

# Staff Report

**TO:** Board of Directors

**FROM:** Chip Close, Director of Water Operations

Shad Chittock, Treated Water Superintendent

**DATE:** April 12, 2023

SUBJECT: Bulk Water Treatment Chemical Purchase (Consent)

\_\_\_\_\_ WATER OPERATIONS

### **RECOMMENDATION:**

Approve the purchase of up to \$435,000 in bulk water treatment chemicals for the 2023 calendar year, and authorize the General Manager to execute the appropriate documents.

### BACKGROUND:

The District produces over 3 billion gallons of potable water at its six drinking water treatment plants annually. A critical part of the treatment process includes the use of coagulant, disinfection and corrosion control chemicals. In 2022, the District purchased 85 loads of chemicals at a cost of over \$350,000.

The acquisition of treatment chemicals is one of the more costly purchases through the year. In 2016 the District embarked on an effort to find ways to save money on these purchases. The solution was to join a consortium of other water utilities to combine purchasing power for better pricing. The District is now a member of the Bay Area Consortium which combines the purchasing power of 59 agencies and provides a substantial discount as compared to the District purchasing on its own.

The purchase of chemicals occurs twice a year as the consortium follows a fiscal year. Staff has completed the purchases necessary for the first half of 2023, however, the remaining purchase requires board authorization based upon the total purchase amounts.

### **BUDGETARY IMPACT:**

The anticipated cost of purchasing chemicals through 2023 was included in the 2023 Operating Budget for a total of \$435,000. This is a substantial increase over the 2022 budget and is a result of inflationary pressure and supply constraints.

### Attachments:

- List of Consortium Participants
- Purchase Requisitions for 2023

Region \ Agency	Chemical	# of bids	Cost to Agency
Central Valley			
City of Lathrop (Veiola NA)			
	Sodium Bisulfite	2	\$859.00
	Sodium Hypochlorite 12.5%		
City of Merced	Family Chlorida	2	\$859.00
	Ferric Chloride Sodium Hypochlorite 12.5%		
City of Modesto	30diuiii Hypociiioiite 12.3%		
<u>City of Modesto</u>	Citric Acid	3	¢1 200 E0
		3	\$1,288.50
	Sodium Hydroxide Sodium Hypochlorite 12.5%		
City of Stockton	30didiii TrypociiioTite 12.370	5	\$2,147.50
City of Stockton	Aguagus Ammania	3	φ2, 147.50
	Aqueous Ammonia Citric Acid		
	Sodium Bisulfite		
	Sodium Hydroxide Sodium Hypochlorite 12.5%		
City of Turlock	30didili riypociliorite 12.3%	2	\$859.00
City of Turiock	Aluminum Sulfate	۷	φουθ.υυ
	Sodium Hypochlorite 12.5%		
Oakwood Lake Water District	30didiii TrypociiioTite 12.370	2	\$859.00
Oukwood Lake Water District	Ferric Chloride	2	ψ039.00
	Sodium Hypochlorite 12.5%		
East Bay	,,		
Alameda County Water District		5	\$2,147.50
	Aqueous Ammonia	•	Ψ=,σσ
	Ferric Chloride		
	Hydrofluosilicic Acid (Fluoride)		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
City of Hayward	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4	\$1,718.00
	Ammoninum Sulfate		, ,
	Ferric Chloride		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
City of San Leandro		3	\$1,288.50
	Ferric Chloride		
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
East Bay Dischargers Authority		1	\$429.50
	Sodium Bisulfite		
Oro Loma Sanitary District		3	\$1,288.50
	Ferric Chloride		
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
Union Sanitary District		2	\$859.00
	Ferrous Chloride		
Marin Sonoma Napa	Sodium Hypochlorite 12.5%		

