



Technical Memorandum

**To: Regional Monitoring Program Steering Committee
BACWA Executive Board and Committees**

From: Mary Cousins, BACWA Regulatory Program Manager

**Subject: Cost Allocation for RMP CEC Studies to be funded by Amended Monitoring
& Reporting Order**

Date: October 22, 2021

Background

On May 28, 2021, the Bay Area Clean Water Agencies (BACWA) submitted a proposal to the Regional Water Board titled *Proposed Evolution of the 2016 Alternate Monitoring & Reporting Program to Add Support to the Regional Monitoring Program* ("BACWA Proposal"). The proposal requested that the Regional Water Board replace Order R2-2016-0008 (*Alternate Monitoring and Reporting Requirements for Municipal Wastewater Dischargers for the Purpose of Adding Support to the San Francisco Bay Regional Monitoring Program (RMP)*, or "2016 Order")) with a new set of monitoring frequency reductions to continue supporting RMP monitoring of Constituents of Emerging Concern (CECs).

Based on this proposal, on October 11, 2021, the Regional Water Board released a Tentative Order proposing amendments to individual NPDES permits, the Mercury & PCBs watershed permit, and the 2016 Order. The Tentative Order contains fewer monitoring reductions than the full list included in the BACWA proposal, but the overall approach is consistent with the BACWA proposal.

The Fact Sheet of the Tentative Order (page F-12) identifies a total funding level of \$320,000 to be provided to the RMP for CEC studies. This amount is comparable to the monitoring reductions from the 2016 Order plus 16% due to inflation over the last five years. The funding level would be adjusted annually to keep pace with inflation, similar to other RMP fee adjustments (about 3% per year in some recent years). The expectation is that the funding level would *not* be adjusted upwards in the future for reasons other than inflation.

In late 2021, each Bay discharger is expected to receive an invoice for 2022 RMP fees that includes a supplemental fee line item to reflect the total cost savings of this program. This approach and the cost sharing proposal in this memo have been shared with the RMP Steering Committee and SFEI administrative staff responsible for generating RMP invoices. This memo describes the planned method for splitting the \$320,000 among Bay dischargers.

There are three dischargers that are likely to have expired NPDES permits at the time the Tentative Order is heard by the Regional Water Board (anticipated date: December 15, 2021): SFPUC's Southeast Plant, Calistoga, and Napa Sanitation District. Expired permits are administratively extended, but they cannot be amended. As a result, the transition from the 2016 Order to the terms of the new Tentative Order will be delayed for these dischargers. The cost allocation method described below is applicable to these agencies over the long term, and will be used once individual NPDES permits for these three agencies are reissued (i.e., for future invoices issued for Calendar Year 2023 or beyond). The following transition plan will be used:

- Napa and Calistoga opted in to the 2016 Order, and will continue to be covered by the 2016 Order. Therefore, invoices for Calendar Year 2022 will use values from the 2016 Order.
- SFPUC's Southeast Plant did not opt in to the 2016 Order, so values from the new cost allocation corresponding to the Tentative Order will be used for Calendar Year 2022 invoices.

1. Cost Allocation Methodology

This memo proposes a cost allocation method to divide the total funding level for RMP CECs studies among 35 Bay dischargers. Each discharger is assigned a percentage of the overall funding level, and this percentage would be fixed in time going forward. The total fee amount would increase to keep pace with inflation, but each agency's proportional share would remain fixed.

The cost allocation is based primarily on expected median cost savings from the Tentative Order monitoring reductions. **Table 1** below summarizes the estimated total cost savings from each element of the Tentative Order, and the allocation method for each.

Table 1. Estimated Total Cost Savings from Tentative Order

Parameter	Estimated Cost Savings (\$/Year for Region)	Cost Allocation Method
a. Dioxin-TEQ	\$40,000	Estimated savings specific to each Discharger
b. Effluent VOCs and BNAs	\$26,000	
c. PCBs (as aroclors)	\$13,000	
d. Effluent Mercury	\$123,000	
e. Influent Mercury	\$6,000	
f. Influent VOCs and BNAs	\$12,000	
g. Biosolids VOCs and BNAs	\$8,000	
Subtotal	\$228,000	
h. Chronic Toxicity	\$92,000 (See note in text below)	Split evenly among 31 "Major" Dischargers (> 1 MGD)
Total	\$320,000	

In the table above, the estimated cost savings for items (a) through (g) are based on the median unit costs identified in the May 2021 BACWA proposal combined with the specific monitoring reductions proposed in the Tentative Order. Costs for items (e) and (g) have been adjusted to correct a limited number of monitoring frequency reductions that were incorrect in the original proposal.

