
	9/14/2012 Dup	---	---	---	---	44	---	---	---	460	---	---	---	---
9/24/2013	---	---	---	---	<100	---	---	---	230	---	---	---	---	
9/24/2013 Dup	---	---	---	---	<100	---	---	---	230	---	---	---	---	
9/29/2014	---	---	---	---	<200	---	---	---	720	---	---	---	---	
9/29/2014 Dup	---	---	---	---	<200	---	---	---	750	---	---	---	---	
9/23/2015	---	---	---	---	<20	---	---	---	600	---	---	---	---	
10/4/2016	---	---	---	---	<400 D	---	---	---	710	---	---	---	---	
10/10/2017	---	---	---	---	<20	---	---	---	170	---	---	---	---	
9/26/2018	---	---	---	---	44	---	---	---	550	---	---	---	---	
9/26/2018 Dup	---	---	---	---	<200	---	---	---	240	---	---	---	---	

Table 2. Analytical Results - Petroleum Hydrocarbons
Alvarado Wastewater Treatment Plant

Well ID	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	1,2,4-THA (ug/L)	DIPE (ug/L)	E1BE (ug/L)	1,2,4-THA (ug/L)	M1BE (ug/L)	TPH-G (ug/L)	TPH-D (ug/L)	TPH-MO (ug/L)	PNAS (ug/L)
MW-6*	12/14/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	<50	---	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	<50	<300	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	0.7	<50	<50	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	0.6	<50	<50	---	---
	4/11/2007	---	---	---	---	---	---	---	---	0.7	---	---	---	---
	9/25/2007	---	---	---	---	<10	---	---	---	0.6	---	---	---	---
	9/9/2008	---	---	---	---	<10	---	---	---	0.6	---	---	---	---
	9/30/2009	---	---	---	---	<10	---	---	---	< 0.5	---	---	---	---
MW-7*	12/15/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	0.59	<50	<50	---	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	<50	<300	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	1.0	<50	<50	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	1.2	<50	<50	---	---
	4/11/2007	---	---	---	---	---	---	---	---	1.0	---	---	---	---
	9/25/2007	---	---	---	---	<10	---	---	---	0.8	---	---	---	---
	9/9/2008	---	---	---	---	<10	---	---	---	0.8	---	---	---	---
	9/30/2009	---	---	---	---	<10	---	---	---	< 0.5	---	---	---	---
MW-8**	12/15/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	58	<50	<50	---	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	37	<50	78	<300	---
	6/28/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	16	<50	61 ^y	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	33	<50	55 ^y	---	---
	4/11/2007	---	---	---	---	---	---	---	---	61	---	---	---	---
	9/25/2007	---	---	---	---	<10	---	---	---	32	---	---	---	---
	3/7/2008	---	---	---	---	<10	---	---	---	48	---	---	---	---
	9/9/2008	---	---	---	---	<10	---	---	---	69	---	---	---	---
	9/29/2009	---	---	---	---	< 10	---	---	---	51	---	---	---	---
	9/17/2010	<0.50	<0.50	<0.50	<0.50	<10	---	---	---	78	---	---	---	---
	10/28/2011	---	---	---	---	<10	---	---	---	36	---	---	---	---
	9/14/2012	---	---	---	---	7.2	---	---	---	24	---	---	---	---
	9/24/2013	---	---	---	---	<10	---	---	---	65	---	---	---	---
	9/29/2014	---	---	---	---	<20	---	---	---	9.7	---	---	---	---
	9/23/2015	---	---	---	---	<20	---	---	---	16	---	---	---	---
	10/4/2016	---	---	---	---	<20	---	---	---	22	---	---	---	---
	10/10/2017	---	---	---	---	<20	---	---	---	160	---	---	---	---
9/26/2018	---	---	---	---	<20	---	---	---	0.59	---	---	---	---	
MW-9*	12/14/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	<50	---	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	52	<300	---
	6/28/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	<50	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.5	<50	<50	---	---
	4/11/2007	---	---	---	---	---	---	---	---	<0.5	---	---	---	---
	9/24/2007	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-10*	12/14/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	<50	---	---
	3/21/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	83	<300	---
	3/21/2006 Dup	---	---	---	---	---	---	---	---	---	---	120	<300	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	68 ^y	---	---
	6/27/2006 Dup	---	---	---	---	---	---	---	---	---	---	62 ^y	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.5	<50	76 ^{y,z}	---	---
	9/11/2006 Dup	---	---	---	---	---	---	---	---	---	---	<50	---	---
	4/10/2007	---	---	---	---	---	---	---	---	---	---	55 ^y	---	---
9/24/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	
Field Equipment Blank	6/8/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<1.0	<50	---	---	---
	12/21/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	2/27/2001	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	<50	<300	---
	4/11/2007	---	---	---	---	---	---	---	---	<0.5	<50	<300	---	---
	9/24/2007	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/25/2007	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	3/7/2008	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/8/2008	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/9/2008	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	3/17/2009	---	---	---	---	---	---	---	---	---	---	<50	<300	---
	9/17/2010	<0.5	<0.5	<0.5	<0.5	<10	---	---	---	<0.5	---	---	---	---
	9/14/2012	---	---	---	---	<4	---	---	---	<0.5	---	---	---	---
	9/24/2013	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
9/29/2014	---	---	---	---	<20	---	---	---	<0.5	---	---	---	---	

Table 2. Analytical Results - Petroleum Hydrocarbons
Alvarado Wastewater Treatment Plant

Well ID	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	tBA (ug/L)	DIPE (ug/L)	EtBE (ug/L)	tAME (ug/L)	MtBE (ug/L)	TPH-G (ug/L)	TPH-D (ug/L)	TPH-MO (ug/L)	PNAs (ug/L)
Trip Blank	11/8/1999	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<5.0	<50	---	---	---
	6/8/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	9/18/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<1.0	<50	---	---	---
	12/21/2000	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	2/27/2001	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<5.0	<50	---	---	---
	12/14/2005	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<50	---	---	---
	3/20/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<0.50	<50	---	---	---
	6/27/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	---	---	---
	9/11/2006	<0.50	<0.50	<0.50	<0.50	---	---	---	---	<2.0	<50	---	---	---
	4/11/2007	---	---	---	---	---	---	---	---	<0.5	---	---	---	---
	9/25/2007	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/8/2008	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/30/2008	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/17/2010	<0.5	<0.5	<0.5	<0.5	<10	---	---	---	<0.5	---	---	---	---
	10/28/2011	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/14/2012	---	---	---	---	<4	---	---	---	<0.5	---	---	---	---
	9/24/2013	---	---	---	---	<10	---	---	---	<0.5	---	---	---	---
	9/29/2014	---	---	---	---	<20	---	---	---	<0.5	---	---	---	---
	9/23/2015	---	---	---	---	<20	---	---	---	<0.5	---	---	---	---
	10/4/2016	---	---	---	---	---	---	---	---	---	---	---	---	---
10/10/2017	---	---	---	---	---	---	---	---	---	---	---	---	---	
9/26/2018	---	---	---	---	<20	---	---	---	<0.5	---	---	---	---	
ESL - DW		1.0	40	30	20	12	NE	NE	NE	5.0	100	100	100	
ESL - NDW		4b	130	43	100	18,000	NE	NE	NE	1,800	500	640	640	

Notes:
ug/L = micrograms per liter
D = Dilution factor on sample increased reporting limit.
Benzene analyzed following U.S. EPA Method 8020, 8021B or 8260B
Toluene analyzed following U.S. EPA Method 8020, 8021B or 8260B
Ethylbenzene analyzed following U.S. EPA Method 8020, 8021B or 8260B
Xylenes analyzed following U.S. EPA Method 8020, 8021B or 8260B (concentration reported is total of m,p- and o-xylenes).
tBA = tert-Butyl Alcohol analyzed following U.S. EPA Method 8260B
DIPE = Isopropyl Ether analyzed following U.S. EPA Method 8260B
EtBE = Ethyl tert-Butyl Ether analyzed following U.S. EPA Method 8260B
tAME = Methyl tert-Amyl Ether analyzed following U.S. EPA Method 8260B
MtBE = Methyl tert-Butyl Ether analyzed following U.S. EPA Method 8260A or 8260B
TPH-G = Total Petroleum Hydrocarbons as Gasoline analyzed following modified EPA Method 8015
TPH-D = Total Petroleum Hydrocarbons as Diesel analyzed following modified EPA Method 8015 and prepared with silica gel clean-up
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil analyzed following modified EPA Method 8015 and prepared with silica gel clean-up
PNAs = Polynuclear Aromatic Hydrocarbons analyzed following U.S. EPA Method 8270A
ESL-DW = San Francisco Regional Water Quality Control Board Environmental Screening Level for sites where groundwater is a current or potential drinking water source, Table F-1a, May 2008
ESL-NDW = San Francisco Regional Water Quality Control Board Environmental Screening Level for sites where groundwater is not a current or potential drinking water source, Table F-1b, May 2008
Dup = Duplicate sample
<n = Not detected above the laboratory reporting limit of n ug/L
ND = Not detected above laboratory reporting limits for respective individual compounds
NF = Well not found
NE = Not established
--- = Not analyzed
^g = Heavier gasoline range compounds are significant, chromatogram possibly shows aged gasoline pattern.
^o = Medium boiling point pattern that does not match diesel, chromatogram possibly shows aged kerosene pattern.
^d = Diesel range compounds are significant; no recognizable pattern.
ⁿ = Heavier hydrocarbons contributed to the quantitation.
^l = Lighter hydrocarbons contributed to the quantitation.
^z = Sample exhibits chromatographic pattern which does not resemble standard
z = Sample analyzed outside EPA Method's holding time
bp = bis (2-Ethylhexyl) phthalate concentration reported
^g = Hydrocarbon reported in the gasoline range does not match laboratory's gasoline standard
^{ndp} = Hydrocarbon reported does not match the pattern of laboratory's diesel standard
^{ldr} = Hydrocarbon reported is in the late diesel range, and does not match laboratory's diesel standard
* = Analyzed following U.S. EPA Method 8260A
Bold = Current groundwater monitoring event
Italicized = Concentration exceeds the respective ESL-DW
Underline = Concentration exceeds the respective ESL-NDW
- = Discontinued sampling groundwater monitoring well per approval from Alameda County Water District; MW-4, MW-9 and MW-10 were destructed on May 2, 2008
- = Well sampled annually per approval from Alameda County Water District.



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 16, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Laurie Brenner, Business Services Coach
Skip Calvo, Purchasing Agent
Nina Narvaez, Administrative Specialist

SUBJECT: Agenda Item No. 16 - Meeting of January 28, 2019
Information Item: **CAL-Card Quarterly Merchant Activity Report**

Background

The attached CAL-Card Merchant Spend Analysis details the CAL-Card activity for the second quarter of FY 2019. This covers transactions from the CAL-Card billing period October 23, 2018 through December 22, 2018. During this quarter, we had 283 transactions totaling \$71,094.66.