Central Marin Sanitation Agency		3	\$1,288.50
	Ferric Chloride		. ,
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
Southern Marin		1	\$429.50
	Sodium Hypochlorite 12.5%		·
Las Gallinas Valley Sanitary District	•	3	\$1,288.50
	Ferric Chloride		
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
Marin Municipal Water District		5	\$2,147.50
	Aqueous Ammonia		
	Ferric Chloride		
	Hydrofluosilicic Acid (Fluoride)		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
Napa Sanitation District	,,	4	\$1,718.00
	Ferric Chloride		, ,
	Sodium Bisulfite		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
North Marin Water District	,,	4	\$1,718.00
	Ferric Chloride	·	Ψ 1,1 10100
	Liquid Chlorine		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
Sanitary District No. 5 of Marin County	7,	2	\$859.00
	Sodium Bisulfite	_	********
	Sodium Hypochlorite 12.5%		
Sausalito Marin City Sanitary District		3	\$1,288.50
	Ferric Chloride	ŭ	Ψ1,200.00
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
North Bay	7,		
Central Contra Costa Sanitary District		2	\$859.00
<u> </u>	Aluminum Sulfate	_	Ψ000.00
	Sodium Hypochlorite 12.5%		
City of Antioch		5	\$2,147.50
<del></del>	Aluminum Sulfate	ŭ	Ψ2,111.00
	Ammoninum Sulfate		
	Hydrofluosilicic Acid (Fluoride)		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
City of Brentwood	Sociality poemonic 12.5%	2	\$859.00
<u>City of Brentwood</u>	Sodium Bisulfite	_	ψ000.00
	Sodium Hypochlorite 12.5%		
City of Martinez	Sociality poemonic 12.5%	5	\$2,147.50
City of Wartings	Aluminum Sulfate	J	ΨΖ, 141.50
	Ammoninum Sulfate		
	Hydrofluosilicic Acid (Fluoride)		

	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		4
City of Pinole (Pinole/Hercules WPCP)	Causia Chlauida	3	\$1,288.50
	Ferric Chloride Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
City of Pittsburg		5	\$2,147.50
<del></del>	Aluminum Sulfate	-	, ,
	Ammoninum Sulfate		
	Hydrofluosilicic Acid (Fluoride)		
	Liquid Chlorine		
	Sodium Hydroxide		
Contra Costa Water District		6	\$2,577.00
	Ammoninum Sulfate		
	Aqueous Ammonia		
	Hydrofluosilicic Acid (Fluoride)		
	Liquid Chlorine		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		<b>*</b> + <b>=</b> + 0 00
<u>Delta Diablo Sanitation District</u>		4	\$1,718.00
	Aluminum Sulfate		
	Ferrous Chloride		
	Sodium Bisulfite Sodium Hypochlorite 12.5%		
Diablo Water District	Sociali Hypochionic 12.570	2	\$859.00
Blable Water Bistrict	Hydrofluosilicic Acid (Fluoride)	2	ψ000.00
	Sodium Hypochlorite 12.5%		
Ironhouse Sanitary District	No.	3	\$1,288.50
	Aluminum Sulfate		, ,
	Citric Acid		
	Sodium Hypochlorite 12.5%		
Mt. View Sanitary District		1	\$429.50
	Ferrous Chloride		
Pleasant Hill Recreation & Park District		1	\$429.50
	Sodium Hypochlorite 12.5%		<b>#050.00</b>
Rodeo Sanitary District	- 11 - 15:	2	\$859.00
	Sodium Bisulfite		
Town of Discovery Bay CSD	Sodium Hypochlorite 12.5%	2	\$859.00
TOWIT OF DISCOVERY BAY C3D	Aluminum Sulfate	2	φουθ.00
	Sodium Hypochlorite 12.5%		
West County Wastewater District	Souldin Hypochierite 12:370	2	\$859.00
	Sodium Hydroxide	_	*******
	Sodium Hypochlorite 12.5%		
Peninsula			
City of South San Francisco		3	\$1,288.50
	Ferric Chloride		
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
<u>City of Burlingame</u>		2	\$859.00