The total estimated cost savings for item (h), chronic toxicity screening studies, is listed as \$92,000 per year in Table 1. This reflects a downward adjustment from the cost savings of \$140,000 per year identified by the Regional Water Board in the Tentative Order. The cost savings from this item are less certain than items (a) through (g) because they depend on adoption of the Statewide Toxicity Provisions. This line item for chronic toxicity was adjusted downwards to bring the overall total to equal \$320,000 exactly, after rounding all dischargers' contributions to the nearest 0.1%.

Costs associated with item (h) for chronic toxicity were divided equally among the 31 "Major" dischargers (those with flow capacity > 1 MGD), all of which have chronic toxicity screening studies included in their respective individual NPDES permits.

Crockett Community Services District's Port Costa facility and Sanitary District No. 5 of Marin County's Paradise Cove treatment facility are not included in the cost sharing proposal (i.e., the cost allocation is set to 0%). The estimated cost savings for these two agencies is less than \$200 per year, and neither contributes to core RMP fees. The effort of generating invoices for these two facilities would place an administrative burden on the RMP with very little financial benefit.

Estimated cost savings for each discharger are shown in the attached **Table 2** at the end of this memorandum. Dischargers are listed in alphabetical order. There are some minor discrepancies between the totals in Table 1 and Table 2 due to rounding. Also, some cost savings for individual agencies are negative for specific monitoring reductions (example: Influent VOCs and BNAs for Delta Diablo). This is the case when an agency will be required to do more monitoring, not less, as a result of the Tentative Order. Delta Diablo and SSF-San Bruno reported that their respective agencies are already monitoring at the higher frequency by choice, and the change will not actually result in increased costs. Similarly, EBDA agencies are already monitoring for influent mercury more frequently than the frequency of 1/year listed in their individual NPDES permit.

A comparison between the planned supplemental fees and those identified in the 2016 Order are shown below in **Figure 1** through **Figure 4** for each discharger. Dischargers are shown in order of dry weather flow capacity (MGD), from smallest to largest. A brief discussion follows the figures.

