



**BOARD MEETING AGENDA**  
**Monday, July 23, 2018**  
**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.

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2. Pledge of Allegiance.

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3. Roll Call.

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- Information 4. June 2018 Monthly Operations Report *(to be reviewed by the Budget & Finance and Legal/Community Affairs Committees)*.

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5. Written Communications.

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6. 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.*

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- Motion 7. Award the Contract for the Temporary Calcium Nitrate Chemical Feed System to Thatcher Company of California, Inc. for the Odor Control Alternatives Study *(to be reviewed by the Engineering and Information Technology Committee)*.

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- Motion 8. Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project *(to be reviewed by the Engineering and Information Technology Committee)*.

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- Motion 9. Authorize the General Manager to Execute an Amended and Restated Standby Emergency Services Assistance Agreement with McGuire and Hester *(to be reviewed by the Engineering and Information Technology Committee)*.

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- Information 10. Cal-Card Quarterly Activity Report *(to be reviewed by the Budget & Finance Committee)*.

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- Information 11. Check Register.

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Information

12. Committee Meeting Reports. *(No Board action is taken at Committee meetings):*
  - a. Engineering and Information Technology Committee – Wednesday, July 18, 2018, at 9:00 a.m.
    - Director Fernandez and Director Kite
  - b. Legal/Community Affairs Committee – Thursday, July 19, 2018, at 12:00 p.m.
    - Director Handley and Director Lathi
  - c. Budget & Finance Committee – Friday, July 20, 2018, at 11:00 a.m.
    - Director Handley and Director Toy
  - d. Legislative Committee – will not meet.
  - e. Audit Committee – will not meet.
  - f. Personnel Committee – will not meet.

Information

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14. General Manager’s Report. *(Information on recent issues of interest to the Board).*
- 
15. 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.
- 
16. Adjournment – The Board will adjourn to a Special Meeting in the Boardroom on Tuesday, July 24, 2018, at 6:00 p.m.
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17. Adjournment – The Board will then adjourn to a Regular Meeting in the Boardroom on Monday, August 13, 2018, at 7:00 p.m.

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 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 “Oral Communications” 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 in the Boardroom and are to be completed prior to discussion of the agenda item.

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

**REVISED**



**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**ENGINEERING & INFORMATION TECHNOLOGY  
COMMITTEE MEETING**

Committee Members: Director Fernandez and Director Kite

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

**AGENDA**

~~Thursday, July 19, 2018~~ Wednesday, July 18, 2018

~~9:15~~ 9:00 A.M.

Karen W. Murphy  
*Attorney*

~~Alvarado~~ Niles Conference Room

5072 Benson Road  
Union City, CA 94587

**THIS MEETING WILL BE TELECONFERENCED WITH DIRECTOR KITE FROM THE EXTERIOR OF  
35040 NEWARK BOULEVARD, NEWARK, CALIFORNIA.**

1. Call to Order

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2. Roll Call

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3. Public Comment

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4. Items to be reviewed for the Regular Board meeting of July 23, 2018:
  - Award the Contract for the Temporary Calcium Nitrate Chemical Feed System to Thatcher Company of California, Inc. for the Odor Control Alternatives Study
  - Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project
  - Authorize the General Manager to Execute an Amended and Restated Standby Emergency Services Assistance Agreement with McGuire and Hester

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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



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

**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**AGENDA**  
**Thursday, July 19, 2018**  
**12:00 p.m.**

**Alvarado 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 July 23, 2018:
  - June 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.

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**BUDGET & FINANCE COMMITTEE MEETING**  
Committee Members: Director Handley and Director Toy

**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**AGENDA**  
**Friday, July 20, 2018**  
**11:00 a.m.**

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

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

Karen W. Murphy  
*Attorney*

1. Call to Order  
\_\_\_\_\_
2. Roll Call  
\_\_\_\_\_
3. Public Comment  
\_\_\_\_\_
4. Items to be reviewed for the Regular Board meeting of July 23, 2018:
  - June 2018 Monthly Operations Report – Financial Reports
  - Cal-Card Quarterly Activity Report\_\_\_\_\_
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.

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**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

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

Karen W. Murphy  
*Attorney*

**DATE:** July 16, 2018

**MEMO TO:** Board of Directors - Union Sanitary District

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

**SUBJECT:** Agenda Item No. 4 – Special Meeting of July 23, 2018  
Information Item: **Monthly Operations Report for June 2018**

### **Background**

Attached are Monthly Operations Reports for June 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 June 2018, there was one odor complaint received by the Collection System. Details regarding the odor complaint were included in the June 2018 Odor Report.

### **SAFETY:**

- We had the lost time injury in February and the employee is now back to work with restrictions.
- We submitted our injury information to Federal OSHA as required by new regulations.
- The Safety Committee sent out the new Safety Survey for all employees. This is done every two years.
- We had a near miss incident with a parked cart in the treatment plant. The cart rolled and hit another vehicle. It was found that the brake was not completely set.

## **STAFFING & PERSONNEL:**

### **Continuing Recruitments:**

- Assistant/Associate Engineer (replacement for Chris Elliott's resignation)
- Coach, Collection Services (replacement for Rich Czapkay's retirement)

### **Other Accomplishments:**

- Contract negotiations on-going
- Leadership School – Commencement ceremony held

**G.M. ACTIVITIES:** For the month of June, 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
- Attended a working lunch with Castro Valley Sanitary District General Manager
- Attended a Board Closed Session
- Attended an East Bay Regional Recycled Water Round-table hosted by Dublin San Ramon Services District
- Attended a working lunch with the EBDA General Manager

**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 June 2018

### Collection Services

During the recording period from June 01, 2018 through June 30, 2018, there was one odor related service request received by Collection Services.

#### City: Fremont

##### 1. **Complaint Details:**

*Date:* 6/5/2018

*Location:* SENECA PARK AV

*Wind (from):* N/A

*Temperature:* 68 Degrees F

*Time:* 10:00 am

*Reported By:* Anneliese

*Wind Speed:* 5 mph

*Weather:* Sunny

##### **Response and Follow-up:**

We responded to an odor complaint regarding a sewer smell coming from inside the residence's bathrooms. Reporting party felt the smell was caused by a nearby recent private lateral installation. We did detect a slight smell in the downstream manhole (P19004). We contacted CS management and was advised to have the line cleaned to assure the line was clear of debris or grease. We cleaned the line and found no debris or grease build up. We informed the home owner of our findings and gave the home owner USD pamphlets on Vents and Laterals. We informed the reporting party to call us back should the odor return.

### Treatment Plant (Union City)

During the recording period from June 01, 2018 through June 30, 2018, there was one odor related service request received by the Treatment Plant.

##### 1. **Complaint Details:**

*Date:* 6/10/2018

*Location:* MACKINAW ST

*Wind (from):* West

*Temperature:* 60 Degrees F

*Tide Information:*

*High Tide Reading:* 6.4 FT/Time

*High Tide Time:* 10:39 PM

*Time:* 7:10 pm

*Reported By:* Sam Dua

*Wind Speed:* 8.1 mph

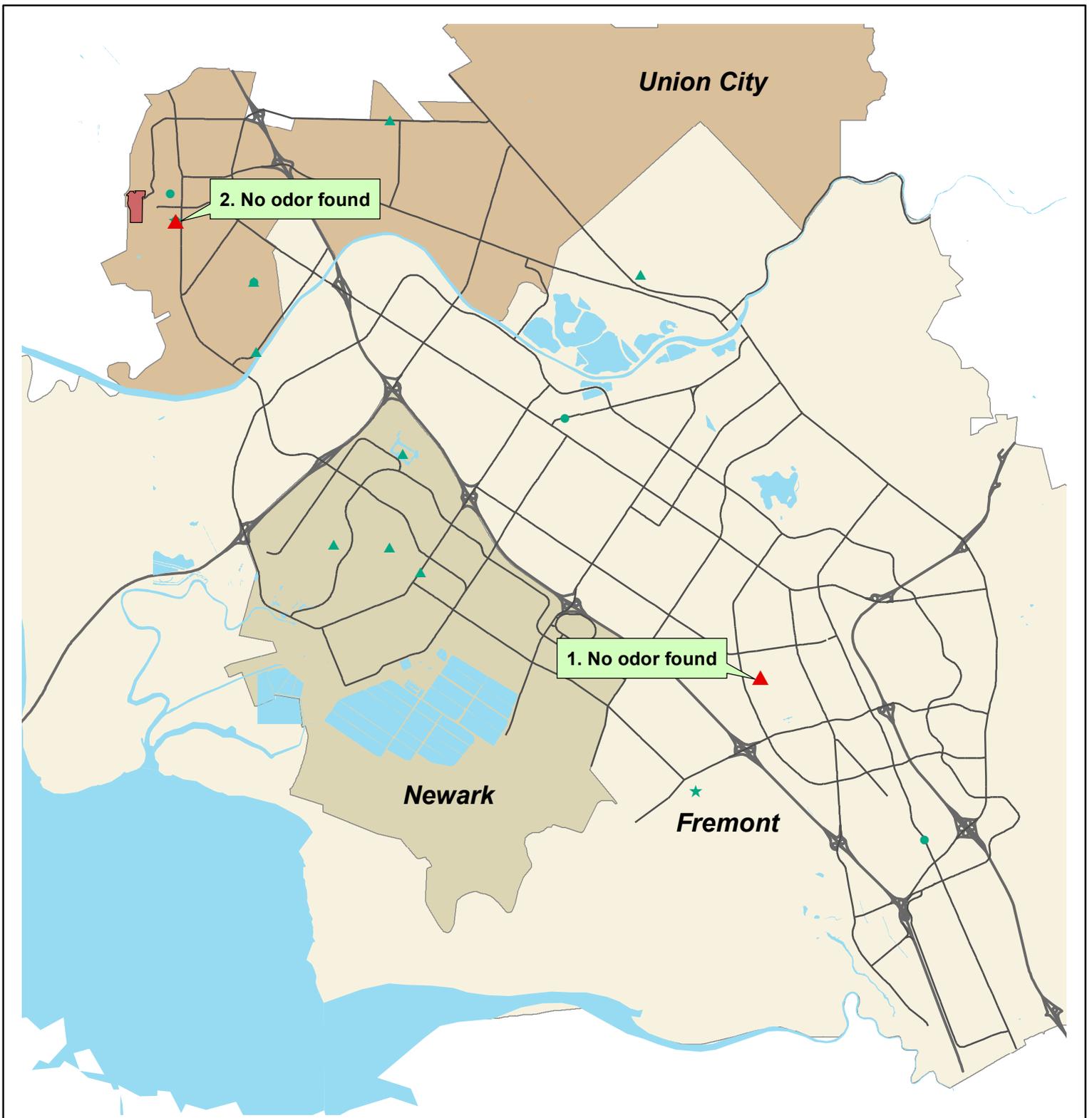
*Weather:* Clear/Sunny

*Low Tide Reading:* 0.1 FT/Time

*Low Tide Time:* 6:05 AM

##### **Response and Follow-up:**

- *USD Staff dispatched to complaint location?* Yes
- *Were any odors detected at the complaint location?* No
  - *If yes, was odor attributed to USD?* N/A
- *Were any odors detected at the Plant?* No
  - *If yes, what odors were found?* N/A
- *Additional Information:* N/A



**Legend**

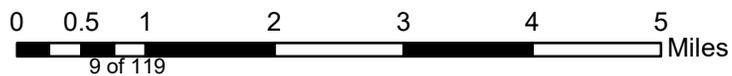
**Odor Complaints: June 2018**

- ★ Odor found, USD resolved (0)
- Odor found, not related to USD (0)
- ▲ No odor found (2)

**Odor Complaints: Jul. 2017 to May 2018**

- ★ Odor found, USD resolved (3)
- Odor found, not related to USD (5)
- ▲ No odor found (13)

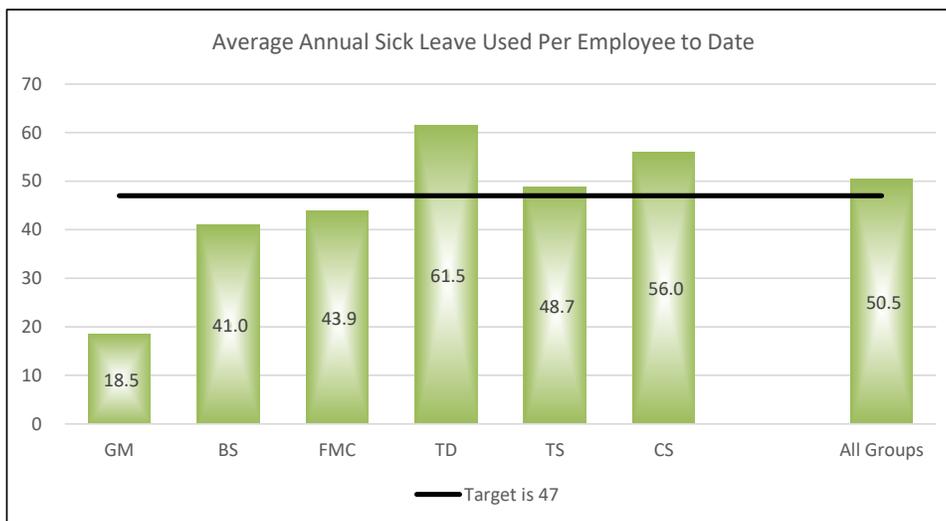
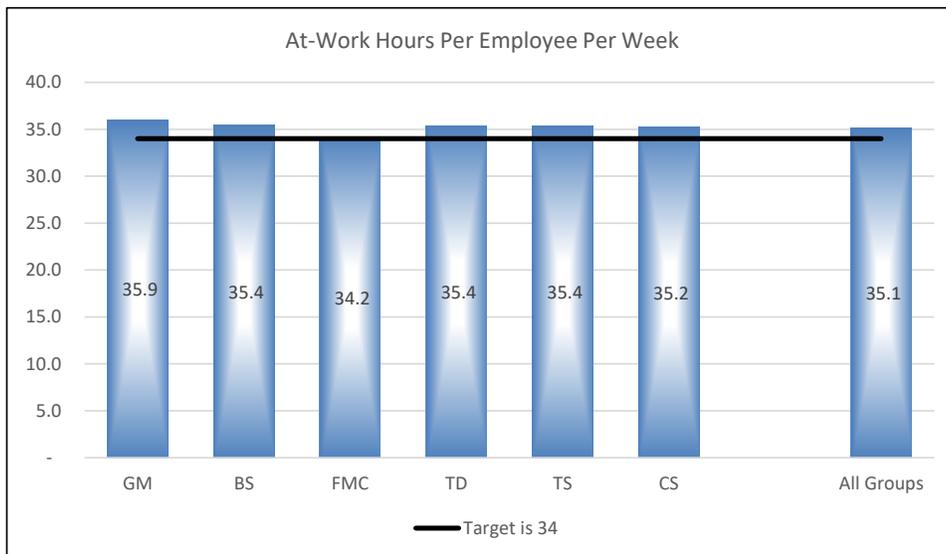
**Location of Odor Reports  
July 2017 to June 2018**



**HOURS WORKED AND LEAVE TIME BY WORK GROUP**

**June 29, 2017 through June 27, 2018**

**Weeks to Date: 52 out of 52 (100%)**



**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 29, 2017 through June 27, 2018**

**Weeks to Date: 52 out of 52 (100%)**

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	FY17		
		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	3,663.00	64.75	35.9	460.00	-	-	37.00	18.5	2	35.7	34.6
BS	20	36,615.00	140.56	35.4	4,827.38	-	-	819.55	41.0	21	34.2	33.5
FMC	23	39,988.25	827.00	34.2	4,657.09	(21.12)	1,561.00	1,009.36	43.9	23	34.2	48.4
TD	26	46,405.41	1,261.44	35.4	5,991.82	909.20	12.00	1,599.57	61.5	27	34.7	39.1
TS	31	56,568.66	269.99	35.4	7,074.95	168.25	-	1,510.42	48.7	32	34.9	47.3
CS	31	53,529.33	3,062.74	35.2	7,905.06	307.16	19.50	1,736.43	56.0	31	34.1	77.6
<b>All Groups</b>	<b>133</b>	<b>236,769.65</b>	<b>5,626.48</b>	<b>35.1</b>	<b>30,916.30</b>	<b>1,363.49</b>	<b>1,592.50</b>	<b>6,712.33</b>	<b>50.5</b>	<b>136</b>	<b>35.1</b>	<b>44.5</b>

**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 2018

**Year-to-date as of 6/30/18**

100% of year elapsed

**Revenues**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Rec'd</b>	<b>Audited Last Year Actuals 6/30/17</b>
Capacity Fees	\$ 7,910,000	\$ 23,623,947	299%	\$ 12,595,637
Sewer Service Charges	54,913,920	51,598,629	94%	52,384,710
Operating (Work Groups)	1,300,000	1,399,533	108%	1,575,480
Interest	625,000	1,675,655	268%	482,342
Misc. (LAVWMA pymnt, solar, Cogen rebates)	242,000	118,848	49%	561,734
<b>Subtotal Revenues</b>	<b>\$ 64,990,920</b>	<b>\$ 78,416,612</b>	<b>121%</b>	<b>\$ 67,599,903</b>
SRF Loan Proceeds (Thickener Proj.)	-	455,642		3,433,448
<b>Total Revenues + SRF Proceeds</b>	<b>\$ 64,990,920</b>	<b>\$ 78,872,254</b>	<b>121%</b>	<b>\$ 71,033,351</b>

**Expenses**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Capital Improvement Program:				
Capacity Proj.	\$ 3,420,000	\$ 2,075,899	61%	\$ 3,608,815
Renewal & Repl. Proj.	6,660,000	4,795,992	72%	10,185,023
Operating	36,816,878	33,803,950	92%	33,866,972
Special Projects	1,873,523	861,694	46%	945,496
Retiree Medical (ARC)	602,009	708,015	118%	585,832
Vehicle & Equipment	1,139,555	552,020	48%	116,986
Information Systems	600,100	321,769	54%	492,639
Plant & Pump Stat. R&R	250,000	219,622	88%	247,329
Emerg. Fund	-	-	0%	286
Pretreatment Fund	5,000	2,076	42%	11,611
Cty Fee for SSC Admin.	107,000	107,581	101%	106,643
Debt Servicing:				
SRF Loans	3,880,441	4,254,481	110%	3,127,110
<b>Total Expenses</b>	<b>\$ 55,354,506</b>	<b>\$ 47,703,098</b>	<b>86%</b>	<b>\$ 53,294,740</b>
<b>Total Revenue &amp; Proceeds less Expenses</b>	<b>\$ 9,636,414</b>	<b>\$ 31,169,156</b>		<b>17,738,611</b>

**Operating (Work Group) Expenses**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Board of Directors	\$ 176,093	\$ 128,924	73%	\$ 139,285
General Manager/Admin.	1,082,884	703,663	65%	786,134
Business Services	5,023,943	4,313,340	86%	5,091,870
Collection Services	6,551,768	6,292,903	96%	6,290,826
Technical Services	5,995,655	5,645,524	94%	5,840,942
Treatment & Disposal Services	11,122,285	10,299,467	93%	9,888,969
Fabrication, Maint. & Construction	6,277,170	5,953,854	95%	5,828,946
Non-Departmental	587,080	466,275	79%	
<b>Total</b>	<b>\$ 36,816,878</b>	<b>\$ 33,803,950</b>	<b>92%</b>	<b>\$ 33,866,972</b>

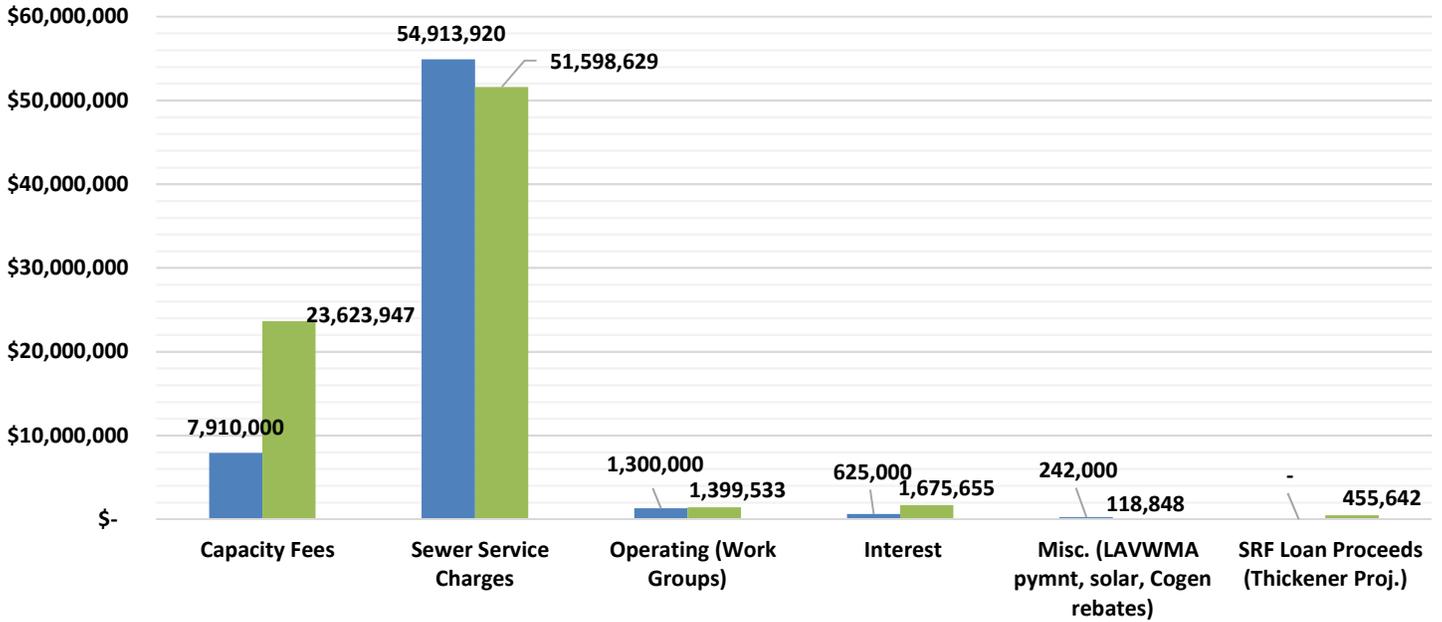
**Operating (Work Group) Expenses by Type**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Personnel (incl D&E)	\$ 25,359,529	\$ 23,623,183	93%	\$ 24,278,885
Repairs & Maintenance	2,147,050	2,102,059	98%	1,998,086
Supplies & Matls (chemicals, small tools)	2,622,250	2,338,977	89%	2,093,989
Outside Services (utilities, biosolids, legal)	6,353,189	5,591,884	88%	5,417,173
Fixed Assets	334,860	147,848	44%	78,839
<b>Total</b>	<b>\$ 36,816,878</b>	<b>\$ 33,803,950</b>	<b>92%</b>	<b>\$ 33,866,972</b>