City of Daly City/North San Mateo County	Sodium Bisulfite Sodium Hypochlorite 12.5%	3	\$1,288.50
City of Daily City/North San Mateo County	Ferrous Chloride Sodium Bisulfite	3	ψ1,200.30
<u>City of Millbrae</u>	Sodium Hypochlorite 12.5%	2	\$859.00
City of tymistae	Ferric Chloride	2	Ψ039.00
<u>City of San Mateo</u>	Sodium Hypochlorite 12.5%	3	\$1,288.50
City of Sun Muteo	Ferric Chloride	J	ψ1,200.00
	Sodium Bisulfite		
Sewer Authority Mid-Coastside	Sodium Hypochlorite 12.5%	3	\$1,288.50
Sewel Hathory Mila Coustside	Ferric Chloride	O	Ψ1,200.00
	Sodium Bisulfite		
Sacramento	Sodium Hypochlorite 12.5%		
Carmichael Water District		2	\$859.00
	Sodium Hydroxide		,
	Sodium Hypochlorite 12.5%		
<u>City of Folsom</u>	Sodium Hypochlorite 12.5%	1	\$429.50
City of Roseville	Sociality pocinionic 12.378	6	\$2,577.00
	Aluminum Sulfate		
	Aqueous Ammonia		
	Ferric Chloride Hydrofluosilicic Acid (Fluoride)		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
<u>City of Sacramento</u>	- 10	6	\$2,577.00
	Aluminum Sulfate Hydrofluosilicic Acid (Fluoride)		
	Liquid Chlorine		
	Sodium Bisulfite		
	Sodium Hydroxide		
City of Yuba City	Sodium Hypochlorite 12.5%	6	\$2,577.00
City Of Tubu City	Aluminum Sulfate	Ü	Ψ2,011.00
	Citric Acid		
	Hydrofluosilicic Acid (Fluoride)		
	Liquid Chlorine		
	Sodium Bisulfite Sodium Hypochlorite 12.5%		
El Dorado Irrigation District	,,	2	\$859.00
	Sodium Hydroxide		
Nevada Irrigation District	Sodium Hypochlorite 12.5%	3	\$1,288.50
NOTAGE INIGATION DISTRICT	Aluminum Sulfate	3	ψ1,200.30
	Sodium Hydroxide		

	Sodium Hypochlorite 12.5%		
Rancho Murieta Community Services District		2	\$859.00
	Aluminum Sulfate		
Sacramenta County Water Agency	Liquid Chlorine	3	\$1,288.50
Sacramento County Water Agency	Hydrofluosilicic Acid (Fluoride)	3	ֆ1,200.30
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
South Bay			
City of Morgan Hill	_	1	\$429.50
	Sodium Hypochlorite 12.5%	4	<b>#400 50</b>
City of San Jose	Ferrous Chloride	1	\$429.50
<u>City of Santa Clara</u>	Terrous chioride	4	\$1,718.00
Sity 5. Garier Glare	Aqueous Ammonia	•	ψ1,7 10.00
	Sodium Bisulfite		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
City of Sunnyvale		5	\$2,147.50
	Aluminum Sulfate		
	Ammoninum Sulfate Sodium Bisulfite		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		
City of Watsonville		3	\$1,288.50
	Aluminum Sulfate		
	Ferric Chloride		
Facility	Sodium Hypochlorite 12.5%	5	\$2,147.50
racinty	Aluminum Sulfate	5	φ2, 14 <i>1</i> .50
	Aqueous Ammonia		
	Ferric Chloride		
	Sodium Bisulfite		
	Sodium Hypochlorite 12.5%		
Tri Valley		0	<b>#050.00</b>
<u>City of Livermore</u>	Ferric Chloride	2	\$859.00
	Sodium Hypochlorite 12.5%		
Dublin San Ramon Services District	,,	6	\$2,577.00
	Aluminum Sulfate		
	Aqueous Ammonia		
	Citric Acid		
	Ferrous Chloride		
	Hydrofluosilicic Acid (Fluoride) Sodium Hypochlorite 12.5%		
Zone 7 Water Agency	Sociali Hypocinorite 12.5%	4	\$1,718.00
<del></del>	Aluminum Sulfate		, , <b>.</b>
	Aqueous Ammonia		
	Sodium Hydroxide		
	Sodium Hypochlorite 12.5%		