Figure 1. Supplemental Fees for Dischargers with 0.5 – 3 MGD Capacity

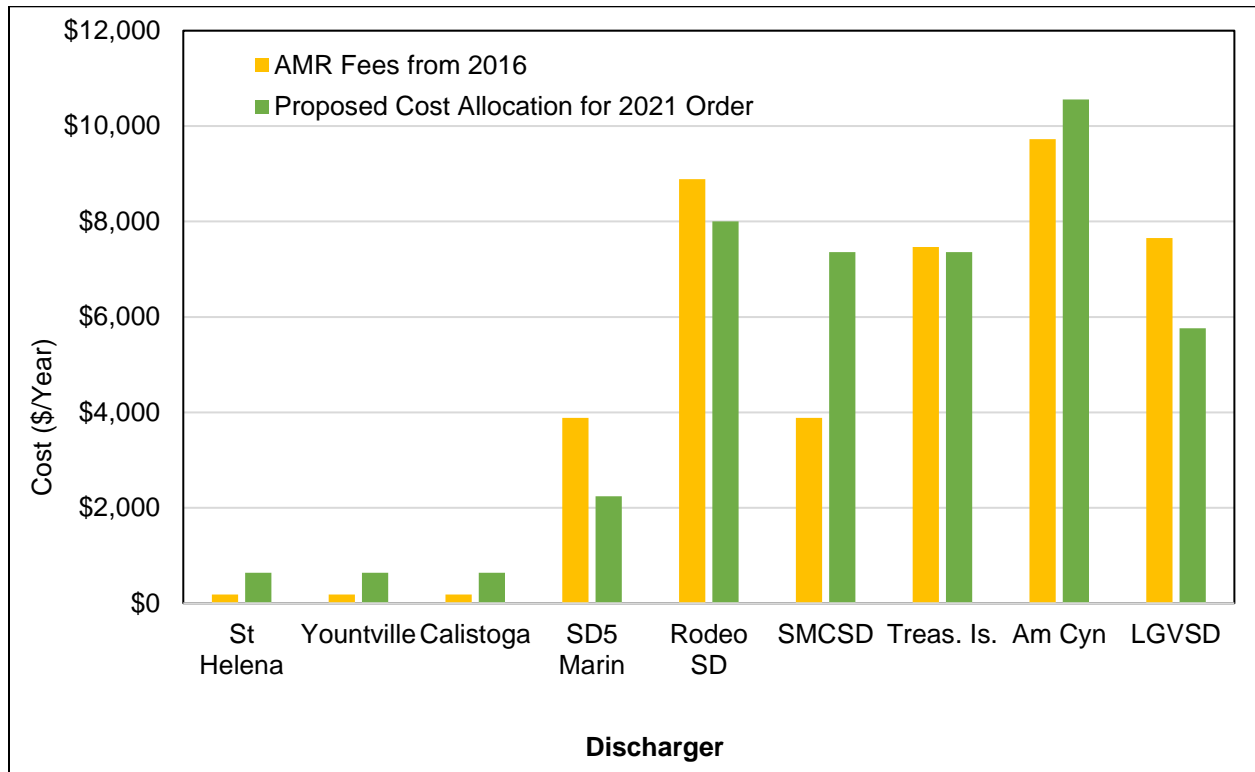


Figure 2. Supplemental Fees for Dischargers with 3-7 MGD Capacity