Attachments: Merchant Spend Analysis Report

Merchant Spend Analysis - Detail

MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/ Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47961	AUTO/RV DEALERS	5511	GOLDEN GATE TRUCK CENTER	OAKLAND	CA	\$ 8,938.96	4	\$ 2,234.74	\$ 0.00	0	\$ 8,938.96	12.57%	4	\$ 0.00
47963	BUSINESS EXPENS	8699	CALIFORNIA WATER ENVIRONM	510-3827800	CA	5,268.00	26	202.62	0.00	0	5,268.00	7.41%	26	0.00
47963	BUSINESS EXPENS	8699	GOVERNMENT FINANCE OFFIC	CHICAGO	IL	2,700.00	3	900.00	0.00	0	2,700.00	3.80%	3	0.00
47963	BUSINESS EXPENS	9399	CITY OF FREMONT DEV SVCS	FREMONT	CA	2,662.00	2	1,331.00	0.00	0	2,662.00	3.74%	2	0.00
47979	WHOLESALE TRADE	5411	ARTEAGA'S CATERING	NEWARK	CA	2,489.87	1	2,489.87	0.00	0	2,489.87	3.50%	1	221.20
47978	VEHICLE EXPENSE	5599	THOMPSON TANK INC	562-8697711	CA	2,154.70	2	1,077.35	0.00	0	2,154.70	3.03%	2	0.00
47978	VEHICLE EXPENSE	7538	CATS AUTOMOTIVE	FREMONT	CA	2,066.91	1	2,066.91	0.00	0	2,066.91	2.91%	1	0.00
47963	BUSINESS EXPENS	8999	IN *KEN GRADY COMPANY, IN	415-8835924	CA	1,894.25	2	947.13	0.00	0	1,894.25	2.66%	2	151.70
47979	WHOLESALE TRADE	5085	IN *E.I.C. INC	770-9567838	GA	1,383.50	1	1,383.50	0.00	0	1,383.50	1.95%	1	0.00
47972	OTHER	7993	VIDEO AMUSEMENT. INC.	650-871-5852	CA	1,300.00	1	1,300.00	0.00	0	1,300.00	1.83%	1	0.00
47979	WHOLESALE TRADE	5099	R.F. MACDONALD	510-784-0110	CA	1,298.20	1	1,298.20	0.00	0	1,298.20	1.83%	1	108.42
284298	VTA Catering	5814	TOGOS - UNION CITY	UNION CITY	CA	1,260.97	7	180.14	0.00	0	1,260.97	1.77%	7	0.00
47970	OFFICE SERVICES	7394	CELEBRATION PARTY EQUIPME	510-8870727	CA	1,251.83	2	625.92	0.00	0	1,251.83	1.76%	2	0.00
47969	MRO SUPPLIES	5969	FLUID COMPONENTS INTL	760-7446950	CA	1,021.94	1	1,021.94	0.00	0	1,021.94	1.44%	1	68.15
47963	BUSINESS EXPENS	8299	ACADEMYX TRAINING	415-392-8024	CA	1,000.00	2	500.00	0.00	0	1,000.00	1.41%	2	0.00
47963	BUSINESS EXPENS	8699	NACWA	202-5331804	DC	975.00	2	487.50	0.00	0	975.00	1.37%	2	0.00
47963	BUSINESS EXPENS	8249	INFRASTRUCTURE RESOURCES,	952-746-2301	MN	950.00	1	950.00	0.00	0	950.00	1.34%	1	0.00

Merchant Spend Analysis - Detail

MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47963	BUSINESS EXPENS	8699	WEF MAIN	703-684-2400	VA	\$ 911.00	3	\$ 303.67	\$ 0.00	0	\$ 911.00	1.28%	3	\$ 0.00
47979	WHOLESALE TRADE	5065	BATTERY SYSTEMS SAN JOSE	SAN JOSE	CA	877.79	1	877.79	0.00	0	877.79	1.23%	1	73.99
47963	BUSINESS EXPENS	8299	WWW.LORMAN.COM	WWW.LORMAN.CO	WI	866.26	2	433.13	0.00	0	866.26	1.22%	2	0.00
47970	OFFICE SERVICES	7311	IN *TRI-CITY VOICE NEWSPA	510-4941999	CA	830.00	2	415.00	0.00	0	830.00	1.17%	2	0.00
47963	BUSINESS EXPENS	8999	TELOG INSTRUMENTS, INC	585-7423000	CA	823.13	1	823.13	0.00	0	823.13	1.16%	1	0.00
47979	WHOLESALE TRADE	5211	GRANITE ROCK 211	831-768-2019	CA	815.63	1	815.63	0.00	0	815.63	1.15%	1	65.63
47979	WHOLESALE TRADE	5065	ON-LINE ELECTRONICS INC	949-645-9900	AZ	807.72	2	403.86	0.00	0	807.72	1.14%	2	0.00
47979	WHOLESALE TRADE	5074	RB HAYWARD	HAYWARD	CA	789.32	1	789.32	0.00	0	789.32	1.11%	1	0.00
284298	VTA Catering	5814	MR PICKLES 325 - UNION	UNION CITY	CA	775.80	9	86.20	0.00	0	775.80	1.09%	9	0.00
47963	BUSINESS EXPENS	8699	AMERICAN PAYROLL ASSOC	210-226-4600	TX	760.00	4	190.00	0.00	0	760.00	1.07%	4	0.00
47979	WHOLESALE TRADE	5251	PRYOR TOOLS INC	714-6328198	CA	737.00	1	737.00	0.00	0	737.00	1.04%	1	0.00
47979	WHOLESALE TRADE	5251	SOL*SNAP-ON INDUSTRIAL	877-740-1900	WI	718.05	2	359.03	0.00	0	718.05	1.01%	2	63.79
47979	WHOLESALE TRADE	5099	PAYPAL *RCM	402-935-7733	OK	699.00	1	699.00	0.00	0	699.00	0.98%	1	59.00
47963	BUSINESS EXPENS	9399	CA TOXIC MAIN/US EPA FEE	SACRAMENTO	CA	660.00	1	660.00	0.00	0	660.00	0.93%	1	0.00
47971	OFFICE SUPPLIES	5943	PRINT TO MAIL BY DELUXE	866-6672861	CA	886.89	4	221.72	228.85	1	658.04	0.93%	5	0.00
47979	WHOLESALE TRADE	5200	HOMEDEPOT.COM	800-430-3376	GA	580.58	1	580.58	0.00	0	580.58	0.82%	1	51.58
47972	OTHER	7699	DRIVELINE	SAN LEANDRO	CA	514.11	1	514.11	0.00	0	514.11	0.72%	1	0.00

Merchant Spend Analysis - Detail

MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47972	OTHER		SERVICE OF SAN											
47963	BUSINESS EXPENS	8299	PAYPAL *CCTC	402-935-7733	CA	500.00	1	500.00	0.00	0	500.00	0.70%	1	0.00
47963	BUSINESS EXPENS	8299	PESTICIDE APPLICATORS PRO	831-442-3536	CA	495.00	3	165.00	0.00	0	495.00	0.70%	3	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M89N67JT1	AMZN.COM/BILL	WA	473.97	1	473.97	0.00	0	473.97	0.67%	1	0.00
47965	HOTELS	3501	HOLIDAY INN LONG BEACH A	LONG BEACH	CA	457.70	2	228.85	0.00	0	457.70	0.64%	2	0.00
47972	OTHER	5732	SQ *DECADE ENGINEER	415-375-3176	CA	456.56	1	456.56	0.00	0	456.56	0.64%	1	0.00
47971	OFFICE SUPPLIES	4812	JACK DOHENY COMPANIES	248-349-0904	MI	450.00	1	450.00	0.00	0	450.00	0.63%	1	0.00
47979	WHOLESALE TRADE	5261	DOMYOWN.COM	770-840-8831	GA	448.71	1	448.71	0.00	0	448.71	0.63%	1	0.00
47979	WHOLESALE TRADE	5046	BOBCAT OF FREMONT	510-8974123	CA	430.95	1	430.95	0.00	0	430.95	0.61%	1	33.52
47970	OFFICE SERVICES	7375	COMPLINE	916-774-4000	CA	427.00	1	427.00	0.00	0	427.00	0.60%	1	0.00
47970	OFFICE SERVICES	7399	IN *PENINSULA MESSENGER S	559-7346328	CA	425.00	1	425.00	0.00	0	425.00	0.60%	1	0.00
47979	WHOLESALE TRADE	5045	CDW GOVT #PPG6487	800-808-4239	IL	417.04	1	417.04	0.00	0	417.04	0.59%	1	37.05
47963	BUSINESS EXPENS	9399	UNION CITY CITY HALL	510-6755381	CA	411.00	1	411.00	0.00	0	411.00	0.58%	1	0.00
47979	WHOLESALE TRADE	5065	NEWARK US 00000075	773-907-6000	IL	400.59	1	400.59	0.00	0	400.59	0.56%	1	35.59
47963	BUSINESS EXPENS	8299	CA-NV SECTION, AWWA	909-481-7200	CA	400.00	2	200.00	0.00	0	400.00	0.56%	2	0.00
		8999	SQ *SARSIE'S PARTIE	UNION CITY	CA	400.00	1	400.00	0.00	0	400.00	0.56%	1	0.00
47979	WHOLESALE TRADE	5072	BURLINGTON SAFETY LABORAT	925-8661412	CA	400.00	1	400.00	0.00	0	400.00	0.56%	1	0.00
47963	BUSINESS	8398	INT PERSONNEL	510-4325959	CA	399.00	1	399.00	0.00	0	399.00	0.56%	1	0.00

Merchant Spend Analysis - Detail

MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/ Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47963	EXPENS		MGMT ASSOC											
47963	BUSINESS EXPENS	8699	CALIFORNIA ASSOCIATION OF	530-822-5009	CA	395.00	1	395.00	0.00	0	395.00	0.56%	1	0.00
47979	WHOLESALE TRADE	5065	MASTER ELECTRONICS	888-473-5297	CA	357.83	1	357.83	0.00	0	357.83	0.50%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M03084X10	AMZN.COM/BILL	WA	357.56	1	357.56	0.00	0	357.56	0.50%	1	31.76
47979	WHOLESALE TRADE	5300	COSTCO WHSE #1061	HAYWARD	CA	345.95	4	86.49	0.00	0	345.95	0.49%	4	0.00
47979	WHOLESALE TRADE	5045	CDW GOVT #PWW0943	800-808-4239	IL	344.04	1	344.04	0.00	0	344.04	0.48%	1	30.56
289779	COMPUTER	4816	DNH*GODADDY.COM	480-505-8855	AZ	339.98	1	339.98	0.00	0	339.98	0.48%	1	0.00
47978	VEHICLE EXPENSE	7538	BAYCOUNTIESDIES ELSERVINC	FREMONT	CA	317.62	1	317.62	0.00	0	317.62	0.45%	1	0.00
47963	BUSINESS EXPENS	8398	THE NELAC INSTITUTE	817-5981624	TX	300.00	1	300.00	0.00	0	300.00	0.42%	1	0.00
47963	BUSINESS EXPENS	8299	SKILLPATH / NATIONAL	913-3623900	KS	299.00	1	299.00	0.00	0	299.00	0.42%	1	11.96
47970	OFFICE SERVICES	7338	CONTENT MANAGEMENT COR	510-505-1100	CA	284.05	1	284.05	0.00	0	284.05	0.40%	1	0.00
47979	WHOLESALE TRADE	5085	CUMMINS INC	SAN LEANDRO	CA	283.73	2	141.87	0.00	0	283.73	0.40%	2	0.00
47960	AIRLINE	3066	SOUTHWES 5262418622414	800-435-9792	TX	270.60	1	270.60	0.00	0	270.60	0.38%	1	0.00
47960	AIRLINE	3066	SOUTHWES 5262400493829	800-435-9792	TX	266.96	1	266.96	0.00	0	266.96	0.38%	1	0.00
47960	AIRLINE	3066	SOUTHWES 5262400503246	800-435-9792	TX	258.96	1	258.96	0.00	0	258.96	0.36%	1	0.00
47970	OFFICE SERVICES	7361	ZIPRECRUITER, INC.	855-747-5493	CA	249.00	1	249.00	0.00	0	249.00	0.35%	1	0.00
		7361	ZIPRECRUITER, INC.	855-747-5493	CA	249.00	1	249.00	0.00	0	249.00	0.35%	1	0.00
		7361	ZIPRECRUITER, INC.	855-747-5493	CA	249.00	1	249.00	0.00	0	249.00	0.35%	1	0.00