**REVENUES AND EXPENSES REPORT**  
as of 6/30/18

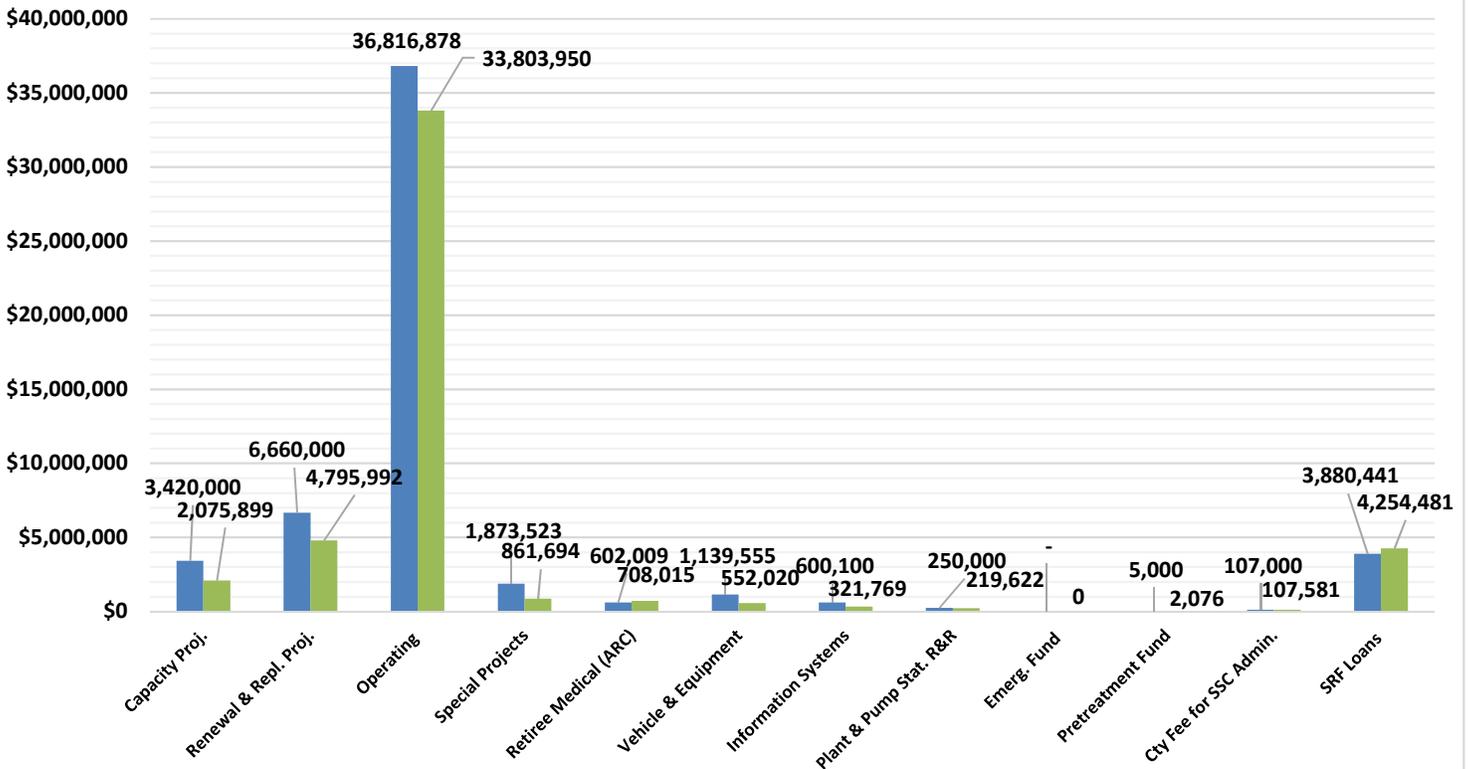
## Total Revenues

■ Budget ■ Actual



## Total Expenses

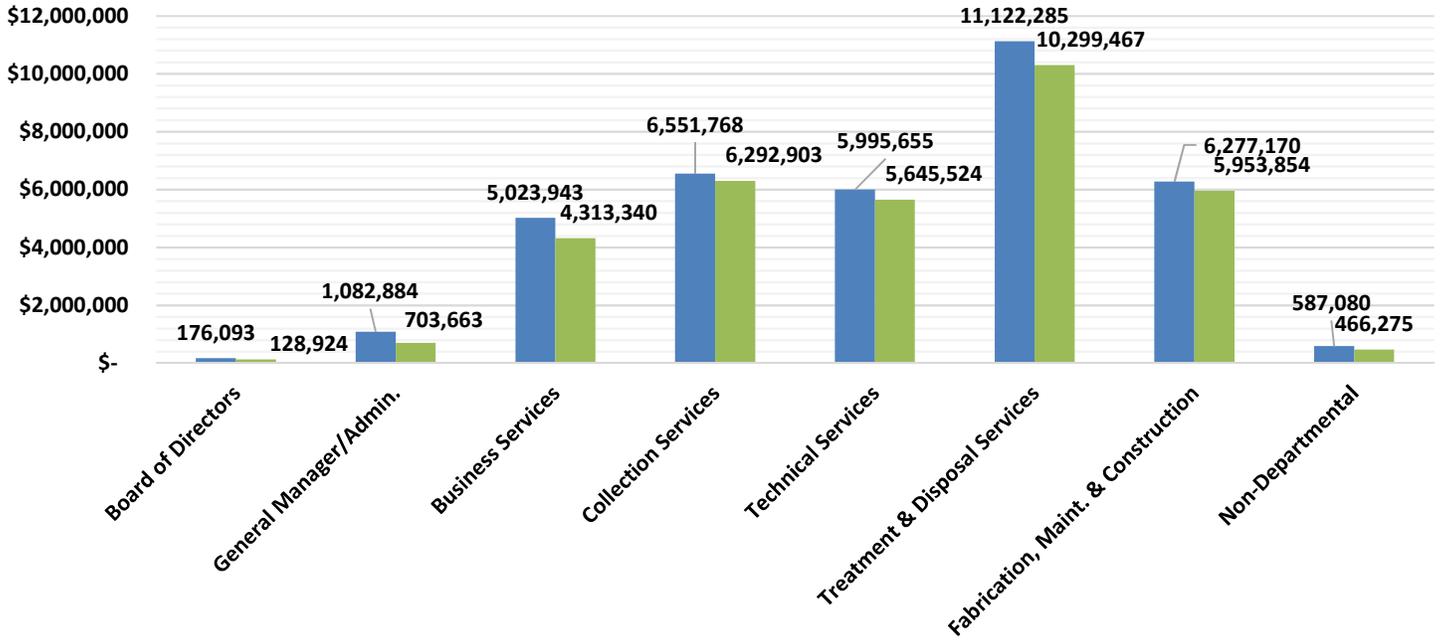
■ Budget ■ Actual



**REVENUES AND EXPENSES REPORT**  
as of 6/30/18

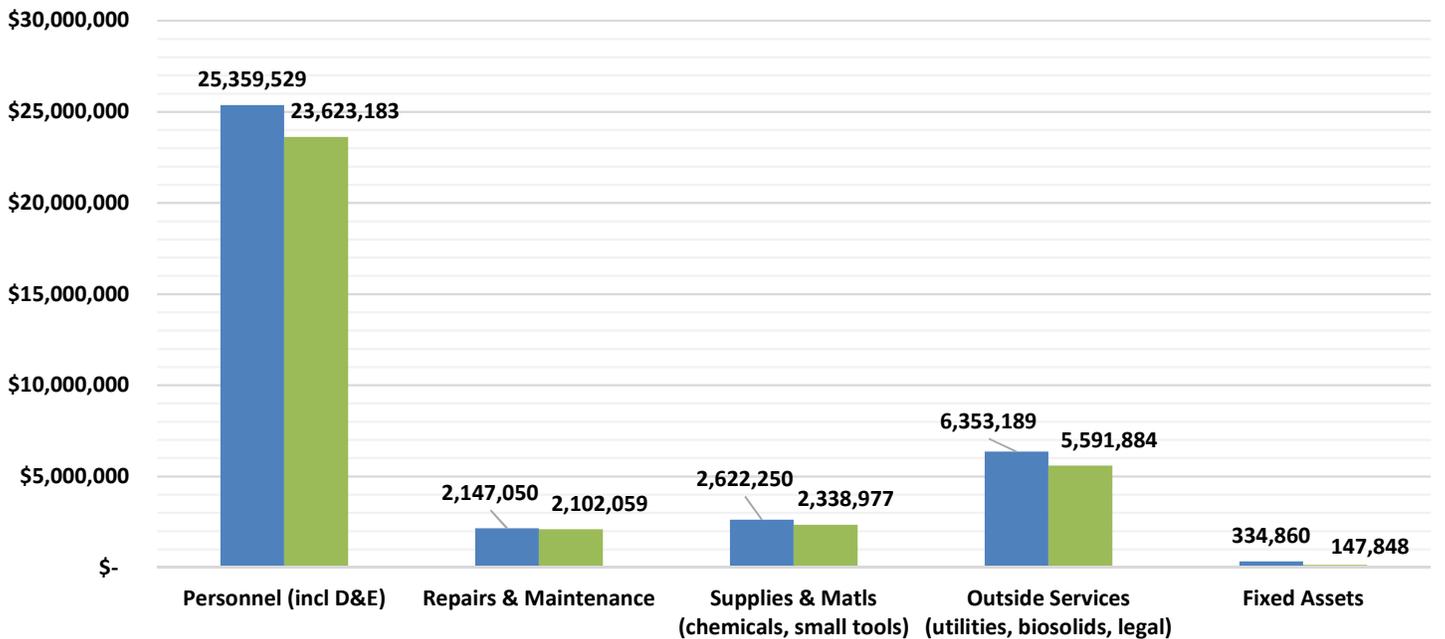
### Operating Expenses by Work Group

■ Budget ■ Actual



### Operating Expenses by Type

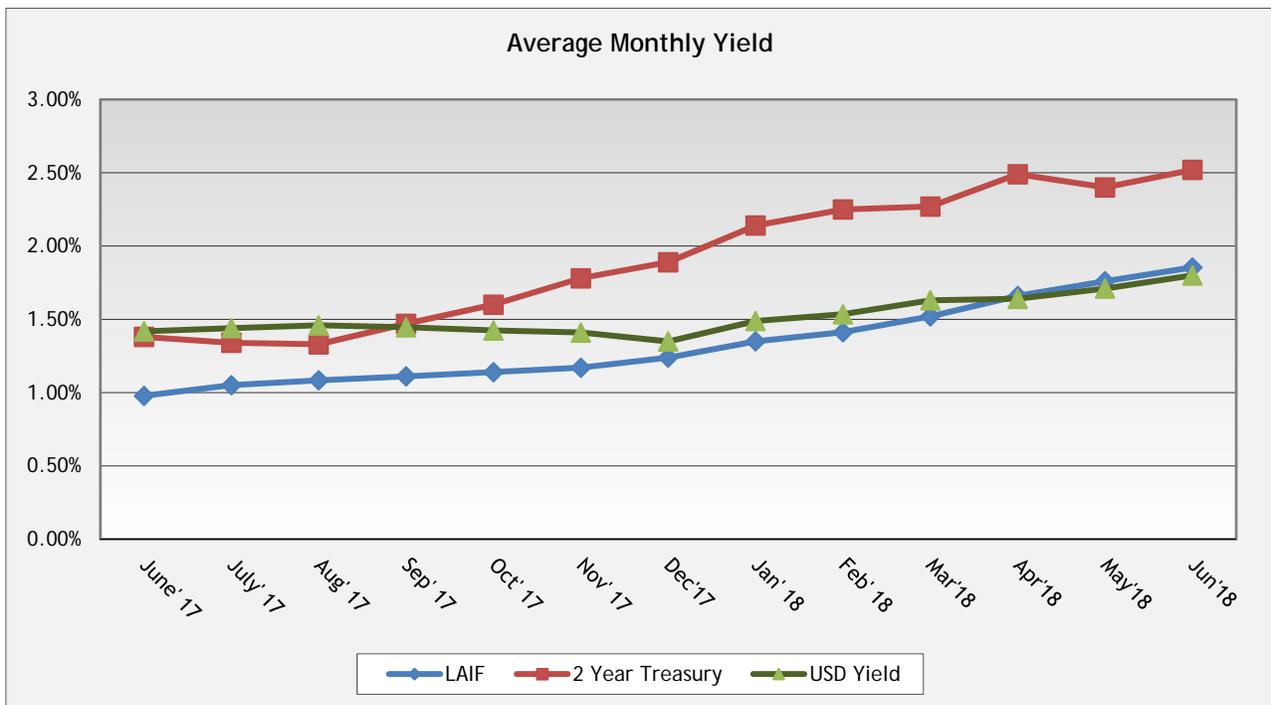
■ Budget ■ Actual



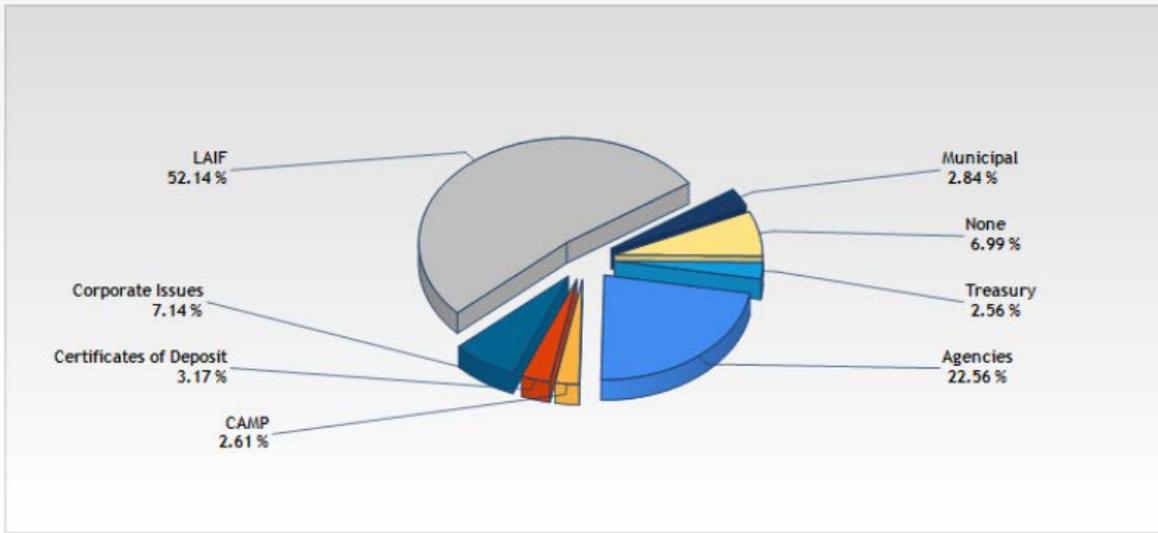
**Business Services Group  
June 2018**

- Participated in Leadership School Commencement
- Submitted required CERBT (retirement trust) report to CalPERS
- Completed required credit card security procedure attestation/certification
- Coach and staff attended "Seven Deadly Sins: Control Over Cash Handling Webinar"
- Interim financial audit completed with no findings

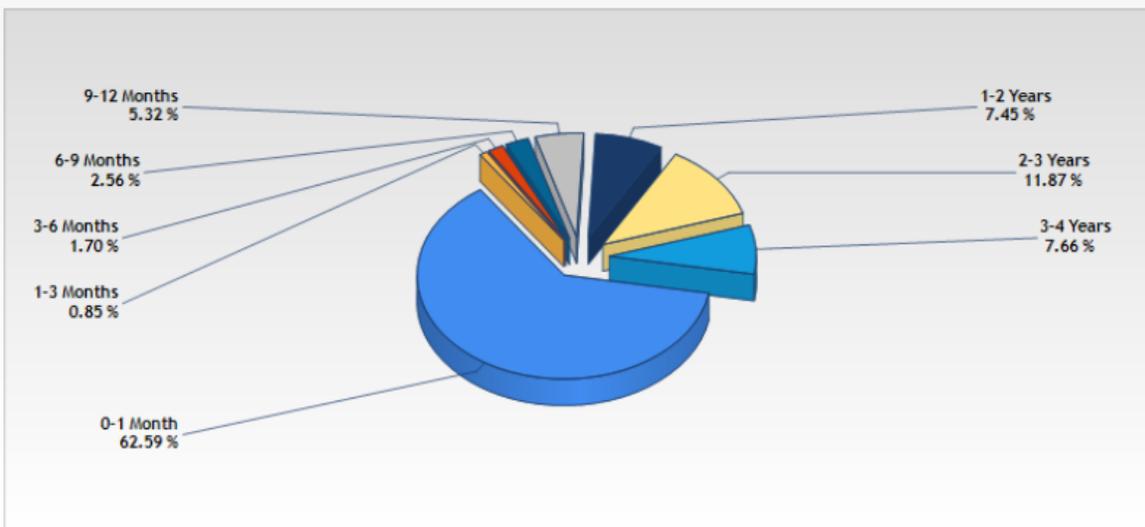
**Performance Measures for the USD Investment Portfolio**



### 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	73,491,605.24	1.819	73,494,095.24	1	62.59	73,491,305.24	73,491,643.37	0.00
1-3 Months	1,000,000.00	1.087	998,700.00	46	0.85	998,820.00	999,893.40	0.13
3-6 Months	2,000,000.00	1.285	2,000,000.00	174	1.70	1,990,720.00	2,000,000.00	0.47
6-9 Months	3,000,000.00	1.301	3,004,540.00	231	2.56	2,983,950.00	3,001,436.02	0.63
9-12 Months	6,248,000.00	1.241	6,249,040.00	319	5.32	6,189,688.71	6,248,294.86	0.87
1-2 Years	8,734,000.00	1.571	8,746,406.57	507	7.45	8,612,535.59	8,738,964.72	1.37
2-3 Years	13,745,000.00	2.041	13,940,787.56	976	11.87	13,529,627.06	13,848,344.39	2.60
3-4 Years	8,983,000.00	2.297	8,996,429.67	1,302	7.66	8,768,412.00	8,994,157.45	3.43
<b>TOTAL / AVERAGE</b>	<b>117,201,605.24</b>	<b>1.804</b>	<b>117,429,999.04</b>	<b>280</b>	<b>100</b>	<b>116,565,058.60</b>	<b>117,322,734.21</b>	<b>0.75</b>

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 6/30/2018

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
<b>Agencies</b>											
FFCB 1.17 5/16/2019-17	3133EF7L5	Moody-Aaa	5/16/2016	1,000,000.00	1,000,000.00	1.170	989,990.00	1.170		5/16/2019	0.85
FFCB 1.3 11/25/2019-16	3133EGBK0	Moody-Aaa	5/25/2016	1,000,000.00	997,950.00	1.300	983,120.00	1.360		11/25/2019	0.85
FFCB 1.35 6/24/2019	3133EEZ60	Moody-Aaa	5/24/2017	1,000,000.00	1,003,480.00	1.350	991,410.00	1.180		6/24/2019	0.85
FFCB 1.37 12/27/2018-17	3133EGZ24	None	12/27/2016	1,000,000.00	1,000,000.00	1.370	995,400.00	1.370		12/27/2018	0.85
FFCB 1.59 3/23/2020-17	3133EFR25	Moody-Aaa	3/23/2016	1,000,000.00	1,000,000.00	1.590	983,290.00	1.590		3/23/2020	0.85
FFCB 1.7 5/3/2021-17	3133EF5T0	Moody-Aaa	5/3/2016	1,000,000.00	1,000,000.00	1.700	969,730.00	1.700		5/3/2021	0.85
FHLB 1.24 1/23/2019-18	3130AAN20	Moody-Aaa	2/2/2017	1,000,000.00	999,100.00	1.240	994,580.00	1.286		1/23/2019	0.85
FHLB 1.375 2/28/2019-17	3130ABEH5	Moody-Aaa	5/30/2017	1,000,000.00	1,000,000.00	1.375	994,250.00	1.375		2/28/2019	0.85
FHLB 1.93 12/21/2020-17	3130AADQ8	None	12/21/2016	1,000,000.00	1,000,000.00	1.930	978,700.00	1.930		12/21/2020	0.85
FHLB 2 10/26/2021-19	3130AB3D6	None	4/26/2017	1,000,000.00	1,000,000.00	2.000	972,870.00	2.000	4/26/2019	10/26/2021	0.85
FHLB 2.05 12/29/2021-17	3130AAET1	Moody-Aaa	12/29/2016	1,000,000.00	1,000,000.00	2.050	974,260.00	2.050	9/29/2018	12/29/2021	0.85
FHLB 2.4 12/22/2021-17	3130AAHC5	None	12/22/2016	1,000,000.00	1,000,000.00	2.400	981,870.00	2.400		12/22/2021	0.85
FHLB Step 4/28/2021-16	3130A7PR0	Moody-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.500	987,900.00	2.114	7/28/2018	4/28/2021	0.85
FHLB Step 4/28/2021-16	3130A7QX6	Moody-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.500	982,070.00	2.021		4/28/2021	0.85
FHLMC 1 8/15/2018-17	3134GABQ6	Moody-Aaa	1/31/2017	1,000,000.00	998,700.00	1.000	998,820.00	1.087		8/15/2018	0.85
	3134GAZU1	None	12/14/2016	1,000,000.00	1,000,000.00	1.200	995,320.00	1.200	9/14/2018	12/14/2018	0.85

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 1.2 12/14/2018-17											
FHLMC 1.25 10/28/2019-17	3134G8XQ7	Moody's-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.250	983,800.00	1.250		10/28/2019	0.85
FHLMC 1.4 6/14/2019-17	3134GBRH7	Moody's-Aaa	6/14/2017	1,000,000.00	1,000,000.00	1.400	990,880.00	1.400		6/14/2019	0.85
FHLMC 1.41 4/26/2019-18	3134GBEG3	None	4/26/2017	1,000,000.00	1,000,000.00	1.410	990,350.00	1.410		4/26/2019	0.85
FHLMC 1.5 12/30/2019-17	3134GAYY4	S&P-AA+	12/30/2016	1,000,000.00	1,000,000.00	1.500	981,000.00	1.500	9/30/2018	12/30/2019	0.85
FHLMC 1.5 9/9/2019-18	3134GA7A6	Moody's-Aaa	5/10/2017	1,000,000.00	1,000,000.00	1.500	988,010.00	1.500		9/9/2019	0.85
FHLMC 2 12/30/2021-17	3134GAYV0	None	12/30/2016	1,000,000.00	1,000,000.00	2.000	971,250.00	2.000	9/30/2018	12/30/2021	0.85
FHLMC Step 4/28/2021-16	3134G8VZ9	Moody's-Aaa	4/28/2016	2,500,000.00	2,500,000.00	1.375	2,443,350.00	2.116		4/28/2021	2.13
FHLMC Step 4/28/2021-16	3134G8Z28	Moody's-Aaa	5/10/2016	1,000,000.00	999,500.00	1.125	980,900.00	2.044	7/28/2018	4/28/2021	0.85
FNMA 1.5 6/16/2021-16	3136G3QX6	Moody's-Aaa	6/16/2016	1,000,000.00	995,000.00	1.500	961,410.00	1.604	9/16/2018	6/16/2021	0.85
<b>Sub Total / Average</b>				<b>26,500,000.00</b>	<b>26,493,730.00</b>	<b>1.502</b>	<b>26,064,530.00</b>	<b>1.654</b>			<b>22.56</b>
<b>CAMP</b>											
CAMP LGIP	LGIP4000	None	5/31/2011	3,059,953.01	3,059,953.01	2.050	3,059,953.01	2.050	N/A	N/A	2.61
<b>Sub Total / Average</b>				<b>3,059,953.01</b>	<b>3,059,953.01</b>	<b>2.050</b>	<b>3,059,953.01</b>	<b>2.050</b>			<b>2.61</b>
<b>Certificates of Deposit</b>											
Ally Bank 1.35 10/28/2019	02006LQ48	None	10/27/2016	248,000.00	248,000.00	1.350	243,159.88	1.350		10/28/2019	0.21
American Expr Centurion 2.45 4/5/2022	02587DN38	None	4/5/2017	247,000.00	247,000.00	2.450	242,770.42	2.450		4/5/2022	0.21
Belmont Savings Bank 2.15 3/22/2022	080515BV0	None	3/20/2017	248,000.00	248,000.00	2.150	241,094.19	2.150		3/22/2022	0.21
BMW Bank 2.15 3/10/2022	05580AGR9	None	3/10/2017	247,000.00	247,000.00	2.150	240,225.85	2.150		3/10/2022	0.21
Capital One Bank 1.5 10/26/2020	140420L99	None	10/26/2016	248,000.00	248,000.00	1.500	240,299.03	1.500		10/26/2020	0.21
Comenity Capital 1.25 4/11/2019	20033ASR8	None	10/25/2016	248,000.00	248,000.00	1.250	245,338.71	1.250		4/11/2019	0.21
Discover Bank 2.25 12/29/2021	254672Y36	None	12/29/2016	247,000.00	247,000.00	2.250	241,429.83	2.250		12/29/2021	0.21

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
JP Morgan Chase Bank 1.1 7/15/2019	48125Y5L4	None	7/15/2016	249,000.00	249,000.00	1.100	244,480.75	1.100		7/15/2019	0.21
Lakeside Bank 1.75 5/29/2020	51210SMU8	None	5/30/2017	249,000.00	249,000.00	1.750	243,907.50	1.750		5/29/2020	0.21
Landmark Bank 2.1 3/29/2021-17	51506VCA9	None	3/29/2017	248,000.00	248,000.00	2.100	242,761.87	2.100	9/27/2018	3/29/2021	0.21
Ponce De Leon Federal Bank 1.85 5/28/2021	732333AJ8	None	5/31/2017	249,000.00	249,000.00	1.850	241,546.16	1.850		5/28/2021	0.21
State Bank of India 2.25 1/26/2022	8562846A7	None	1/26/2017	247,000.00	247,000.00	2.250	241,286.03	2.250		1/26/2022	0.21
Summit Community Bank 1.65 5/29/2020	86604XLT1	None	5/31/2017	249,000.00	249,000.00	1.650	243,425.74	1.650		5/29/2020	0.21
Synchrony Bank 2.3 2/24/2022	87165ELT2	None	2/28/2017	247,000.00	247,000.00	2.300	241,575.68	2.300		2/24/2022	0.21
Wells Fargo Bank 1.15 7/22/2019	9497486R3	None	7/20/2016	249,000.00	249,000.00	1.150	244,531.42	1.150		7/22/2019	0.21
<b>Sub Total / Average</b>				<b>3,720,000.00</b>	<b>3,720,000.00</b>	<b>1.816</b>	<b>3,637,833.06</b>	<b>1.816</b>			<b>3.17</b>

#### Corporate Issues

American Express Credit 2.7 3/3/2022	0258M0EG0	Moody's-A2	5/15/2017	1,000,000.00	1,013,279.67	2.700	976,290.00	2.406		3/3/2022	0.86
Barclays Bank PLC Step 4/26/2022-17	06741VR95	Moody's-A1	4/26/2017	1,000,000.00	1,000,000.00	2.500	985,860.00	3.093	10/26/2018	4/26/2022	0.85
Chevron Corp 2.1 5/16/2021	166764BG4	Moody's-Aa2	5/10/2017	1,000,000.00	999,500.00	2.100	976,600.00	2.113		5/16/2021	0.85
Chevron Corp 2.193 11/15/2019	166764AN0	Moody's-Aa2	2/26/2016	1,160,000.00	1,167,806.57	2.193	1,151,856.80	2.004		11/15/2019	0.99
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	977,480.00	1.738		11/15/2020	0.86
HSBC 4.875 8/24/2020	4042Q1AE7	Moody's-A1	5/17/2016	2,000,000.00	2,191,145.28	4.875	2,061,320.00	2.500		8/24/2020	1.87
Toyota Motor Credit 1.55 7/13/2018	89236TCP8	Moody's-Aa3	3/16/2016	1,000,000.00	1,002,490.00	1.550	999,700.00	1.440		7/13/2018	0.85
<b>Sub Total / Average</b>				<b>8,160,000.00</b>	<b>8,384,863.80</b>	<b>2.885</b>	<b>8,129,106.80</b>	<b>2.226</b>			<b>7.14</b>

#### LAIF

LAIF LGIP	LGIP1002	None	4/30/2011	61,224,153.56	61,224,153.56	1.854	61,224,153.56	1.854	N/A	N/A	52.14
<b>Sub Total / Average</b>				<b>61,224,153.56</b>	<b>61,224,153.56</b>	<b>1.854</b>	<b>61,224,153.56</b>	<b>1.854</b>			<b>52.14</b>

#### 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	485,560.00	2.125		6/1/2021	0.43
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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
La Qunita Redev Agency 2.034 9/1/2019	50420BCH3	S&P-AA-	12/22/2016	1,330,000.00	1,336,650.00	2.034	1,321,953.50	1.843		9/1/2019	1.14
State of California 2.152 4/1/2022	13063DAD0	Moody's-Aa3	4/27/2017	1,000,000.00	1,010,000.00	2.152	973,910.00	1.938		4/1/2022	0.86
Victor Valley College General Obligation Bond 2.35	92603PER9	Moody's-Aa2	12/28/2016	500,000.00	490,150.00	2.350	483,720.00	2.811		8/1/2021	0.42
<b>Sub Total / Average</b>				<b>3,330,000.00</b>	<b>3,336,800.00</b>	<b>2.130</b>	<b>3,265,143.50</b>	<b>2.056</b>			<b>2.84</b>
<b>None</b>											
Union Bank Cash	LGIPUNIONBANK	None	12/31/2016	8,207,498.67	8,207,498.67	1.520	8,207,498.67	1.520	N/A	N/A	6.99
<b>Sub Total / Average</b>				<b>8,207,498.67</b>	<b>8,207,498.67</b>	<b>1.520</b>	<b>8,207,498.67</b>	<b>1.520</b>			<b>6.99</b>
<b>Treasury</b>											
T-Note 0.875 5/15/2019	912828R44	None	4/26/2017	1,000,000.00	993,080.00	0.875	987,420.00	1.217		5/15/2019	0.85
T-Note 1.283 3/31/2019	912828SN1	None	2/22/2017	1,000,000.00	1,004,480.00	1.283	994,300.00	1.067		3/31/2019	0.86
T-Note 1.5 2/28/2019	912828C24	None	1/9/2017	1,000,000.00	1,005,440.00	1.500	995,120.00	1.241		2/28/2019	0.86
<b>Sub Total / Average</b>				<b>3,000,000.00</b>	<b>3,003,000.00</b>	<b>1.221</b>	<b>2,976,840.00</b>	<b>1.175</b>			<b>2.56</b>
<b>Total / Average</b>				<b>117,201,605.24</b>	<b>117,429,999.04</b>	<b>1.820</b>	<b>116,565,058.60</b>	<b>1.804</b>			<b>100</b>

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: 05/31/2018, End Date: 06/30/2018

Description	CUSIP/Ticker	Face Amount/Shares	Principal	Interest/Dividends	Coupon Rate	YTM @ Cost	Settlement Date	Total
<b>Deposit</b>								
CAMP LGIP	LGIP4000	5,136.54	5,136.54	0.00	N/A	0.000	6/30/2018	5,136.54
LAIF LGIP	LGIP1002	7,000,000.00	7,000,000.00	0.00	N/A	0.000	6/14/2018	7,000,000.00
Union Bank Cash	LGIPUNIONBANK	8,207,498.67	8,207,498.67	0.00	N/A	0.000	6/30/2018	8,207,498.67
<b>Sub Total / Average</b>		<b>15,212,635.21</b>	<b>15,212,635.21</b>	<b>0.00</b>				<b>15,212,635.21</b>
<b>Interest</b>								
CAMP LGIP	LGIP4000	0.00	0.00	5,136.54	N/A	0.000	6/30/2018	5,136.54
City of Riverside CA 2.125 6/1/2021	769036BA1	0.00	0.00	5,312.50	2.125	0.000	6/1/2018	5,312.50
Comenity Capital 1.25 4/11/2019	20033ASR8	0.00	0.00	263.29	1.250	0.000	6/11/2018	263.29
Discover Bank 2.25 12/29/2021	254672Y36	0.00	0.00	2,771.14	2.250	0.000	6/29/2018	2,771.14
FFCB 1.35 6/24/2019	3133EEZ60	0.00	0.00	7,600.00	1.350	0.000	6/25/2018	7,600.00
FFCB 1.37 12/27/2018-17	3133EGZ24	0.00	0.00	6,850.00	1.370	0.000	6/27/2018	6,850.00
FHLB 1.93 12/21/2020-17	3130AADQ8	0.00	0.00	9,650.00	1.930	0.000	6/21/2018	9,650.00
FHLB 2.05 12/29/2021-17	3130AAET1	0.00	0.00	10,250.00	2.050	0.000	6/29/2018	10,250.00
FHLB 2.4 12/22/2021-17	3130AAHC5	0.00	0.00	12,000.00	2.400	0.000	6/22/2018	12,000.00
FHLMC 1.2 12/14/2018-17	3134GAZU1	0.00	0.00	6,000.00	1.200	0.000	6/14/2018	6,000.00
FHLMC 1.4 6/14/2019-17	3134GBRH7	0.00	0.00	7,000.00	1.400	0.000	6/14/2018	7,000.00
FNMA 1.5 6/16/2021-16	3136G3QX6	0.00	0.00	7,500.00	1.500	0.000	6/18/2018	7,500.00
Landmark Bank 2.1 3/29/2021-17	51506VCA9	0.00	0.00	1,312.70	2.100	0.000	6/29/2018	1,312.70
Wells Fargo Bank 1.15 7/22/2019	9497486R3	0.00	0.00	243.20	1.150	0.000	6/20/2018	243.20
<b>Sub Total / Average</b>		<b>0.00</b>	<b>0.00</b>	<b>81,889.37</b>				<b>81,889.37</b>
<b>Withdraw</b>								
Union Bank Cash	LGIPUNIONBANK	16,606,260.09	16,606,260.09	0.00	N/A	0.000	6/29/2018	16,606,260.09
<b>Sub Total / Average</b>		<b>16,606,260.09</b>	<b>16,606,260.09</b>	<b>0.00</b>				<b>16,606,260.09</b>

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

**Capital Improvement Program**

**Fremont and Paseo Padre Lift Stations Improvements Project** – Project closeout and punchlist work.

**Chemical Tanks and Piping Replacement Project** – Corrective work and punch list work.

**Sludge Degritter System Project** – Previous degritter performance test was unsuccessful. Degritter manufacturer proposed revisions to test protocol and will schedule a final round of test in July.

**Newark Pump Station Wet Well Improvements** – Corrective work and punch list work.

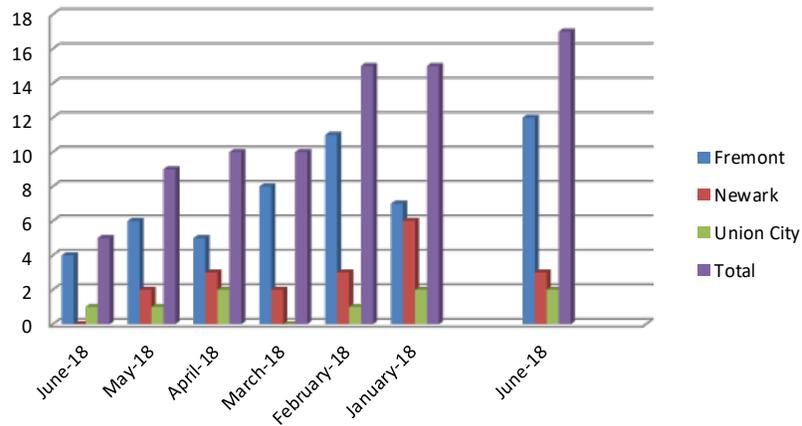
**Primary Digester No. 3 Rehabilitation Project** – Modifications for the south Thickener Scum Pit are in progress. Installation of the two new at-grade manways at Primary Digester No. 3 were completed. Coatings work within the interior of Primary Digester No. 3 and piping installation at Heating and Mixing Building No. 2 has begun.

**Force Main Corrosion Repairs Project Phase 2** – The manhole repairs are in progress. Force main start-up is planned for mid-August.

## Customer Service

Trouble Calls dispatched from the Front Desk during business hours:

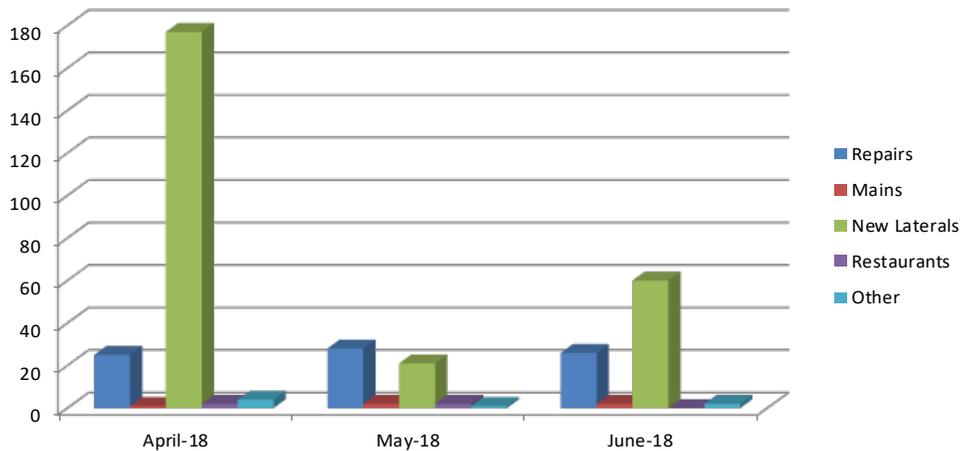
Month	Fremont	Newark	Union City	Total
June-18	4	0	1	5
May-18	6	2	1	9
April-18	5	3	2	10
March-18	8	2	0	10
February-18	11	3	1	15
January-18	7	6	2	15
June-18	12	3	2	17
6-Month Total				64



## Sewer Permits Issued

Month	Repairs	Mains	New Laterals	Restaurants	Other
June-18	26	2	60	0	2
May-18	28	2	21	2	1
April-18	25	1	177	2	4

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



**Communication**

- Social Media posts: Leadership School graduation, scheduled repair work
- Updated website: Scheduled sewer repair work
- Continued activities regarding District Branding initiative
- Participated in Chamber of Commerce Board activities as Director and Past-President
- Participated as member of CASA Program Committee and Communications Committee in August 2018 conference planning
- Continued content development for Fall 2018 newsletter

**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. We conduct over 600 Stormwater compliance inspections 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 111 Stormwater (Urban Runoff), and 68 FOG (restaurant) inspections. During this reporting period, Inspectors identified 35 Stormwater and 19 FOG enforcement actions. Eighteen (18) of the Stormwater enforcements resulted in administrative fines ranging from \$100 to \$500. Four (4) of the administrative fines were for illicit discharges and 14 were for repeated violations.