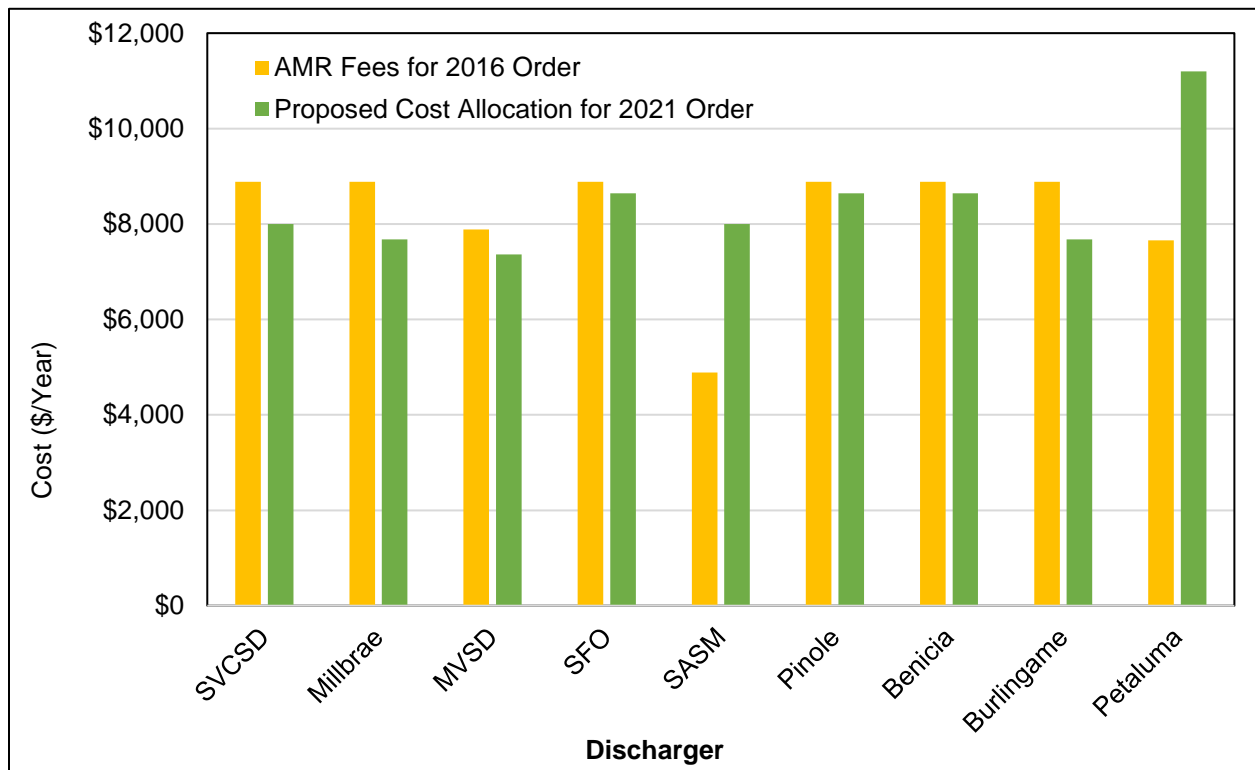


Figure 3. Supplemental Fees for Dischargers with 7-29 MGD Capacity

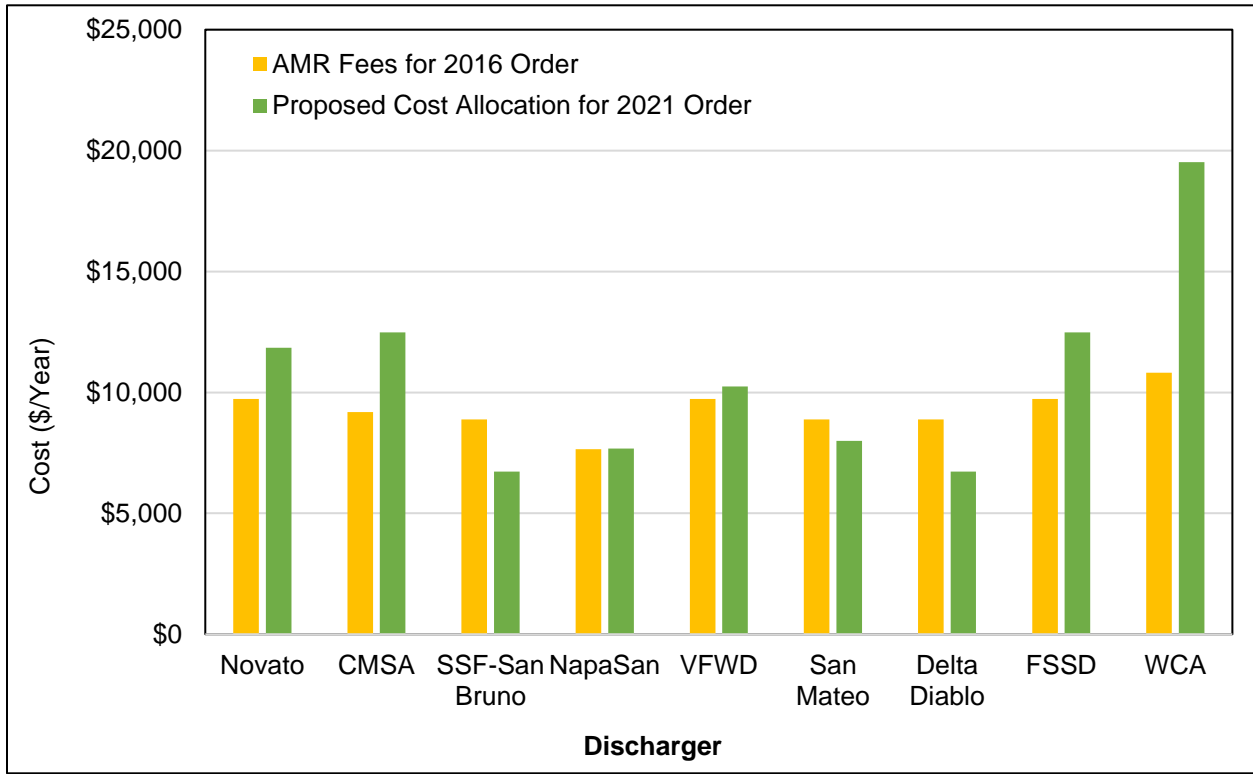
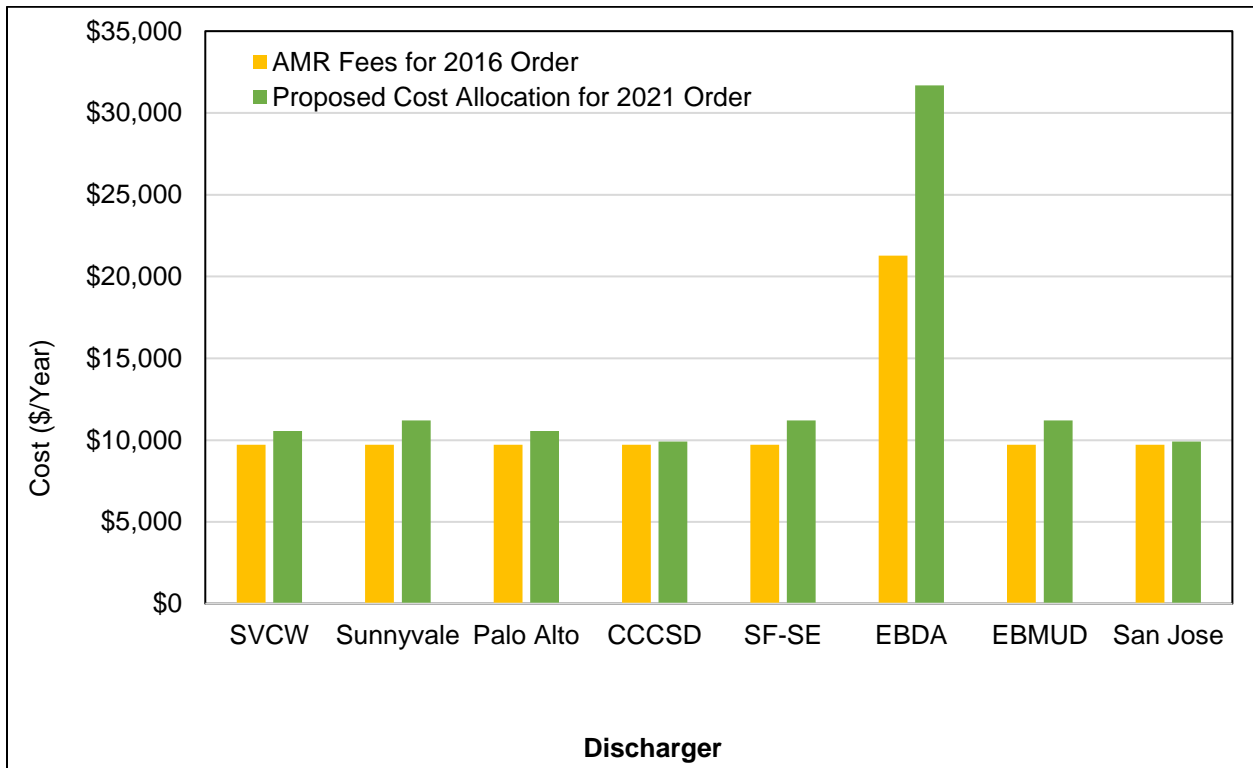