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MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/ Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47970	OFFICE SERVICES		INC.											
47960	AIRLINE	3066	SOUTHWES 5262418625705	800-435-9792	TX	248.96	1	248.96	0.00	0	248.96	0.35%	1	0.00
47979	WHOLESALE TRADE	5085	GRAINGER	877-2022594	IL	246.95	1	246.95	0.00	0	246.95	0.35%	1	20.97
47963	BUSINESS EXPENS	8299	LYNDA.COM, INC.	888-3359632	CA	239.88	1	239.88	0.00	0	239.88	0.34%	1	0.00
47979	WHOLESALE TRADE	5047	IN *GLASS EXPANSION, INC.	508-5631800	MA	230.00	1	230.00	0.00	0	230.00	0.32%	1	0.00
47963	BUSINESS EXPENS	8699	CAPIO - CA ASSOCIATION OF	530-9245444	CA	225.00	1	225.00	0.00	0	225.00	0.32%	1	0.00
47979	WHOLESALE TRADE	5111	WEBOFFICEMART COM	866-5680524	MN	1,651.19	2	825.60	1,437.27	1	213.92	0.30%	3	111.62
47965	HOTELS	3530	RENAISSANCE HOTELS PAL	INDIAN WELLS	CA	212.26	1	212.26	0.00	0	212.26	0.30%	1	0.00
47970	OFFICE SERVICES	8911	BROWN AND CALDWELL	925-2102277	CO	200.00	1	200.00	0.00	0	200.00	0.28%	1	0.00
342849	Postage Stamps	9402	USPS PO 0580260401	UNION CITY	CA	200.00	1	200.00	0.00	0	200.00	0.28%	1	0.00
47962	BUILDING SERVIC	780	REED AND GRAHAM INC	SAN JOSE	CA	198.02	1	198.02	0.00	0	198.02	0.28%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT4628Q40	AMZN.COM/BILL	WA	191.38	1	191.38	0.00	0	191.38	0.27%	1	13.49
47962	BUILDING SERVIC	1711	BRUCE BARTON PUMP SVS	408-292-1182	CA	191.15	1	191.15	0.00	0	191.15	0.27%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M849333S1	AMZN.COM/BILL	WA	189.95	1	189.95	0.00	0	189.95	0.27%	1	0.00
		5942	AMZN MKTP US*MT0K672B2	AMZN.COM/BILL	WA	189.95	1	189.95	0.00	0	189.95	0.27%	1	0.00
47979	WHOLESALE TRADE	5045	CDW GOVT #PMM4423	800-808-4239	IL	187.85	1	187.85	0.00	0	187.85	0.26%	1	15.70
284298	VTA Catering	5814	CHIPOTLE ONLINE	303-595-4000	CO	185.68	1	185.68	0.00	0	185.68	0.26%	1	0.00
47966	MAIL/TELEPHON	5965	OFFICE DEPOT #950	800-463-3768	CA	180.30	1	180.30	0.00	0	180.30	0.25%	1	16.02

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47966	E													
47972	OTHER	5931	PAYPAL *K5 AUTO	402-935-7733	CA	179.99	1	179.99	0.00	0	179.99	0.25%	1	0.00
47979	WHOLESALE TRADE	5099	ZEMARC CORPORATION	323-721-5598	CA	171.54	1	171.54	0.00	0	171.54	0.24%	1	15.24
47978	VEHICLE EXPENSE	5532	PAYPAL *FASTLNTIRES	402-935-7733	CA	169.00	1	169.00	0.00	0	169.00	0.24%	1	0.00
47978	VEHICLE EXPENSE	5533	FREMONT FORD	888-244-9105	CA	158.67	1	158.67	0.00	0	158.67	0.22%	1	0.00
47970	OFFICE SERVICES	7394	PETERSON SAN LEANDRO	510-357-6200	CA	155.96	2	77.98	0.00	0	155.96	0.22%	2	0.00
284298	VTA Catering	5812	DOORDASH*TOMA TINA	STRIPE.COM	CA	145.31	1	145.31	0.00	0	145.31	0.20%	1	0.00
47971	OFFICE SUPPLIES	4812	VERIZON WRLS 729006-01	UNION CITY	CA	142.65	1	142.65	0.00	0	142.65	0.20%	1	0.00
284298	VTA Catering	5462	NOTHING BUNDT CAKES 39	FREMONT	CA	142.00	1	142.00	0.00	0	142.00	0.20%	1	0.00
47979	WHOLESALE TRADE	5411	SPROUTS FARMERS MAR	NEWARK	CA	139.98	1	139.98	0.00	0	139.98	0.20%	1	12.43
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M029C24G0	AMZN.COM/BILL	WA	123.89	1	123.89	0.00	0	123.89	0.17%	1	7.08
47963	BUSINESS EXPENS	8699	UNION CITY CHAMBER OF	WWW.UNIONCITY	MN	120.00	1	120.00	0.00	0	120.00	0.17%	1	0.00
47979	WHOLESALE TRADE	5231	HAYWARD COLOR INC	HAYWARD	CA	117.16	1	117.16	0.00	0	117.16	0.16%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M87 R97291	AMZN.COM/BILL	WA	114.13	1	114.13	0.00	0	114.13	0.16%	1	10.14
47970	OFFICE SERVICES	7399	EB PUMPS 101	801-413-7200	CA	106.08	1	106.08	0.00	0	106.08	0.15%	1	0.00
47966	MAIL/TELEPHON E	5964	OTC BRANDS, INC.	800-2280475	NE	103.25	1	103.25	0.00	0	103.25	0.15%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M86VQ6282	AMZN.COM/BILL	WA	102.34	1	102.34	0.00	0	102.34	0.14%	1	3.99
47972	OTHER	5732	BEST BUY 00001446	UNION CITY	CA	100.95	1	100.95	0.00	0	100.95	0.14%	1	8.97

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47963	BUSINESS EXPENS	8999	SSPC	877-2817772	PA	\$ 100.00	1	\$ 100.00	\$ 0.00	0	\$ 100.00	0.14%	1	\$ 0.00
47972	OTHER	5732	FRY'S ELECTRONICS #21	FREMONT	CA	90.01	1	90.01	0.00	0	90.01	0.13%	1	7.62
47963	BUSINESS EXPENS	8699	NATIONAL PROCUREMENT INST	702-989-8095	NV	90.00	1	90.00	0.00	0	90.00	0.13%	1	0.00
		8299	PESTICIDE APPLICATORS PRO	916-4412272	CA	90.00	2	45.00	0.00	0	90.00	0.13%	2	0.00
47972	OTHER	7216	GREEN LEAF CLEANERS	FREMONT	CA	90.00	2	45.00	0.00	0	90.00	0.13%	2	30.00
47978	VEHICLE EXPENSE	7523	LAZ PKG OAKLAND	OAKLAND	CA	90.00	1	90.00	0.00	0	90.00	0.13%	1	0.00
47979	WHOLESALE TRADE	5085	HOISTSDIREC	704-985-1110	NC	88.90	1	88.90	0.00	0	88.90	0.13%	1	0.00
47979	WHOLESALE TRADE	5399	CHEMETRICS COM	5407889026	VA	88.73	1	88.73	0.00	0	88.73	0.12%	1	0.00
47963	BUSINESS EXPENS	8699	AWS E-COMMERCE	305-443-9353	FL	88.00	1	88.00	0.00	0	88.00	0.12%	1	0.00
47979	WHOLESALE TRADE	5261	DOMYOWN.COM	770-840-8831	GA	87.63	1	87.63	0.00	0	87.63	0.12%	1	0.00
47971	OFFICE SUPPLIES	5943	STAPLES 00112995	FREMONT	CA	86.30	1	86.30	0.00	0	86.30	0.12%	1	7.31
47979	WHOLESALE TRADE	5200	THE HOME DEPOT #0635	UNION CITY	CA	82.57	2	41.29	0.00	0	82.57	0.12%	2	7.34
284298	VTA Catering	5462	PETERS BAKERY	SAN JOSE	CA	82.40	2	41.20	0.00	0	82.40	0.12%	2	0.00
47964	EATING/DRINKING	5499	SP * BUYEMERGENCYFOODS	HTTPSWWW.BUYE	UT	77.98	1	77.98	0.00	0	77.98	0.11%	1	0.00
47978	VEHICLE EXPENSE	5542	76 - ASHOKA WARM SPRINGS	FREMONT	CA	75.17	1	75.17	0.00	0	75.17	0.11%	1	0.03
284298	VTA Catering	5812	THAI BBQ	UNION CITY	CA	74.60	1	74.60	0.00	0	74.60	0.10%	1	0.00
47979	WHOLESALE TRADE	5310	TARGET 00014720	HAYWARD	CA	71.30	1	71.30	0.00	0	71.30	0.10%	1	6.33

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47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M88R59D22	AMZN.COM/BILL	WA	\$ 69.99	1	\$ 69.99	\$ 0.00	0	\$ 69.99	0.10%	1	\$ 0.00
47979	WHOLESALE TRADE	5411	LUCKY #782 UNION CI	UNION CITY	CA	69.96	3	23.32	0.00	0	69.96	0.10%	3	0.00
284298	VTA Catering	5812	TOMATINA UNION CITY	UNION CITY	CA	69.43	1	69.43	0.00	0	69.43	0.10%	1	0.00
289779	COMPUTER	4816	DRI*CLOUDBERRY LAB(TM)	ELEMENT5.INFO	MN	68.00	1	68.00	0.00	0	68.00	0.10%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M23 9N1EV0	AMZN.COM/BILL	WA	67.63	1	67.63	0.00	0	67.63	0.10%	1	6.01
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M88 S85PP0	AMZN.COM/BILL	WA	65.84	1	65.84	0.00	0	65.84	0.09%	1	5.85
47970	OFFICE SERVICES	7399	EB CWEA PDC SEMINAR P	801-413-7200	CA	64.06	1	64.06	0.00	0	64.06	0.09%	1	0.00
		7399	EB CWEA PDC SEMINAR P	801-413-7200	CA	64.06	1	64.06	0.00	0	64.06	0.09%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M05 387D81	AMZN.COM/BILL	WA	63.59	1	63.59	0.00	0	63.59	0.09%	1	5.65
47963	BUSINESS EXPENS	8398	CALIFORNIA SOCIETY OF MUN	916-2312137	CA	60.00	1	60.00	0.00	0	60.00	0.08%	1	0.00
		9399	CA DEPT PEST REGS LICENSI	916-4453891	CA	60.00	1	60.00	0.00	0	60.00	0.08%	1	0.00
47978	VEHICLE EXPENSE	5533	PAYPAL *CMAPAZ	402-935-7733	CA	58.68	1	58.68	0.00	0	58.68	0.08%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M81 VW2T11	AMZN.COM/BILL	WA	57.66	1	57.66	0.00	0	57.66	0.08%	1	5.12
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT1VE92U0	AMZN.COM/BILL	WA	54.95	1	54.95	0.00	0	54.95	0.08%	1	2.92
47971	OFFICE SUPPLIES	5942	AMAZON.COM*MT8 D14R61	AMZN.COM/BILL	WA	54.13	1	54.13	0.00	0	54.13	0.08%	1	4.81
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M05 R18CL1	AMZN.COM/BILL	WA	53.77	1	53.77	0.00	0	53.77	0.08%	1	4.78
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT58T8B61	AMZN.COM/BILL	WA	52.74	1	52.74	0.00	0	52.74	0.07%	1	0.00

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284298	VTA Catering	5812	BRONCO BILLY'S PIZZA	UNION CITY	CA	\$ 51.97	1	\$ 51.97	\$ 0.00	0	\$ 51.97	0.07%	1	\$ 0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M86S80PP0	AMZN.COM/BILL	WA	51.57	1	51.57	0.00	0	51.57	0.07%	1	4.58
47978	VEHICLE EXPENSE	4784	FASTRAK CSC	415-486-8655	CA	50.00	2	25.00	0.00	0	50.00	0.07%	2	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M82 C13S02	AMZN.COM/BILL	WA	49.72	1	49.72	0.00	0	49.72	0.07%	1	0.00
47963	BUSINESS EXPENS	8699	PAYPAL *NEWARKCHAMB	402-935-7733	CA	48.00	1	48.00	0.00	0	48.00	0.07%	1	0.00
47979	WHOLESALE TRADE	5200	LOWES #01132*	UNION CITY	CA	47.65	2	23.83	0.00	0	47.65	0.07%	2	4.24
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M88QC35S1	AMZN.COM/BILL	WA	46.08	1	46.08	0.00	0	46.08	0.06%	1	4.09
47971	OFFICE SUPPLIES	5943	FRANKLINCOVEYP RODUCTS	800-819-1812	UT	43.94	1	43.94	0.00	0	43.94	0.06%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M03 6C48U1	AMZN.COM/BILL	WA	42.64	1	42.64	0.00	0	42.64	0.06%	1	3.79
47979	WHOLESALE TRADE	5411	SMART AND FINAL 523	UNION CITY	CA	40.14	1	40.14	0.00	0	40.14	0.06%	1	0.00
47960	AIRLINE	3066	SOUTHWES 5261498957588	800-435-9792	TX	40.00	1	40.00	0.00	0	40.00	0.06%	1	0.00
		3066	SOUTHWES 5261498957589	800-435-9792	TX	40.00	1	40.00	0.00	0	40.00	0.06%	1	0.00
		3066	SOUTHWES 5261498957590	800-435-9792	TX	40.00	1	40.00	0.00	0	40.00	0.06%	1	0.00
47964	EATING/DRINKIN G	5499	WISE COMPANY INC	801-427-2499	UT	39.99	1	39.99	0.00	0	39.99	0.06%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT6RF9820	AMZN.COM/BILL	WA	39.80	1	39.80	0.00	0	39.80	0.06%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT9YY48F0	AMZN.COM/BILL	WA	36.99	1	36.99	0.00	0	36.99	0.05%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M001M60I0	AMZN.COM/BILL	WA	34.99	1	34.99	0.00	0	34.99	0.05%	1	0.00