**Urban Runoff Inspections and Enforcements**

June 2018	No. of UR Inspections	VW	WL	NOV	AF	LA	Total Enforcements	No. of Illicit Discharge/s	
	111	8	0	9	18	0	35	% enforcement	4

**FOG Inspections and Enforcements**

June 2018	No. of FOG Inspections	VW	WL	NOV	AF	LA	Total Enforcements	% Enforcement	
	68	8	11	0	0	0	19		28%

*Enforcements:*

*VW – Verbal Warning*

*WL – Warning Letter*

*NOV – Notices of Violation*

*AF – Administrative Fine*

*LA – Legal Action*

*NOD – Notice of Deficiency*

*AO – Administrative Order*

*C&D – Cease & Desist Order*

*SNC – Significant Non-Compliance*

**Dental Inspections, School Outreach, and Plant Tours**

# of Dental Inspections	# of School Outreach Events including Sewer Science	# of Plant Tours
9	0	0

**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**

<b>New Industrial/Groundwater Permits</b>	<b>Groundwater/Temporary</b>
None	

**Permits Issued**

<b>Company Name</b>	<b>Date Permit Issued</b>
None	

**Industrial Permit Closures**

<b>Company Name</b>	<b>Date of Closure</b>
None	

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

<b>Report Name</b>	<b>Date Report Completed and Submitted</b>
None	

**Enforcement Action**

<b>IU Name &amp; Nature of Business</b>	<b>Comments</b>	<b>City</b>	<b>Parameters Violated</b>	<b>Discharge concentration (mg/L)</b>	<b>USD/Fed Limit Violated(mg/L)</b>	<b>Enforcement (1)</b>
Trulite Glass & Aluminum (glass cutting and polishing)	Trulite bypassed treatment requirements and failed to notify USD. (Wastewater Discharge Permit Conditions - Sections G2.8(a), G2.11(a), and G2.12.	F	N.A.	N.A.	N.A.	NOV-N18-007

(1) *WL – Warning Letter*

*NOV – Notices of Violation*

*AO – Administrative Order*

*C&D – Cease and Desist Order*

*SNC – Significant Non-Compliance*

*EM – Enforcement Meeting*

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

<b>Activity</b>	<b>Date of Event</b>	<b>Attendees</b>
BAPPG Behavior Change Workshop	June 6, 2018	Marian Gonzalez, Doug Dattawalker
Industrial Advisory Council Meeting (Significant Non-Compliance reporting and City of Fremont Cigarette Butt litter guidance)	June 28, 2018	Six (6) Industrial User representatives and five EC Team members
MEDS Coalition	June 18, 2018	Doug Dattawalker
BACWA Pretreatment Committee	June 14, 2018	Michael Dunning, Alex Paredes

**Engineering/Construction**No. of projects under construction: **6**

	<b>Construction Projects</b>	<b>Capital (\$1000)</b>	<b>Scheduled Completion</b>	<b>Completed Scope</b>	<b>Completed Time</b>	<b>Comments for June 2018 Activities</b>
1.	Fremont and Paseo Padre LS Improvement – Derek	\$2,801	10/16	100%	100%	Project closeout and punchlist work.
2.	Chemical Tanks and Piping Replacement Project – Thomas	\$2,102	10/17	99%	100%	Corrective work and punch list item work.
3.	Sludge Degritter System Project – Kevin	\$1,436	11/17	95%	100%	One final round of degritter performance test is scheduled in July.
4.	Newark Pump Station Wet Well Improvements – Thomas	\$674	03/18	99%	100%	Corrective work and punch list item work.
5.	Primary Digester No. 3 Rehabilitation – Derek	\$1,956	08/18	42%	87%	Coatings work within Digester 3 and piping installation at Heating and Mixing Building No. 2 have begun.
6.	Force Main Corrosion Repairs Phase 2 – Andrew	\$932	09/18	60%	51%	The manhole repairs are in progress.

**Design/Study**

No. of projects in design/study phase: **15**

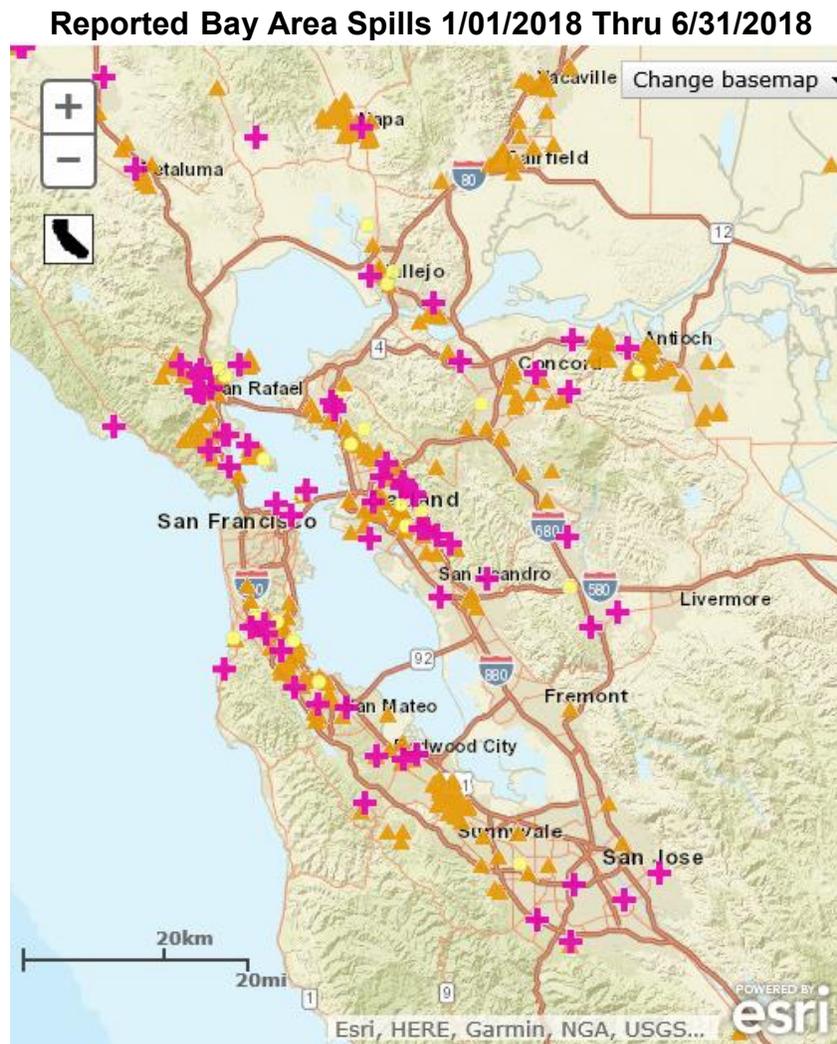
	<b>Design/Study Projects</b>	<b>Capital (\$1000)</b>	<b>Scheduled Completion</b>	<b>Completed Scope</b>	<b>Completed Time</b>	<b>Comments for June 2018 Activities</b>
1.	Plant Solids System / Capacity Assessment Phase 2 – Curtis	\$329	02/18	98%	100%	Draft final report is under review.
2.	Local Limits Study – Raymond	\$77	09/18	75%	50%	Assist with industrial discharge permits.
3.	Cathodic Protection System Project – Thomas	\$79	08/18	75%	85%	Staff reviewed the draft 10-year cathodic protection Capital Improvement Plan and the draft cathodic protection system as-built plans.
4.	Newark Basin Masterplan – Andrew	\$303	08/18	48%	80%	Consultant completed review of condition assessment, meeting scheduled for July 10 <sup>th</sup> to develop repair method decision criteria. Board authorized Task Order No. 2 on June 25 <sup>th</sup> for the capacity analysis of the basin’s sewers.
5.	Standby Power Generation System Upgrade Project– Raymond/Kevin	\$1,976	12/18	15%	15%	Consultant will evaluate power demand of future plant upgrades.
6.	Force Main Condition Assessment – Andrew	\$121	10/20	45%	41%	Condition assessment of west force main north of Newark PS completed June 14 <sup>th</sup> .
7.	Emergency Outfall Improvements Project – Andrew	\$317	10/18	45%	70%	Public hearing for the initial study held at the June 25 <sup>th</sup> Board meeting. Public comment period will end on July 9 <sup>th</sup> .
8.	Primary Digester No. 7 Project – Curtis	\$1,476	09/18	51%	68%	90% design in progress.
9.	Plant Master Plan – Raymond/Curtis	\$304	03/18	85%	100%	Amendment to evaluate three new building alternatives in progress.
10.	Effluent Management Study – Curtis	\$155	03/18	92%	100%	Preparation of Final Report in progress.
11.	Odor Control Alternatives Study – Kevin	\$330	7/18	50%	50%	Coordination of odor control pilot technology testing in progress.
12.	Plant Condition Assessment Study – Kevin	\$118	06/18	85%	95%	Final Study Report in progress

	<b>Design/Study Projects</b>	<b>Capital (\$1000)</b>	<b>Scheduled Completion</b>	<b>Completed Scope</b>	<b>Completed Time</b>	<b>Comments for June 2018 Activities</b>
13.	Headworks Screen No. 3 Project – Thomas	\$159	11/18	5%	10%	Board authorized design task order at the June 11 <sup>th</sup> meeting. NTP issued for design phase.
14.	Alvarado Influent Pump Station Improvements Project – Thomas	\$54	01/18	96%	100%	Evaluation of the pump type and configuration continues.
15.	Cast Iron / Piping Lining Phase VII – Andrew	In-house	05/18	100%	100%	Bid opening is scheduled on July 3 <sup>rd</sup> .

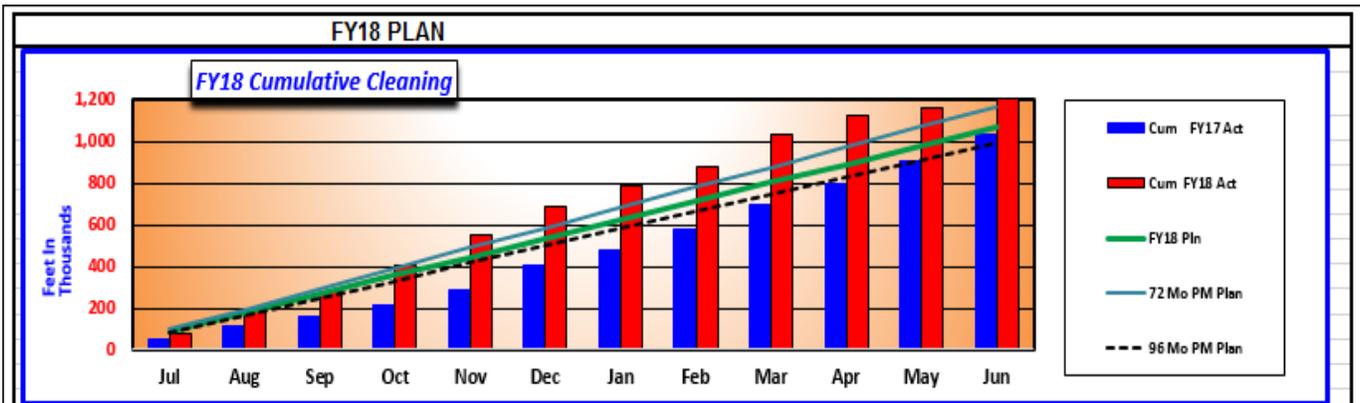
**COLLECTION SERVICES  
ACTIVITIES REPORT  
June 2018**

**Progress/Accomplishments**

- Zero Spills in June
- Completed 7.6 miles of sewer main cleaning in June.
- Completed 5.3 miles of sewer main inspection in June.
- Responded to 10 service request calls in June.
- Completed a total of 45 sewer main repairs in June.
- Trainings
  - Lock Out / Tag Out
  - Traffic Control
  - Dump Truck (new equipment)

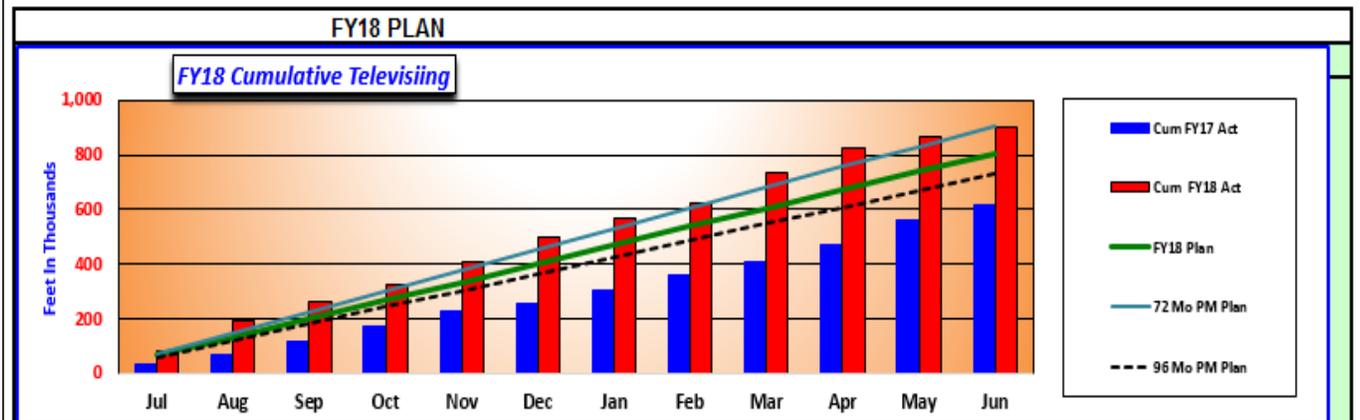


# Performance Measures



**Cleaning Actual Footages/Costs** **Jun-18 Clean Cost/Ft = \$1.61**

Description	FY18 Q1 Footage	FY18 Q2 Footage	FY18 Q3 Footage	Apr-18 Footages	May-18 Footages	Jun-18 Footage	FY18 Q4 Footages	FY18 YTD Footage	FY18 YE Goal	% Cmpl to Plan	FY17 Y/E Footage
72 Month Hydro-jet Clean-REV	229,414	220,540	216,694	66,278	28,304	708	95,290	761,938	731,522	104.2%	525,009
Selective Line Cleaning	28,316	64,584	32,842	886	4,792	26,081	31,759	157,501	113,365	138.9%	156,815
Special Condition Clean	410	20,992	3,239	687	1,713	4,643	7,043	31,684	18,720	169.3%	17,237
Root Control/Chemical Cln	15,865	104,560	102,753	19,400	3,488	8,449	31,337	254,515	209,078	121.7%	331,805
Cast Iron Proj/Other (not included in Cost Per Foot)	0	0	0				0	0			1,183
<b>Totals</b>	<b>274,005</b>	<b>410,676</b>	<b>355,528</b>	<b>87,251</b>	<b>38,297</b>	<b>39,881</b>	<b>165,429</b>	<b>1,205,638</b>	<b>1,072,685</b>	<b>112.4%</b>	<b>1,032,049</b>

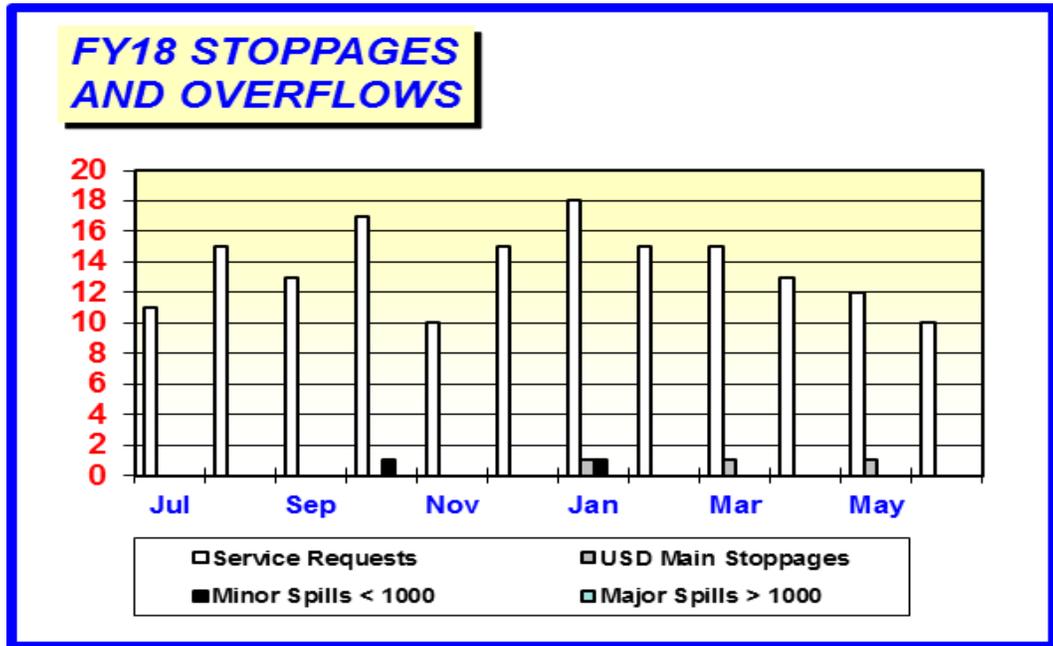


**Televising Actual Footages/Costs** **Jun-18 TV Cost/Ft = \$1.54**

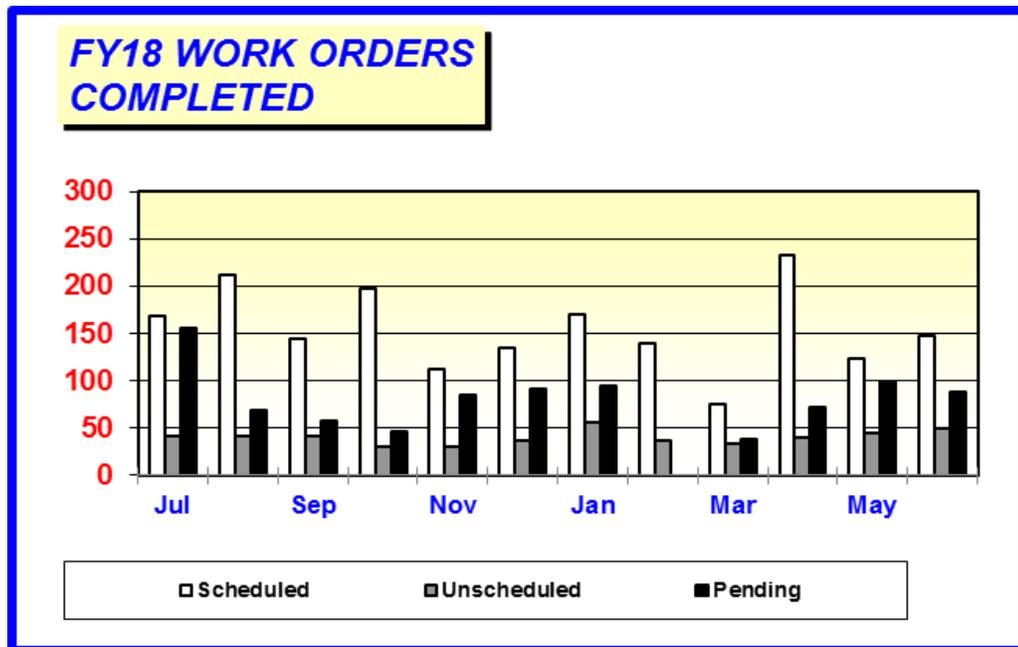
Description	FY18 Q1 Footage	FY18 Q2 Footage	FY18 Q3 Footage	Apr-18 Footages	May-18 Footages	Jun-18 Footage	FY18 Q4 Footages	FY18 YTD Footage	FY18 YE Goal	% Cmpl to Plan	FY17 Y/E Footage
72 Month TV Inspection	244,859	221,130	218,068	88,308	36,859	27,090	152,257	836,314	710,910	117.6%	541,780
Visual/Condition, Pre/Post Cnst TV	315	561	8,256	1,404	7,775	0	9,179	18,311	18,540	98.8%	21,742
New Development, CIP, Misc.	20,669	13,603	6,110	0	1,477	1,109	2,586	42,968	45,900	93.6%	43,099
Condition Assessments	0	0	0	0	0	0	0	0	32,245	0.0%	12,409
<b>Totals</b>	<b>265,843</b>	<b>235,294</b>	<b>232,434</b>	<b>89,712</b>	<b>46,111</b>	<b>28,199</b>	<b>164,022</b>	<b>897,593</b>	<b>807,595</b>	<b>111.1%</b>	<b>619,030</b>

**Other Collection Services Status Data:**

**Support Team Work Order Status:**



**C/S Maintenance Status:**



**Fabrication, Maintenance and Construction  
Activities Report  
June 2018**

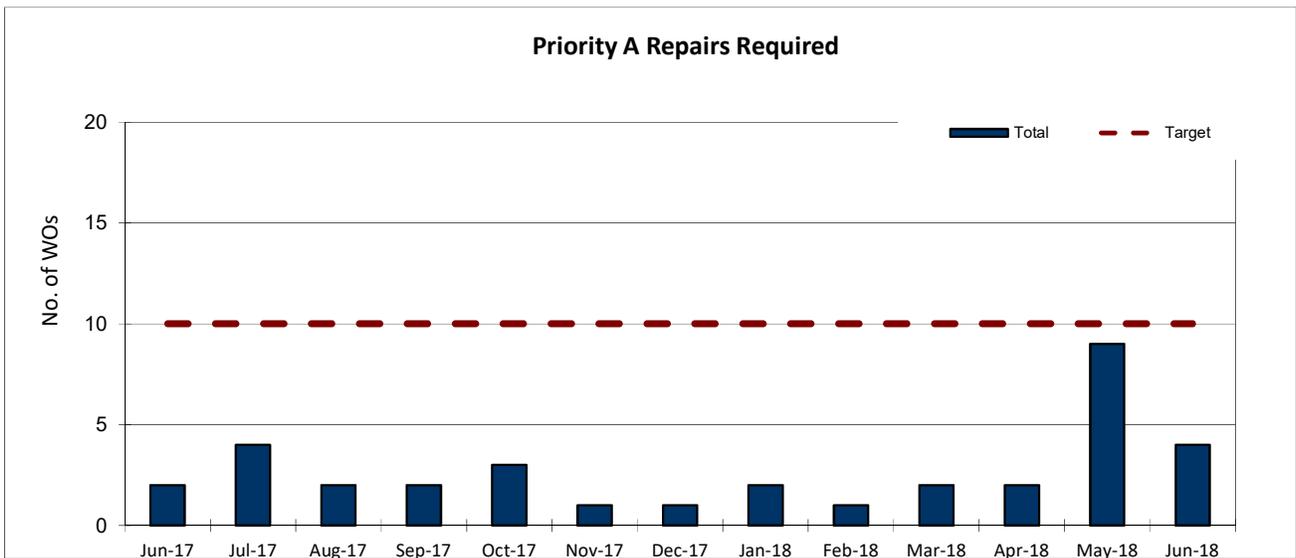
**Progress/Accomplishments**

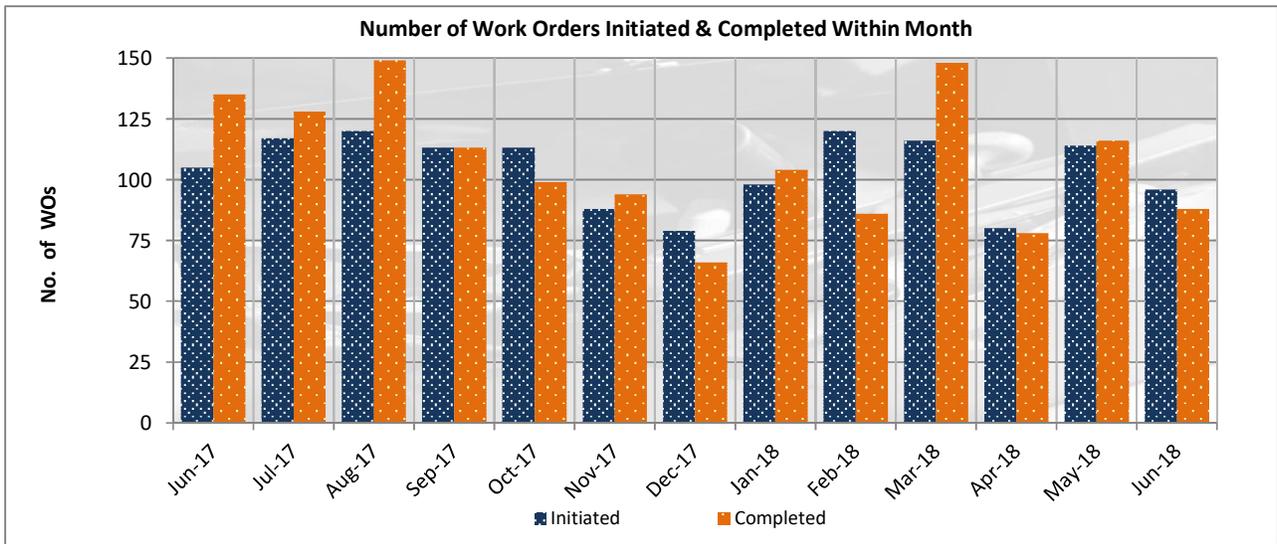
- Completed 97.79% of preventive maintenance activities for the month of June
- Completed 88 corrective maintenance work orders for the month of June
- Alvarado Pump Station sewage pump 3 overhaul
- Aeration Basin 4 mud valve repair
- Replacement of radiator fan motor for Cogen 1
- Aeration Basin 4 tubing replacement
- Co-gen 1 catalyst replacement

**Future Planning**

- Aeration Basin 1 & 7 Tubing Replacement
- Mixing Pump 5 Discharge Valve Replacement
- Secondary Digester Manway Installation
- Cogen 1 4K Service
- Cogen 2 2K Service

**Performance Measurements**





**Treatment & Disposal  
Activities Report  
June 2018**

**Progress/Accomplishments**

- Maintained 100% compliance with NPDES permits.
- Completed 95% preventive maintenance activities for the month of June.
- Conducted multiple solids system shutdowns in support of the Digester No. 3 Capital Improvement Project.
- Completed review of PCB and recommended parameters for creation of operational data management system (ODMS).
- Completed annual reporting for the Old Alameda Creek intermittent wet weather outfall.
- Calculated and submitted metals loading to SFEI for determination of RMP program fees for the Hayward Marsh.
- Attended the BACWA permits meeting.

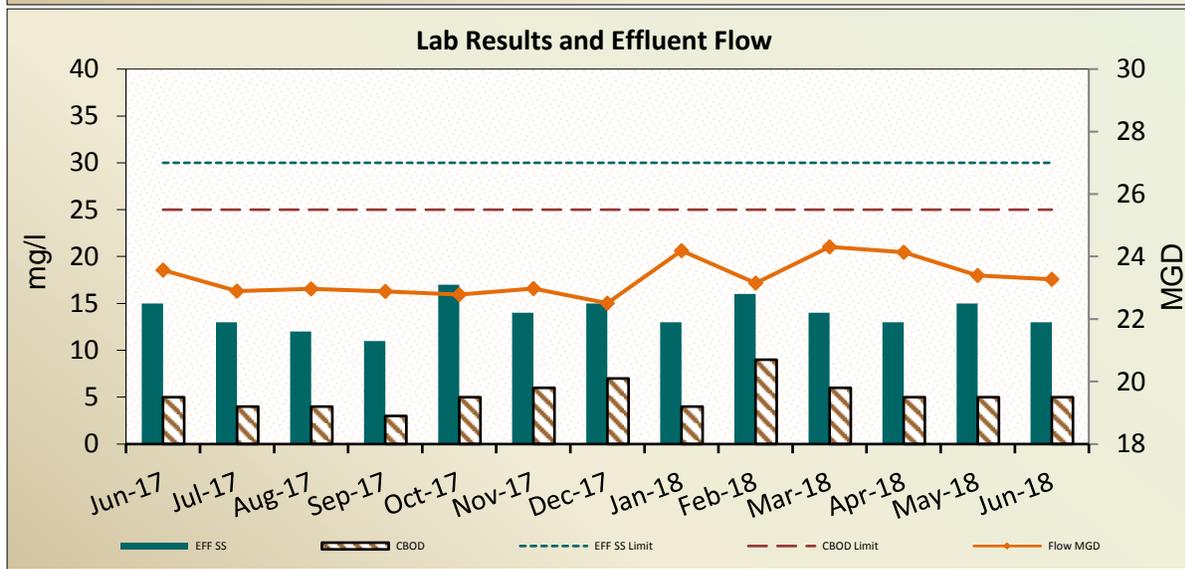
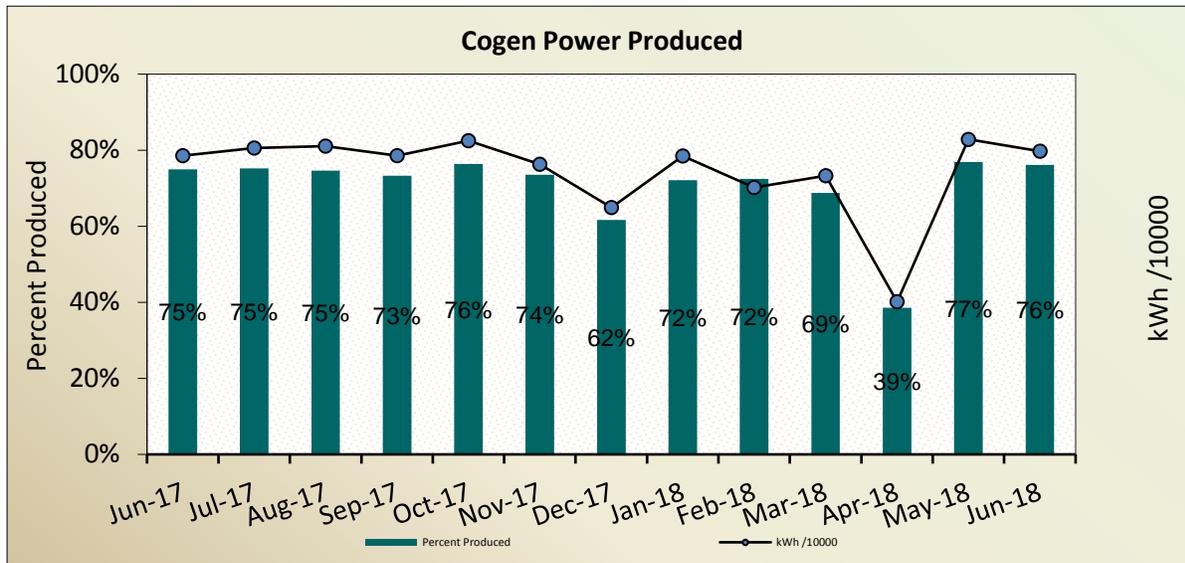
**Future Planning**

- Conduct multiple solids system shutdowns in support of the Digester No. 3 Capital Improvement Project.
- Draft the Union City Annual Report for FY 2018.
- Work with DMJ gas and purchasing on an IFB to procure third party natural gas for electrical generation.
- Negotiate a sampling plan with Hazen and Sawyer for secondary treatment process improvement project.
- Attend Hach Wims training and assist in parallel testing of the new ODMS system.

**Other**

- Cogen system produced 76% of power consumed for the month of June.

## Performance Measurements



USD's Final Effluent Monthly Monitoring Results				
Parameter	EBDA Limit	Apr-18	May-18	Jun-18
Copper, µg/l	78	5.0	4.1	4.2
Mercury, µg/l	0.066	0.00460	0.00250	0.00200
Cyanide, µg/l	42	DNQ 0.96	< 0.90	< 0.9
Ammonia- N, mg/L (Range)	130	36.0 - 42.2	40.6 - 43.4	38.9 - 42.5
Fecal Coliform, MPN/100ml (Range)				
• 5-Day Geometric Mean	500	12 - 55	21 - 28	24 - 46
• 11-Sample 90th Percentile	1100	44 - 98	33-38	55 - 66
Enterococci				
• Monthly Geometric Mean	240	18.8	18.9	15.8
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:** July 16, 2018

**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  
Kevin Chun, Associate Engineer

**SUBJECT:** Agenda Item No. 7 - Meeting of July 23, 2018  
**Award the Contract for the Temporary Calcium Nitrate Chemical Feed System to Thatcher Company of California, Inc. for the Odor Control Alternatives Study**

### **Recommendation**

Staff recommends the Board award the contract for a temporary calcium nitrate chemical feed system to Thatcher Company of California, Inc. in the amount of \$112,482.78 for the Odor Control Alternatives Study.

### **Background**

On January 9, 2017, the Board authorized the General Manager to execute an agreement and Task Order No. 1 with CH2M in the amount of \$139,801 to conduct the Odor Control Alternatives Study.