Figure 4. Supplemental Fes for Dischargers with Capacity > 29 MGD



2. Discussion of Cost Impacts

- For most dischargers, the fees from the 2016 Order are similar in magnitude to the fee allocation for the 2021 Tentative Order. Some dischargers would see an increase, while others would see a decrease. Variability between dischargers in the direction of the change (increase vs. decrease) reflects the different pretreatment program monitoring requirements found in current NPDES permits.
- For two large dischargers – EBDA and West County Agency – costs show a significant increase compared to the 2016 Order. The reason for the change is that the Tentative Order contains several monitoring reductions related to pretreatment programs. These monitoring reductions were not included in the 2016 Order, and they scale with the number of pretreatment programs operated by each agency (6 in the case of EBDA, 2 in the case of West County Agency). For each of these dischargers, multiple agencies will benefit from decreased pretreatment-related monitoring requirements for influent, effluent, and biosolids.
- Several medium-sized dischargers have a slightly higher cost allocation than larger dischargers (for example, Novato, CMSA, and FSSD in **Figure 3** compared to EBMUD and San Jose in **Figure 4**). Compared to the large agencies, these medium-sized dischargers will see more significant reductions in their pretreatment program monitoring due to the low number of Significant Industrial Users (5 or fewer). As a result, the potential cost savings are higher for these medium-sized agencies.

Table 2. Comparison of Estimated Cost Savings and Fee Allocation for each Discharger