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47979	WHOLESALE TRADE	5251	HARBOR FREIGHT TOOLS 494	HAYWARD	CA	\$ 32.91	1	\$ 32.91	\$ 0.00	0	\$ 32.91	0.05%	1	\$ 2.92
47970	OFFICE SERVICES	7399	ACT*MSA SAN FRANCISCO	877-551-5560	TX	30.00	1	30.00	0.00	0	30.00	0.04%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*MT1 WX86E1	AMZN.COM/BILL	WA	29.18	1	29.18	0.00	0	29.18	0.04%	1	2.60
47964	EATING/DRINKING	5499	MY PATRIOT SUPPLY	866-2290927	ID	27.90	1	27.90	0.00	0	27.90	0.04%	1	0.00
47970	OFFICE SERVICES	7311	YAHOO SMALL BUSINESS	866-800-8092	CA	27.88	2	13.94	0.00	0	27.88	0.04%	2	0.00
284298	VTA Catering	5814	PACIFIC WHOLE FOODS	UNION CITY	CA	26.31	1	26.31	0.00	0	26.31	0.04%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M04 6N56M0	AMZN.COM/BILL	WA	25.52	1	25.52	0.00	0	25.52	0.04%	1	0.00
47978	VEHICLE EXPENSE	4784	FASTRAK CSC	415-486-8655	CA	25.00	1	25.00	0.00	0	25.00	0.04%	1	0.00
47971	OFFICE SUPPLIES	5942	AMAZON.COM*MT9 WX8661	AMZN.COM/BILL	WA	24.12	1	24.12	0.00	0	24.12	0.03%	1	2.14
47979	WHOLESALE TRADE	5310	WAL-MART #2031	UNION CITY	CA	23.39	2	11.70	0.00	0	23.39	0.03%	2	0.92
119156	MCC001	9311	CROS R2 PAYMENTS	916-3229463	CA	22.40	1	22.40	0.00	0	22.40	0.03%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M888D3FZ2	AMZN.COM/BILL	WA	21.59	1	21.59	0.00	0	21.59	0.03%	1	0.00
47979	WHOLESALE TRADE	5411	LUCKY #782 UNION CI	UNION CITY	CA	20.95	1	20.95	0.00	0	20.95	0.03%	1	0.00
47979	WHOLESALE TRADE	5046	WATER CANNON INC	800-3339274	FL	20.70	1	20.70	0.00	0	20.70	0.03%	1	0.00
47979	WHOLESALE TRADE	5251	HARBOR FREIGHT TOOLS 638	FREMONT	CA	94.33	2	47.17	74.24	1	20.09	0.03%	3	14.28
47970	OFFICE SERVICES	7399	HTTP://WEBEX.COM	916-861-3174	CA	19.00	1	19.00	0.00	0	19.00	0.03%	1	0.00
47978	VEHICLE EXPENSE	5533	AUTOZONE #3338	UNION CITY	CA	15.29	1	15.29	0.00	0	15.29	0.02%	1	1.36

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47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M07PU45J0	AMZN.COM/BILL	WA	\$ 14.88	1	\$ 14.88	\$ 0.00	0	\$ 14.88	0.02%	1	\$ 0.00
47978	VEHICLE EXPENSE	5533	OREILLY AUTO #2728	FREMONT	CA	14.19	1	14.19	0.00	0	14.19	0.02%	1	0.00
47970	OFFICE SERVICES	7311	YAHOO SMALL BUSINESS	866-800-8092	CA	13.94	1	13.94	0.00	0	13.94	0.02%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT01M8QB0	AMZN.COM/BILL	WA	13.07	1	13.07	0.00	0	13.07	0.02%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT43N9QV1	AMZN.COM/BILL	WA	12.98	1	12.98	0.00	0	12.98	0.02%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT7AF08T1	AMZN.COM/BILL	WA	12.06	1	12.06	0.00	0	12.06	0.02%	1	1.07
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT45U7R00	AMZN.COM/BILL	WA	10.99	1	10.99	0.00	0	10.99	0.02%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M04CC1XO1	AMZN.COM/BILL	WA	8.99	1	8.99	0.00	0	8.99	0.01%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M068Z7FW0	AMZN.COM/BILL	WA	8.75	1	8.75	0.00	0	8.75	0.01%	1	0.78
47971	OFFICE SUPPLIES	5942	AMAZON.COM*M88775WC2	AMZN.COM/BILL	WA	8.37	1	8.37	0.00	0	8.37	0.01%	1	0.57
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*MT2IC6UD0	AMZN.COM/BILL	WA	5.32	1	5.32	0.00	0	5.32	0.01%	1	0.38
47971	OFFICE SUPPLIES	5942	AMZN MKTP US*M023Z9C21	AMZN.COM/BILL	WA	5.00	1	5.00	0.00	0	5.00	0.01%	1	0.00
47963	BUSINESS EXPENS	9399	OPC CROS R2 PYMNT FEE	800-4874567	NE	1.00	1	1.00	0.00	0	1.00	0.00%	1	0.00
47970	OFFICE SERVICES	5968	SF CHRONICLE SUBSCRIPT	8003102455	CA	0.00	0	0.00	1.63	1	(1.63)	0.00%	1	0.00
47971	OFFICE SUPPLIES	5942	AMZN MKTP US	AMZN.COM/BILL	WA	0.00	0	0.00	14.88	1	(14.88)	0.00%	1	0.00
47963	BUSINESS EXPENS	8699	INTERNATIONAL PUBLIC MANA	703-5497100	VA	0.00	0	0.00	45.42	1	(45.42)	0.00%	1	2.16
47971	OFFICE SUPPLIES	5942	AMZN MKTP US	AMZN.COM/BILL	WA	0.00	0	0.00	69.99	1	(69.99)	0.00%	1	0.00

Merchant Spend Analysis - Detail

MCCG	Merchant Category Code Group Description	MCC	Merchant Name	Merchant City	Merchant State/Province	Debit Amount	Nbr of Debit Trans	Average Spend per Debit Trans	Credit Amount	Nbr of Credit Trans	Total Spend	% of Total Spend	Nbr of Trans	Total Sales Tax
47965	HOTELS	3530	RENAISSANCE HOTELS PAL	INDIAN WELLS	CA	\$ 0.00	0	\$ 0.00	\$ 212.26	1	\$ (212.26)	0.00%	1	\$ 0.00
47963	BUSINESS EXPENS	8299	PESTICIDE APPLICATORS PRO	831-442-3536	CA	0.00	0	0.00	330.00	2	(330.00)	0.00%	2	0.00
47963	BUSINESS EXPENS	9399	CALPERS CVENT	SACRAMENTO	CA	0.00	0	0.00	349.00	1	(349.00)	0.00%	1	0.00
47970	OFFICE SERVICES	7399	SMRP MTGS	ATLANTA	GA	0.00	0	0.00	1,500.00	6	(1,500.00)	(2.11%)	6	0.00
Total						\$75,358.20			\$4,263.54		\$71,094.66		283	\$ 1,419.20

Total Number of Records: 191

End of Report

Merchant Spend Analysis - Detail Output Parameter Page

Cycle Close Date Range: 10/2018 to 12/2018

Report Type: Detail

Merchant Profile Source: Association

Merchant Names: All

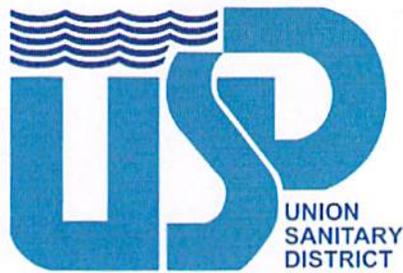
Merchant Category Code Group: All

Merchant States: All

Sort Report By: (1) Total Spend, (2) No Sort, (3) No Sort, (4) No Sort

Break/Subtotal Level: No Break/Subtotal

Processing Hierarchy Position:	Bank	Agent	Company	Division	Department
	1425	3135	51756	All	All



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: January 22, 2019

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Laurie Brenner, Business Services Coach

SUBJECT: Agenda Item No.17 - Meeting of January 28, 2019
Information Item: **Board Expenses for the 2nd Quarter of Fiscal Year 2019**

Recommendation

Information only.

Background

Please see attached the Board of Directors Quarterly Travel and Training Expenditure Report for the 2nd quarter of Fiscal Year 2019.

BOARD OF DIRECTORS
QUARTERLY TRAVEL AND TRAINING EXPENDITURE REPORT
2ND QTR, FISCAL YEAR 2019

Board Members	Description	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Beginning Balance	Y-T-D Expense	Balance Available
FERNANDEZ, MANNY	Lodging - Annual CASA Conference	646.80						
	Mileage - Annual CASA Conference	100.93						
	Meals - Annual CASA Conference	189.00						
	Registraion - Annual CASA Conference	575.00						
	Union City State of the City Luncheon		30.00					
TOTAL		1,511.73	30.00	0.00	0.00	5000.00	1,541.73	3458.27
HANDLEY, TOM	25% of Ipad and accessories purchase costs	310.67						
	Lodging - Annual CASA Conference	646.80						
	Mileage - Annual CASA Conference	97.28						
	Meals - Annual CASA Conference	189.00						
	Registraion - Annual CASA Conference	575.00						
TOTAL		1,818.75	0.00	0.00	0.00	5000.00	1,818.75	3181.25
HARRISON, JENNIFER	Union City State of the City Luncheon		30.00					
TOTAL		0.00	30.00	0.00	0.00	5000.00	30.00	4970.00
KITE, PAT	Lorman All Access Education Pass		537.01					
TOTAL		0.00	537.01	0.00	0.00	5000.00	537.01	4462.99
LATHI, ANJALI	Lorman Education Services Membership	383.58						
TOTAL		383.58	0.00	0.00	0.00	5000.00	383.58	4616.42
GRAND TOTAL		3,714.06	597.01	0.00	0.00	25000.00	4,311.07	20688.93

The Board of Directors' Quarterly Expenditure Report is attached as part of the check register in accordance with Board Member Business Expense policy adopted September 5, 1991

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169970	1/10/2019		20181203	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065085110 - NEWARK PS		
						\$685,404.62	\$685,404.62
170008	1/17/2019	110	3138	EAST BAY DISCHARGERS AUTHORITY	O&M ASSESSMENT, JAN-MAR 2019		
						\$338,406.58	\$338,406.58
170022	1/17/2019	120	23870	MCGUIRE & HESTER	EMERGENCY REPAIR - DECOTO & FREMONT BLVD		
						\$98,098.44	\$175,339.14
	1/17/2019	120	24144		EMERGENCY REPAIR - CHRISTY STREET - FREMONT		
						\$77,240.70	
169996	1/17/2019		6400	CAL SAN RISK MNGT AUTH	POOLED LIABILITY INSURANCE - 12/31/2018 - 12/31/2019		
						\$167,768.00	\$167,768.00
170038	1/17/2019	110	30105051	SYNAGRO WEST LLC	SEPTEMBER 2018 BIOSOLIDS DISPOSAL		
						\$69,221.17	\$141,604.23
	1/17/2019	110	30105087		OCTOBER 2018 BIOSOLIDS DISPOSAL		
						\$72,383.06	
170001	1/17/2019	173	QBZ7850	CDW GOVERNMENT LLC	SMARTNET		
						\$28,640.00	\$107,941.80
	1/17/2019		QLR1903		SIEM RENEW		
						\$6,470.49	
	1/17/2019	173	QCB8141		BACKUP SOFTWARE RENEWAL		
						\$7,315.00	
	1/17/2019	173	QHP0588		MICROSOFT ANNUAL SOFTWARE ASSURANCE		
						\$60,621.07	
	1/17/2019	173	QLT3603		RSA SOFTWARE SECURID TOKENS		
						\$785.20	
	1/17/2019	173	QLT3585		REPLACEMENT RSA SECURITY TOKENS		
						\$3,067.41	
	1/17/2019	173	QJB4199		PARTS FOR ATT UPGRADE		
						\$1,042.63	
169993	1/17/2019		1332414	BROWN & CALDWELL CONSULTANTS	STANDBY POWER SYSTEM UPGRADE		
						\$53,458.02	\$60,178.34
	1/17/2019	143	11333338		EMERGENCY OUTFALL OUTLET IMPROVEMENTS		
						\$6,720.32	
169971	1/10/2019	110	30105093	SYNAGRO WEST LLC	NOVEMBER 2018 BIOSOLIDS DISPOSAL		
						\$57,644.00	\$57,644.00