The Study's scope of services included the following tasks:

1. Review findings from previous odor control and sampling reports and related data.
2. Conduct air sampling at the WWTP and in the general vicinity where recent complaints have occurred to help identify potential nuisance level odorous compounds present and possible sources.
3. Develop and conduct a dispersion model of the WWTP facilities, odor sources, and odor receptors in the adjacent properties under different weather conditions.

4. Summarize findings, evaluate odor control alternatives not included in previous odor control studies, and recommended odor control alternatives for implementation, if deemed necessary. The recommended alternatives will include life cycle costs.

CH2M completed three air sampling events at the WWTP, and in the general vicinity where odor complaints had occurred, in April, June, and August 2017, and developed the dispersion model. During the air sampling events, CH2M and staff identified that vapor phase odors at the WWTP seemed to be significantly reduced in the dispersion model with the occasional dosing of chemicals in the collection system.

Staff believed there was an opportunity to minimize odors and odor control capital improvement costs at the WWTP if odors in the collection system can be minimized via the development, refinement, and implementation of a source control program. This alternative approach utilizes source control as a strategy and may also yield additional activated sludge process benefits by reducing the septicity of the influent entering the WWTP. Staff recommended to explore this further with a second phase of the current Odor Control Alternatives Study.

On February 26, 2018, the Board authorized the General Manager to execute Task Order No. 2 with CH2M in the amount of \$190,033. The main objective of Task Order No. 2 was to conduct sampling and evaluation of the collection system and force main odors and to conduct bench tests of various chemicals to determine the chemical dosing rates and level of odor reduction in the wastewater before it reaches the WWTP.

Task Order No. 2 included the following scope of services:

1. Conduct odor sampling and modeling to determine wastewater odor characteristics within the collection system and force mains. Conduct odor sampling of the marsh area adjacent to the plant to establish baseline data.
2. Conduct bench-scale testing of chemical alternatives to determine odor control and dosing rates in the collection system and force mains.
3. Develop an odor model to evaluate current odor impacts in the collection system, identify wastewater characteristics, and simulate different chemical dosing schemes. Recommend a chemical dosing strategy that will provide the dosing chemical, location(s), quantity, and frequency that will best reduce sulfides in the collection and transport systems.
4. Summarize findings, evaluate odor control alternatives not included in previous odor control studies, and recommend an implementation plan with odor control alternatives. The alternatives will include life cycle cost estimates.

CH2M completed Tasks 1 and 2 and recommended two odor control technology alternatives be pilot tested at the Newark Pump Station (PS) and Irvington PS in conjunction with Task 3. The objective of the selected technologies is to prevent wastewater septicity and limit the formation of hydrogen sulfides and other odorant compounds in the force mains during the long transit time to the WWTP.

The two odor control technology alternatives are:

- Super Oxygenation Systems,
- Calcium Nitrate Chemical Systems with, and without the existing hydrogen peroxide chemical dosing system in operation at the WWTP.

During the pilot tests, the existing ferrous chloride chemical system at Irvington PS will be shut off to not affect the efficacy of the alternatives. Instead, a temporary ferrous chloride chemical system will be installed at the gravity sludge thickeners to minimize formation of hydrogen sulfides in the primary digesters. The pilot tests of the two alternatives will take approximately three months to complete which includes installation, testing, operation, and removal of the equipment and materials. After the pilot tests, the existing ferrous chloride chemical system at Irvington PS will resume normal operation.

The attached Figures 1 through 5 show the locations of the systems described above.

**Quotation and Bid Results**

Staff prepared and issued Request for Quotations (RFQ) and Invitations for Bids (IFB) for the above systems and the results are as follows:

1. Ferrous Chloride Chemical System at the WWTP for duration of three months (RFQ): \$40,806.15 from Evoqua Water Technologies.
2. Super Oxygenation Systems at Newark PS and Irvington PS (IFB): \$65,657.63 from Inland Environmental Resources, Inc.
3. Calcium Nitrate Chemical Systems at Newark PS and Irvington PS (IFB):

<b>Vendor</b>	<b>Bid Amount</b>
Thatcher Company of California, Inc. Sacramento, CA	\$112,482.78
Evoqua Water Technologies Sarasota, FL	\$237,369.06
Evoqua Water Technologies Sarasota, FL	\$200,139.66 (Alternate dosing control system)

This bid also includes the cost of the calcium nitrate chemical that will be used during the testing and operation periods. A summary of the bids is shown in the attached Table 1.

Staff will execute contracts with Evoqua and IER for the Ferrous Chloride Chemical System and Super Oxygenation Systems, respectively.

### **Schedule**

Staff anticipates delivery and installation of the systems in August and September 2018 and completion of pilot tests by October 2018. After pilot tests are completed, the temporary ferrous chloride and pilot test systems will be removed from the WWTP and pump stations.

Staff recommends the Board award a contract for a temporary calcium nitrate chemical feed system to Thatcher Company of California, Inc. in the amount of \$112,482.78 for the Odor Control Alternatives Study.

PRE/SEG/RC/KC:dl

Attachments: Figure 1 – Ferrous Chloride System, WWTP  
Figure 2 – Super Oxygenation System, Newark PS  
Figure 3 – Super Oxygenation System, Irvington PS  
Figure 4 – Calcium Nitrate Chemical System, Newark PS  
Figure 5 – Calcium Nitrate Chemical System, Irvington PS  
Table 1 – Bid Summary of the Calcium Nitrate Chemical Systems

Figure 1 - Ferrous Chloride System, WWTP

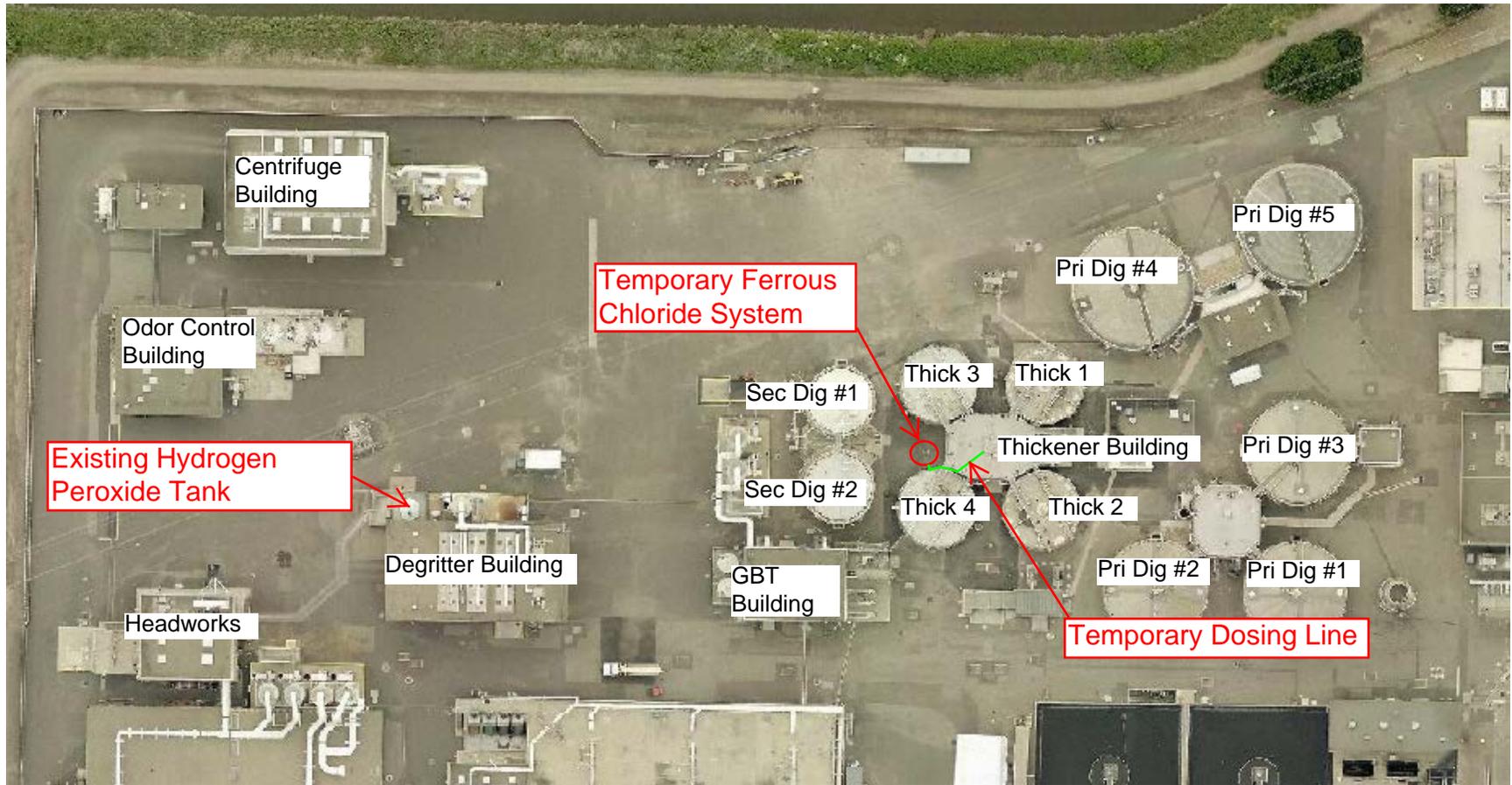


Figure 2 – Super Oxygenation System, Newark PS

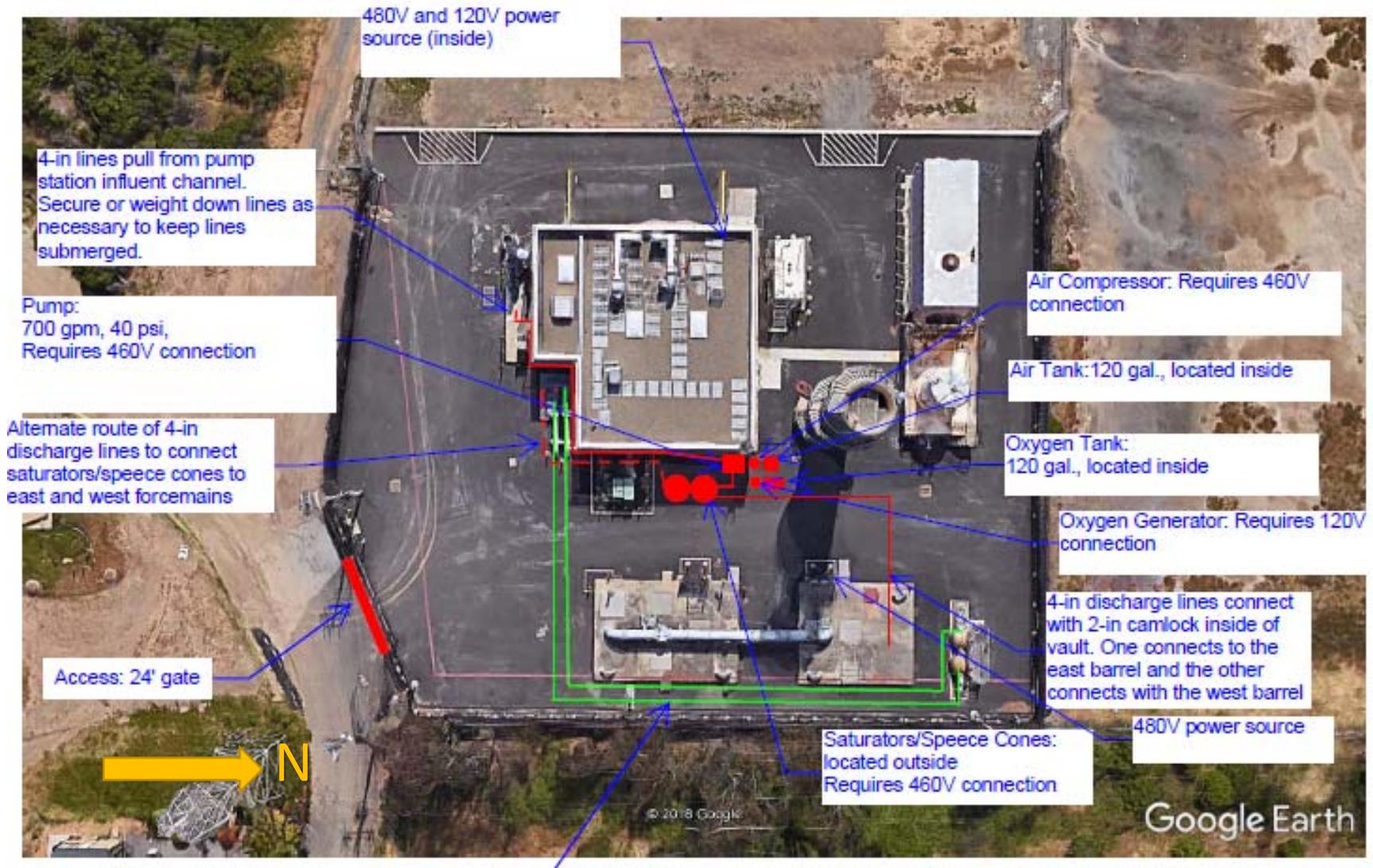


Figure 3 – Super Oxygenation System, Irvington PS

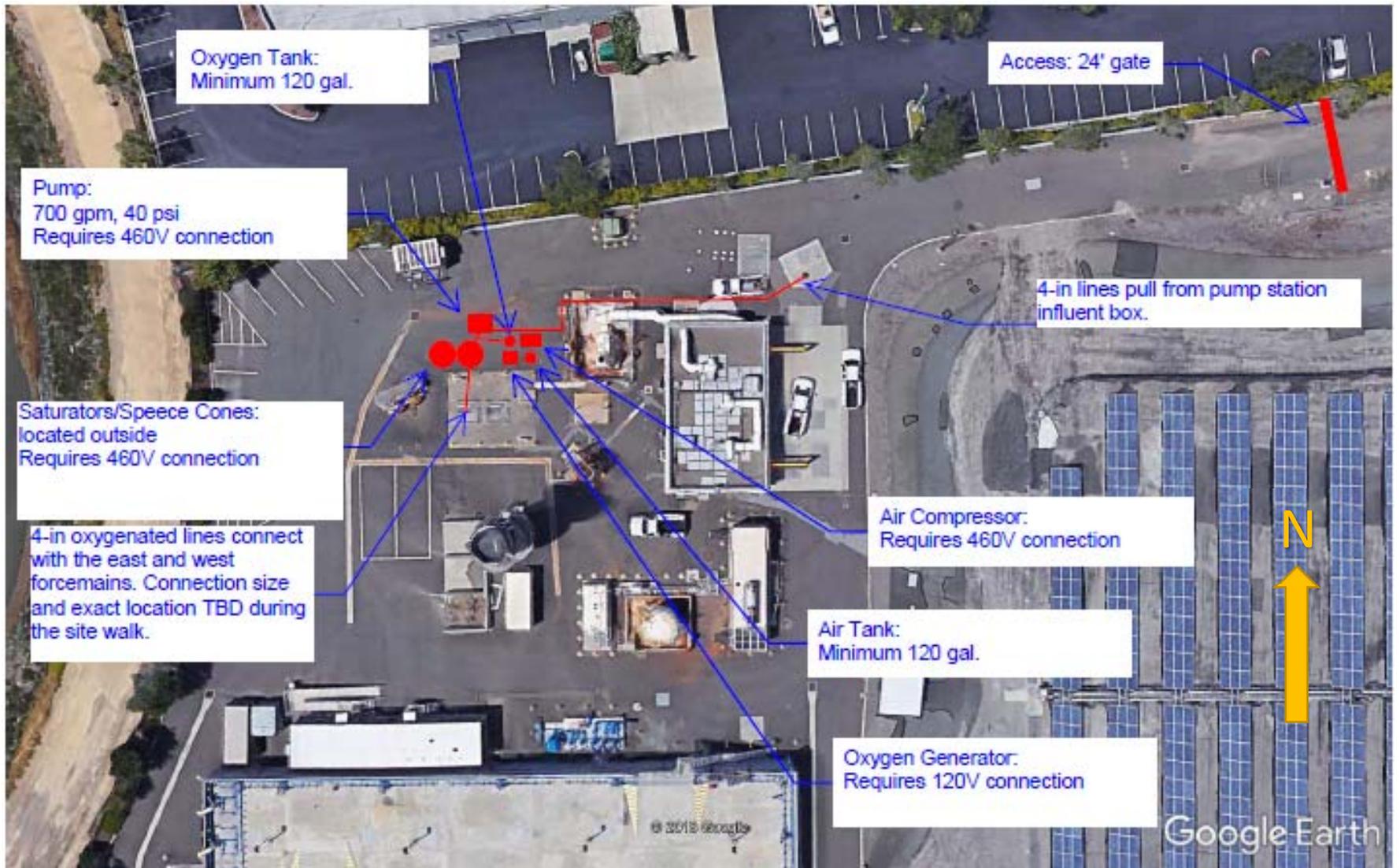
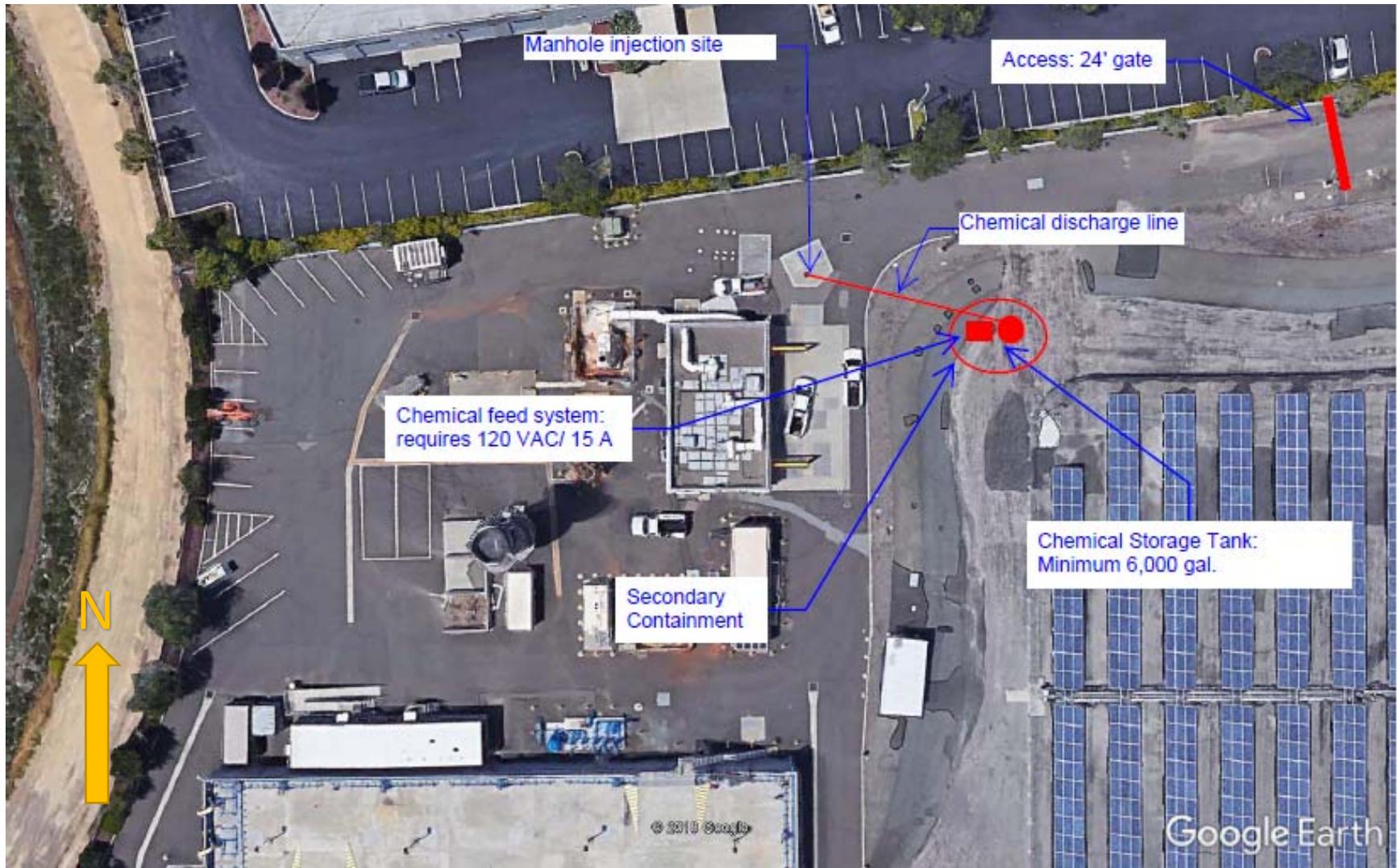


Figure 4 – Calcium Nitrate Chemical System, Newark PS



Figure 5 – Calcium Nitrate Chemical System, Irvington PS



**Table 1**  
**Bid Summary - Calcium Nitrate Chemical Systems**

Bid Opening: July 12, 2018

Bid Item No.	Bid Item	Unit	Estimated Quantity	Thatcher Company of California, Inc. Sacramento, CA	Evoqua Water Technologies Sarasota, FL	Evoqua Water Technologies (Alternate Dosing Control System) Sarasota, FL
				Total Bid Price	Total Bid Price	Total Bid Price
<b>1</b>	<b>Equipment Mobilization Fee</b>	LS	1	\$10,550.00	\$22,994.00	\$22,994.00
<b>2</b>	<b>Calcium Nitrate Pilot Test Systems at Irvington PS and Newark PS</b>	Weeks	4	\$81,390.00	\$184,253.60	\$150,331.60
<b>3</b>	<b>Equipment Demobilization Fee</b>	LS	1	\$10,550.00	\$9,034.00	\$9,034.00
<b>Subtotal</b>				<b>\$102,490.00</b>	<b>\$216,281.60</b>	<b>\$182,359.60</b>
<b>Sales Tax @ 9.75%</b>				<b>\$9,992.78</b>	<b>\$21,087.46</b>	<b>\$17,780.06</b>
<b>Grant Total</b>				<b>\$112,482.78</b>	<b>\$237,369.06</b>	<b>\$200,139.66</b>



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

Karen W. Murphy  
*Attorney*

**DATE:** July 16, 2018

**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, Associate Engineer

**SUBJECT:** Agenda Item No. 8 – Meeting of July 23, 2018  
**Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project**

### **Recommendation**

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Hazen and Sawyer in the amount of \$177,374 for the Secondary Treatment Process Improvements Project (Project).

### **Background**

The Board authorized the General Manager to execute a task order with Carollo Engineers to determine the current capacity of the treatment plant. Phase I focused on the solids side of the plant, while phase II focused on all liquids processes, including but not limited to: headworks, primary clarifiers, aeration basins, secondary clarifiers, and disinfection. Among other things, the results of this assessment concluded that the plant's secondary treatment processes are at/near capacity at current average dry weather flow (ADWF) and over capacity during certain peak flow events, due to poor settling sludge.

Coinciding with the capacity analysis, staff has been working with Woodard and Curran (formerly RMC Water and Environment) on the Plant Master Plan and Effluent Management Study. The objective of this work is to assess the District's near- and long-term projects, recommend the

sequence of design and construction implementation based on capacity constraints as well as future regulatory changes. The scope also will determine priorities and schedules of improvements, evaluate existing and future space and capacity needs, assess potential effluent management options, and summarize what is intended to be a road map for the plant for the next 20 to 40 years. Additionally, the scope included the evaluation of new buildings (Administration, Operations Control, and FMC) versus retrofitting of the existing buildings.

Preliminary results from this effort identified two potential alternatives as Phase I secondary process improvements, which were: (1) construct two new secondary clarifiers or (2) construct new membrane bioreactor (MBR) tanks and new fine-screening facility. Both alternatives would include considerable retrofits and/or expansions to the existing aeration basins, as well as some improvements to existing electrical, mechanical, communication, and conveyance systems.

To help further develop and expedite the delivery of the two alternatives for Phase I of the secondary process improvements, staff conducted a consultant selection process and invited five consultants, AECOM, Brown and Caldwell, Carollo Engineers, Hazen and Sawyer (Hazen), and Woodard and Curran, to participate. All five consultants elected to submit proposals for this project. Staff invited Brown and Caldwell, Carollo Engineers, and Hazen to present their project team, related experience, and project approach during interviews held on June 13<sup>th</sup>.

During their interview, Hazen presented staff with an alternate approach that further optimizes current secondary treatment processes and leverages the use of existing infrastructure. This concept, if successful, would provide additional capacity by producing better settling sludge and would allow for some level of nutrient reduction. These proposed improvements would still require substantial upgrades to the existing plant infrastructure, but they could potentially minimize the overall project costs, or extend project costs over a longer period of time.

Hazen's approach would increase the Plant's secondary treatment capacity in the near-term, improve reliability, and address the anticipated nutrient removal limits required for possible wet weather shallow water discharge to the Old Alameda Creek. Hazen has an experienced wastewater process evaluation team that worked on similar projects for many east coast plants and several local plants including San Francisco Public Utilities Commission, East Bay Municipal Utility District, Central Marin Sanitation Agency, and Portland Water District.

District staff was intrigued by this concept, however, it meant redirecting the Plant Master Plan efforts to focus on the buildings while this concept is further evaluated. Staff approached the consultant and informed them that the District would allow them 12 to 15 weeks to prove, beyond a reasonable doubt, that this concept was feasible. Although a delay in the forward progress of the Plant Master Plan is not ideal, staff was of the opinion that it would be fiscally irresponsible not to fully evaluate this concept given the potentially long-term benefits and cost considerations.

The purpose of Task Order No. 1 is to have Hazen validate the feasibility of their approach before staff considers implementation of the proposed near-term and long-term solutions from the plant capacity analysis.

**Project Scope**

Task Order No. 1 will include the following scope of services:

- Review historical operational data and reports as well as perform special sampling and stress testing to develop new and validate existing process models.
- Verify existing secondary treatment capacity and recommend near-term projects to increase capacity and/or reliability.
- Evaluate and recommend near-term improvements to reliably meet Bay Area Clean Water Agencies (BACWA) Level 2 nutrient limits.
- Perform microscopic filament analyses to categorize and document the quantity of dominant bacterial species observed.

The scope of services and fees for this project are summarized below:

<b>Task No.</b>	<b>Task Description</b>	<b>Fee</b>
1	Project Management	\$10,236
2	Comprehend Phase	\$107,190
3	Explore Phase	\$44,908
4	Project Report	\$15,040
	<b>Total Not-to-Exceed Fee</b>	<b>\$177,374</b>

Staff has reviewed the scope and fee and found the proposal to be reasonable, considering the required level of effort. It is currently anticipated that Hazen will conduct a workshop with staff to present their findings and recommendations in October 2018 with a presentation to the full Board sometime thereafter, if warranted. All work under this task order is expected to be completed by December 2018.

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

<b>Description</b>	<b>Fee</b>
Task Order No. 1 – Process Modeling and Approach Validation	\$177,374
<b>Total Not-to-Exceed Fee for this Agreement</b>	<b>\$177,374</b>

Agenda Item No. 8  
Meeting of July 23, 2018  
Page 4

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Hazen and Sawyer in the amount of \$177,374 for the Secondary Treatment Process Improvements Project.

PRE/SEG/RC/CB:dl

Attachments: Agreement  
Task Order No. 1

**SECONDARY TREATMENT PROCESS IMPROVEMENTS PROJECT**  
**AGREEMENT**  
**BETWEEN**  
**UNION SANITARY DISTRICT**  
**AND**  
**HAZEN AND SAWYER**  
**FOR**  
**PROFESSIONAL SERVICES**

THIS IS AN AGREEMENT MADE AS OF July \_\_\_\_, 2018, BETWEEN UNION SANITARY DISTRICT (hereinafter referred to as District), and HAZEN AND SAWYER (hereinafter referred to as Engineer).

WITNESSETH:

WHEREAS, District intends to develop a unified approach to secondary treatment improvements that will increase capacity in the near-term, improve reliability, and address the anticipated nutrient removal limits required for possible wet weather shallow water discharge to the Old Alameda Creek. The Project includes a process and hydraulic analysis of the existing WWTP to confirm that additional capacity, including potential nutrient removal, can be obtained from the existing facility to meet the District's near-term needs. (hereinafter referred to as Project), and,

WHEREAS, District requires certain professional services in connection with the Project (hereinafter referred as Services); and

WHEREAS, Engineer is qualified and prepared to provide such Services;

NOW, THEREFORE, in consideration of the promises contained herein, the parties agree as follows:

**ARTICLE 1 - SERVICES TO BE PERFORMED BY ENGINEER**

- 1.1 Specific Services and the associated scope of services, payment, schedule, and personnel will be defined in specific Task Order as mutually agreed by District and Engineer.
- 1.2 All Task Orders will by reference incorporate the terms and conditions of this Agreement, and become formal amendments hereto.

## ARTICLE 2 - COMPENSATION

2.1 Compensation for consulting services performed under this Agreement shall include:

- (1) Direct labor costs, multiplied by an agreed upon fixed factor (the Multiplier), to compensate for fringe benefits, indirect costs, and profit.
- (2) Non-labor direct project charge not included in the fixed factor and acceptable, without any markup.
- (3) Subconsultant costs, with a maximum markup of 5%.

Definitions are as follows:

- (a) Direct labor is salaries and wages paid to personnel for time directly chargeable to the project. Direct labor does not include the cost of Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, and medical and retirement benefits nor the cost of the time of executive and administrative personnel and others whose time is not identifiable to the project.
- (b) Fringe benefits include Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, medical and retirement benefits, incentive pay, tuition, and other costs classified as employee benefits.
- (c) Indirect costs are allocations of costs that are not directly chargeable to a specific engagement and are commonly referred to as Engineer's overhead. Indirect costs include provisions for such things as clerical support, office space, light and heat, insurance, statutory and customary employee benefits, and the time of executive and administrative personnel and others whose time is not identifiable to the Project or to any other project. Under no circumstances can the same labor costs be charged as direct labor and also appear at the same time as indirect costs, and vice versa.
- (d) The Multiplier is a multiplicative factor which is applied to direct labor costs, and compensates Engineer for fringe benefits and indirect costs (overhead) and profit.

- (e) Other non-labor direct project charges shall be included in the overhead and these charges include typical expenses as cost of transportation and subsistence, printing and reproduction, computer time and programming costs, identifiable supplies, outside consultant's charges, subcontracts, and charges by reviewing authorities."

Alternatively, the District and the Engineer may agree to utilize the fully-encumbered hourly rates and fees for Services performed by the Engineer. These hourly rates and fees shall be based on the Engineer's rate schedule published at the time this Agreement or Task Order is executed and shall be attached to each applicable Task Order.

- 2.2 Reimbursement for mileage shall not exceed the prevailing Internal Revenue Service's standard mileage rate.
- 2.3 A *Cost Ceiling* will be established for each Task Order which is based upon estimated labor-hours and cost estimates. Costs as described above, comprising direct labor, overhead cost, and other direct costs, shall be payable up to a Cost Ceiling as specified in the Task Order. A *Maximum Fee Ceiling*, or *Task Order Firm Ceiling*, will also be established for each Task Order which includes the Cost Ceiling plus the Professional Fee.
- 2.4 Engineer shall invoice District monthly for the actual costs incurred, and a pro-rated portion of the Professional Fee for work performed during the previous month. If the Maximum Fee Ceiling is reached, the Engineer will complete the agreed-upon work for the Maximum Fee Ceiling. With District staff approval, labor hours may be reallocated within the tasks without renegotiation in such a manner so as not to exceed the Maximum Fee Ceiling.
- 2.5 The Engineer shall provide the District with a review of the budget amounts when 75 percent of the Cost Ceiling for any task has been expended. Engineer may request a revision in the Cost Ceiling for performance of this Agreement, and will relate the rationale for the revision to the specific basis of estimate as defined in the Scope of Services. Such notification will be submitted to the District at the earliest possible date. The authorized Cost Ceiling shall not be exceeded without written approval of the District.
- 2.6 The Professional Fee will not be changed except in the case of a written amendment to the Agreement which alters the Scope of Services. District and Engineer agree to negotiate an increase or decrease in Cost Ceiling and Professional Fee for any change in

Scope of Services required at any time during the term of this Agreement. Engineer will not commence work on the altered Scope of Services until authorized by District.