**Purchase Requisition** 

No. 23-10171- WT2

Date: 1-3-23

Attention: Shad Chittock	
Chittock	

Ship to: NID

This area is for comments, text here can be overwritten. Delivery Required by: Quantity General Manager N. Auburn - 2 loads @ approx. 5000 gal (10,000 gal total) @ \$0.929/gal Lake of the Pines -2 loads @ approx. 5000 gal (10,000 gal total) @ \$0.929/gal 5.25% Sodium Hypochlorite from Olin 1-1-23 to 6-30-23 (Bleach) Lake Wildwood - 2 loads @ approx. 5000 gal (10,000 gal total) @ \$0.929/gal Loma Rica - 2 loads @ approx. 5000 gal (10,000 gal total) @ \$0.929/gal Description Finance Approver Armon Digitally signed by Armon Armon \*Chip" Close Date: 2023.01.04 15:08:27 -08'00' 10171 10171 10171 10171 Dept Due Date Code 52501 52501 52501 52501 Expense Proj/Fac 10307 10304 10308 10305 Terms Signed P.O. No. Digitally signed by Shad Shad Chittock Chittock Date: 2023.01.03 10:24:31 # Attachments To be filled in by Purchasing Dept IT Approver (if needed) Vendor F.O.B. **Unit Price** Total Cost 9290.00 37160 9290.00 9290.00 9290.00 Total

First Level Approver

Department Manager



# NEVADA IRRIGATION DISTRICT Purchase Requisition

No. 23-10171- WT1

Date: 1-3-23

Ship to: NID

Delivery Required by:

Attention: Shad Chittock

Via

\_ Due Date

To be filled in by Purchasing Dept.

	Approver	First Level Approver		ger	Department Manager	epartme		ger Finance Approver	General Manager	<
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	needed)	IT Approver (if needed)							· ·	
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76084.32	Total Cost	# Attachments								
							be overwritten.	This area is for comments, text here can be overwritten.	rea is for co	This ar
17557.92				10308	52501	10171	lbs total) @ \$0.48772/dry lbs	ads @ approx. 12,000 lbs (36,000 lbs total) @ \$0.48772/dry lbs.	N. Auburn - 3 loads	
11705.28				10307	52501	10171	@ approx. 12,000 lbs (24,000 lbs total) @ \$0.48772/dry lbs	loads	Lake of the Pines - 2	
11705.28				10305	52501	10171	lbs total) @ \$0.0.48772/dry lbs	Lake Wildwood - 2 loads @ approx. 12,000 lbs (24,000 lbs total) @ \$0.0.48772/dry lbs.	Lake Wildwood - 2	
11705.28				10304	52501	10171	lbs total) @ \$0.48772/dry lbs	oads @ approx. 12,000 lbs (24,000 lbs total) @ \$0.48772/dry lbs.	Loma Rica - 2 loads	
23410.56				10303	52501	10171	lbs total) @ \$0.48772/dry lbs.	ads @ approx. 12,000 lbs (48,000 lbs total) @	E. George - 4 loads	
C										
							to 7-1-23 (caustic)	25% Sodium Hydroxide from Univar 1-1-23 to 7-1-23 (caustic)	25% Sodium I	
Total	Unit Price	Vendor	P.O. No.	Code	Code	Code		-		
	F.O.B.		Terms	Proj/Fac	Expense	Dept		Description		Quantity
	chasing Dept.	To be filled in by Purchasing Dept.								