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
170028	1/17/2019	110	1310327	POLYDYNE INC	45,580 LBS CLARIFLOC C-6267		
						\$50,739.39	\$50,739.39
169977	1/10/2019	171	907041	VINCENT ELECTRIC MOTOR CO	OVERHAUL OF IPS PUMP 2		
						\$29,447.23	\$50,376.13
	1/10/2019	171	907042		GENERATOR 2 REPAIR		
						\$20,928.90	
169959	1/10/2019	170	096020190102	PACIFIC GAS AND ELECTRIC	SERV TO 1/1/19 CATHODIC PROJECT		
						\$46.36	\$36,710.59
	1/10/2019	170	380420190102		SERV TO 01/01/19 CHERRY ST PS		
						\$208.33	
	1/10/2019	110	170120190102		SERV TO 12/19/2018 PLANT		
						\$36,455.90	
169983	1/10/2019	143	157710	WOODARD & CURRAN INC	NEWARK BASIN MASTER PLAN/PACP UPDATE		
						\$11,766.14	\$35,231.48
	1/10/2019	143	157753		CONTROL BOX NO. 1 IMPROVEMENTS		
						\$21,152.94	
	1/10/2019	143	157705		NEWARK BASIN MASTER PLAN/PACP UPDATE		
						\$2,312.40	
170000	1/17/2019	143	172695	CAROLLO ENGINEERS	WAS THICKENERS		
						\$32,300.48	\$32,300.48
170039	1/17/2019	173	15257	SYSTEMATES INC	PROJECTMATES SOFTWARE ANNUAL MAINTENANCE		
						\$28,700.00	\$28,700.00
169936	1/10/2019		10283955620	DELL MARKETING LP C/O DELL USA	1 FY19 Q2 LAPTOP		
						\$2,987.97	\$28,486.50
	1/10/2019		10284896067		10 FY19 Q2 DESKTOPS		
						\$25,498.53	
170043	1/17/2019		533620181224	US BANK CORP PAYMENT SYSTEM	MONTHLY CAL CARD STMT - DEC 2018		
						\$20,968.23	\$20,968.23
169937	1/10/2019		3199277C	DELTA DENTAL SERVICE	DECEMBER 2018 DENTAL		
						\$15,584.60	\$17,746.18
	1/10/2019		3199277A		DECEMBER 2018 DENTAL		
						\$2,161.58	
169954	1/10/2019	132	13	MUSGRAVES CONSULTING SERVICES	SPECIALTY FINANCIAL SERVICES CONSULTANT		
						\$14,228.05	\$14,228.05
169924	1/10/2019	110	34469	CALIFORNIA WATER TECHNOLOGIES	43,820 LBS FERROUS CHLORIDE		
						\$5,549.86	\$11,218.65
	1/10/2019	110	34506		43,220 LBS FERROUS CHLORIDE		
						\$5,668.79	

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
170042	1/17/2019	110	918929	UNIVAR USA INC	4898.2 GALS SODIUM HYPOCHLORITE		
						\$3,515.22	\$10,510.71
	1/17/2019	110	919337		4799.1 GALS SODIUM HYPOCHLORITE		
						\$3,444.10	
	1/17/2019	110	919082		4948.6 GALS SODIUM HYPOCHLORITE		
						\$3,551.39	
169947	1/10/2019	170	95219	JWC ENVIRONMENTAL INC	THICKENER 4 GRINDER REPLACEMENT		
						\$10,501.92	\$10,501.92
169975	1/10/2019	110	917920	UNIVAR USA INC	4948.3 GALS SODIUM HYPOCHLORITE		
						\$3,551.17	\$10,473.59
	1/10/2019	110	918265		4848.3 GALS SODIUM HYPOCHLORITE		
						\$3,479.40	
	1/10/2019	110	918483		4797.6 GALS SODIUM HYPOCHLORITE		
						\$3,443.02	
169981	1/10/2019	171	3960257	WESTERN ENERGY SYSTEMS	PROGRAM AVR UNITS /1 VOLTAGE REGULATOR		
						\$8,773.69	\$8,773.69
170046	1/17/2019	121	42482	WECO INDUSTRIES LLC	120 GALS SANAFOAM VAPOROOTER II		
						\$8,553.19	\$8,553.19
170026	1/17/2019	110	224720181228	PACIFIC GAS AND ELECTRIC	SERV TO 12/20/18 CS TRAINING TRAILER		
						\$180.05	\$7,749.81
	1/17/2019	170	140120190107		SERV TO 01/03/19 IRVINGTON PS		
						\$26.60	
	1/17/2019	110	892820190108		SERV TO 01/01/19 HAYWARD MARSH		
						\$64.24	
	1/17/2019	170	013720190110		SERV TO 01/04/19 BOYCE RD PS		
						\$2,887.72	
	1/17/2019	170	666720190108		SERV TO 01/01/19 PASEO PADRE PS		
						\$377.66	
	1/17/2019	110	784820190103		SERV TO 12/31/18 PLANT - GAS ONLY		
						\$4,002.49	
	1/17/2019	170	898220190108		SERV TO 01/01/19 FREMONT PS		
						\$211.05	
169951	1/10/2019		37432220190101	LINCOLN NATIONAL LIFE INS COMP	LIFE & DISABILITY INSURANCE - JAN 2019		
						\$7,703.26	\$7,703.26
169918	1/10/2019	171	154564	BIGGE CRANE & RIGGING CO	RIGGING & CRANE FOR WAUKESHA		
						\$6,747.84	\$6,747.84
170019	1/17/2019	171	971639	KAMAN INDUSTRIAL TECHNOLOGIES	1 SKF TMMS 380 TRI-SECTION PULLING PLATE		
						\$5,956.15	\$5,956.15

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169923	1/10/2019	143	11332911	BROWN & CALDWELL CONSULTANTS	PLANT GROUNDWATER WELLS MONITORING	\$5,932.71	\$5,932.71
169997	1/17/2019	110	34515	CALIFORNIA WATER TECHNOLOGIES	43,900 LBS FERROUS CHLORIDE	\$5,609.48	\$5,609.48
169966	1/10/2019	110	18122024	S&S TRUCKING	GRIT BIN RENTAL 12/01/2018	\$750.00	\$5,562.43
	1/10/2019	110	18121725		GRIT HAULING 12/13/2018	\$270.00	
	1/10/2019	110	18122025		GRIT HAULING 12/03, 12/07, 12/10, 12/14, 12/18/2018	\$4,542.43	
169960	1/10/2019	110	1306516	POLYDYNE INC	40,740 LBS CLARIFLOC WE-539	\$5,553.25	\$5,553.25
169988	1/17/2019	170	4017274120190107	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 1/04/19 - FREMONT BLVD	\$5,033.84	\$5,242.01
	1/17/2019	170	4017420220190107		SERV TO: 1/03/19 - FREMONT BLVD	\$56.58	
	1/17/2019	170	4017275220190107		SERV TO: 1/04/19 - FREMONT BLVD	\$151.59	
169979	1/10/2019	113	8084735185	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$27.44	\$4,342.29
	1/10/2019	113	8084746751		1 LABORATORY MUFFLE FURNACE	\$4,031.94	
	1/10/2019	113	8084697256		LAB SUPPLIES	\$89.94	
	1/10/2019	113	8084700443		LAB SUPPLIES	\$192.97	
169938	1/10/2019		9471	DOME CONSTRUCTION	REFUND # 21615	\$4,127.50	\$4,127.50
169995	1/17/2019	150	235567	BURKE, WILLIAMS & SORENSON LLP	GENERAL LEGAL - NOVEMBER 2018	\$3,861.00	\$3,992.04
	1/17/2019	150	235569		EBDA - NOVEMBER 2018	\$131.04	
170029	1/17/2019	170	1802073001	R&B COMPANY	ASTD PARTS & MATERIALS	\$3,827.60	\$3,827.60

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169990	1/17/2019		12368350	AT&T	SERV: 11/20/18 - 12/19/18	\$214.22	\$3,821.62
	1/17/2019		12368326		SERV: 11/20/18 - 12/19/18	\$20.73	
	1/17/2019		12368328		SERV: 11/20/18 - 12/19/18	\$3,586.67	
169998	1/17/2019		20190116	STATE OF CALIFORNIA	SALES & USE TAX 10/18 - 12/18	\$3,709.00	\$3,709.00
169949	1/10/2019		9519	LAZY DOG RESTAURANT LLC	REFUND # 21544 & 21545	\$3,507.50	\$3,507.50
169919	1/10/2019		9545	BILL'S CAFE	REFUND # 21627	\$3,300.00	\$3,300.00
169950	1/10/2019		9090	WEIFENG LI	REFUND # 21628	\$3,300.00	\$3,300.00
169958	1/10/2019		8923	OLD REPUBLIC TITLE COMPANY	REFUND # 21430	\$3,300.00	\$3,300.00
169953	1/10/2019		82082563	MCMASTER SUPPLY INC	2 T-HANDLE PUSH-BUTTON QUICK-RELEASE PINS	\$177.48	\$3,264.00
	1/10/2019		82508287		CREDIT FOR 2 T-HANDLE PUSH-BUTTON QUICK-RELEASE PINS	\$-177.48	
	1/10/2019	120	81979367		1 TIMIE & DAY ACTIVATED SWITCH	\$25.16	
	1/10/2019		83031830		ASTD PARTS & MATERIALS	\$1,583.64	
	1/10/2019	123	82244014		2 T-HANDLE PUSH-BUTTON QUICK-RELEASE PINS	\$269.64	
	1/10/2019	170	83001335		ASTD PARTS & MATERIALS	\$103.88	
	1/10/2019		82244015		ASTD PARTS & MATERIALS	\$888.69	
	1/10/2019	170	82669398		ASTD PARTS & MATERIALS	\$206.92	
	1/10/2019	120	82754841		1 TORQUE WRENCH	\$186.07	
169926	1/10/2019		19551076	CANON SOLUTIONS AMERICA INC	LEASE 6 CANON COLOR COPIERS	\$3,154.15	\$3,154.15
169956	1/10/2019	141	1218000099	NBS	SEWER SERVICE CHARGE DATA SERV JAN - MAR 2019	\$3,149.55	\$3,149.55

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169978	1/10/2019		20190101	VISION SERVICE PLAN - CA	JANUARY 2019 VISION STMT		
						\$3,042.71	\$3,042.71
169962	1/10/2019	120	916003709883	REPUBLIC SERVICES #916	RECYCLE & ROLL OFF - JAN 2019	\$2,611.87	\$2,611.87
169920	1/10/2019	113	13075800	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$69.12	\$2,584.21
	1/10/2019	130	13076090		1 BX FOLDERS	\$6.90	
	1/10/2019	113	13077410		2019 CALENDARS & DIARIES - TD	\$1,967.92	
	1/10/2019	113	13078140		2019 CALENDARS & DIARIES - TD	\$237.97	
	1/10/2019	144	13085410		1 MOUSE	\$33.39	
	1/10/2019	113	13080410		ASTD OFFICE SUPPLIES	\$63.17	
	1/10/2019	130	13059430		1 TONER	\$172.34	
	1/10/2019	130	13073710		1 WALL CALENDAR	\$21.94	
	1/10/2019	130	13081570		ASTD OFFICE SUPPLIES	\$11.46	
169968	1/10/2019		721005201911	STAPLES CONTRACT & COMMERCIAL	JANITORIAL & BREAK ROOM SUPPLIES	\$-2.40	\$2,523.26
	1/10/2019	134	720925539402		JANITORIAL SUPPLIES	\$138.25	
	1/10/2019	134	721005201903		JANITORIAL & BREAK ROOM SUPPLIES	\$7.21	
	1/10/2019	134	721005201902		JANITORIAL & BREAK ROOM SUPPLIES	\$276.46	
	1/10/2019	134	720781815702		JANITORIAL SUPPLIES	\$474.76	
	1/10/2019	134	720925539401		JANITORIAL & BREAK ROOM SUPPLIES	\$612.28	
	1/10/2019		721016232501		JANITORIAL & BREAK ROOM SUPPLIES	\$1,016.70	
169914	1/10/2019		9519.1	ASSOCIATED PLUMBING, INC	REFUND # 21545	\$2,500.00	\$2,500.00