- 2.7 Direct labor rates are subject to revision to coincide with Engineer's normal salary review schedule. Adjustments in direct labor rates shall not affect the firm ceiling without prior written authorization of the District.
- 2.8 District shall pay Engineer in accordance with each Task Order for Services.
- 2.9 Engineer shall submit monthly statements for Services rendered. District will make prompt monthly payments in response to Engineer's monthly statements.

### ARTICLE 3 - PERIOD OF SERVICE

- 3.1 Engineer's services will be performed and the specified services rendered and deliverables submitted within the time period or by the date stipulated in each Task Order.
- 3.2 Engineer's services under this Agreement will be considered complete when the services are rendered and/or final deliverable is submitted and accepted by District.
- 3.3 If any time period within or date by which any of the Engineer's services are to be completed is exceeded through no fault of Engineer, all rates, measures and amounts of compensation and the time for completion of performance shall be subject to equitable adjustment.

### ARTICLE 4 - DISTRICT'S RESPONSIBILITIES

District will do the following in a timely manner so as not to delay the services of Engineer.

- 4.1 Provide all criteria and full information as to District's requirements for the services assignment and designate in writing a person with authority to act on District's behalf on all matters concerning the Engineer's services.
- 4.2 Furnish to Engineer all existing studies, reports and other available data pertinent to the Engineer's services, obtain or authorize Engineer to obtain or provide additional reports and data as required, and furnish

to Engineer services of others required for the performance of Engineer's services hereunder, and Engineer shall be entitled to use and rely upon all such information and services provided by District or others in performing Engineer's services under this Agreement.

- 4.3 Arrange for access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services hereunder.
- 4.4 Perform such other functions as are indicated in each Task Order related to duties of District.
- 4.5 Bear all costs incident to compliance with the requirements of this Section.

#### ARTICLE 5 - STANDARD OF CARE

- 5.1 Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a professional Engineer under similar circumstance and Engineer shall, at no cost to District, re-perform services which fail to satisfy the foregoing standard of care.

#### ARTICLE 6 - OPINIONS OF COST AND SCHEDULE

- 6.1 Since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors', subcontractors', or vendors' methods of determining prices, or over competitive bidding or market conditions or economic conditions, Engineer's cost estimate and economic analysis shall be made on the basis of qualification and experience as a professional engineer.
- 6.2 Since Engineer has no control over the resources provided by others to meet contract schedules, Engineer's forecast schedules shall be made on the basis of qualification and experience as a professional Engineer.
- 6.3 Engineer cannot and does not guarantee that proposals, bids or actual project costs will not vary from his cost estimates or that actual schedules will not vary from his forecast schedules.

## ARTICLE 7 - SUBCONTRACTING

- 7.1 No subcontract shall be awarded by Engineer until prior written approval is obtained from the District.

## ARTICLE 8 - ENGINEER-ASSIGNED PERSONNEL

- 8.1 Engineer shall designate in writing an individual to have immediate responsibility for the performance of the services and for all matters relating to performance under this Agreement. Key personnel to be assigned by Engineer will be stipulated in each Task Order. Substitution of any assigned person shall require the prior written approval of the District, which shall not be unreasonably withheld. If the District determines that a proposed substitution is not responsible or qualified to perform the services then, at the request of the District, Engineer shall substitute a qualified and responsible person.

## ARTICLE 9 - OWNERSHIP OF DOCUMENTS

- 9.1 All work products, drawings, data, reports, files, estimate and other such information and materials (except proprietary computer programs, including source codes purchased or developed with Engineer monies) as may be accumulated by Engineer to complete services under this Agreement shall be owned by the District.
- 9.2 Engineer shall retain custody of all project data and documents other than deliverables specified in each Task Order, but shall make access thereto available to the District at all reasonable times the District may request. District may make and retain copies for information and reference.
- 9.3 All deliverables and other information prepared by Engineer pursuant to this Agreement are instruments of service in respect to this project. They are not intended or represented to be suitable for reuse by District or others on extensions of this Project or on any other project. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at District's sole risk and without liability or legal exposure to Engineer; and District shall indemnify and hold harmless Engineer against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Engineer to further compensation at rates to be agreed upon by District and Engineer.

## ARTICLE 10 - RECORDS OF LABOR AND COSTS

- 10.1 Engineer shall maintain for all Task Orders, records of all labor and costs used in claims for compensation under this Agreement. Records shall mean a contemporaneous record of time for personnel; a methodology and calculation of the Multiplier for fringe benefits and indirect costs; and invoices, time sheets, or other factors used as a basis for determining other non-labor Project charges. These records must be made available to the District upon reasonable notice of no more than 48 hours during the period of the performance of this Agreement.
- 10.2 After delivery of Services (completion of Task Orders) under this Agreement, the Engineer's records of all costs used in claims for compensation under this Agreement shall be available to District's accountants and auditors for inspection and verification. These records will be maintained by Engineer and made reasonably accessible to the District for a period of three (3) years after completion of Task Orders under this Agreement.
- 10.3 Engineer agrees to cooperate and provide any and all information concerning the Project costs which are a factor in determining compensation under this Agreement as requested by the District or any public agency which has any part in providing financing for, or authority over, the Services which are provided under the Agreement.
- 10.4 Failure to provide documentation or substantiation of all Project costs used as a factor in compensation paid under Article 2 hereof will be grounds for District to refuse payment of any statement submitted by the Engineer and for a back charge for any District funds, including interest from payment; or grant, matching, or other funds from agencies assisting District in financing the Services specified in this Agreement.

## ARTICLE 11 - INSURANCE

Engineer shall provide and maintain at all times during the performance of the Agreement the following insurances:

- 11.1 Workers' Compensation and Employer's Liability Insurance for protection of Engineer's employees as required by law and as will protect Engineer from loss or damage because of personal injuries, including death to any of his employees.

- 11.2 Comprehensive Automobile Liability Insurance. Engineer agrees to carry a Comprehensive Automobile Liability Policy providing bodily injury liability. This policy shall protect Engineer against all liability arising out of the use of owned or leased automobiles both passenger and commercial. Automobiles, trucks, and other vehicles and equipment (owned, not owned, or hired, licensed or unlicensed for road use) shall be covered under this policy. Limits of liability for Comprehensive Automobile Liability Insurance shall not be less than \$1,000,000 Combined Single Limit.
- 11.3 Comprehensive General Liability Insurance as will protect Engineer and District from any and all claims for damages or personal injuries, including death, which may be suffered by persons, or for damages to or destruction to the property of others, which may arise from the Engineer's operations under this Agreement, which insurance shall name the District as additional insured. Said insurance shall provide a minimum of \$1,000,000 Combined Single Limit coverage for personal injury, bodily injury, and property damage for each occurrence and aggregate. Such insurance will insure Engineer and District from any and all claims arising from the following:
1. Personal injury;
  2. Bodily injury;
  3. Property damage;
  4. Broad form property damage;
  5. Independent contractors;
  6. Blanket contractual liability.
- 11.4 Engineer shall maintain a policy of professional liability insurance, protecting it against claims arising out of negligent acts, errors, or omissions of Engineer pursuant to this Agreement, in an amount of not less than \$1,000,000. The said policy shall cover the indemnity provisions under this Agreement.
- 11.5 Engineer agrees to maintain such insurance at Engineer's expense in full force and effect in a company or companies satisfactory to the District. All coverage shall remain in effect until completion of the Project.
- 11.6 Engineer will furnish the District with certificates of insurance and endorsements issued by Engineer's insurance carrier and countersigned by an authorized agent or representative of the insurance company. The certificates shall show that the insurance will not be cancelled without at least thirty (30) days' prior written notice to the District. The certificates for liability insurance will show that liability assumed under this Agreement is included. The endorsements will

show the District as an additional insured on Engineer's insurance policies for the coverage required in Article 11 for services performed under this Agreement, except for workers' compensation and professional liability insurance.

- 11.7 Waiver of Subrogation: Engineer hereby agrees to waive subrogation which any insurer of Engineer may acquire from Engineer by virtue of the payment of any loss. Engineer agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the District for all work performed by the Engineer, its employees, agents and subconsultants.

## ARTICLE 12 - LIABILITY AND INDEMNIFICATION

- 12.1 Having considered the risks and potential liabilities that may exist during the performance of the Services, and in consideration of the promises included herein, District and Engineer agree to allocate such liabilities in accordance with this Article 12. Words and phrases used in this Article shall be interpreted in accordance with customary insurance industry usage and practice.
- 12.2 Engineer shall indemnify and save harmless the District and all of their agents, officers, and employees from and against all claims, demands, or causes of action of every name or nature to the extent caused by the negligent error, omission, or act of Engineer, its agents, servants, or employees in the performance of its services under this Agreement. In no event shall Engineer's costs to defend the District exceed the Engineer's proportionate percentage of negligence or fault, based upon a final judicial determination, except that if one or more defendants in an action are unable to pay its share of defense costs due to bankruptcy or dissolution, Engineer shall meet and confer with the other defendant parties regarding defense costs.
- 12.3 In the event an action for damages is filed in which negligence is alleged on the part of District and Engineer, Engineer agrees to defend District. In the event District accepts Engineer's defense, District agrees to indemnify and reimburse Engineer on a pro rata basis for all expenses of defense and any judgment or amount paid by Engineer in resolution of such claim. Such pro rata share shall be based upon a final judicial determination of proportionate negligence or, in the absence of such determination, by mutual agreement.

- 12.4 Engineer shall indemnify District against legal liability for damages arising out of claims by Engineer's employees. District shall indemnify Engineer against legal liability for damages arising out of claims by District's employees.
- 12.5 Indemnity provisions will be incorporated into all Project contractual arrangements entered into by District and will protect District and Engineer to the same extent.
- 12.6 Upon completion of all services, obligations and duties provided for in the Agreement, or in the event of termination of this Agreement for any reason, the terms and conditions of this Article shall survive.
- 12.7 To the maximum extent permitted by law, Engineer's liability for District's damage will not exceed the aggregate compensation received by Engineer under this Agreement or the maximum amount of professional liability insurance available at the time of any settlement or judgment, which ever is greater.

#### ARTICLE 13 - INDEPENDENT CONTRACTOR

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. District will have no right to supervise the methods used, but District will have the right to observe such performance. Engineer shall work closely with District in performing Services under this Agreement.

#### ARTICLE 14 - COMPLIANCE WITH LAWS

In performance of the Services, Engineer will comply with applicable regulatory requirements including federal, state, and local laws, rules, regulations, orders, codes, criteria and standards. Engineer shall procure the permits, certificates, and licenses necessary to allow Engineer to perform the Services. Engineer shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Task Order.

#### ARTICLE 15 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Engineer shall consider all information provided by District and all drawings, reports, studies, design calculations, specifications, and other documents resulting from the Engineer's performance of the Services to be proprietary unless such information is available from public sources. Engineer shall not

publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of District or in response to legal process.

#### ARTICLE 16 - TERMINATION OF CONTRACT

- 16.1 The obligation to continue Services under this Agreement may be terminated by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
- 16.2 District shall have the right to terminate this Agreement or suspend performance thereof for District's convenience upon written notice to Engineer, and Engineer shall terminate or suspend performance of Services on a schedule acceptable to District. In the event of termination or suspension for District's convenience, District will pay Engineer for all services performed and costs incurred including termination or suspension expenses. Upon restart of a suspended project, equitable adjustment shall be made to Engineer's compensation.

#### ARTICLE 17 - UNCONTROLLABLE FORCES

- 17.1 Neither District nor Engineer shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the nonperforming party. It includes, but is not limited to, fire, flood, earthquake, storms, lightening, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either District or Engineer under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint.
- 17.2 Neither party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, removed or remedied with reasonable dispatch. The provisions of this Article shall not be interpreted or construed to require Engineer or District to prevent,

settle, or otherwise avoid a strike, work slowdown, or other labor action. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement. The Engineer will be allowed reasonable negotiated extension of time or adjustments for District initiated temporary stoppage of services.

#### ARTICLE 18 - MISCELLANEOUS

- 18.1 A waiver by either District or Engineer of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.
- 18.2 The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way effect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

#### ARTICLE 19 - INTEGRATION AND MODIFICATION

- 19.1 This Agreement (consisting of pages 1 to 14), together with all Task Orders executed by the undersigned, is adopted by District and Engineer as a complete and exclusive statement of the terms of the Agreement between District and Engineer. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the District and Engineer pertaining to the Services, whether written or oral.
- 19.2 The Agreement may not be modified unless such modifications are evidenced in writing signed by both District and Engineer.

#### ARTICLE 20 - SUCCESSORS AND ASSIGNS

- 20.1 District and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal

representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.

- 20.2 Neither District nor Engineer shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Engineer from employing such independent engineers, associates, and subcontractors as he may deem appropriate to assist him/her in the performance of the Services hereunder and in accordance with Article 7.
- 20.3 Nothing herein shall be construed to give any rights or benefits to anyone other than District and Engineer.

#### ARTICLE 21 – INFORMATION SYSTEM SECURITY

When the District determines this article is applicable, the Engineer shall obtain written approval from the District representative prior to accessing District internal systems through real-time computer connections. Upon approval, the Engineer will use only in-bound connections to accomplish a legitimate business need and a previously defined and approved task. As a condition of approval, the Engineer shall:

- a) Be running a current operating system supported by the District with up-to-date security patches applied as defined in the District COE/Non-COE document.
- b) Have anti-virus software installed on his/her personal computer with up-to-date virus signatures.
- c) Have personal firewall software installed and enabled on their computer.
- d) Understand and sign the District's Electronic Equipment Use Policy, number 2160.

The District reserves the right to audit the security measures in effect on Engineer's connected systems without prior notice. The District also reserves the right to terminate network connections immediately with all Engineer's systems not meeting the above requirements.

ARTICLE 22 – EMPLOYEE BACKGROUND CHECK

Engineer, at no additional expense to the District, shall conduct a background check for each of its employees, as well as for the employees of its subconsultants (collectively "Consultant Employees") who will have access to District's computer systems, either through on-site or remote access, or whose contract work requires an extended presence on the District's premises. The minimum background check process for any District consultant shall include, but not be limited to:

1. California residents: Criminal Records (County and State Criminal Felony and Misdemeanor
2. Out of State residents: Federal criminal search of the National Criminal Database,

The background check shall be conducted and the results submitted to the District prior to initial access by Consultant Employees. If at any time, it is discovered that a Consultant Employee has a criminal record that includes a felony or misdemeanor, the Engineer is required to inform the District immediately and the District will assess the circumstances surrounding the conviction, time frame, nature, gravity, and relevancy of the conviction to the job duties, to determine whether the Consultant Employee will be placed or remain on a District assignment. The District may withhold consent at its sole discretion. The District may also conduct its own criminal background check of the Consultant Employees. Failure of the Engineer to comply with the terms of this paragraph may result in the termination of its contract with the District.

ARTICLE 23 - EXCEPTIONS

No exceptions.

IN WITNESS THEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

UNION SANITARY DISTRICT

HAZEN AND SAWYER

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

By: \_\_\_\_\_  
Marc Solomon, P.E.  
Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# SECONDARY TREATMENT PROCESS IMPROVEMENTS PROJECT

TASK ORDER NO. 1

TO

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

HAZEN AND SAWYER

FOR

PROFESSIONAL SERVICES

Dated July \_\_\_\_, 2018

## 1. PURPOSE

The Union Sanitary District (District) owns and operates the Alvarado Wastewater Treatment Plant (WWTP), a conventional activated sludge plant. The WWTP has an average dry weather flow (ADWF) of 23 mgd and is permitted to discharge 33 mgd to the East Bay Dischargers Authority (EBDA) common outfall. Under certain conditions the plant may discharge up to 42.9 mgd to the EBDA outfall and up to 20 mgd to the Hayward Marsh. The District is currently exploring a concept that would permit shallow surface discharge to Old Alameda Creek with the San Francisco Bay Regional Water Quality Control Board (RWQCB). This concept may result in a requirement to treat wastewater to a higher standard.

Furthermore, the recent Plant Solids System / Capacity Assessment Report (SSCAR) identified that the WWTP is nearing its secondary treatment design capacity at ADWF and over capacity during certain peak flow events. The report identified the need for improvements to increase capacity.

The District is also undertaking a Master Planning effort for the WWTP. The Master Plan will provide the District with a road map for the required facilities needed to meet potentially more stringent discharge standards (including

nutrients), to address secondary capacity concerns, and provide improved administration and O&M buildings.

The purpose of the Secondary Treatment Process Improvements Project (Project) is to develop a unified approach to secondary treatment upgrades that will both increase capacity in the near-term while addressing anticipated nutrient limits to allow discharge to the Old Alameda Creek. Under Task Order No. 1, the Project includes a process analysis of the existing WWTP to confirm that additional capacity, including potential nutrient removal, can be obtained from the existing facility to meet the District's near-term needs.

## 2. PROJECT COORDINATION

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

## 3. SCOPE OF SERVICES

The task numbers in this Scope of Services are associated with the cost and schedule data presented in Exhibits A and B, respectively.

### **Task 1 Project Management**

#### 1.1 Project Management

The Engineer shall provide general project management throughout the project to include oversight and coordination of the Engineer's efforts, including sub-consultants, in executing the work. General project management will include developing and maintaining the project scope, schedule, and budget. The Engineer shall prepare a Project Management Plan (PMP) for the project, which will be submitted to the District for review and approval.

The Engineer shall provide monthly reports to the District, including information on work performed the previous month, work expected for the next month, any outstanding issues or requests as well as budget information. Monthly reports will be submitted with monthly invoices. In addition, weekly email updates will be provided to the District to summarize current activities and identify any issues/concerns.

## 1.2 Meetings and Workshops

The Engineer shall prepare agendas in advance of scheduled meeting and workshops. The Engineer shall prepare meeting/workshop materials (i.e. presentations or handouts as needed) for each meeting/workshop. The Engineer shall prepare and submit draft meeting minutes following the meeting/workshop and shall finalize the meeting minutes within five working days of receipt of comments from the District. Anticipated meetings included in this scope include:

- Kick-Off Meeting: The Engineer shall prepare for and conduct a Kick-off Meeting with key District and Engineer staff. The kick-off meeting will address communication protocol and project execution planning.
- Monthly Progress Meetings: The Engineer shall prepare for and conduct Monthly Progress meetings on a designated day/time at the District. Project progress, schedule, budget, variances, and action items will be discussed.
- Technical Workshops: The Engineer shall facilitate three workshops to present project progress and technical findings. These workshops are included under Task 2, Task 3, and Task 4 below.
- Unscheduled Meetings: The Engineer shall, upon direction from District, conduct additional meetings as needed to effectively complete the project.

## 1.3 Quality Management Plan

The Engineer shall prepare a Quality Management Plan (QMP) for the project. The QMP will provide for quality management reviews of key work products at appropriate times throughout the duration of the project. Quality management reviews will be conducted by Engineer's staff who are not directly involved in the project.

## **Task 2 Comprehend Phase**

The Comprehend Phase will rapidly integrate the Engineer's project team into the WWTP through review of existing material, site visits to the facility, specialized sampling, and development of modeling tools. This Comprehend phase will develop the tools to be used in the Explore Phase and set the framework for convergence on both near-term and long-term improvements to meet the District's objectives.

## 2.1 Identify Goals and Set Boundary Conditions

The Engineer and the District will confirm the following goals for the Project during the kick-off meeting.

- Secondary Treatment goals (including Nutrient Removal Limits)
- Timeline for treatment goals
- Secondary Treatment Capacity and redundancy
- Energy goals

The Engineer shall prepare a draft of planning trigger points, to which improvements identified in the Project will be keyed, which will allow for creation of a living document. The draft list will be reviewed by the District, finalized by the Engineer, and presented as part of the Workshop at the end of the Explore Phase.

## 2.2 Review Historical Data and Reports

The Engineer shall review five years of comprehensive historical operating data for the WWTP as provided by the District. The Engineer shall review the design, the standard operating procedures (SOPs), SCADA system, and control strategies for each existing unit process. The Engineer shall review previous reports and relevant studies.

The Engineer shall conduct a site visit to review operation of each unit process with operating staff. This operational review and walk-through will be conducted during the initial project mobilization. The site visit will include identification of all routine sampling locations and instrumentation/analyzer locations.

Assumptions:

- The District will provide five years of operating data in electronic format
- The District will provide previous reports and relevant studies including but not limited to:
  - Solids System / Capacity Analysis Report
  - Anitamox piloting information
  - As-built and relevant shop drawings
  - Recent survey elevations related to the plant hydraulic grade line
  - Unit process design criteria
  - Most recent condition assessment reports

### 2.3 Flows and Loads Development

The Engineer shall peer review master planning projections for planning horizon flows and loads. The Engineer shall conduct a statistical analysis of historical influent flows and loads based on five years of data to develop design influent flows and loads (TSS, COD, BOD<sub>5</sub> and NH<sub>3</sub>-N). Influent TKN and TP loadings will be based on ratios obtained during special sampling.

### 2.4 Special Sampling

The Engineer shall coordinate special sampling to support the validation of the existing WWTP Process Model. The Engineer shall develop a sampling plan encompassing one week of process sampling to include:

- Raw influent, primary influent, primary effluent and secondary effluent composites
- Grab sampling to define process performance through the secondary process including impacts of solids recycle streams
- Grab sampling to confirm the solids balance through the solids handling process
- Diurnal sampling to establish daily variation in influent flows and loads

Sampling and analysis responsibilities will be divided between the District and the Engineer. The draft memorandum Biowin Calibration Supplemental Sampling Plan was submitted to the District on July 2, 2018 and is the basis of the proposed scope and fee for this sub-task.

### 2.5 Existing Process Model Validation

The Engineer shall update the existing WWTP process model to BioWin™ version 5.3 and will apply the historical and special sampling data to refine influent wastewater characteristics and/or other model parameters as appropriate. The Engineer shall calibrate the model as necessary to validate the WWTP process model to current performance. The Engineer shall use an iterative procedure to perform validation as follows:

- Steady state validation to average historical operational and effluent data from the past five years of operation.
- Long-term dynamic validation to daily operational and effluent data for the past two years
- Short-term dynamic validation based on the one-week sampling period including diurnal (hourly) sampling

Quality Assurance and Quality Control (QA/QC) for model development will be performed by the Engineer's senior process modeling experts during all stages of model validation. Revisions will be incorporated before the model is shared with the District for review and comment. The Engineer shall further revise the model based on feedback received from the District.

## 2.6 Secondary Clarifier CFD Model Development

The Engineer shall develop and calibrate 2D and 3D computation fluid dynamic (CFD) models of the WWTP's secondary clarifiers. It is anticipated that two sets of models will be developed; one for Secondary Clarifiers 1-4, and one for Secondary Clarifiers 5-6. The models will be validated under high and low flow conditions. The models will be set up using available geometrical information and will be calibrated using the stress testing and additional data gathered during the field sampling. The Engineer shall conduct iterative steady state and/or dynamic simulations to calibrate effluent TSS and sludge blanket data to observed data during field sampling and stress testing. CFD model QA/QC will be performed by the Engineer's senior clarifier modeling experts.

The Engineer shall develop and coordinate a site-specific sampling plan for the evaluation of the WWTP secondary clarifiers. The goal of this sampling plan is to gather data that will be used for the setup, calibration and validation of the CFD clarifier models. The sampling plan will include stress testing and field investigation of the secondary clarifiers. This plan will be shared with the District for review and comment.

The Engineer shall be responsible for coordinating the stress testing and collecting all samples during the event. The District will be responsible for placing units on and offline and modifying flow to units in service, if possible, during testing. The District will also be responsible for laboratory analysis of all collected samples. Should the district not be able to handle the volume of samples produced, an outside lab contracted directly with the District may be used. The Engineer shall provide five personnel for four days of field investigations and sampling assistance. In general, the data collected during the clarifier field sampling will include:

- Settling properties of the sludge: zone and compression rates.
- Sludge Volume Index (SVI)
- Flocculation parameters.

- Flocculated suspended solids (FSS) and dispersed suspended solids (DSS).
- Discrete settling parameters.
- Samples of the influent and effluent of the secondary clarifiers, including return activated sludge.
- Sludge blanket depth and clarifier solids profile.
- Plant influent, plant effluent, and RAS flows.

## 2.7 Filament Analysis

The Engineer shall perform a microscopic analysis for up to 5 samples throughout the course of the project. The Engineer shall categorize the quantity of the dominant bacterial species observed and summarize the findings in an email with photographs of observed filaments. Sampling locations will be identified in consultation with the District prior to sampling mobilizations.

## 2.8 Comprehend Phase Workshop

A full-day workshop will be held with District staff to present the findings from the Comprehend Phase (Task 2). The Engineer shall prepare an agenda for District review in advance of the workshop. The Engineer shall develop a presentation summarizing each sub-task under Task 2. The Engineer shall prepare and submit draft meeting minutes following the workshop and will finalize the meeting minutes within five working days of receipt of comments from the District.

Written documentation of Task 2 efforts including historical data analysis, special sampling results, process model validation, clarifier model development and calibration, and hydraulic profile will be included as appendices in the report provided under Task 5.

## **Task 3 Explore Phase**

The Explore Phase will leverage the analysis and tools developed during the Comprehend Phase to verify existing secondary treatment capacity and identify near-term projects to increase process capacity/reliability while meeting potential BACWA Level 2 nutrient limits. Emphasis will be put on Leveraging Existing Assets First (LEAF) to meet project objectives while limiting capital and operational costs.

### 3.1 Verify Existing Secondary Process Capacity

The Engineer shall utilize the process and clarifier models developed in the Comprehend Phase to identify the secondary process capacity under current and BACWA Level 2 nutrient limits. This will serve as a baseline to compare the near-term improvements alternatives evaluated in subsequent subtasks.

### 3.2 Evaluate Near-Term Improvements to Increase Capacity and Enhance Nutrient Removal

The Engineer shall utilize the process and clarifier models developed in the Comprehend Phase to identify and evaluate near-term improvements to reliably meet current and BACWA Level 2 nutrient limits. The Engineer shall use the validated process model to identify near-term aeration basin improvements to achieve BACWA Level 2 nutrient limits. The following modifications will be evaluated:

- Sizing and implementation of flexible zones to provide anaerobic and anoxic selectors in both the East and West basins
- Common nitrogen removal process configurations including the Modified Ludzack-Ettinger (MLE) process, four-stage Bardenpho, and step-feed BNR.
- Chemical requirements for phosphorus removal
- Chemically enhanced primary treatment (CEPT)
- Wet weather step-feed operation
- Ammonia-based aeration control (ABAC)

The Engineer shall investigate the need for sidestream treatment to achieve BACWA Level 2 nutrient limits. Sidestream treatment implementation will also be considered to maintain BACWA Level 2 standards when basins are out of service.

The Engineer shall apply the CFD models to evaluate potential secondary clarifier modifications and optimization opportunities to increase clarifier hydraulic and solids loading capacity. The Engineer shall conduct a performance and capacity analysis for the existing and optimized clarifiers. The capacity analysis will be conducted under different operating conditions and sludge settling characteristics. Up to eight modeling scenarios will be considered for each set of clarifiers.

The optimized configuration will be validated using modeling to show compliance under assumed conditions for flow, load, temperature and settleability. Assumed conditions will be defined and agreed upon with the District.

### 3.3 Explore Phase Workshop

A full-day workshop will be held with District staff to present the findings from the Explore Phase (Task 3). The Engineer shall prepare an agenda for District review in advance of the workshop. The Engineer shall develop a presentation summarizing the secondary process capacity evaluation and near-term improvement analysis. The Engineer shall prepare and submit draft meeting minutes following the workshop and will finalize the meeting minutes within five working days of receipt of comments from the District.

## **Task 4 Project Report**

### 4.1 Draft Project Report

The Engineer will develop a draft report summarizing work performed in Tasks 2 through 3. Conceptual level capital and operational and maintenance (O & M) costs will be summarized.

The following appendices will be included in the draft report:

- Historical data analysis
- Special sampling results
- Process model validation
- Clarifier model development and calibration
- Secondary process capacity analysis
- Near-term improvements evaluation
- Secondary clarifier optimization
- Recommended near-term improvements

### 4.2 Draft Report Meeting

A meeting will be held with District staff to review District comments on the draft report. The Engineer will prepare and submit draft meeting minutes following the meeting and will finalize the meeting minutes.

#### 4.3 Final Project Report

The Engineer will receive and incorporate comments from the District and prepare and submit a final report.

#### 4. DELIVERABLES

##### **Summary of Task 1 Deliverables**

- Project Management Plan
- Quality Management Plan
- Kick-off Meeting agenda and minutes
- Weekly email updates
- Monthly invoices and reports

##### **Summary of Task 2 Deliverables**

- Confirmation of Project Goals and Boundary Conditions
- Biowin sampling plan
- Updated Biowin model
- Stress testing sampling plan
- CFD model output
- Filament analysis results
- Comprehend Phase workshop agenda, presentation, and meeting minutes

##### **Summary of Task 3 Deliverables**

- Explore Phase workshop agenda, presentation, and meeting minutes

##### **Summary of Task 4 Deliverables**

- Draft Report
- Final Report

The Engineer shall submit the final reports and technical memoranda in both Word and .pdf formats; presentations in both Powerpoint and .pdf formats; drawings in the latest AutoCAD version; and other deliverables required for the project to the District electronically.

5. DIGITAL SUBMITTAL REQUIREMENTS

Not Used

6. EQUIPMENT AND PIPELINE SCHEDULES

Not Used

7. 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 3.15, the profit shall be 10 percent, and the not-to-exceed amount shall be \$177,374. 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:

<b>Task Order / Amendment</b>	<b>Not to Exceed Amount</b>	<b>Board Authorization Required?</b>	<b>District Staff Approval</b>
Task Order No. 1 – Predesign Services	\$177,374	Yes	Paul Eldredge
<b>Total</b>	<b>\$177,374</b>		

8. TIME OF COMPLETION

All work defined in this Task Order shall be complete in 137 calendar days after the execution of this Task Order and subject to the conditions of Article 3 of this Agreement. A summary of the anticipated schedule of work is shown in Exhibit B.