No. 23-10171- WT3

**Purchase Requisition** 

Delivery Required by: Ship to: NID Quantity E. George-3 loads @ approx. 5000 gal (15,000 gal total) @ \$1.52/gal 12.5% Sodium Hypochlorite from Olin 1-1-23 to 6-30-23 (Bleach) Attention: Shad Chittock Description Yia 10171 Dept Code **Due Date** 52501 Expense Code Proj/Fac 10303 Code Terms P.O. No. To be filled in by Purchasing Dept. Vendor Date: 1/3/23 F.O.B. **Unit Price** 22800.00 Total

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General Manager

Finance Approver

Department Manager

Signed

Digitally signed by Shad Shad Chittock Chittock Date: 2023.01.03 10:25:18

First Level Approver

IT Approver (if needed)

# Attachments

**Total Cost** 

22800

Oligitally signed by Armon Armon Chip" Close Date: 2023.01.04 15:06:11-08'00'

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No. 23-10171- WT4

**Purchase Requisition** 

Delivery Required by: Ship to: NID Attention: Shad Chittock . Sia Due Date To be filled in by Purchasing Dept. Date: 1/3/23

Department Manager Signed Signed First Lovel Appropria		15:06:56 -08'00'	15:06:56	5 1 9	on or	Finance Approver	General Manager
Shad Chittock Chittock			Digitally signed by Armon "Chip" Close Date: 2023.01.04	Digitally signed by Armon "Chip" Clos Date: 2023.01.04	o" Clos	Arm.	2
IT Approver (if needed)	-						
# Attachments Total Cost							
						his area is for comments, text here can be overwritten.	rea is for comments
		_					
			10308	52501	10171	@ approx. 4800 gal (14,400 gal total) @ @ \$0.8668gal	N. Auburn -3 loads @ app
			10307	52501	10171	Lake of the Pines - 2 loads @ approx. 4800 gal (9,600 gal total) @ @ \$0.8668gal	Lake of the Pines - 2 loads (
			10305	52501	10171	Lake Wildwood - 3 loads @ approx. 4800 gal (14,400 gal total) @ @ \$0.8668gal	Lake Wildwood - 3 loads @
		_	10304	52501	10171	2 loads @ approx. 4800 gal (9,600 gal total) @ @ \$0.8668gal	Loma Rica - 2 loads @ ap
			10303	52501	10171	@ approx. 4800 gal (24,000 gal total) @ \$0.8668gal	E. George - 5 loads @ ap
						iulfate 1-1-23 to 6-30-23	Chemtrade Aluminum Sulfate
P.O. No. Vendor Unit Price	P.O. No.	-	Code	Code	Code	-	
Terms F.O.B.	Terms	=	Proj/Fac	Expense	Dept	Description	Quantity
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First Level Approver

General Manager

Finance Approver

Department Manager



No. **23-10171-**

Purchase Requisition	
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Quantity		Description		Code	Code	Code	P.O. No.	Vendor	Unit Price	Total
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								" Accuernments	Total Cost	
			1					IT Approve	r (if needed)	
							Signed			
(	General Manager	Finance Ap	prover	Departme	nt Mana	iger	5.5	First Le	vel Approver	



No. **23-10171-**

Purchase Requisition	
•	Date:

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					IT Approver (if needed)							
							Signed					
General Manager		Finance Ap	prover	r Denartment Manager			]	First Le	vel Approver			



No. **23-10171-**

Purchase Requisition	
•	Date:

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Quantity		<u> </u>		Code	Code	Code	P.O. No.	Vendor	Unit Price	Total	
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								" Accuernments	Total Cost		
							Signed				
General Manager Finance Ap		prover	Departme	nt Mana	iger	5.5	First Le	vel Approver			



Ship to:

Attention:

## **NEVADA IRRIGATION DISTRICT**

No.	23-	10	17	11
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Date:

Delivery Required by:		\	/ia	Due [	Date		To be filled in by Purchasing Dept.				
				Dept Code	Expense Code	Proj/Fac Code	Terms F.O.B.				
Quantity		Description					P.O. No.	Vendor	Unit Price	Total	
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							Signed				
General Manager Finance App		Finance Appro	ver D	epartme	nt Mana	ger		First Lev	el Approver		