**UNION SANITARY DISTRICT
CHECK REGISTER
01/05/2019-01/18/2019**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169976	1/10/2019		9820718002	VERIZON WIRELESS	WIRELESS SERV 11/21/2018 - 12/20/2018	\$2,488.71	\$2,488.71
169928	1/10/2019	143	173113	CAROLLO ENGINEERS	DIGESTER NO. 3 INSP & REHAB	\$2,482.88	\$2,482.88
169911	1/10/2019		7111	42186 PALM AVE DEVELOPERS LLC	REFUND # 21573	\$2,450.00	\$2,450.00
169943	1/10/2019		11269857	HACH COMPANY	1 PROBE & 1 ELECTROLYTE FOR CLT	\$2,430.66	\$2,430.66
169910	1/10/2019	134	68359	3T EQUIPMENT COMPANY INC	4 PIPEPATCH KITS	\$2,176.37	\$2,176.37
169932	1/10/2019		73284921	COMCAST OF CALIFORNIA,	FIBER INTERNET BACKUP - DECEMBER 2018	\$1,999.40	\$1,999.40
169934	1/10/2019	120	20190102.1	CWEA	8 CERT & 5 MEMBERSHIP RENEWALS - CS 12 EMPLOYEES	\$1,686.00	\$1,686.00
170041	1/17/2019	170	6481	THORNTON ENVIRONMENTAL CONST	REPAIR WASTE OIL TANK BOOTS AT BLDG 83-69	\$1,665.00	\$1,665.00
169933	1/10/2019	132	124191	COMPUTER TRAINING SOURCE INC	12/12/2018 DISTRICT EXCEL TRAINING	\$1,595.00	\$1,595.00
169973	1/10/2019	123	8487	THORNTON ENVIRONMENTAL CONST	FUEL ISLAND VAPOR TESTING	\$1,546.00	\$1,546.00
169957	1/10/2019	141	7483864	NEOPOST USA INC	POSTAGE METER LEASE 12/12/18 TO 12/11/19	\$1,503.84	\$1,503.84
169921	1/10/2019	130	20190109	GENE BOUCHER	EXP REIMB: REGISTRATION SHRM ANNUAL TRAINING CONF	\$1,490.00	\$1,490.00
170032	1/17/2019	110	18122415	S&S TRUCKING	GRIT HAULING 12/20/2018	\$690.41	\$1,462.00
	1/17/2019	110	18122803		GRIT HAULING 12/24/2018	\$771.59	

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Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169929	1/10/2019		54K152537	CINTAS CORPORATION NO. 2	UNIFORM LAUNDERING SERVICE		
						\$214.00	\$1,291.56
	1/10/2019	122	54K152538		ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$17.22	
	1/10/2019		54K149688		UNIFORM LAUNDERING SERVICE	\$214.00	
	1/10/2019		54K149690		UNIFORM LAUNDERING & RUGS	\$192.35	
	1/10/2019		54K151147		UNIFORM LAUNDERING & RUGS	\$213.76	
	1/10/2019		54K152539		UNIFORM LAUNDERING & RUGS	\$192.35	
	1/10/2019		54K151145		UNIFORM LAUNDERING SERVICE	\$247.88	
170007	1/17/2019		20181225	DALE HARDWARE INC	12/18 - ASTD PARTS & MATERIALS	\$1,072.50	\$1,207.27
	1/17/2019		311294		ASTD PARTS & MATERIALS	\$134.77	
169974	1/10/2019	123	99116	TRI-SIGNAL INTEGRATION INC	ANNUAL FIRE ALARM TEST & INSPECTION	\$1,152.77	\$1,152.77
169942	1/10/2019		9022651518	GRAINGER INC	3 BOXES COFFEE	\$141.60	\$1,109.80
	1/10/2019	170	9019706952		1 METAL GRATING	\$441.06	
	1/10/2019	170	9022368923		1 MOTOR START CAPACITOR	\$9.43	
	1/10/2019		9022623301		ASTD PARTS & MATERIALS	\$486.38	
	1/10/2019	170	9020699744		5 FIRE EXTINGUISHER SIGNS	\$31.33	
169922	1/10/2019	121	904286	BRENNTAG PACIFIC, INC.	2564 LBS SODIUM HYDROXIDE	\$729.76	\$1,096.30
	1/10/2019	121	904287		1282 LBS SODIUM HYDROXIDE	\$366.54	
170009	1/17/2019	113	1142927	ENTHALPY ANALYTICAL LLC	29 LAB SAMPLE ANALYSIS	\$1,025.00	\$1,025.00
170004	1/17/2019	170	20181228	COMMUNICATION & CONTROL INC	UTILITY FEE/ANTENNA RENTAL	\$1,013.21	\$1,013.21

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170033	1/17/2019	173	48226	SACRAMENTO COMPUTER POWER INC	ANNUAL SCADA UPS SUPPORT		
						\$965.00	\$965.00
169915	1/10/2019		12337205	AT&T	SERV: 11/13/18 - 12/12/18		\$954.07
	1/10/2019		12337207		SERV: 11/13/18 - 12/12/18	\$42.82	
	1/10/2019		12337203		SERV: 11/13/18 - 12/12/18	\$87.35	
	1/10/2019		12337206		SERV: 11/13/18 - 12/12/18	\$758.03	
						\$65.87	
170006	1/17/2019	121	17813041238	CORIX WATER PRODUCTS INC	5 RISER FRAME & COVER		\$912.31
						\$912.31	\$912.31
169987	1/17/2019	123	181102294	AIRTECH MECHANICAL INC	SERVICE CALL: BLDG 83 CONF ROOM		\$911.45
						\$911.45	\$911.45
169986	1/17/2019	122	9083865191	AIRGAS NCN	1 CART MD DL CYL 16"		\$908.73
						\$908.73	\$908.73
169955	1/10/2019		20181231	NAPA AUTO PARTS	MONTHLY AUTO PARTS STMT - DEC 2018		\$871.94
						\$871.94	\$871.94
170036	1/17/2019	120	12312018	STATE BOARD OF EQUALIZATION	STORAGE TANK MAINT FEE 2018		\$726.98
						\$726.98	\$726.98
169972	1/10/2019		18122121	TELOG INSTRUMENTS INC	6 BATTERY PACKS		\$701.81
						\$701.81	\$701.81
169946	1/10/2019	121	251344	INVENTIVE RESOURCES INC.	4 MANHOLE ODOR ELIMINATOR REPLACEMENT FILTERS		\$698.50
						\$698.50	\$698.50
169940	1/10/2019	141	10224	FREMONT EXPRESS COURIER SVC	COURIER SVCS: NOV 2018 DAILY MAIL/1 BOARDMEMBER DELIVERII		\$695.00
						\$695.00	\$695.00
169927	1/10/2019	136	4027674865	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE		\$672.24
						\$672.24	\$672.24
170037	1/17/2019		163147	SWRCB - STATE WATER RESOURCES	ANNUAL PERMIT FEE - NEWARK PS		\$652.00
						\$652.00	\$652.00
169912	1/10/2019	170	9083577819	AIRGAS NCN	1 FLOOR MAT FOR LATHE AND MILL		\$567.82
	1/10/2019	170	9083732730		ASTD PARTS & MATERIALS		\$71.49
						\$71.49	
170018	1/17/2019	113	3041012348	IDEXX DISTRIBUTION INC	ASTD COLILERT & ENTEROLERT TEST KITS		\$636.93
						\$636.93	\$636.93
169930	1/10/2019	132	43848	CLAREMONT BEHAVIORAL SERVICES	JAN 2019 EAP PREMIUMS		\$634.80
						\$634.80	\$634.80

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169916	1/10/2019	136	2522159399	BANK OF NEW YORK	NOV 2018 SERVICE FEES	\$630.80	\$630.80
169952	1/10/2019	110	20190107	ARMANDO LOPEZ	EXP REIMB: T&D WORK GROUP YEAR END RECOGNITION GIFT	\$597.48	\$597.48
169961	1/10/2019	141	20190110	MICHELLE POWELL	EXP REIMB: LODGING, PER DIEM, PARKING-CA OFC EMERG SERV 1	\$559.90	\$559.90
169999	1/17/2019	136	4027959795	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE	\$557.69	\$557.69
170030	1/17/2019	120	09A0036018380	NESTLE WATERS NO. AMERICA	READYREFRESH WATER SERVICE 12/07/18 - 01/06/19	\$546.36	\$546.36
170025	1/17/2019	121	133725	MUNICIPAL MAINT EQUIPMENT INC	PARTS FOR NOZZEL	\$531.37	\$531.37
170015	1/17/2019	122	9028939818	GRAINGER INC	2 BAND CLAMPS	\$18.33	\$511.59
	1/17/2019	170	9028402999		10 EA FUSES	\$204.47	
	1/17/2019	170	9030163845		4 PRS BIFOCAL SAFETY READING GLASSES	\$45.88	
	1/17/2019	122	9031385793		2 STEP LADDERS	\$186.11	
	1/17/2019	170	9031750152		ASTD PARTS & MATERIALS	\$56.80	
169965	1/10/2019		9938	ROOTER HERO	REFUND # 21632	\$500.00	\$500.00
169967	1/10/2019		9853	JOE PYIT SHA	REFUND # 21625	\$500.00	\$500.00
169969	1/10/2019		9993	STREAMLINE PLUMBING & DRAIN	REFUND # 21621	\$500.00	\$500.00
169985	1/17/2019		10015	ACS PLUMBING & MECHANICAL	REFUND # 21639	\$500.00	\$500.00
170016	1/17/2019		9978	MARCOS GUZMAN	REFUND # 21638	\$500.00	\$500.00
170040	1/17/2019		9926	CHARANDEEP TATLAH	REFUND # 21637	\$500.00	\$500.00

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Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
170012	1/17/2019	122	50708	FREMONT TEST ONLY	ANNUAL SMOG TESTING - VEHICLE T1360	\$35.00	\$490.00
	1/17/2019	122	50614		ANNUAL SMOG TESTING - VEHICLE P8265	\$35.00	
	1/17/2019	122	50661		ANNUAL SMOG TESTING - VEHICLE T1271	\$35.00	
	1/17/2019	122	50689		ANNUAL SMOG TESTING - VEHICLE T1304	\$35.00	
	1/17/2019	122	50806		ANNUAL SMOG TESTING - VEHICLE T1309	\$35.00	
	1/17/2019	122	50686		ANNUAL SMOG TESTING - VEHICLE T1066	\$35.00	
	1/17/2019	122	50856		ANNUAL SMOG TESTING - VEHICLE T1338	\$35.00	
	1/17/2019	122	50657		ANNUAL SMOG TESTING - VEHICLE T1267	\$35.00	
	1/17/2019	122	50796		ANNUAL SMOG TESTING - VEHICLE T1358	\$35.00	
	1/17/2019	122	50837		ANNUAL SMOG TESTING - VEHICLE T1367	\$35.00	
	1/17/2019	122	50637		ANNUAL SMOG TESTING - VEHICLE P8330	\$35.00	
	1/17/2019	122	50800		ANNUAL SMOG TESTING - VEHICLE T1305	\$35.00	
	1/17/2019	122	50632		ANNUAL SMOG TESTING - VEHICLE P8035	\$35.00	
	1/17/2019	122	50832		ANNUAL SMOG TESTING - VEHICLE T1326	\$35.00	
170044	1/17/2019		9821293585	VERIZON WIRELESS	WIRELESS SERV 12/02/18-01/01/19 & (6) IPADS	\$477.47	\$477.47
170005	1/17/2019	171	20190114	SOL COOPER	TRAVEL REIMB: PER DIEM/MCC TRAINING CLASS	\$441.00	\$441.00
170034	1/17/2019	171	20190114	ELOY SEPULVEDA	TRAVEL EXP: PER DIEM - MITCHS CERTIFIED CLASSES	\$441.00	\$441.00
169945	1/10/2019	170	768520181228	HOME DEPOT CREDIT SERVICES	MONTHLY HARDWARE STMT - DEC 2018	\$437.79	\$437.79
170003	1/17/2019	150	72094	CITYLEAF INC	PLANT MAINTENANCE - DEC 2018	\$431.86	\$431.86