9. KEY PERSONNEL

Engineering personnel assigned to this Task Order No. 1 are as follows:

<u>Role</u>	<u>Key Person to be Assigned</u>
Technical Lead	Paul Pitt
Clarifier Lead	Alonso Griborio
Aeration Lead	Joe Rohrbacher
MBR Lead	Tony Greiner
Process Engineer	Irene Chu
Project Manager	Marc Solomon

Key personnel shall not be changed except in accordance with Article 8 of the Agreement. A Project Team Organization chart showing key team members is shown in Exhibit C.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 1 as of July \_\_\_\_, 2018 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

Hazen and Sawyer

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

By: \_\_\_\_\_  
Marc Solomon, P.E.  
Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

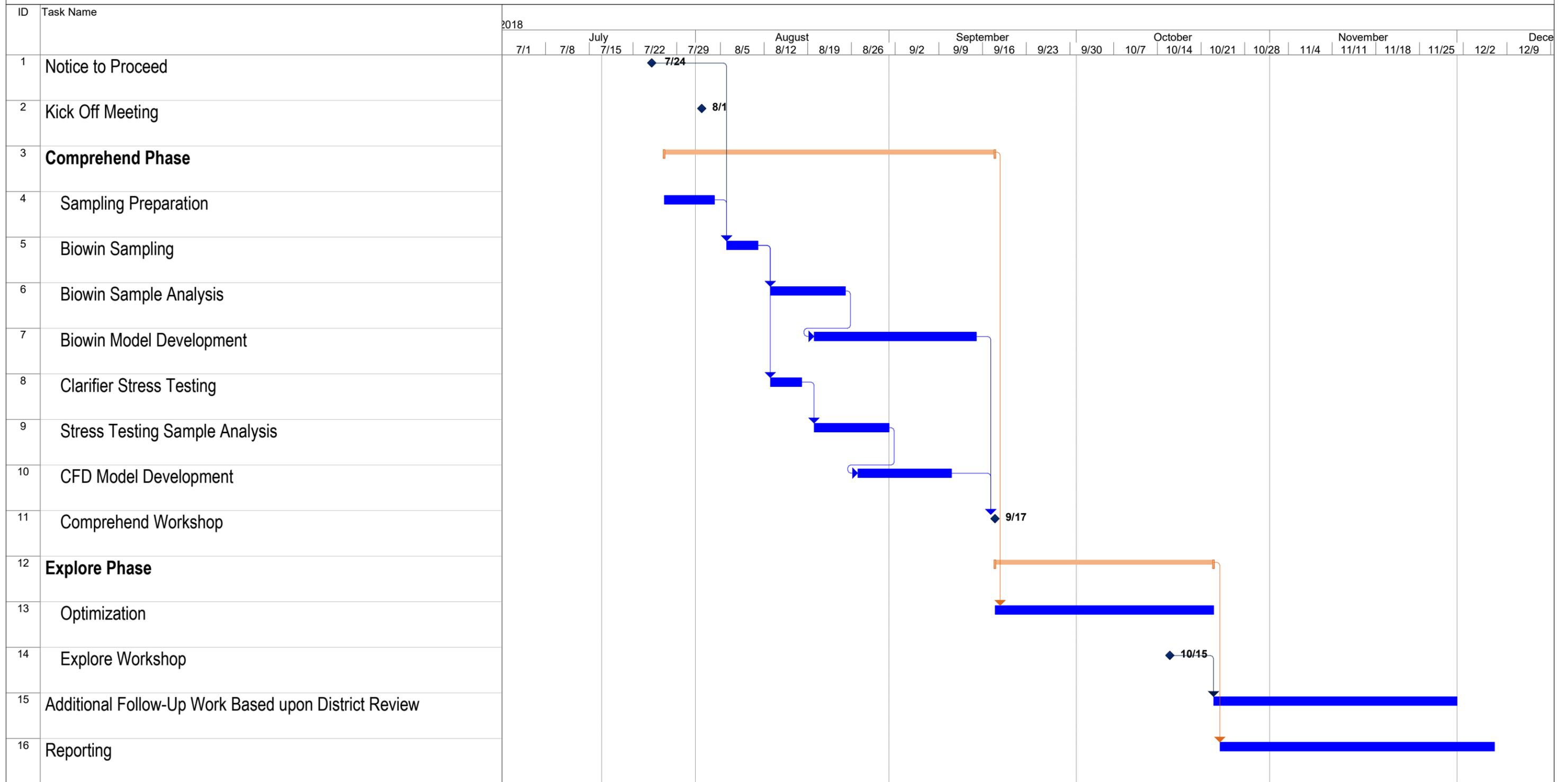
## Exhibit A - Cost Breakdown

Union Sanitary District		Project Manager	Technical Lead	Clarifier Lead	Clarifiers	Aeration	Process	Clarifier Engr	Hydraulics	I&C Engr	Costing Engr	Staff Engr	Admin	H&S Labor Cost	Permits	Other Direct Costs (ODCs)	Subconsultant Markup (5%)	Total Fee
Secondary Treatment Process Improvement Project		Marc Solomon	Paul Pitt	Ron Latimer	Alonso Griborio	Joe Rohrbacher	Irene Chu	Will Martin	Frank Qiao	Justin Irving	Chris Portner	Melissa Meyer			Dave Smith			
Billing Rate		\$290	\$290	\$225	\$215	\$200	\$165	\$150	\$155	\$160	\$165	\$120	\$145		\$220			
<b>1</b>	<b>Project Management</b>	<b>24</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>\$ 10,060</b>	<b>\$ -</b>	<b>\$ 176</b>	<b>\$ -</b>	<b>\$ 10,236</b>
1.01	Project Management Plan	2									0	2	0	4		\$ 16		\$ 836
1.02	Kick-Off Meeting	2	2				4					4	0	12		\$ 48		\$ 2,348
1.03	Communication and Coordination	16					0							16		\$ 64		\$ 4,704
1.04	Monthly Reporting	4					4					4		12		\$ 48		\$ 2,348
<b>2</b>	<b>Comprehend Phase</b>													<b>\$ -</b>				<b>\$ 107,190</b>
2.1	Identify Goals and Set Boundary Conditions	1	2	2	0	0	2	0	0	0	0	0	0	\$ 1,650	\$ 880	\$ 28	\$ 44	\$ 2,602
2.11	Identify trigger points for planning	1	2	2			2							7	4	\$ 28	\$ 44	\$ 2,602
2.2	Review Historical Data and Reports	1	2	4	4	4	8	0	0	8	0	8	0	\$ 6,990	\$ -	\$ 156	\$ -	\$ 7,146
2.21	Historical Data Review	1	2	4	4	4	8			8		8		39		\$ 156		\$ 7,146
2.3	Develop Flows and Loads	0	2	0	0	2	0		0	8	0	0	0	\$ 2,260	\$ -	\$ 48	\$ -	\$ 2,308
2.31	Historical Flows and Loads		2			2				8				12		\$ 48		\$ 2,308
2.4	Special Sampling	0	2	2	0	2	24		0	24	0	24	0	\$ 12,110	\$ -	\$ 4,062	\$ -	\$ 16,172
2.41	Special Sampling	0	2	2		2	24			24		24		78		\$ 4,062		\$ 16,172
2.5	Process Model Validation	0	0	8	0	8	24		0	48	0	0	0	\$ 15,040	\$ -	\$ 352	\$ -	\$ 15,392
2.51	Data Analysis						4			8				12		\$ 48		\$ 1,988
2.52	Model Calibration and Validation			8		8	20			40				76		\$ 304		\$ 13,404
2.6	Develop Secondary Clarifier CFD Models	0	4	0	44	0	40	60	0	36	36	44	0	\$ 43,200	\$ -	\$ 3,556	\$ -	\$ 46,756
2.61	Field Sampling and Stress Testing		2		28		36	28		36	36	36		202		\$ 3,308		\$ 36,068
2.62	Data Analysis						4					8		12		\$ 48		\$ 1,668
2.63	CFD Model set up and Calibration		2		16			32						50		\$ 200		\$ 9,020
2.7	Filament Analysis	0	10	0	0	0	0	0	0	0	0	0	10	\$ 4,350	\$ -	\$ 80	\$ -	\$ 4,430
2.71	Upto 5 Filaments		10										10	20		\$ 80		\$ 4,430
2.8	Comprehend Phase Workshop	4	4	0	8	8	8	0	0	8	0	16	0	\$ 10,160	\$ -	\$ 2,224	\$ -	\$ 12,384
2.81	Workshop	4	4		8	8	8			8		16		56		\$ 2,224		\$ 12,384
<b>3</b>	<b>Explore Phase</b>													<b>\$ -</b>				<b>\$ 44,908</b>
3.1	Verify Existing Secondary Process Capacity	0	0	0	8	8	8	8	0	8	0	0	0	\$ 7,120	\$ -	\$ 752	\$ -	\$ 7,872
3.11	Verify Existing System Capacity for Nutrient Removal				8	8	8	8		8				40		\$ 160		\$ 7,280
3.2	Evaluate Near-Term Improvements to Increase Capacity and Enhance N	0	8	20	16	12	16		24	32	0	0	0	\$ 24,140	\$ -	\$ 512	\$ -	\$ 24,652
3.21	Clarifier Optimization Scenarios		4		16									20		\$ 80		\$ 4,680
3.22	Biowin Process Optimization Scenarios		4	12		12	16			32				76		\$ 304		\$ 14,324
3.23	Check Hydraulics / Identify Bottlenecks			8					24					32		\$ 128		\$ 5,648
3.3	Explore Phase Workshop	4	4	0	8	8	8	0	0	8	0	16	0	\$ 10,160	\$ -	\$ 2,224	\$ -	\$ 12,384
3.31	Explore Phase Workshop	4	4		8	8	8			8		16		56		\$ 2,224		\$ 12,384
<b>4</b>	<b>Reporting</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>26</b>	<b>8</b>	<b>\$ 14,680</b>	<b>\$ -</b>	<b>\$ 360</b>	<b>\$ -</b>	<b>\$ 15,040</b>
4.01	Reporting	2	2	2	2	2	16			24		24	8	82		\$ 328		\$ 13,288
4.02	Report Workshop	2	2							2		2		8		\$ 32		\$ 1,752
		38	44	38	90	54	162	68	24	206	36	144	18	\$ 161,920	\$ 880	\$ 14,530	\$ 44	\$ 177,374
		38	44	38	90	54	162	68	24	206	36	144	18					

## Exhibit B - Schedule



### Union Sanitary District Secondary Treatment Process Improvements Project



**Exhibit C  
Organizational Chart**



**PROCESS IMPROVEMENTS**

**TECHNICAL LEAD**  
Paul Pitt, PhD, PE, BCEE

**MICROBIAL ASSESSMENT**  
Paul Pitt, PhD, PE BCEE

**PROCESS OPTIMIZATION**  
Ron Latimer, PE

**CLARIFIERS**  
Alonso Griborio, PhD, PE

**PROCESS ENGINEERING**  
Irene Chu, PE

**AERATION BASINS/  
BLOWERS**  
Joe Rohrbacher, PE

**SIDESTREAM TREATMENT**  
Wendell Khunjar, PhD

**DISINFECTION**  
Melanie Mann, PE

**MBR**  
Tony Greiner, PE

**PROCESS RESOURCES**  
Justin Irving  
Melissa Meyer

**RWQCB COORDINATION**  
Dave Smith, PhD



**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** July 17, 2018

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Karen W. Murphy, General Counsel

**SUBJECT:** Agenda Item No. 9 - Meeting of July 23, 2018  
**Authorize the General Manager to Execute an Amended and Restated Standby Emergency Services Assistance Agreement with McGuire and Hester**

**Recommendation**

Staff recommends the Board approve and authorize the General Manager to execute an Amended and Restated Standby Emergency Services Assistance Agreement with McGuire and Hester, with minor revisions that may be approved by the General Manager in consultation with the General Counsel.

**Background**

The District and McGuire and Hester ("Contractor") are currently parties to a Standby Emergency Services Assistance Agreement dated as of February 15th, 2006 ("Emergency Agreement"), which provides that the District shall receive immediate/first priority access to at least one large track excavator machine and an operator for the machine from the Contractor to assist with the repair of damaged facilities in an emergency.

After the Alvarado Blvd. sinkhole emergency in 2015, District legal counsel and staff determined that it would be appropriate to expand the terms of the existing Emergency Agreement to ensure a contractor is in place to provide additional services beyond those specified in the Emergency Agreement in the event of an emergency.

The proposed Amended and Restated Standby Emergency Services Assistance Agreement provides that the Contractor will continue to provide an excavator and operator in the event of an emergency. In addition, the proposed agreement specifies that the Contractor shall be prepared to provide additional construction services, equipment, and personnel in the event of an emergency if requested by the District.

The agreement includes standard indemnity and insurance provisions, as well as requires the Contractor to provide bonds for any construction services beyond the provision of an excavator. Further, the agreement includes general public contracting terms regarding the payment of prevailing wages and claims resolution. The compensation is based on the rates set forth in the then-applicable Caltrans Standard Specifications, with a number of exceptions to include typical mark-ups for the type of emergency services that would be required.

Attachment: Amended and Restated Standby Emergency Services Assistance Agreement Between Union Sanitary District and McGuire and Hester

**AMENDED AND RESTATED  
STANDBY EMERGENCY SERVICES  
ASSISTANCE AGREEMENT  
BETWEEN UNION SANITARY DISTRICT AND  
MCGUIRE AND HESTER**

THIS AMENDED AND RESTATED STANDBY EMERGENCY SERVICES ASSISTANCE AGREEMENT (“**Agreement**”) is entered into as of \_\_\_\_\_, 2018 by and between UNION SANITARY DISTRICT, a California sanitary district, (“**District**”) and MCGUIRE AND HESTER, a California corporation, (“**Contractor**”), hereinafter referred to individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. District is a sanitary district providing wastewater collection, treatment, and disposal services within Alameda County, California.

B. Contractor does business in Alameda County, California and is a pipeline and general engineering Contractor with expertise in pipeline and sanitary sewer project construction.

C. District and Contractor entered into the Standby Emergency Services Assistance Agreement on February 15th, 2006 (“**Existing Agreement**”) pursuant to which District receives immediate/first priority access to at least one large track excavator machine and an operator for the machine from Contractor when emergency circumstances make it necessary for it to conduct immediate repairs or rehabilitation to its system (“**Excavator and Operator Services**”).

D. District desires to continue to have access to Excavator and Operator Services in the event of an emergency. In addition, District desires to have a contractor or contractors in place to provide additional services in the event of an emergency. Therefore, District seeks to expand its agreement with Contractor to additional emergency equipment, personnel, and construction services.

E. District and Contractor seek to amend and restate the Existing Agreement pursuant to the amended and restated terms herein, pursuant to which District may receive and Contractor may provide emergency services assistance in the event of an emergency.

AGREEMENT

NOW THEREFORE, in exchange for consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Purpose. District seeks to have access to Excavator and Operator Services within twenty-four (24) hours of notifying Contractor of its need, as well as access to construction services, equipment and personnel, in the event of an Emergency, as defined below. Contractor seeks to provide such services, equipment, and personnel.

2. Term. This Agreement will commence of the date first written above and will continue until June 30, 2019. It will renew automatically for up to nine (9) additional years (“**Term**”) upon District’s payment of an annual reservation fee of \$1,000 to Contractor on July 1 of each year.

3. Emergency. “**Emergency**” for purposes of this Agreement is any force which causes a District owned facility to be breached or compromised, or any other event which potentially causes a hazard to the public or District facilities, which requires immediate repair to protect public health. District has sole discretion in determining what constitutes an Emergency.

4. Excavator and Operator Services.

4.1 Timing. In the event of an Emergency, Contractor shall provide the Excavator and Operator Services within twenty-four hours of notification by District. Contractor is responsible for ensuring it has adequate resources ready and available so that it may promptly respond to a District request. Any track excavator, with operator provided, shall be capable of excavating to a minimum depth of 16 feet to access the District gravity or force mains to allow for emergency repairs.

4.2 Compensation. Contractor shall be compensated for the Excavator and Operator Services at the rates and charges set forth in Exhibit A, attached hereto and incorporated herein by reference.

4.3 Safety Compliance. Contractor shall be responsible for the safe operation of all of its equipment in compliance with all applicable federal, State, and local laws and regulations. Contractor is working at the District’s direction and if the Excavator and Operator Services are requested to be performed by Contractor in less than the required notification period for an active USA ticket, generally 48 hours, such Excavator and Operator Services will be performed at the District’s risk, and Contractor shall be indemnified by the District for any and all utility damage that may occur during this period, except to the extent of Contractor’s gross negligence or willful misconduct.

4.4 Failure to Provide Excavator and Operator Services. If Contractor fails to provide the Excavator and Operator Services within twenty-four (24) hours, it shall assist the District in sourcing substantially equivalent Services (“**Substituted Services**”) and the Contractor shall be liable to District for the total amount of accumulated annual reservation payments previously made to Contractor from the date of the last Emergency for which Contractor has provided Excavator and Operator Services. It shall pay the costs required in this Section 4.4 within thirty (30) days of receipt of a District invoice. Contractor may be excused from providing Excavator and Operator Services in the event (i) a local or regional emergency, such as an earthquake, creates conditions precluding access to the site in need of repair, or (ii) the Excavator and Operator Services are unavailable because a demand from a city, county, or regional authority for similar services has been made where the services are needed for a life-saving activity.

5. Additional Services.

5.1 Timing. In the event of an Emergency, Contractor shall be prepared to provide additional construction services, equipment, and personnel as requested by District (“**Additional Services**”) within twenty-four (24) hours of a District request, unless Contractor does not have the

resources to provide the Additional Services, in which case Contractor shall notify the District as soon as possible, but no later than twenty-hours (24) after such request by the District. The Excavator and Operator Services and the Additional Services may be collectively referred to as the “**Services.**”

5.2 Compensation. Contractor shall be compensated for the Additional Services at the rates and charges set forth in Exhibit A, attached hereto and incorporated herein by reference.

5.3 Service Notification. District will issue a written service notification or addendum detailing the Emergency, and the Additional Services requested to respond (“**Service Notification**”) as soon as practical following District knowledge of an Emergency requiring the Additional Services. The Service Notification may be provided via electronic mail, with a hardcopy mailed to Contractor within seven (7) days.

5.4 Completion of Additional Services. After the commencement of the Additional Services by Contractor, Contractor represents and warrants that it shall take all actions necessary to carry out the work required to achieve completion of the Additional Services to the satisfaction of the District.

5.5 Safety Compliance. Contractor shall be responsible for the safe operation of all of its equipment and the safety of its personnel in compliance with all applicable federal, State, and local laws and regulations, subject to the same USA notification parameters set forth in Section 4.3.

5.6 Bonds. At its option, District may require Contractor to provide a construction performance bond in substantially the form attached hereto as Exhibit D, and/or a payment bond in substantially the form attached hereto Exhibit E, each in amounts to be determined. Each bond shall remain in effect for the provision of the Additional Services. Contractor may substitute cash in lieu of the required bond(s). District shall reimburse Contractor for the reasonable costs of obtaining the bonds required by this Section 5.6, plus a 15 percent mark-up for Contractor costs.

5.7 Warranty. Contractor shall guarantee the Additional Services for one (1) year after their completion. Contractor agrees that if any of the equipment should fail due to any reason other than improper direction from District on an emergency repair method, maintenance or improper operation, if any pipe or appurtenances should develop leakage, or if any settlement of fill or backfill occurs, or should any portion of the work becomes damaged as a result of Contractor’s negligence, Contractor shall, within ten days after written notice of such defects, commence to repair or replace the same together with any other work which may be damaged or displaced in so doing. For this warranty to apply, the District must follow any repair recommendations made by Contractor, regardless of cost of such recommendation.

In the event of Contractor’s failure to comply with the above-mentioned conditions within a reasonable time after being notified, or should the exigencies of the case require repairs or replacements to be made before Contractor can be notified or respond to notification, the District is authorized to proceed to have the defect repaired and made good at the Contractor’s expense, and Contractor shall pay the cost therefor upon demand.

6. Non-Emergency Services. If District wishes to procure Contractor services for non-Emergency work, it will do so under a separate process and agreement.

7. District Responsibilities.

7.1 Identification of Conditions. District will identify and inform Contractor of any known hazards or possible hazards for all requested Services. District will provide all known information relevant to the Emergency, the District system, and the existing conditions, including any applicable drawings and specifications.

7.2 Services Deployment. Unless requested of the Contractor as part of its Services, District will provide additional services as necessary.

8. Contact Information. Contractor shall provide District sufficient contact information to reasonably ensure District can contact Contractor in case of an Emergency. Contractor shall annually update its contact information.

9. Permits. The Parties will cooperate with each other to obtain any permits required to perform the Services under this Agreement. However, each Party shall be responsible for its permits necessary for the regular course or conduct of its business, for example Contractor shall be responsible for maintaining any regular and necessary permits for the operation of its equipment and for its Excavator and Operator Services, including any required for the transportation of equipment

10. Hazardous Waste. Both Parties acknowledge and agree that, due to the nature of facilities owned and operated by the District, which facilities may be subject to excavation under this Agreement, it is highly likely that hazardous waste associated with domestic and industrial wastewater, and hazardous site conditions may be encountered. The Parties hereby waive the conditions of Public Contract Code § 7104(a), which would require a Contractor to notify a public entity before hazardous waste may be disturbed or removed, in consideration of that fact that this Agreement is for the provisioning of Services in an Emergency. The hazardous waste considered herein is that defined under Health and Safety Code § 25117.

10.1 Notification. If either Party knows of or discovers hazardous waste or hazardous site conditions it will promptly notify the other Party of such waste or site condition.

10.2 Unknown Conditions Acknowledged. The Parties acknowledge that subsurface and latent physical conditions at the site may not be ascertainable by anyone using any methodology prior to Services being provided. The Parties hereby acknowledge that unknown physical conditions at the site of an unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in similar projects, may not be predicted. Upon the discovery of a subsurface or latent physical condition, the discovering Party will promptly notify the other Party of the condition.

10.3 Responsibility for Hazardous Waste. It is generally understood and agreed that the District will be responsible for the containment or amelioration of hazardous waste or hazardous site conditions. However, action by Contractor during the performance of Services which does not meet the general standards of care, conduct, or actions of a Contractor in similar circumstance

and which results in an exacerbation of the hazardous waste, hazardous waste contamination, or hazardous site condition will be the responsibility of Contractor and Contractor shall be liable for all damages resulting.

11. Insurance. Contractor shall maintain the insurance provided for in Exhibit B attached hereto and incorporated herein, and shall furnish satisfactory proof of such insurance to the District. At all times that this Agreement is in effect, Contractor must maintain insurance sufficient to meet the requirements of Exhibit B.

12. Mutual Indemnification. District will indemnify and defend Contractor from all liability for any loss, damage, injury to persons or property arising from or related to the performance of this Agreement as directed by District, except to the extent of Contractor's negligence or willful misconduct or to the extent covered by the insurance required by Section 11. District will be solely responsible for any damage caused by Contractor's equipment to environmentally sensitive areas, to third-party property or to the District facilities, as a direct result of the execution of emergency repair work directed by the District, except to the extent of Contractor's negligence of willful misconduct.

Contractor will indemnify and defend District from all liability for any loss, damage, injury to persons or property arising from or related to its negligent acts or omissions or willful misconduct during the performance of this Agreement

13. Claims. Any Contractor claim under this Agreement shall be submitted pursuant to Exhibit C attached hereto and incorporated herein.

14. Prevailing Wages. Contractor (and any subcontractors) shall be responsible for compliance with Labor Code Section 1776. Services under this Agreement are subject to prevailing wage compliance monitoring and enforcement by the Department of Industrial Relations. Contractor shall inform District of the location of required records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address. With each application for payment, Contractor shall also deliver certified payrolls to District, and concurrently therewith (but in no event less frequently than monthly) directly to the Labor Commissioner in the format prescribed by the Labor Commissioner. Contractor shall post all jobsite notices if and when prescribed by regulation.

15. Invoicing and Payment. Contractor shall provide District with written, detailed invoice of Services provided. District will make payment on any undisputed portion of Contractor's invoice within thirty (30) days of receipt pursuant to Public Contract Code section 20104.50.

16. Termination. This Agreement may be terminated by either Party by providing a written termination notification. Termination will be effective six (6) months from the receipt of the termination notification, unless mutually agreed otherwise by the Parties.

17. Notices. All notices required or permitted to be given under the terms of this Agreement will be in writing and will be deemed to be given as of the time of hand delivery to the addresses set forth below, or five (5) days after deposit in the United States mail, postage prepaid, by register or certified mail, return receipt requested, addressed set forth below. Requests for emergency services may be made by phone, to be followed in writing to the address or email set forth below.

If to District

Union Sanitary District  
5072 Benson Road  
Union City, CA 94587  
Attn: General Manager  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

If to Contractor

McGuire and Hester  
2810 Harbor Bay Parkway  
Alameda, CA 94502  
Attn: Matt Finley  
Phone: 510-632-7676  
Email: mfinley@mcguireandhester.com

Phone: [Please call McGuire and Hester's Emergency Phone number at 510-632-7676 first; Mike Haley – 408-210-0559; Mike Anderson – 510-774-2897; Matt Finley – 510-715-1870; or Brock Grunt – 510-715-1093.

18. Waiver. The failure of any Party at any time or times to require performance of any provision hereof will in no manner affect the right of such Party at a later time to enforce the same. No waiver by any Party of any condition, or of any breach of any term, covenant, representation, or warranty contained herein, in any one or more instances, will be deemed to be construed as a further or continuing waiver of any such condition or breach or waiver of any other condition or of any breach of any other term, covenant, representation or warranty.

19. Time of Essence. Time is of the essence in the performance of the Services. Contractor shall perform the Services in a skillful and workmanlike manner; comply fully with criteria established by District, and with applicable laws, codes, and all applicable industry standards. Contractor shall not damage or disrupt any property unless specifically part of the scope of the Agreement.

20. Assignment. Contractor may not sublicense, assign, or otherwise confer upon any other person or entity its rights or interests under this Agreement without the express written approval of District.

21. Severability. If one or more of the provisions of this Agreement will be held by a court of competent jurisdiction in a final judicial action to be void, voidable or unenforceable, such provision will be deemed severable from the remaining provisions of this Agreement and will not affect the legality, validity or constitutionality of the remaining portions of this Agreement.

22. Amendment and Restatement; Entire Agreement. This Agreement amends and restates the Existing Agreement in its entirety. The Existing Agreement is of no further force and effect. This Agreement contains the entire agreement of the Parties with respect to the matters addressed herein.

23. Modification. This Agreement may not be amended unless made in writing and signed by each Party.

24. Venue and Governing Law. The interpretation and enforcement of this Agreement will be governed by the laws of the State of California, without reference to its choice of law principles. Exclusive venue for any action will either be in the United States District Court for the Northern District of California or the Superior Court of California, Alameda County. The rights and remedies of District and Contractor for default in performance under this Agreement are in addition to any other rights or remedies provided by law. The prevailing Party in any action brought under this Agreement will be entitled to reasonable attorneys' fees in addition to any other relief to which the Party may be entitled.

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same agreement.

26. Authority. The Parties represent that the individuals signing this Agreement have the authority to do so.

27. No Personal Liability. No member, official or employee of District will be personally liable to Contractor or any successor in interest in the event of any default or breach by District or on any obligation under the terms of this Agreement.

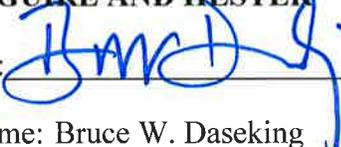
In witness whereof each Party has caused the agreement to be executed by its duly authorized representative as set forth below as of the date set forth above.

**UNION SANITARY DISTRICT**

By: \_\_\_\_\_

Name: Paul R. Eldredge  
Title: General Manager

**MCGUIRE AND HESTER**

By:  \_\_\_\_\_

Name: Bruce W. Daseking  
Title: Exec VP/Treasurer

Approved as to form:

By: \_\_\_\_\_

General Counsel

## Exhibit A

### **Compensation**

Contractor shall be compensated as set forth in Section 9, entitled "Force Account", of the most current version of the State of California, Department of Transportation, (Caltrans) Standard Specifications, with the following exceptions:

1. Labor shall be compensated as follows: (a) Labor Base Rate as verified by certified payroll records; multiplied by (b) Labor Surcharge, as defined by Caltrans and fixed at 15 percent; multiplied by (c) markup of 45 percent. No other charges shall be allowed.

2. The 45 percent markup shall be for overhead costs as specified by Caltrans, except for Field Office Overhead, where the 45 percent markup will only be allowed for field office overhead during the first 15 actual working days.

3. Markup for Materials shall be fixed at 10 percent.

4. Equipment shall be compensated for at the rental rates listed in the latest version of Caltrans' "Labor Surcharge and Equipment Rental Rates" which are in effect on the date upon which the work is performed, plus a fixed 20 percent markup.

5. All other costs incurred as a result of USD direction will be charged at actual cost plus a fixed 10 percent markup.

## Exhibit B

### **Insurance**

#### 1. General Requirements.

1.1 Prior to commencement of this Agreement and July 1 annually thereafter, Contractor shall furnish to District satisfactory proof that Contractor has taken out for the year the following classes of insurance in the form and with limits and deductibles specified below:

(a) Comprehensive General Liability Insurance covering claims for personal injury, bodily injury and property damage arising out of the Services and in a form providing coverage not less than that of a Standard Commercial General Liability Insurance policy (Occurrence Form). Such insurance will provide for all operations and include independent Contractors, products liability, completed operations for one year after acceptance of the payment for the Services, Contractual liability, and coverage for explosion, collapse, and underground hazards. The limits of such insurance will not be coverage of less than [\$5,000,000] each occurrence, [\$10,000,000] general aggregate limit, and [\$10,000,000] aggregate for products and completed operations. The policy will be endorsed to provide Broad Form Property Damage Coverage. Deductible will not exceed \$25,000.

(b) Comprehensive Automobile Liability Insurance covering all owned, non-owned, and hired vehicles. Such insurance will provide coverage not less than the standard Comprehensive Automobile Liability policy with limits not less than [\$5,000,000] each person Bodily Injury, [\$5,000,000] each occurrence Bodily Injury, and [\$5,000,000] each occurrence Property Damage. Deductible will not exceed \$25,000.

(c) Workers' Compensation Insurance for all persons whom the Contractor may employ in carrying out Services, in accordance with the Act of Legislature of State of California, known as "Workers' Compensation Insurance and Safety Act," approved May 26, 1913, and all acts amendatory or supplemental thereto, in the statutory amount.

(d) At District's option, Contractor's Pollution Legal Liability Insurance shall provide for \$1,000,000 coverage for each occurrence and a \$2,000,000 policy aggregate. Deductible will not exceed \$25,000. District shall reimburse Contractor for the reasonable costs of obtaining the insurance required by this Section 28.1(d).

(e) At District's option, a Railroad Protective Liability insurance shall provide for \$2,000,000 coverage for each occurrence and a \$6,000,000 policy aggregate. Deductible will not exceed \$25,000. District shall reimburse Contractor for the reasonable costs of obtaining the insurance required by this Section 1.1(e).

1.2 If Contractor normally carries insurance in an amount greater than the minimum amounts required by District in Section 1.1 above, that greater amount will become the minimum required amount of insurance for purposes of the Agreement. Therefore, Contractor hereby

acknowledges and agrees that all insurance carried by it will be deemed liability coverage for all actions it performs in connection with the Agreement.

1.3 All policies of insurance will be placed with insurers acceptable to District. The insurance underwriter(s) for all insurance policies except Workers' Compensation will have an A. M. Best Company rating of [A-, VIII] or better. Required minimum amounts of insurance may be increased should conditions of Emergency or Services, in opinion of District, warrant such increase. Contractor shall increase required insurance amounts upon direction by District.

1.4 Required Endorsements: The policies required (including any umbrella or excess liability policy(ies)) will be endorsed as set forth below as soon as possible, but in no event later than five days, following District's request for Services from Contractor. District shall reimburse Contractor for the reasonable costs of obtaining the required endorsements. The policies shall be endorsed as follows:

(a) Name Union Sanitary District, its elected and/or appointed governing body and boards, employees, representatives, consultants, and agents, and project manager as additional insureds, but only with respect to liability arising out of the activities of the named insured, unless District determines in its sole discretion that an additional insured endorsement is not required. Additional insured language must be at least as broad as the Insurance Services Office (ISO) forms GC 20 38 04 13 and GC 20 37 04 13. District shall reimburse Contractor for the reasonable costs of obtaining the endorsements.