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170002	1/17/2019		54K153766	CINTAS CORPORATION NO. 2	UNIFORM LAUNDERING & RUGS	\$192.35	\$423.57
	1/17/2019		54K153764		UNIFORM LAUNDERING SERVICE	\$214.00	
	1/17/2019	122	54K153765		ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$17.22	
170010	1/17/2019	113	1000537522	ENVIRONMENTAL EXPRESS	METALS STANDARDS LAB SAMPLES	\$387.85	\$387.85
170017	1/17/2019	111	3N0060	HARRINGTON INDUSTRIAL PLASTICS	5 SEAL KITS	\$384.73	\$384.73
170024	1/17/2019	170	24051666	MOTION INDUSTRIES INC	ASTD NUTS & BOLTS	\$372.51	\$372.51
170020	1/17/2019	143	1809111213.1	KELCO SERVICES INC	ALVARADO INFLUENT PS PUMPS AND VFDS	\$300.00	\$300.00
170021	1/17/2019	123	4568310	MALLORY SAFETY AND SUPPLY LLC	PRO 1 WINCH SERVICE	\$296.05	\$296.05
170023	1/17/2019	170	83160367	MCMASTER SUPPLY INC	3 EXTENSION SPRING STOCKS	\$31.40	\$285.75
	1/17/2019	170	83359514		1 EXTENSION SPRING STOCK	\$13.84	
	1/17/2019	170	83271502		2 LONG-LIFE RECHARGEABLE BATTERIES	\$104.75	
	1/17/2019	170	83271503		2 LIQUID-TIGHT CORD GRIPS	\$41.53	
	1/17/2019	111	83241655		1 DISCHARGE HOSE	\$32.43	
	1/17/2019	170	83405306		5 PACKS LOCKNUTS	\$61.80	
170027	1/17/2019	170	363419	PENN TOOL CO INC	1 ELECTRONIC DEPTH GAGE	\$259.50	\$259.50
169980	1/10/2019	173	6022896	WEST SAFETY SERVICES INC	E911 ANNUAL SUBSCRIPTION	\$250.00	\$250.00
169913	1/10/2019	170	28006	ALLIED FLUID PRODUCTS CORP	ASTD PARTS & MATERIALS	\$232.27	\$232.27
169994	1/17/2019	170	1777361	BUREAU VERITAS/ANALYSTS, INC.	10 LAB SAMPLE ANALYSIS	\$222.15	\$222.15
169991	1/17/2019	111	21974900	BECK'S SHOES	SAFETY SHOES: W. COGGINS	\$208.00	\$208.00

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170031	1/17/2019	171	820152468	RED WING BUS ADVANTAGE ACCT	SAFETY SHOES: R. SCHWARTZ	\$208.00	\$208.00
169917	1/10/2019	171	21947600	BECK'S SHOES	SAFETY SHOES: M. TATAKAMOTONGA	\$204.29	\$204.29
169963	1/10/2019	170	365138	RKI INSTRUMENTS INC	ASTD PARTS & MATERIALS	\$195.85	\$195.85
169941	1/10/2019	122	1841085520	GOODYEAR COMM TIRE & SERV CTRS	1 TIRE	\$188.63	\$188.63
170011	1/17/2019	113	8008876	FISHER SCIENTIFIC	3 CIRCULAR CHARTS	\$156.91	\$156.91
169948	1/10/2019	170	62600000152058	KELLY-MOORE PAINT COMPANY	ASTD PAINT SUPPLIES	\$134.91	\$134.91
170045	1/17/2019	113	8084775229	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$131.66	\$131.66
169935	1/10/2019	113	20190102	CWEA	SESSION REG: D. JACKSON&J. SEO	\$130.00	\$130.00
169984	1/10/2019	113	1812110	ZALCO LABORATORIES INC	LAB ANALYSIS	\$125.00	\$125.00
170035	1/17/2019	141	20181231	SPOK INC	JANUARY 2019 PAGER SERVICE	\$124.08	\$124.08
169931	1/10/2019	111	1722803	COLE-PARMER INSTRUMENT COMPANY	1 CS TEDLAR GAS SAMPLING BAGS	\$123.34	\$123.34
170013	1/17/2019	111	20190111	MICHAEL FULKERSON	EXP REIMB: TPO 3RD QTR SAFETY RECOGITION FY19	\$119.96	\$119.96
169992	1/17/2019	120	13065850	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$58.10	\$117.97
	1/17/2019	170	13092490		1 NOTEBOOK	\$16.45	
	1/17/2019	170	13092491		1 NOTEBOOK	\$16.45	
	1/17/2019	143	13088650		2 COMPRESSED GAS DUSTERS	\$14.69	
	1/17/2019	130	13087240		1 PLANNER	\$12.28	
169989	1/17/2019	170	5198490	ALL INDUSTRIAL ELECTRIC SUPPLY	100 CPI-CONDUIT	\$108.97	\$108.97
170014	1/17/2019	144	484983750	GLACIER ICE COMPANY INC	48 7-LB BAGS OF ICE	\$77.08	\$77.08

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169944	1/10/2019	170	3M9924	HARRINGTON INDUSTRIAL PLASTICS	1 PIPE CUTTER	\$61.81	\$61.81
169982	1/10/2019	170	2376449001	WHCI PLUMBING SUPPLY CO	1 CONCRETE AND CAST IRON LID/ 1 CURB BOX	\$56.01	\$56.01
169964	1/10/2019	132	20190107	WALKER ROLLINS	EXP REIMB: PRE-EMPLOYMENT LIVE SCAN FEE	\$38.00	\$38.00
169925	1/10/2019	132	3444185	STATE OF CALIFORNIA	1 NEW HIRE FINGERPRINTS	\$32.00	\$32.00
169939	1/10/2019	113	1141562	ENTHALPY ANALYTICAL LLC	1 LAB SAMPLE ANALYSIS	\$30.00	\$30.00

Invoices:

Credit Memos :	2	-38,145.51
\$0 - \$1,000 :	153	1,146,320.74
\$1,000 - \$10,000 :	62	5,066,951.39
\$10,000 - \$100,000 :	21	835,578.77
Over \$100,000 :	3	1,191,579.20
Total:	241	2,286,013.73

Checks:

\$0 - \$1,000 :	66	27,222.23
\$1,000 - \$10,000 :	49	166,312.89
\$10,000 - \$100,000 :	16	476,014.24
Over \$100,000 :	6	1,616,464.37
Total:	137	2,286,013.73

EAST BAY TIMES

2016 COMPLAINT

BART under campaign scrutiny

State watchdog agency seeks criminal charges concerning Measure RR

By Erin Baldassari

December 21, 2018

ebaldassari@bayareanewsgroup.com

SACRAMENTO » In a move ethics experts call “significant,” a state watchdog agency on Thursday requested the attorney general and Bay Area district attorneys prosecute BART over violations in its Measure RR campaign.

The request is about sending a message, said Alice Germond, the chairwoman of the Fair Political Practices Commission (FPPC). The commission voted unanimously to also impose a \$7,500 fine against the agency for failing to report the campaign expenses, as required by law.

“It’s not the total (amount) of what was used; it’s the concept of misusing public funds,” Germond said at the commission’s monthly meeting Thursday. “We want to send a warning and not create a precedent that it’s a minor, ‘slap on the wrist’ kind of thing.”

The commission began investigating the transit agency in 2016 following a complaint filed by Lafayette attorney Jason Bezis, who claimed BART improperly used district resources to advocate for its \$3.5 billion bond, Measure RR, including posting a video starring Warriors player Draymond Green on its YouTube channel. Ultimately, the commission decided two other videos, along with text messages sent to riders, crossed the line into advocacy, not Green’s video.

Voters approved the measure in 2016 to pay for repairs and upgrades on the system with more than 70 percent of the vote in BART’s three-county district. It needed 66 percent to pass.

State law prohibits public agencies from using public funds to campaign for any candidate or ballot measure, though they can provide factual information. Using taxpayers’ dollars to advocate or oppose anything on a ballot, however, qualifies as “an independent expenditure,” which must be registered with the state, attorneys for the state’s Fair Political Practices Commission (FPPC), said in its draft order.

But, fining BART for failing to disclose the money it spent campaigning misses the point, said state Sen. Steve Glazer, who has long been critical of the agency.

“This was so much more than a disclosure issue,” Glazer said. “Fundamentally, it’s that you can’t have public agencies engaged in electioneering.”

To Glazer's point, the commission voted to draft a letter to the legislature at a future meeting to allow the FPPC to censure public agencies that misuse public funds for campaigning, which has so far been the purview of the Attorney General and district attorneys.

"(It's) not a subject we have any jurisdiction over," said Brian Hatch, an FPPC commissioner. "And, they ought to make it our jurisdiction, not exclusively, but adding a provision to the (Political Reform Act) to make it our jurisdiction."

BART spokeswoman Alicia Trost said the agency cooperated fully with the FPPC on its investigation, and it had "learned from this process." She described the errors as "accidental."

"We have been and will continue to be committed to following the law," said Alicia Trost, a BART spokeswoman. "We accept their finding."

Usually, agencies are much more careful about distinguishing education from advocacy, said Bob Stern, a principal author of the Political Reform Act, which created the FPPC, as well as the commission's first general counsel.

"That's unusual to have a public agency in violation of campaigning improperly or campaigning at all," he said. "There has to be more awareness about what the law says and more care being spent to promote these measures."

Bevan Dufty, the president of BART's Board of Directors, said he would work to make sure that care is taken in the future. He was elected in 2016, after the measure was developed and put before voters, and called the agency's actions "wholly inappropriate."

"It speaks to our reputation, including my own," he said. "I've been in politics and public service for 43 years, and I do take this very seriously and have wanted always to err on the side of caution and maintain people's trust."

But, the issue is not unique to BART, Bezis said in written comments to the commission. Often, agencies hire consultants to help them conduct public outreach and craft a ballot measure, and then those same consultants lead the campaign for the measure once it's on the ballot. In this instance, BART paid the public relations firm, Clifford Moss LLC, \$99,000 to craft its measure before the item was placed on the ballot, according to public records Bezis obtained.

The same firm then led the independent campaign. That led to striking similarities in a so-called "independent" campaign and BART's own messaging, including Green's YouTube video. These were not "accidental coincidences," Bezis said.

BART has said in the past it didn't coordinate with Green or the Warriors on the video spot, but Bezis noted Green used the campaign's tagline to "Keep BART Safe and Reliable." Dufty was supportive of ensuring that future measures would not employ the same agencies to help BART craft its message and then run its campaign, he said.

“There’s an importance to have a separation from the legitimate public purpose of outreach and developing a plan, which then should be implemented for campaign purposes by another entity or firm,” Dufty said.

Either way, the letter to the state Attorney General and Bay Area district attorneys, which has yet to be written, sends a strong message to other public agencies, said Jessica Levinson, a law professor at the Loyola Law School and the former president of the Los Angeles Ethics Commission.

“It’s very significant they decided to refer this for a criminal investigation and to do it so publicly,” she said. “They are trying to say, ‘You can’t get away with doing this.’”
Contact Erin Baldassari at 510-208-6428.

Sonoma Water reports untreated sewage spill into Schell Slough

CHRISTIAN KALLEN

INDEX-TRIBUNE STAFF WRITER | January 14, 2019

Two million gallons of untreated wastewater spilled from a pipeline at the county wastewater treatment facility on Eighth Street East on Saturday. A faulty valve was to blame, according to officials from the county water agency.

The polluted water flowed into Schell Slough at the southern end of the Sonoma Valley County Sanitation District, but water experts did not express concern.

"The problem valve was isolated, and flows were stopped at 10:45 a.m." on Saturday, Jan. 12, according to Ann DuBay, community and government affairs manager for Sonoma Water, the county's water agency. The valve had been leaking wastewater for about 24 hours, DuBay said.

The valve is one component of a complex network of pipelines that collect wastewater from the equivalent of about 17,000 single family dwellings in the Sonoma Valley. The sanitation district's wastewater treatment facility provides the final cleaning process, known as tertiary treatment, for some 3 million gallons per day on average. During spring and summer the water is reclaimed for irrigation and wetlands habitat restoration.

But from November through May the treated water is discharged into either Schell Slough or Hudeman Slough, both of which flow into San Pablo Bay.

On Saturday morning, a technician noticed the inflow/outflow numbers for the facility were unusual, showing higher than normal outflow numbers. He made a physical inspection of the system, and when he located the partially unclosed valve he corrected the problem by closing it.

The valve was to have been shut earlier in the week by work crews in anticipation of heavy rains, but the exact cause of the valve's failure has not been determined.

"Fortunately, there was a lot of water in Schell Slough during the leak – which was, fortunately, a relatively slow leak – so our environmental folks didn't find any issues of concern," said DuBay. She added that there were no signs of fish or wildlife distress.

Julian Meisler, baylands program manager of the Sonoma Land Trust, agreed. "I think we're fortunate that it occurred following a rainy period – I'm sure the inflows are helping dilute, which is always important."

Meisler's comments brought to mind an environmental adage of an earlier era, "Dilution is the solution to pollution."

"I wouldn't say dilution is a solution," cautioned Meisler, "but dilution helps – if it were concentrated we'd be seeing dead fish."

Added DuBay: "We clearly are not happy about the mechanical failure and are looking for a solution to prevent it from occurring again."

Email Christian at christian.kallen@sonomanews.com.

Sewers could help clean the atmosphere

John Sullivan, Office of Engineering Communications
Jan. 15, 2019

Sewage treatment — an unglamorous backbone of urban living — could offer a cost-effective way to combat climate change by flushing greenhouse gases from the atmosphere.

In an article analyzing several possible technical approaches in the journal *Nature Sustainability* on Dec. 18, 2018, researchers at Princeton University concluded that sewer plants serving municipalities worldwide offer a major option for capturing carbon dioxide and other greenhouse gases. Although cautioning that research and development is needed before the systems could be deployed, the team identified several potentially viable paths to using sewage as a carbon sink — that is, sewer plants could clean the atmosphere as they clean water.

“The water industry could play a big role in tackling climate change,” said senior author Jason Ren, professor of civil and environmental engineering and the Andlinger Center for Energy and the Environment. “It is a very exciting idea because people always think about energy or transportation, but water has not been considered as a major factor in carbon reduction.”



Researchers at Princeton have concluded that sewer plants serving municipalities worldwide offer a major option for capturing carbon dioxide and other greenhouse gases. Although cautioning that research and development is needed before the systems could be deployed, the team identified several potentially viable paths to using sewage as a carbon sink — that is, sewer plants could clean the atmosphere as they clean water.

Photo by iStock

Sewer plants are massive industrial operations that use a variety of techniques to remove pollutants before wastewater returns to the environment. Although most people never think about the systems, the volume of water is staggering. New York City, for example, runs 14 sewer plants and processes 1.3 billion gallons of water daily (enough to fill about 22,000 Olympic pools.)

In the past few years, researchers have proposed methods to use that wastewater to capture enough carbon to offset the amount generated to power heavy equipment used to run sewer plants. They discovered that some techniques not only would allow the plants to balance their own emissions (cleaning water requires considerable energy use), they could also absorb extra carbon that operators pumped into the sewage as it moved through the plants.

“If you consider it as a resource, you could convert part of the waste material including the CO₂ into products,” Ren said. “You could actually make money.”

Generally, the operators would use pipes to pump carbon dioxide gas into the sewer water in the plants. They would then use a variety of techniques to convert the gas into carbonate minerals, biofuels or a sludge-based fertilizer called biochar.

The researchers reviewed a range of techniques including:

Microbial electrolytic carbon capture

This techniques uses a combination of bacteria and a low electrical charge to change the water's alkalinity and, with the addition of silicates, convert carbon dioxide to solid carbonate and bi-carbonate. In addition to the solids, which can be used by industry, the process creates large amounts of hydrogen gas. The researchers noted that this technique is currently used in the laboratory and additional work is needed to show whether it is economical and applicable at the industrial level.

Microbial electrosynthesis

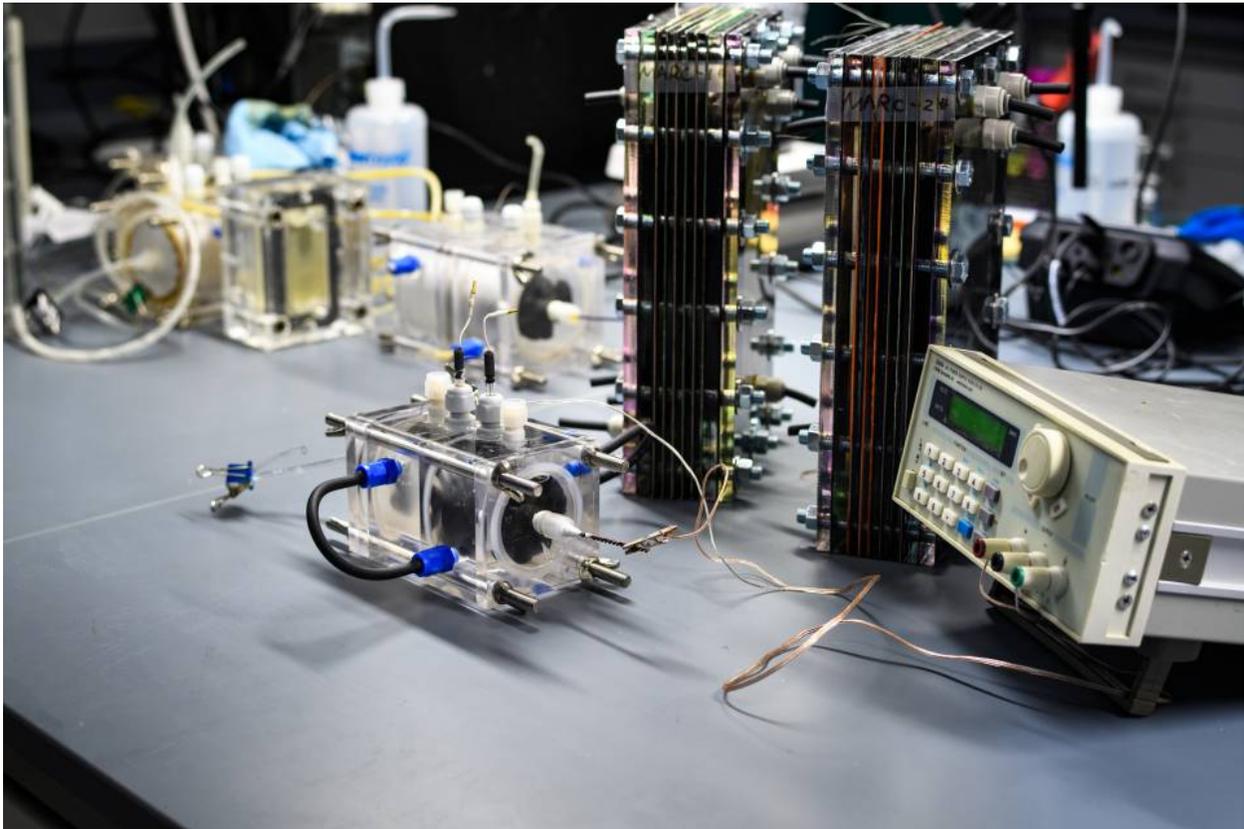
Microbial electrosynthesis is similar to the microbial electrolytic technique except that the process relies on bacteria to directly capture carbon dioxide and convert it into other organic compounds such as ethanol or formic acid. The researchers noted that the technology is promising but major breakthroughs are needed to fully develop the process.

Microalgae cultivation

Microalgae cultivation could be used as a complement to other processes. Algae and bacteria use the carbon dioxide, nitrogen and phosphorous in the wastewater to grow. Operators then harvest the algae, which can be used as animal feed, for soil treatment or in biofuel production. The researchers said work is going forward on identifying the best local microbial communities, small and intensive bioreactors, and efficient techniques for separating solids and liquids.

Biochar production

This method converts wastewater sludge and microalgae into material that improves soil's ability to retain water and nutrients. The technique, which removes pathogens, is usually self-sufficient in terms of energy, although most biochar is now made from dry plants. The researchers said using wastewater sludge to make biochar may require more energy or additional steps to account for the additional water content.



A bioreactor used in Jason Ren's lab at the Andlinger Center for Energy and the Environment. "The water industry could play a big role in tackling climate change," said Ren, a professor of civil and environmental engineering and the Andlinger Center for Energy and the Environment. *Photo by Sameer A. Khan/Fotobuddy*

Ren said that in many locations, sewer plants are already located near industrial facilities that emit large amounts of carbon dioxide such as power plants, cement factories and refineries. He said using the sewer systems to capture the carbon could provide an economic return for these companies in the form of carbon credits. He also said the technique could be used by industries that already run their own wastewater treatment systems such as oil and gas producers, brewers, and distillers. When analyzing the potential environmental and economic benefits of such operation, they found millions of tons of CO₂ could be captured and utilized, while billions of dollars in revenue could be generated in both the U.S. and China, the world's two largest CO₂ emitters.

The researchers cautioned that while many techniques are promising, “the concept is still in its infancy.” They said that full use of the technology will require work of not only scientists, but also regulators, investors and industry.

Jerald Schnoor, an engineering professor at the University of Iowa, said national leaders should consider wastewater treatment as part of efforts to decrease the country’s carbon footprint in coming decades.

“Wastewater treatment is one of the largest energy users and greenhouse gas emitters of a municipal spreadsheet,” said Schnoor, who was not involved in this research. “Technologies exist at pilot scale to achieve zero carbon and energy footprints, but they are not proven to be scalable or cost-effective at the current time. As the country now embarks on ‘green infrastructure’ initiatives, as being discussed by the new Congress, this should be a high priority.”

In addition to Ren, the authors include first author Lu Lu, an associate research scholar at Princeton; Catherine Peters, a professor of civil and environmental engineering at Princeton; Jeremy Guest, of the University of Illinois at Urbana-Champaign; Greg Rau, of the University of California, Santa Cruz; and Xiuping Zhu, of Louisiana State University. Support for the project was provided in part by the National Science Foundation.



Rain Storms Raise Reservoir Levels But Overwhelm Wastewater Pipelines In Sonoma Valley

Bay City News Service

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The heavy rain this week raised the levels of the two main reservoirs that supply water to the Sonoma County Water Agency, but at a cost.

The water agency, now known as Sonoma Water, said the rain put pressure on the wastewater collection system in the Sonoma Valley causing several sanitary sewer overflows at four locations.

Between 2 and 2.5 inches of rain was measured over a 24-hour period in the Sonoma Valley, and sewer pipelines intended only for wastewater exceeded capacity, Sonoma Water said in a statement.

Less than 50,000 gallons of wastewater overflowed during the four spills, and maintenance crews were on the scene through Wednesday night. The overflows were stopped at 2 a.m. Thursday, and crews cleaned up and monitored flows later Thursday morning, Sonoma Water officials said.

The flows into the Sonoma Valley wastewater treatment plant were 20 million gallons a day at 7 p.m. Wednesday night, about 10 times greater than flows during dry weather, according to Sonoma Water.

During increased flows, groundwater and storm water enter leaky sewer pipelines, manhole covers and private sewer laterals.

The Sonoma Valley Sanitation District plans a \$6 million project to replace 1.8 miles of pipeline along state Highway 12, and will continue replacing aging pipelines for the next several years.

The District also plans sewer lateral inspections and repairs to reduce inflow from private sewer laterals and illegal connections to the sewer system, Sonoma Water said.

The District's Lake Mendocino reservoir reached the 72,000 acre-feet level during the storms. When the reservoir reaches 68,000 acre-feet, the U.S. Army Corps of Engineers controls the dam operations for flood control purposes.

The larger reservoir, Lake Sonoma, filled to 227,000 acre-feet, a 15,000-acre-feet increase over a 24-hour period. Between the two reservoirs, the storm increased storage of 20,000 acre-feet, or about 6.5 billion gallons of water, according to Sonoma Water.