(b) Each such policy will apply separately to each insured against whom claim is made or suit is brought, except with respect to the limit of the insurance company's liability required hereunder. Should any of the policies identified herein contain a "cross-suits" exclusion, such exclusion must not apply to any additional insureds.

(c) Insurance will be primary to District and no other insurance or self-insured retention carried or held by District will be called upon to contribute to a loss covered by insurance for the named insured.

(d) All endorsements will include the applicable policy number, the named insured(s) and policy terms.

(e) Contractor or its insurance broker shall submit to District a copy of the "Declarations Page" for each policy identified under Section 1.1 above. The Declarations Page will include the name of the insurance carrier, the applicable policy number, the types of coverage and limits of insurance provided, the effective date(s) of the policy, the insurance broker's name and license number, and a list of all coverage forms and endorsements.

1.5 Certificates of insurance and endorsements will have clearly typed thereon the title of this Agreement. Written notice of cancellation, non-renewal, or reduction in coverage of any policy will be mailed to District at the address listed in the Notice provision of the Agreement 60 Days in advance of the effective date of the cancellation, non-renewal, or reduction in coverage.

Written notice of cancellation for non-payment will be mailed within 10 Days of cancellation. Contractor shall maintain all insurance in full force and effect during entire period of performance of Agreement, including warranty and guarantee periods. Upon District's request, Contractor shall submit to District, within 30 Days, copies of the actual insurance policies or renewals or replacements.

1.6 Contractor shall pay all insurance premiums, including any charges for required waivers of subrogation or the endorsement of additional insureds. If Contractor fails to maintain insurance, District may take out comparable insurance, and deduct and retain amount of premium from any sums due Contractor under the Agreement.

1.7 [intentionally omitted]

1.8 Nothing herein will be construed as limiting in any way the extent to which Contractor or any subcontractor may be held responsible for payment of damages resulting from their operations.

1.9 Except for Comprehensive General Liability Insurance, of which subcontractors need only obtain \$1,000,000 in coverage, all subcontractors shall maintain the same insurance required to be maintained by Contractor with respect to their portions of the Services, and Contractor shall cause the subcontractors to furnish proof thereof to District within ten Days of District's request.

1.10 At District's option, the following provisions apply to any licensed professional engaged by Contractor to perform portions of the Services ("Professional").

(a) Each Professional will maintain the following insurance, unless otherwise specified in the Agreement: Professional Liability Insurance, insuring against professional errors and omissions arising from Professional's Services for Services under this Agreement, in an amount not less than [\$1,000,000] combined single limit for each occurrence. If Professional cannot provide an occurrence policy, Professional will provide insurance covering claims made as a result of performance of Services and will maintain such insurance in effect for not less than two years following final completion of the Services.

(b) Professional will satisfy all other provisions of this Exhibit relating to that insurance, including without limitation providing required insurance certificates (containing the required endorsements) before commencing its Services

(c) District shall reimburse Professional for the reasonable costs of obtaining the insurance required by this Section 1.10.

## Exhibit C

### **Claims**

#### 1. Claim Submission and Initial Review

1.1 A claim for (a) payment by a District of money or damages arising from Services done by or on behalf of the Agreement which is not otherwise expressly provided for or entitled to, or (b) payment amount disputed by the District, shall be submitted by registered mail or certified mail with return receipt requested. The claimant shall furnish reasonable documentation to support the claim.

1.2 Upon receipt of a Claim the District shall conduct a reasonable review of the Claim and within 45 days, or if District's governing body must approve District's response to the Claim and the governing body has not met within the 45 days then within three (3) days of the governing body's meeting, shall provide Contractor with a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any failure by District to respond within the time frames of this section shall result in the claim being deemed rejected in its entirety.

1.3 District shall pay any an undisputed portion of the claim within 60 days after it issues its written statement.

#### 2. Meet and Confer

2.1 If the claimant disputes the District's written response, or if the District fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Such writing shall be sent by registered mail or certified mail, return receipt requested. Upon receipt of a properly submitted demand the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.

2.2 Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the District shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the District and the claimant sharing the associated costs equally.

2.3 District shall pay any an undisputed portion of the claim within 60 days after it issues its written statement.

#### 3. Mediation

3.1 The District and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party

shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

3.2 Mediation shall be confidential, non-binding, and pursuant to the construction mediation procedures of JAMS in San Francisco, California,

3.3 District shall pay any an undisputed portion of the claim within 60 days after the conclusion of mediation.

#### 4. Additional Procedures

4.1 The provisions of this Exhibit constitute a non-judicial claim settlement procedure that, pursuant to Government Code Section 930.2, shall constitute a condition precedent to submission of a valid Government Code Claim under the Government Code. Contractor shall bear all costs incurred in the preparation, submission and administration of a claim. Any claims presented in accordance with the Government Code must affirmatively indicate Contractor's prior compliance with the claims procedure herein and the previous dispositions under the provisions above of the claims asserted. No suit may be brought against District arising out of or in connection with the Services unless and until Contractor presents to District a statutory Government Code Claim, in accordance with Government Code Sections 910, *et seq.* Pursuant to Government Code Section 930.2, the one-year period in Government Code section 911.2 shall be reduced to 150 days from either accrual of the cause of action, substantial completion or termination of the Agreement, whichever occurs first; in all other respects, the Government Code shall apply unchanged.

4.2 Failure to submit and administer claims as required in this Exhibit shall waive Contractor's right to claim on any specific issues not included in a timely submitted claim. Claim(s) or issue(s) not raised in a timely protest and timely claim submitted under this Exhibit may not be asserted in any subsequent litigation, Government Code Claim, or legal action.

4.3 Amounts not paid in a timely manner as required by this Exhibit shall bear interest at 7 percent per annum.

4.4 Waivers or modifications of this Exhibit may only be made a writing signed by both parties approved as to form by legal counsel for both District and Contractor; oral or implied modifications shall be ineffective. Any failure by District to response within the time frames of this Article shall result in the claim being deemed rejected in its entirety, but such failure to meet the time requirements shall not constitute an adverse finding with regards to the merits of the Claim or the responsibility or qualifications of the Contractor.

4.5 All statutes of limitation shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. The cost of mediation shall be equally shared by all parties to the mediation. The parties shall, prior to the commencement of a mediation pursuant to this Paragraph, upon notice of the other party, exchange relevant, non-privileged project documents in compliance with Code of Civil Procedure Sections 2031.010 et

seq. Additionally, the parties may agree mutually to engage in additional discovery prior to mediation. Should the parties proceed with additional discovery, they shall, unless mutually agreed otherwise, comply with Code of Civil Procedure Sections 2019, et. seq. The Mediator will undertake to resolve any discovery disputes relating to the Mediation.

Exhibit D

**Performance Bond**

THIS CONSTRUCTION PERFORMANCE BOND (**Bond**) is dated *[Month, Day]*, 201\_ is in the amount of *[Insert Amount]* (**Penal Sum**) and is entered into by and between the parties listed below to ensure the faithful performance of the Agreement identified below. This Bond consists of this page and the Bond Terms and Conditions, Paragraphs 1 through 14 attached to this page. Any singular reference to *[Insert name of Contractor]* (**Contractor**), *[Insert name of Surety]* (**Surety**), Union Sanitary District (**District**), or other party shall be considered plural where applicable.

**CONTRACTOR:**

*[Insert name of Contractor]*

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip

**SURETY:**

*[Insert name of Surety]*

\_\_\_\_\_  
Principal Place of Business

\_\_\_\_\_  
City/State/Zip

**CONSTRUCTION AGREEMENT:** Agreement for the *[Name of Project]*, located at the *[Address]*, California, dated *[Month, Day]*, 20\_, in the amount of *[Insert Amount]*).

**CONTRACTOR AS PRINCIPAL**

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**SURETY**

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

## **BOND TERMS AND CONDITIONS**

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to District and the State of California for the complete and proper performance of the Construction Agreement, which is incorporated herein by reference.
2. If Contractor completely and properly performs all of its obligations under the Construction Agreement, Surety and Contractor shall have no obligation under this Bond.
3. If there is no District Default, Surety's obligation under this Bond shall arise after:
  - 3.1 District provides Surety with written notice that District has declared a Contractor Default under the Construction Agreement pursuant to the terms of the Construction Agreement; and
  - 3.2 District has agreed to pay the Balance of the Agreement Sum:
    - 3.2.1 To Surety in accordance with the terms of this Bond and the Construction Agreement; or
    - 3.2.2 To a Contractor selected to perform the Construction Agreement in accordance with the terms of this Bond and the Construction Agreement.
4. When District has satisfied the conditions of Paragraph 3 above, Surety shall promptly (within 40 Days) and at Surety's expense elect to take one of the following actions:
  - 4.1 Arrange for Contractor, with consent of District, to perform and complete the Construction Agreement (but District may withhold consent, in which case the Surety must elect an option described in Paragraphs 4.2, 4.3 or 4.4 below); or
  - 4.2 Undertake to perform and complete the Construction Agreement itself, through its agents or through independent Contractors or Construction entities; provided, that Surety may not select Contractor as its agent or independent Contractor or Contractor without District's consent; or
  - 4.3 Undertake to perform and complete the Construction Agreement by obtaining bids from qualified Contractors or Construction entities acceptable to District for a Agreement for performance and completion of the Construction Agreement and, upon determination by District of the lowest responsive and responsible Bidder, arrange for an Agreement to be prepared for execution by District and the Contractor or Contractor selected with District's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Agreement; and, if Surety's obligations defined in Paragraph 6 below, exceed the Balance of the Agreement Sum, then Surety shall pay to District the amount of such excess; or

- 4.4** Waive its right to perform and complete, arrange for completion, or obtain a new Contractor or Contractor, and with reasonable promptness under the circumstances and, after investigation and consultation with District, determine in good faith its monetary obligation to District under Paragraph 6 below, for the performance and completion of the Construction Agreement and, as soon as practicable after the amount is determined, tender payment therefor to District with full explanation of the payment's calculation. If District accepts Surety's tender under this Paragraph 4.4, District may still hold Surety liable for future damages then unknown or unliquidated resulting from the Contractor Default, as agreed by District and Surety at the time of tender. If District disputes the amount of Surety's tender under this Paragraph 4.4, District may exercise all remedies available to it at law to enforce Surety's liability under Paragraphs 6 and 7 below.
- 5.** At all times District shall be entitled to enforce any remedy available to District at law or under the Construction Agreement including, without limitation, and by way of example only, rights to perform Services, protect Services, mitigate damages, advance critical Services to mitigate schedule delay, and coordinate Services with other consultants or Contractors.
- 6.** If Surety elects to act under Paragraphs 4.1, 4.2 or 4.3 above, within the time period provided in Paragraph 4, above, and complies with its obligations under this Bond, Surety's obligations under this Bond are commensurate with Contractor's Construction Agreement obligations. Surety's obligations include, but are not limited to:
- 6.1** Contractor's obligations to complete the Construction Agreement and correct Defective Services;
- 6.2** Contractor's obligations to pay liquidated damages; and
- 6.3** To the extent otherwise required of Contractor under the Construction Agreement, Contractor's obligations to pay additional legal, design professional, and other costs not included within liquidated damages resulting from Contractor Default (but excluding attorney's fees incurred to enforce this Bond).
- 7.** If Surety does not elect to act under Paragraphs 4.1, 4.2, 4.3, or 4.4, above, within the time period provided in Paragraph 4, above, or comply with its obligations under this Bond, then Surety shall be deemed to be in default on this Bond ten Days after receipt of an additional written notice from District to Surety demanding that Surety perform its obligations under this Bond. Such Surety default shall be independent of the Contractor Default. To the extent Surety's independent default causes District to suffer damages including, but not limited to, delay damages, which are different from, or in addition to (but not duplicative of) damages which District is entitled to receive under the Construction Agreement, Surety shall also be liable for such damages. In the event any Surety obligation following its independent default is inconsistent or conflicts with California Civil Code Section 2809, or any other law which either prohibits, restricts, limits or modifies in any way any obligation of a surety which is larger in amount or in any other respect more burdensome than that of the principal, Surety hereby waives the provisions of such laws to that extent.

8. If Surety elects to act under Paragraphs 4.1, 4.3 or 4.4 above, within the time period provided in Paragraph 4, above, and complies with all obligations under this Bond, Surety's monetary obligation under this Bond is limited to the Penal Sum.
9. No right of action shall accrue on this Bond to any person or entity other than District or its successors or assigns.
10. Surety hereby waives notice of any change, alteration or addition to the Construction Agreement or to related subcontracts, design agreements, purchase orders and other obligations, including changes of time, and of any District action in accordance with Paragraph 5 above. Surety consents to all terms of the Construction Agreement, including provisions on changes to the Agreement. No extension of time, change, alteration, Modification, deletion, or addition to the Agreement Documents, or of the Services (including services) required thereunder, or any District action in accordance with Paragraph 5 above shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond, unless such action is an District Default.
11. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between District and Contractor regarding the Construction Agreement, or in the Superior Court of the County of Alameda, California, or in a court of competent jurisdiction in the location in which the Services is located. Communications from District to Surety under Paragraph 3.1 above shall be deemed to include the necessary agreements under Paragraph 3.2 above unless expressly stated otherwise.
12. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to District shall be mailed or delivered as provided in the Construction Agreement. Actual receipt of notice by Surety, District or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.
13. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
14. **Definitions**
  - 14.1 **Balance of the Agreement Sum:** The total amount payable by District to Contractor pursuant to the terms of the Construction Agreement after all proper adjustments have been made under the Construction Agreement, for example, deductions for progress payments made, and increases/decreases for approved Modifications to the Construction Agreement.
  - 14.2 **Construction Agreement:** The agreement between District and Contractor identified on the signature page of this Bond, including all Agreement Documents and changes thereto.

- 14.3 Contractor Default:** Material failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Agreement.
- 14.4 District Default:** Material failure of District, which has neither been remedied nor waived, to pay Contractor progress payments due under the Construction Agreement or to perform other material terms of the Construction Agreement, if such failure is the cause of the asserted Contractor Default and is sufficient to justify Contractor termination of the Construction Agreement.

Exhibit E

**Labor and Performance Payment Bond**

KNOW ALL PERSONS BY THESE PRESENTS:

**1.01** THAT WHEREAS, Union Sanitary District (**Owner**) has contracted with **(Name of Contractor)** \_\_\_\_\_ as Principal, Contract Number \_\_\_\_\_ dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ (the **Contract**), titled THE \_\_\_\_\_ PROJECT in the amount of \$ \_\_\_\_\_, which Contract is by this reference made a part hereof, for the work of the following Contract:

**(Describe Contract Work)**  
\_\_\_\_\_

**1.02** AND WHEREAS, Principal is required to furnish a bond in connection with the Contract to secure the payment of claims of laborers, mechanics, material suppliers, and other persons as provided by law;

**1.03** NOW, THEREFORE, we, the undersigned Principal and **(Name of Surety)** \_\_\_\_\_, as Surety, are held and firmly bound unto Owner in the sum of 100% OF THE CONTRACT PRICE (**\$** \_\_\_\_\_), for which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

**1.04** THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its executors, administrators, successors, or assigns approved by Owner, or its subcontractors shall fail to pay any of the persons named in California Civil Code Section 9100, or amounts due under the State of California Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the State of California Employment Development Department from the wages of employees of Principal and subcontractors pursuant to Section 13020 of the State of California Unemployment Insurance Code with respect to such work and labor, that Surety will pay for the same in an amount not exceeding the sum specified in this bond, plus reasonable attorneys' fees, otherwise the above obligation shall become and be null and void.

**1.05** This bond shall inure to the benefit of any of the persons named in California Civil Code Section 9100, as to give a right of action to such persons or their assigns in any suit brought upon this bond. The intent of this bond is to comply with the California Mechanic's Lien Law.

**1.06** Surety, for value received, hereby expressly agrees that no extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder, shall in any way

affect the obligation of this bond; and it does hereby waive notice of any such extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder.

**1.07** Surety's obligations hereunder are independent of the obligations of any other surety for the payment of claims of laborers, mechanics, material suppliers, and other persons in connection with Contract; and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing Owner's rights against the other.

**1.08** Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this \_\_\_\_ day of \_\_\_\_  
\_\_\_\_\_, 20\_\_\_\_.

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Company: (Corp. Seal)

Company: (Corp. Seal)

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Signature

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Signature

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Name

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Title

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Street Address

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Street Address

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City, State, Zip Code

\_\_\_\_\_  
City, State, Zip Code



**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

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

Karen W. Murphy  
*Attorney*

**DATE:** July 10, 2018

**MEMO TO:** Board of Directors - Union Sanitary District

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

**SUBJECT:** Agenda Item No. 10 - Meeting of July 23, 2018  
Information Item: **CAL-Card Quarterly Merchant Activity Report**

### **Background**

The attached CAL-Card Merchant Spend Analysis details the CAL-Card activity for the fourth quarter of FY 2018. This covers transactions from the CAL-Card billing period April 23, 2018 through June 22, 2018. During this quarter, we had 319 transactions totaling \$82,296.36.

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
47979	WHOLESALE TRADE	5085	<a href="#">PENN DETROIT DIESE</a>	215-335-0500	PA	\$ 8,965.38	2	\$ 4,482.69	\$ 0.00	0	\$ 8,965.38	10.89%	2	\$ 686.30
320956	Dues/Mbr/Conf	8699	<a href="#">AMERICAN PAYROLL ASSOC</a>	210-226-4600	TX	5,668.21	2	2,834.11	0.00	0	5,668.21	6.89%	2	0.00
320956	Dues/Mbr/Conf	9399	<a href="#">CITY OF FREMONT DEV SVCS</a>	FREMONT	CA	3,742.00	2	1,871.00	0.00	0	3,742.00	4.55%	2	0.00
47979	WHOLESALE TRADE	5200	<a href="#">THE HOME DEPOT #0635</a>	UNION CITY	CA	3,133.57	3	1,044.52	128.19	1	3,005.38	3.65%	4	288.53
320956	Dues/Mbr/Conf	8699	<a href="#">CALIFORNIA WATER ENVIRONM</a>	510-3827800	CA	2,817.50	17	165.74	0.00	0	2,817.50	3.42%	17	0.00
320956	Dues/Mbr/Conf	9399	<a href="#">ALAMEDACOENVIR ONHEALTH</a>	877-4328871	CA	2,354.00	1	2,354.00	0.00	0	2,354.00	2.86%	1	0.00
47972	OTHER	2842	<a href="#">EYEWASHDIRECT.COM</a>	720-452-3060	CO	1,922.09	1	1,922.09	0.00	0	1,922.09	2.34%	1	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON MKTPLACE PMTS</a>	AMZN.COM/BILL	WA	1,826.36	14	130.45	0.00	0	1,826.36	2.22%	14	43.38
47972	OTHER	5712	<a href="#">291069329</a>	888-434-4532	MD	1,307.59	1	1,307.59	0.00	0	1,307.59	1.59%	1	0.00
47979	WHOLESALE TRADE	5169	<a href="#">MAR-LEN SUPPLY INC -CLV</a>	510-782-3555	CA	1,306.99	2	653.50	0.00	0	1,306.99	1.59%	2	0.00
47979	WHOLESALE TRADE	5085	<a href="#">AMOT INC</a>	281-9401800	TX	1,126.28	1	1,126.28	0.00	0	1,126.28	1.37%	1	0.00
47979	WHOLESALE TRADE	5300	<a href="#">COSTCO WHSE #1061</a>	HAYWARD	CA	1,111.22	12	92.60	0.00	0	1,111.22	1.35%	12	0.00
47963	BUSINESS EXPENS	8249	<a href="#">TPC TRAINCO</a>	800-220-2265	CO	1,100.00	1	1,100.00	0.00	0	1,100.00	1.34%	1	0.00
47972	OTHER	5722	<a href="#">DYSON 866 693 9766</a>	WWW.DYSON.CO M	IL	1,097.48	1	1,097.48	0.00	0	1,097.48	1.33%	1	0.00
47963	BUSINESS EXPENS	8299	<a href="#">SKILLPATH / NATIONAL</a>	913-3623900	KS	1,096.00	6	182.67	0.00	0	1,096.00	1.33%	6	43.84
47979	WHOLESALE TRADE	5039	<a href="#">C S UNITEC</a>	203-8539522	CT	1,093.07	1	1,093.07	0.00	0	1,093.07	1.33%	1	69.08
47978	VEHICLE EXPENSE	5599	<a href="#">PETERSON TRUCKS SL</a>	510-357-6200	CA	1,077.17	1	1,077.17	0.00	0	1,077.17	1.31%	1	0.00
47972	OTHER	5999	<a href="#">CELEBRATION</a>	510-8870727	CA	1,073.61	3	357.87	0.00	0	1,073.61	1.30%	3	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		<a href="#">PARTY EQUI</a>											
47979	WHOLESALE TRADE	5251	<a href="#">ALL INDUSTRIAL ELECTRIC S</a>	650-7770060	CA	928.96	1	928.96	0.00	0	928.96	1.13%	1	82.53
47972	OTHER	5998	<a href="#">CAREFREE OF COLORADO</a>	BROOMFIELD	CO	924.94	1	924.94	0.00	0	924.94	1.12%	1	0.00
47962	BUILDING SERVIC	7349	<a href="#">UNITED SITE SERVICE</a>	800-864-5387	MA	908.06	1	908.06	0.00	0	908.06	1.10%	1	0.00
47979	WHOLESALE TRADE	5085	<a href="#">ZORO TOOLS INC</a>	855-2899676	IL	897.55	3	299.18	0.00	0	897.55	1.09%	3	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON.COM AMZN.COM/BILL</a>	AMZN.COM/BILL	WA	895.32	9	99.48	0.00	0	895.32	1.09%	9	79.53
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON MKTPLACE PMTS</a>	AMZN.COM/BILL	WA	821.95	9	91.33	0.00	0	821.95	1.00%	9	8.82
47979	WHOLESALE TRADE	5099	<a href="#">EMEDCO</a>	EMEDCO.COM	NY	807.41	1	807.41	0.00	0	807.41	0.98%	1	71.73
47963	BUSINESS EXPENS	8299	<a href="#">CALIFORNIA CPA EDUCATION</a>	800-9225272	CA	795.00	1	795.00	0.00	0	795.00	0.97%	1	0.00
47970	OFFICE SERVICES	7399	<a href="#">ZIPRECRUITER, INC.</a>	855-747-5493	CA	788.50	4	197.13	0.00	0	788.50	0.96%	4	0.00
235401	REGISTRATION	8111	<a href="#">LIEBERTCASS</a>	310-981-2000	CA	780.00	5	156.00	0.00	0	780.00	0.95%	5	0.00
47979	WHOLESALE TRADE	5046	<a href="#">METTLER TOLEDO LLC</a>	866-247-8957	OH	745.21	1	745.21	0.00	0	745.21	0.91%	1	0.00
47970	OFFICE SERVICES	2741	<a href="#">LOGOWEAR</a>	209-367-0596	CA	714.99	1	714.99	0.00	0	714.99	0.87%	1	50.22
47966	MAIL/TELEPHONE	5964	<a href="#">ULINE *SHIP SUPPLIES</a>	800-295-5510	WI	707.94	1	707.94	0.00	0	707.94	0.86%	1	51.17
320956	Dues/Mbr/Conf	9399	<a href="#">CALPERS CVENT</a>	916-795-3433	CA	698.00	2	349.00	0.00	0	698.00	0.85%	2	0.00
47971	OFFICE SUPPLIES	5734	<a href="#">SOURCEGEAR DBA ZUMERO</a>	ZUMERO.COM	IL	630.00	1	630.00	0.00	0	630.00	0.77%	1	0.00
281845	Food Exceptions	5814	<a href="#">TOGOS - UNION CITY</a>	UNION CITY	CA	600.13	4	150.03	0.00	0	600.13	0.73%	4	0.00
47979	WHOLESALE TRADE	5085	<a href="#">GIH*GLOBALINDUS TRIALEQ</a>	800-645-2986	FL	594.15	1	594.15	0.00	0	594.15	0.72%	1	52.78
47979	WHOLESALE	5046	<a href="#">WILMINGTON</a>	3108348240	CA	584.97	1	584.97	0.00	0	584.97	0.71%	1	0.00

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47979	TRADE		<a href="#">INSTRUMENT CO</a>											
47978	VEHICLE EXPENSE	7538	<a href="#">PANKEYS RADIATOR SERVICE</a>	HAYWARD	CA	575.00	1	575.00	0.00	0	575.00	0.70%	1	0.00
320956	Dues/Mbr/Conf	8699	<a href="#">CAPIO - CA ASSOCIATION OF</a>	530-9245444	CA	550.00	1	550.00	0.00	0	550.00	0.67%	1	0.00
320956	Dues/Mbr/Conf	8699	<a href="#">CALIFORNIA STORMWATER QUA</a>	650-366-1042	CA	535.00	1	535.00	0.00	0	535.00	0.65%	1	0.00
47963	BUSINESS EXPENS	8299	<a href="#">PAYPAL *CCTC</a>	402-935-7733	CA	500.00	1	500.00	0.00	0	500.00	0.61%	1	0.00
47979	WHOLESALE TRADE	5039	<a href="#">OWEN EQUIPMENT COMPANY</a>	503-2559055	OR	480.63	1	480.63	0.00	0	480.63	0.58%	1	4.82
47963	BUSINESS EXPENS	8398	<a href="#">CALIFORNIA PAYROLL C</a>	916-3202124	CA	479.00	1	479.00	0.00	0	479.00	0.58%	1	0.00
47970	OFFICE SERVICES	7392	<a href="#">SHAWHRCONSU</a>	805-498-9400	CA	450.00	1	450.00	0.00	0	450.00	0.55%	1	0.00
47972	OTHER	5818	<a href="#">AMAZON DIGITAL SVCS 888-8</a>	888-802-3080	WA	449.00	1	449.00	0.00	0	449.00	0.55%	1	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON.COM AMZN.COM/BILL</a>	AMZN.COM/BILL	WA	437.03	2	218.51	0.00	0	437.03	0.53%	2	38.80
47970	OFFICE SERVICES	7311	<a href="#">IN *TRI-CITY VOICE NEWSPA</a>	510-4941999	CA	415.00	1	415.00	0.00	0	415.00	0.50%	1	0.00
47967	MEDICAL	8099	<a href="#">US HEALTHWORKS MED GRP</a>	661-678-2600	CA	412.00	1	412.00	0.00	0	412.00	0.50%	1	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON MKTPLACE PMTS WWW.</a>	WWW.AMAZON.C O	WA	403.26	7	57.61	0.00	0	403.26	0.49%	7	16.61
320956	Dues/Mbr/Conf	8699	<a href="#">NATIONAL PROCUREMENT INST</a>	702-989-8095	NV	400.00	1	400.00	0.00	0	400.00	0.49%	1	0.00
320956	Dues/Mbr/Conf	8699	<a href="#">INTERNATIONAL PUBLIC MANA</a>	703-5497100	VA	397.00	1	397.00	0.00	0	397.00	0.48%	1	0.00
47979	WHOLESALE TRADE	5200	<a href="#">HOMEDEPOT.COM</a>	800-430-3376	GA	393.99	2	197.00	0.00	0	393.99	0.48%	2	35.00
47970	OFFICE	7399	<a href="#">PUBLIC RISK</a>	703-5287701	VA	385.00	1	385.00	0.00	0	385.00	0.47%	1	0.00

## Merchant Spend Analysis - Detail

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47970	SERVICES		<a href="#">MANAGEMENT</a>											
47963	BUSINESS EXPENS	8299	<a href="#">FREDPRYOR CAREERTRACK</a>	800-5563012	KS	384.00	1	384.00	0.00	0	384.00	0.47%	1	0.00
47979	WHOLESALE TRADE	5047	<a href="#">UNIMED GOVERNMENT SE</a>	202-6703711	MN	382.45	1	382.45	0.00	0	382.45	0.46%	1	0.00
47979	WHOLESALE TRADE	5085	<a href="#">BLACKBURN MANUFACTURING C</a>	402-8874161	NE	373.05	1	373.05	0.00	0	373.05	0.45%	1	21.42
47972	OTHER	5999	<a href="#">JUDYS FLAG CITY</a>	BELMONT	CA	371.45	1	371.45	0.00	0	371.45	0.45%	1	0.00
47979	WHOLESALE TRADE	5169	<a href="#">ENVIRONMENTAL RESOURCE</a>	303-431-8454	CO	367.23	1	367.23	0.00	0	367.23	0.45%	1	0.00
47970	OFFICE SERVICES	5968	<a href="#">SMK*SURVEYMON KEY.COM</a>	971-2445555	CA	360.00	1	360.00	0.00	0	360.00	0.44%	1	0.00
47972	OTHER	5732	<a href="#">B&amp;B ELECTRONICS LTD</a>	800-346-3119	IL	356.78	1	356.78	0.00	0	356.78	0.43%	1	0.00
47979	WHOLESALE TRADE	5072	<a href="#">FACTORY OUTLET MAXTOOL</a>	8006293325	CA	351.19	1	351.19	0.00	0	351.19	0.43%	1	0.00
47963	BUSINESS EXPENS	8999	<a href="#">SQ *BETTY SUE AND COMPANY</a>	TURLOCK	CA	350.00	1	350.00	0.00	0	350.00	0.43%	1	0.00
		8299	<a href="#">PAYPAL *PIPEUSERSGR</a>	402-935-7733	CA	350.00	1	350.00	0.00	0	350.00	0.43%	1	0.00
47973	OTHER TRAVEL	4225	<a href="#">MOBILE MINI</a>	623-308-3756	AZ	350.00	1	350.00	0.00	0	350.00	0.43%	1	0.00
47961	AUTO/RV DEALERS	5561	<a href="#">POLAR SERVICE CENTERS</a>	916-564-4286	CA	348.13	1	348.13	0.00	0	348.13	0.42%	1	23.53
47979	WHOLESALE TRADE	5085	<a href="#">TIFCO INDUSTRIES INC</a>	281-571-6000	TX	340.79	1	340.79	0.00	0	340.79	0.41%	1	23.42
320956	Dues/Mbr/Conf	8699	<a href="#">CALIFORNIA SOCIETY OF CER</a>	800-9225272	CA	340.00	1	340.00	0.00	0	340.00	0.41%	1	0.00
47963	BUSINESS EXPENS	4900	<a href="#">SMITH AND LOVELESS INC</a>	913-888-5201	KS	339.91	1	339.91	0.00	0	339.91	0.41%	1	28.68
320956	Dues/Mbr/Conf	8699	<a href="#">WEF MAIN</a>	703-684-2400	VA	320.00	1	320.00	0.00	0	320.00	0.39%	1	0.00
320956	Dues/Mbr/Conf	8699	<a href="#">NATIONAL INSITUTE OF GOVE</a>	703-7368900	VA	318.00	1	318.00	0.00	0	318.00	0.39%	1	0.00
47979	WHOLESALE TRADE	5251	<a href="#">ALL INDUSTRIAL ELECTRIC S</a>	BURLINGAME	CA	310.89	1	310.89	0.00	0	310.89	0.38%	1	0.00

## Merchant Spend Analysis - Detail

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320956	Dues/Mbr/Conf	8699	<a href="#">CALIFORNIA ASSOCIATION OF PRIME RESINS</a>	530-822-5009	CA	\$ 309.00	2	\$ 154.50	\$ 0.00	0	\$ 309.00	0.38%	2	\$ 0.00
47979	WHOLESALE TRADE	5046	<a href="#">PRIME RESINS</a>	770-3880626	GA	293.77	1	293.77	0.00	0	293.77	0.36%	1	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON MKTPLACE PMTS</a>	AMZN.COM/BILL	WA	277.29	3	92.43	0.00	0	277.29	0.34%	3	20.46
47979	WHOLESALE TRADE	5047	<a href="#">CPI*COLEPARMERI NSTRUMT</a>	800-323-4340	IL	276.40	1	276.40	0.00	0	276.40	0.34%	1	16.28
281845	Food Exceptions	5814	<a href="#">CHIPOTLE ONLINE</a>	303-595-4000	CO	274.94	2	137.47	0.00	0	274.94	0.33%	2	0.00
47979	WHOLESALE TRADE	5045	<a href="#">DMI* DELL HLTHCR/PTR</a>	800-274-1550	TX	271.13	1	271.13	0.00	0	271.13	0.33%	1	24.09
281845	Food Exceptions	5814	<a href="#">MR PICKLES 325 - UNION</a>	UNION CITY	CA	251.90	4	62.98	0.00	0	251.90	0.31%	4	0.00
284298	VTA Catering	5812	<a href="#">DOORDASH*KABIL A CUISIN</a>	STRIPE.COM	CA	247.44	1	247.44	0.00	0	247.44	0.30%	1	0.00
47962	BUILDING SERVIC	7342	<a href="#">DOMYOWN.COM</a>	770-840-8831	GA	238.29	2	119.15	0.00	0	238.29	0.29%	2	0.00
47979	WHOLESALE TRADE	5251	<a href="#">HARBOR FREIGHT TOOLS 638</a>	FREMONT	CA	236.68	2	118.34	0.00	0	236.68	0.29%	2	20.04
47979	WHOLESALE TRADE	5085	<a href="#">DUDA ENERGY LLC</a>	256-3404866	AL	235.18	1	235.18	0.00	0	235.18	0.29%	1	0.00
47970	OFFICE SERVICES	7392	<a href="#">WPY*DKF SOLUTIONS GROUP</a>	855-469-3729	CA	235.00	1	235.00	0.00	0	235.00	0.29%	1	0.00
47972	OTHER	5732	<a href="#">YUBICO INC</a>	650-319-8821	CA	227.50	1	227.50	0.00	0	227.50	0.28%	1	0.00
47979	WHOLESALE TRADE	5251	<a href="#">MID HARDWARE</a>	215-225-5775	PA	220.90	1	220.90	0.00	0	220.90	0.27%	1	0.00
47971	OFFICE SUPPLIES	5734	<a href="#">SP * TAKEYA USA</a>	HTTPSTAKEYAU	CA	218.73	1	218.73	0.00	0	218.73	0.27%	1	0.00
281845	Food Exceptions	5462	<a href="#">NOTHING BUNDT CAKES 39</a>	NOTHINGBUNDT	CA	215.00	2	107.50	0.00	0	215.00	0.26%	2	0.00
47963	BUSINESS EXPENS	8398	<a href="#">ISA</a>	919-549-8411	NC	210.00	1	210.00	0.00	0	210.00	0.26%	1	0.00
284298	VTA Catering	5812	<a href="#">THAI BBQ</a>	UNION CITY	CA	204.67	1	204.67	0.00	0	204.67	0.25%	1	18.00
47971	OFFICE	9402	<a href="#">USPS PO</a>	UNION CITY	CA	200.00	1	200.00	0.00	0	200.00	0.24%	1	0.00

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47971	SUPPLIES		<a href="#">0580260401</a>											
47979	WHOLESALE TRADE	5192	<a href="#">PROGRESSIVE BUSINESS CON</a>	610-695-8600	PA	199.00	1	199.00	0.00	0	199.00	0.24%	1	0.00
47970	OFFICE SERVICES	7399	<a href="#">ACT*MSA SAN FRANCISCO</a>	877-551-5560	TX	195.00	3	65.00	0.00	0	195.00	0.24%	3	0.00
47979	WHOLESALE TRADE	5411	<a href="#">LUCKY #782 UNION CI</a>	UNION CITY	CA	194.69	8	24.34	0.00	0	194.69	0.24%	8	0.00
284298	VTA Catering	5812	<a href="#">BRONCO BILLY'S PIZZA</a>	510-4894601	CA	185.16	1	185.16	0.00	0	185.16	0.22%	1	0.00
47979	WHOLESALE TRADE	5085	<a href="#">FLUID POWER ENERGY INC</a>	262-548-6220	WI	182.35	1	182.35	0.00	0	182.35	0.22%	1	0.00
47979	WHOLESALE TRADE	5072	<a href="#">BURLINGTON SAFETY LABORAT</a>	925-8661412	CA	178.15	1	178.15	0.00	0	178.15	0.22%	1	0.00
308480	MISC PERSONAL	7299	<a href="#">PAC MACHINE COMPANY,IN</a>	916-3871336	CA	174.07	1	174.07	0.00	0	174.07	0.21%	1	14.18
47978	VEHICLE EXPENSE	5532	<a href="#">AMERICAS-TIRE-C O CAN-04</a>	FREMONT	CA	170.43	1	170.43	0.00	0	170.43	0.21%	1	14.43
320956	Dues/Mbr/Conf	8699	<a href="#">ASQ ECOMMERCE</a>	414-2728575	WI	169.00	1	169.00	0.00	0	169.00	0.21%	1	0.00
47972	OTHER	5817	<a href="#">WWW.CLEVERBRID GE.NET</a>	18007999570/		165.75	1	165.75	0.00	0	165.75	0.20%	1	0.00
47960	AIRLINE	3066	<a href="#">SOUTHWES 5261432511151</a>	800-435-9792	TX	164.96	1	164.96	0.00	0	164.96	0.20%	1	0.00
290469	Catering	5811	<a href="#">EZCATER*HONEYB AKED HAM</a>	800-488-1803	MA	158.94	1	158.94	0.00	0	158.94	0.19%	1	0.00
47960	AIRLINE	3066	<a href="#">SOUTHWES 5261436389975</a>	800-435-9792	TX	157.96	1	157.96	0.00	0	157.96	0.19%	1	0.00
47978	VEHICLE EXPENSE	5532	<a href="#">AMERICAS-TIRE-C O CAN-14</a>	UNION CITY	CA	156.26	1	156.26	0.00	0	156.26	0.19%	1	13.26
47979	WHOLESALE TRADE	5074	<a href="#">FRAN A. OLSEN</a>	925-961-8888	CA	140.22	1	140.22	0.00	0	140.22	0.17%	1	0.00
281845	Food Exceptions	5462	<a href="#">DONUT DELIGHT EXPRESS</a>	UNION CITY	CA	140.00	2	70.00	0.00	0	140.00	0.17%	2	0.00
289779	COMPUTER	4816	<a href="#">DROPBOX*39X53YZ FPTW8</a>	DROPBOX.COM	CA	138.00	1	138.00	0.00	0	138.00	0.17%	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
47970	OFFICE SERVICES	2741	<a href="#">ABACUS PRODUCTS INC.</a>	510-7859990	CA	\$ 135.09	1	\$ 135.09	\$ 0.00	0	\$ 135.09	0.16%	1	\$ 0.00
47963	BUSINESS EXPENS	8641	<a href="#">CALIFORNIA SOCIETY OF MUN</a>	916-2312137	CA	135.00	4	33.75	0.00	0	135.00	0.16%	4	0.00
47979	WHOLESALE TRADE	5072	<a href="#">FRESH WATER SYSTEMS, INC</a>	864-284-1800	SC	132.77	1	132.77	0.00	0	132.77	0.16%	1	0.00
47979	WHOLESALE TRADE	5046	<a href="#">GREG SMITH EQUIPMENT</a>	888-8868869	IN	128.41	1	128.41	0.00	0	128.41	0.16%	1	0.00
47979	WHOLESALE TRADE	5085	<a href="#">EPASALES</a>	866-448-5547	TN	127.81	1	127.81	0.00	0	127.81	0.16%	1	0.00
47979	WHOLESALE TRADE	5013	<a href="#">SKYGEEKCOM</a>	888-759-4335	NY	127.76	1	127.76	0.00	0	127.76	0.16%	1	0.00
47972	OTHER	5999	<a href="#">WECO INDUSTRIES LLC</a>	707-446-6661	CA	126.92	1	126.92	0.00	0	126.92	0.15%	1	0.00
289779	COMPUTER	4816	<a href="#">DRI*KWIZCOM</a>	ELEMENT5.INFO	MN	125.00	1	125.00	0.00	0	125.00	0.15%	1	0.00
47970	OFFICE SERVICES	7311	<a href="#">FACEBK ZTBUUE24A2</a>	650-5434800	CA	124.72	1	124.72	0.00	0	124.72	0.15%	1	0.00
47979	WHOLESALE TRADE	5045	<a href="#">CDW GOVT #NBD4715</a>	800-808-4239	IL	122.55	1	122.55	0.00	0	122.55	0.15%	1	9.93
330435	CLOTHING	5691	<a href="#">SP * ESAFETY SUPPLIES,</a>	HTTPSWWWESAF E	CA	118.44	1	118.44	0.00	0	118.44	0.14%	1	0.00
47970	OFFICE SERVICES	7394	<a href="#">PETERSON SAN LEANDRO</a>	510-357-6200	CA	117.06	1	117.06	0.00	0	117.06	0.14%	1	0.00
47979	WHOLESALE TRADE	5046	<a href="#">JM EQUIPMENT MANTECA</a>	209-522-3271	CA	113.94	1	113.94	0.00	0	113.94	0.14%	1	0.00
47979	WHOLESALE TRADE	5311	<a href="#">SEARS ROEBUCK 7936</a>	800-366-7278	TX	113.26	1	113.26	0.00	0	113.26	0.14%	1	8.91
47972	OTHER	5732	<a href="#">SUPERBREAKERS</a>	866-809-9078	NY	109.75	1	109.75	0.00	0	109.75	0.13%	1	0.00
47972	OTHER	5999	<a href="#">EQUIPCO RENTALS</a>	888-234-5678	CA	108.74	1	108.74	0.00	0	108.74	0.13%	1	0.00
284298	VTA Catering	5812	<a href="#">BUCKHORN GRILL UNION CITY</a>	UNION CITY	CA	103.97	1	103.97	0.00	0	103.97	0.13%	1	0.00
47963	BUSINESS EXPENS	8299	<a href="#">PESTICIDE APPLICATORS PRO</a>	831-442-3536	CA	100.00	1	100.00	0.00	0	100.00	0.12%	1	0.00
47979	WHOLESALE	5065	<a href="#">STEVEN</a>	650-588-9200	CA	99.21	1	99.21	0.00	0	99.21	0.12%	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
47979	TRADE		<a href="#">ENGINEERING</a>											
47960	AIRLINE	3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433784317</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433784318</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433784319</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433784320</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433784321</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433803964</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433803965</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433803966</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433803967</a>											
		3066	<a href="#">SOUTHWES</a>	800-435-9792	TX	97.96	1	97.96	0.00	0	97.96	0.12%	1	0.00
			<a href="#">5261433803968</a>											
47979	WHOLESALE TRADE	5085	<a href="#">VW GRAINGER</a>	877-2022594	IL	96.73	1	96.73	0.00	0	96.73	0.12%	1	8.60
47970	OFFICE SERVICES	7372	<a href="#">KWIZCOM CORPORATION</a>	905-4821842	ON	95.00	1	95.00	0.00	0	95.00	0.12%	1	0.00
47979	WHOLESALE TRADE	5099	<a href="#">COMPLIANCE SIGN S.COM</a>	800-578-1245	IL	94.50	1	94.50	0.00	0	94.50	0.11%	1	0.00
47979	WHOLESALE TRADE	5065	<a href="#">NEWARK US 00000075</a>	773-907-6000	IL	93.01	1	93.01	0.00	0	93.01	0.11%	1	7.16
47963	BUSINESS EXPENS	8299	<a href="#">PAYPAL *ALAMEDAEMPL</a>	402-935-7733	CA	90.00	1	90.00	0.00	0	90.00	0.11%	1	0.00
47972	OTHER	7216	<a href="#">GREEN LEAF CLEANERS</a>	FREMONT	CA	90.00	2	45.00	0.00	0	90.00	0.11%	2	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
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON MKTPLACE PMTS WWW.</a>	WWW.AMAZON.CO	WA	\$ 89.30	3	\$ 29.77	\$ 0.00	0	\$ 89.30	0.11%	3	\$ 4.81
47970	OFFICE SERVICES	8911	<a href="#">CA SURVEYING &amp; DRAFTNG</a>	DUBLIN	CA	87.78	1	87.78	0.00	0	87.78	0.11%	1	0.00
289779	COMPUTER	4816	<a href="#">DRI*CLOUDBERRY LAB(TM)</a>	952-908-4084	MN	84.00	2	42.00	0.00	0	84.00	0.10%	2	0.00
320956	Dues/Mbr/Conf	9399	<a href="#">GOVTELLERCONVE NFEE</a>	877-4328871	NY	83.97	1	83.97	0.00	0	83.97	0.10%	1	0.00
320956	Dues/Mbr/Conf	8699	<a href="#">NIGP - IWEB</a>	703-7368900	VA	83.00	1	83.00	0.00	0	83.00	0.10%	1	0.00
47979	WHOLESALE TRADE	5411	<a href="#">SMARTNFINAL4241 1004249</a>	FREMONT	CA	81.35	2	40.68	0.00	0	81.35	0.10%	2	0.00
47972	OTHER	5999	<a href="#">PARTY CITY</a>	UNION CITY	CA	80.29	2	40.15	0.00	0	80.29	0.10%	2	7.13
47961	AUTO/RV DEALERS	5511	<a href="#">MISSION VALLEY FORD TRUCK</a>	SAN JOSE	CA	79.05	1	79.05	0.00	0	79.05	0.10%	1	0.00
47970	OFFICE SERVICES	7333	<a href="#">SAFETYSIGN.COM</a>	800-2746271	NJ	70.09	1	70.09	0.00	0	70.09	0.09%	1	0.00
47979	WHOLESALE TRADE	5200	<a href="#">LOWES #01132*</a>	UNION CITY	CA	68.83	3	22.94	0.00	0	68.83	0.08%	3	6.11
47979	WHOLESALE TRADE	5099	<a href="#">PAYPAL *INNOVATIVE</a>	402-935-7733	CA	68.00	1	68.00	0.00	0	68.00	0.08%	1	0.00
47963	BUSINESS EXPENS	8641	<a href="#">CALIFORNIA SPECIAL DISTRI</a>	916-442-7887	CA	65.00	1	65.00	0.00	0	65.00	0.08%	1	0.00
47979	WHOLESALE TRADE	5039	<a href="#">DEL CITY</a>	800-6544757	WI	62.53	1	62.53	0.00	0	62.53	0.08%	1	0.00
47972	OTHER	7216	<a href="#">GREEN LEAF CLEANERS</a>	FREMONT	CA	60.00	1	60.00	0.00	0	60.00	0.07%	1	0.00
47971	OFFICE SUPPLIES	5734	<a href="#">AVNGATE*WONDE RSHARE.CO</a>	888-2471614	CA	59.95	1	59.95	0.00	0	59.95	0.07%	1	0.00
47972	OTHER	5999	<a href="#">PAYPAL *MNBRIIDGE128</a>	402-935-7733	CA	52.19	1	52.19	0.00	0	52.19	0.06%	1	0.00
47971	OFFICE SUPPLIES	5734	<a href="#">LSOFT TECHNOLOGIES INC</a>	MISSISSAUGA	ON	51.18	1	51.18	0.00	0	51.18	0.06%	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
47970	OFFICE SERVICES	7311	<a href="#">FACEBK KD4WBEN4A2</a>	650-5434800	CA	\$ 50.00	1	\$ 50.00	\$ 0.00	0	\$ 50.00	0.06%	1	\$ 0.00
47970	OFFICE SERVICES	7333	<a href="#">STK*BIGSTOCKPH OTO.COM</a>	855-272-5125	NY	98.00	2	49.00	49.00	1	49.00	0.06%	3	0.00
47979	WHOLESALE TRADE	5251	<a href="#">EREPLACEMENTPA RTS.COM</a>	866-3229842	FL	47.19	1	47.19	0.00	0	47.19	0.06%	1	0.00
284298	VTA Catering	5812	<a href="#">BRONCO BILLY'S PIZZA</a>	UNION CITY	CA	47.14	1	47.14	0.00	0	47.14	0.06%	1	0.00
47979	WHOLESALE TRADE	5411	<a href="#">SAFEWAY #1224</a>	NEWARK	CA	44.08	1	44.08	0.00	0	44.08	0.05%	1	0.00
47966	MAIL/TELEPHONE	5965	<a href="#">OFFICEMAX/DEPOT 6177</a>	800-463-3768	CA	41.69	1	41.69	0.00	0	41.69	0.05%	1	3.70
47972	OTHER	5735	<a href="#">APL* ITUNES.COM/BILL</a>	866-712-7753	CA	39.92	1	39.92	0.00	0	39.92	0.05%	1	0.00
47979	WHOLESALE TRADE	5199	<a href="#">BAUDVILLE INC.</a>	800-728-0888	MI	38.38	1	38.38	0.00	0	38.38	0.05%	1	0.00
47979	WHOLESALE TRADE	5310	<a href="#">WALMART.COM 8009666546</a>	800-966-6546	AR	37.90	1	37.90	0.00	0	37.90	0.05%	1	0.00
284298	VTA Catering	5812	<a href="#">THAI KITCHEN RESTAURANT</a>	UNION CITY	CA	35.18	1	35.18	0.00	0	35.18	0.04%	1	0.00
47978	VEHICLE EXPENSE	7538	<a href="#">BAYCOUNTIESDIES ELSERVINC</a>	FREMONT	CA	34.47	1	34.47	0.00	0	34.47	0.04%	1	0.01
281845	Food Exceptions	5814	<a href="#">STARBUCKS STORE 05653</a>	UNION CITY	CA	33.90	1	33.90	0.00	0	33.90	0.04%	1	0.00
47979	WHOLESALE TRADE	5411	<a href="#">SMARTNFINAL5231 1005238</a>	UNION CITY	CA	31.52	1	31.52	0.00	0	31.52	0.04%	1	0.00
47972	OTHER	5970	<a href="#">MICHAELS STORES 2076</a>	UNION CITY	CA	31.25	2	15.63	0.00	0	31.25	0.04%	2	0.00
281845	Food Exceptions	5462	<a href="#">PETERS BAKERY</a>	SAN JOSE	CA	30.00	1	30.00	0.00	0	30.00	0.04%	1	0.00
47979	WHOLESALE TRADE	5310	<a href="#">TARGET 00014720</a>	HAYWARD	CA	27.43	1	27.43	0.00	0	27.43	0.03%	1	2.44
47960	AIRLINE	3066	<a href="#">SOUTHWES 5261452241606</a>	800-435-9792	TX	26.00	1	26.00	0.00	0	26.00	0.03%	1	0.00
47970	OFFICE	7311	<a href="#">FACEBK</a>	650-5434800	CA	25.28	1	25.28	0.00	0	25.28	0.03%	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
47970	SERVICES		<a href="#">N5XZLE24A2</a>											
47970	OFFICE SERVICES	8734	<a href="#">ST CROIX SENSORY INC</a>	STILLWATER	MN	25.00	1	25.00	0.00	0	25.00	0.03%	1	1.78
		7399	<a href="#">ACT*MSA-SF BAY AREA CH</a>	877-551-5560	TX	25.00	1	25.00	0.00	0	25.00	0.03%	1	0.00
335935	4784	4784	<a href="#">FASTRAK CSC</a>	415-486-8655	CA	25.00	1	25.00	0.00	0	25.00	0.03%	1	0.00
47978	VEHICLE EXPENSE	7538	<a href="#">CALIFORNIA CAMPER REPAIR</a>	510-7938157	CA	23.05	1	23.05	0.00	0	23.05	0.03%	1	0.00
47971	OFFICE SUPPLIES	5942	<a href="#">AMAZON.COM</a>	AMZN.COM/BILL	WA	21.88	1	21.88	0.00	0	21.88	0.03%	1	1.94
47972	OTHER	5941	<a href="#">DICKS SPORTING GOODS1170</a>	FREMONT	CA	21.84	1	21.84	0.00	0	21.84	0.03%	1	0.00
47963	BUSINESS EXPENS	8641	<a href="#">PATCH.COM</a>	PATCH.COM	NY	21.00	1	21.00	0.00	0	21.00	0.03%	1	0.00
47970	OFFICE SERVICES	7399	<a href="#">ACT*MSA SF BAY AREA CH</a>	877-551-5560	TX	20.00	1	20.00	0.00	0	20.00	0.02%	1	0.00
284298	VTA Catering	5812	<a href="#">DOORDASH*NATIO NS GIANT</a>	STRIPE.COM	CA	18.36	1	18.36	0.00	0	18.36	0.02%	1	0.00
47970	OFFICE SERVICES	7311	<a href="#">YAHOO SMALL BUSINESS</a>	866-800-8092	CA	13.94	1	13.94	0.00	0	13.94	0.02%	1	0.00
		7311	<a href="#">YAHOO SMALL BUSINESS</a>	866-800-8092	CA	13.94	1	13.94	0.00	0	13.94	0.02%	1	0.00
		7311	<a href="#">YAHOO SMALL BUSINESS</a>	866-800-8092	CA	13.94	1	13.94	0.00	0	13.94	0.02%	1	0.00
47971	OFFICE SUPPLIES	5943	<a href="#">STAPLES 00112995</a>	FREMONT	CA	12.21	1	12.21	0.00	0	12.21	0.01%	1	1.03
47979	WHOLESALE TRADE	5310	<a href="#">WAL-MART #5426</a>	FREMONT	CA	8.71	1	8.71	0.00	0	8.71	0.01%	1	0.74
47979	WHOLESALE TRADE	5074	<a href="#">WHCI SUPPLY COMPANY</a>	UNION CITY	CA	0.00	0	0.00	14.91	1	(14.91)	0.00%	1	0.00
47970	OFFICE SERVICES	7399	<a href="#">ZIPRECRUITER, INC.</a>	8557475493	CA	0.00	0	0.00	20.75	1	(20.75)	0.00%	1	0.00
47979	WHOLESALE TRADE	5331	<a href="#">PAYPAL *KAUFLANDIAL</a>	402-935-7733	CA	0.00	0	0.00	40.88	1	(40.88)	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
47963	BUSINESS EXPENS	8398	<a href="#">NACE INTERNATIONAL</a>	8007976223	TX	\$ 0.00	0	\$ 0.00	\$ 200.00	1	\$ (200.00)	0.00%	1	\$ 0.00

**Total** **\$82,750.09** **\$ 453.73** **\$82,296.36** **319** **\$ 1,925.22**

**Total Number of Records:** 194

End of Report

## Merchant Spend Analysis - Detail Output Parameter Page

**Cycle Close Date Range:** 04/2018 to 06/2018

**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

<b>Processing Hierarchy Position:</b>	<b>Bank</b>	<b>Agent</b>	<b>Company</b>	<b>Division</b>	<b>Department</b>
	1425	3135	51756	All	All

**UNION SANITARY DISTRICT  
CHECK REGISTER  
07/07/2018-07/13/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
168323	7/12/2018		20180601	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065222110 - BOYCE LIFT	\$411,063.52	\$411,063.52
168314	7/12/2018		898220180629	PACIFIC GAS AND ELECTRIC	SERV TO 06/29/18 FREMONT PS	\$277.77	\$31,765.29
	7/12/2018		761520180625		SERV TO 06/24/18 NEWARK PS	\$30,839.17	
	7/12/2018		666720180629		SERV TO 06/29/18 PASEO PADRE PS	\$286.38	
	7/12/2018		380420180629		SERV TO 06/29/18 CHERRY ST PS	\$236.85	
	7/12/2018		096020180629		SERV TO 06/29/18 CATHODIC PROJECT	\$44.41	
	7/12/2018		892820180629		SERV TO 06/29/18 HAYWARD MARSH	\$55.07	
	7/12/2018		224720180621		SERV TO 06/20/18 CS TRAINING TRAILER	\$25.64	
168307	7/12/2018		7740	D R HORTON	REFUND # 21161	\$16,450.00	\$16,450.00
168317	7/12/2018	120	916003543972	REPUBLIC SERVICES #916	RECYCLE & ROLL OFF - JULY 2018	\$3,400.39	\$3,400.39
168320	7/12/2018		9505	SILICON VALLEY GTWY TECH CTR	REFUND # 21166	\$2,500.00	\$2,500.00
168327	7/12/2018		9809464838	VERIZON WIRELESS	WIRELESS SERV 05/21/18 - 06/20/2018	\$2,449.91	\$2,449.91
168324	7/12/2018		7747	THE NEW HOME CO, NOR CAL LLC	REFUND # 21160	\$2,100.00	\$2,100.00
168319	7/12/2018		8414	ROOTER HERO	REFUND # 21165	\$500.00	\$2,000.00
	7/12/2018		9712		REFUND # 21198	\$500.00	
	7/12/2018		9650		REFUND # 21171	\$500.00	
	7/12/2018		9623		REFUND # 21169	\$500.00	
168326	7/12/2018	110	1647	UGSI CHEMICAL FEED, INC	1 POLYMER MIXING UNIT	\$1,800.00	\$1,800.00

**UNION SANITARY DISTRICT  
CHECK REGISTER  
07/07/2018-07/13/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
168297	7/12/2018	120	20180627	CWEA	7 CERT & 6 MEMBERSHIP RENEWALS - CS 9 EMPLOYEES	\$1,720.00	\$1,720.00
168289	7/12/2018	170	180301872	AIRTECH MECHANICAL INC	SERVICE CALL: BLDG 68 REPLACE THERMOSTATS	\$1,444.47	\$1,444.47
168321	7/12/2018		719882038402	STAPLES CONTRACT & COMMERCIAL	JANITORIAL SUPPLIES	\$772.33	\$1,362.98
	7/12/2018		719938443902		JANITORIAL SUPPLIES	\$39.63	
	7/12/2018		719938443901		JANITORIAL SUPPLIES	\$551.02	
168311	7/12/2018		20180629	NAPA AUTO PARTS	MONTHLY AUTO PARTS STMT - JUNE 2018	\$1,075.84	\$1,075.84
168299	7/12/2018		9714	DRAIN DOCTOR	REFUND # 21200	\$500.00	\$1,000.00
	7/12/2018		9718		REFUND # 21201	\$500.00	
168309	7/12/2018		8416	MR. ROOTER PLUMBING	REFUND # 21184	\$1,000.00	\$1,000.00
168322	7/12/2018		9697	STREAMLINE PLUMBING & DRAIN	REFUND # 21178	\$500.00	\$1,000.00
	7/12/2018		9713		REFUND # 21199	\$500.00	
168292	7/12/2018	141	20180705	ROLLIE ARBOLANTE	EXP REIMB: CS FY18 SAFETY INCENTIVE PROGRAM	\$850.91	\$850.91
168302	7/12/2018		8685	ENDVRCORP	REFUND # 21121	\$800.00	\$800.00
168301	7/12/2018	150	2019125	EDA - ECONOMIC DEVELOPMENT	ANNUAL MEMBERSHIP DUES	\$750.00	\$750.00
168295	7/12/2018		304522	CENTERVILLE LOCKSMITH	24 MASTER PADLOCKS	\$711.18	\$711.18
168288	7/12/2018	170	9077432839	AIRGAS NCN	4 CYL ARGON	\$681.36	\$681.36
168294	7/12/2018	136	12720800	BLAISDELL'S	1 SIT-STAND STATIONS FOR DUAL MONITORS	\$581.66	\$581.66
168329	7/12/2018	143	2035466	WEST YOST ASSOCIATES	3RD SLUDGE DEGRITTER SYSTEM	\$510.00	\$510.00
168293	7/12/2018		8415	BENJAMIN FRANKLIN PLUMBING	REFUND # 21175	\$500.00	\$500.00

**UNION SANITARY DISTRICT  
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Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
168296	7/12/2018		8075	SANJEEV CHHABRIA	REFUND # 21119	\$500.00	\$500.00
168300	7/12/2018		9359	EAST WEST PLUMBING	REFUND # 21177	\$500.00	\$500.00
168312	7/12/2018		9622	ORTIZ CONSTRUCTION, INC.	REFUND # 21168	\$500.00	\$500.00
168315	7/12/2018		8352	PARS POWER INC	REFUND # 21120	\$500.00	\$500.00
168316	7/12/2018		9756	R&L CONSTRUCTION	REFUND # 21183	\$500.00	\$500.00
168325	7/12/2018		9644	TRENCHFREE, INC	REFUND # 21170	\$500.00	\$500.00
168330	7/12/2018		9594	WESTCOAST PLUMBING SERVICE INC	REFUND # 21167	\$500.00	\$500.00
168313	7/12/2018	122	1419	PACIFIC CRANE INSPECTION	QUADRENNIAL CRANE INSPECTION	\$475.00	\$475.00
168308	7/12/2018	122	67107921	MCMASTER SUPPLY INC	1 FIRE EXTINGUISHER COVER	\$34.56	\$471.07
	7/12/2018	170	67304242		1 HAND-HELD AUTOMATIC CHARGER	\$436.51	
168303	7/12/2018	170	903594908	EVOQUA WATER TECHNOLOGIES	DI WATER SYSTEM	\$344.40	\$344.40
168310	7/12/2018	123	129241	MUNICIPAL MAINT EQUIPMENT INC	2 NOZZEL PARTS	\$299.72	\$299.72
168318	7/12/2018		20180712	THERESA RODRIGUEZ	EXP REIMB: SNACKS AND LUNCH FOR ODMS TRAINING	\$228.83	\$228.83
168328	7/12/2018	144	20180709	AUDREY VILLANUEVA	EXP REIMB: EC TEAM RECOGNITION FY18	\$224.24	\$224.24
168304	7/12/2018	132	70460	RICHARD, THORSON, GRAVES & ROYER LLP	LEGAL CONSULTATION	\$200.00	\$200.00
168298	7/12/2018	143	3138589	DAILY JOURNAL CORPORATION	AD: NOTICE OF DOC AVAILABILITY AND INTENT TO ADOPT	\$140.00	\$140.00
168291	7/12/2018	170	635431	A-PRO PEST CONTROL INC	PEST CONTROL - 5 ADDL BAIT STATIONS	\$125.00	\$125.00
168290	7/12/2018		4088644120180626	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 06/25/18 - BOYCE ROAD	\$69.33	\$69.33
168306	7/12/2018	170	944720180627	HOME DEPOT CREDIT SERVICES	MONTHLY HARDWARE STMT - JUNE 2017	\$46.17	\$46.17

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Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
168305	7/12/2018	144	269815	HANIGAN COMPANY INC	1 LOT BUSINESS CARDS: DUNNING, M.	\$40.28	\$40.28

**Invoices:**

Credit Memos :	0		
\$0 - \$1,000 :	46	18,838.25	
\$1,000 - \$10,000 :	8	16,490.61	
\$10,000 - \$100,000 :	2	47,289.17	
Over \$100,000 :	1	411,063.52	
<b>Total:</b>	<b>57</b>	<b>493,681.55</b>	

**Checks:**

\$0 - \$1,000 :	30	14,549.15
\$1,000 - \$10,000 :	10	19,853.59
\$10,000 - \$100,000 :	2	48,215.29
Over \$100,000 :	1	411,063.52
<b>Total:</b>	<b>43</b>	<b>493,681.55</b>