Display Name	Current AMR Fees from 2016 Order	Permitted ADWF (MGD)	Estimated Cost Savings from Monitoring Reductions in 2021 Tentative Order (See Table 1)									Fee Allocation for 2021 Tentative Order	
			a. Dioxin-TEQ	b. Effluent VOCs and BNAs	c. PCB Aroclors	d. Effluent Mercury	e. Influent Mercury	f. Influent VOCs and BNAs	g. Biosolids VOCs and BNAs	h. Chronic Toxicity Screening	Total	% Allocation (Rounded to 0.1%)	Rounded Fee Estimate
American Canyon	\$9,726	2.5	\$640	\$1,332	\$396	\$3,200	\$560	\$1,332	\$0	\$2,960	\$10,420	3.3%	\$10,560
Benicia	\$8,886	4.5	\$1,440	\$592	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$8,588	2.7%	\$8,640
Burlingame NBSU	\$8,886	5.5	\$1,440	\$0	\$396	\$3,200	-\$210	\$0	\$0	\$2,960	\$7,786	2.4%	\$7,680
Calistoga	\$184	0.84	\$0	\$0	\$176	\$400	\$0	\$0	\$0	\$0	\$576	0.2%	\$640 ⁽¹⁾
CCCSD	\$9,726	53.8	\$1,440	\$0	\$396	\$3,200	\$560	\$740	\$610	\$2,960	\$9,906	3.1%	\$9,920
Central Marin Sanitation Agency	\$9,181	10	\$1,440	\$1,332	\$396	\$3,200	\$560	\$1,332	\$1,098	\$2,960	\$12,318	3.9%	\$12,480
Crockett CSD (Port Costa)	\$184	0.033	\$0	\$0	\$176	\$0	\$0	\$0	\$0	\$0	\$0 ⁽²⁾	0.0%	\$0
Delta Diablo	\$8,886	19.5	\$1,440	\$0	\$396	\$3,200	-\$280	-\$592	-\$488	\$2,960	\$6,636	2.1%	\$6,720
EBDA Dischargers	\$21,282	107.8	\$1,440	\$4,884	\$396	\$22,400	-\$1,260	\$592	\$488	\$2,960	\$31,900	9.9%	\$31,680
EBMUD	\$9,726	120	\$1,440	\$1,332	\$396	\$3,200	\$560	\$740	\$610	\$2,960	\$11,238	3.5%	\$11,200
Fairfield-Suisun Sewer District	\$9,726	23.7	\$1,440	\$1,332	\$396	\$3,200	\$560	\$1,332	\$1,098	\$2,960	\$12,318	3.9%	\$12,480
Las Gallinas Valley Sanitary District	\$7,656	2.92	\$640	\$0	\$396	\$1,600	\$0	\$0	\$0	\$2,960	\$5,596	1.8%	\$5,760
Millbrae	\$8,886	3	\$1,440	\$0	\$396	\$3,200	-\$280	\$0	\$0	\$2,960	\$7,716	2.4%	\$7,680
Mt. View Sanitary District	\$7,886	3.2	\$640	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,196	2.3%	\$7,360
Napa Sanitation District	\$7,656	15.4	\$640	\$592	\$396	\$2,400	\$560	\$0	\$0	\$2,960	\$7,548	2.4%	\$7,680 ⁽¹⁾
Novato Sanitary District	\$9,726	7	\$1,440	\$1,332	\$396	\$3,200	\$560	\$1,332	\$488	\$2,960	\$11,708	3.7%	\$11,840
Palo Alto	\$9,726	39	\$1,440	\$1,332	\$396	\$3,200	\$560	\$740	\$0	\$2,960	\$10,628	3.3%	\$10,560
Petaluma	\$7,656	6.7	\$640	\$1,332	\$396	\$1,600	\$560	\$1,332	\$2,318	\$2,960	\$11,138	3.5%	\$11,200
Pinole	\$8,886	4.06	\$1,440	\$592	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$8,588	2.7%	\$8,640
Rodeo Sanitary District	\$8,886	1.14	\$1,440	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,996	2.5%	\$8,000
Saint Helena	\$184	0.5	\$0	\$0	\$176	\$400	\$0	\$0	\$0	\$0	\$576	0.2%	\$640

Display Name	Current AMR Fees from 2016 Order	Permitted ADWF (MGD)	Estimated Cost Savings from Monitoring Reductions in 2021 Tentative Order (See Table 1)									Fee Allocation for 2021 Tentative Order	
			a. Dioxin-TEQ	b. Effluent VOCs and BNAs	c. PCB Aroclors	d. Effluent Mercury	e. Influent Mercury	f. Influent VOCs and BNAs	g. Biosolids VOCs and BNAs	h. Chronic Toxicity Screening	Total	% Allocation (Rounded to 0.1%)	Rounded Fee Estimate
San Jose / Santa Clara	\$9,726	167	\$1,440	\$1,332	\$396	\$3,200	\$560	\$0	\$0	\$2,960	\$9,888	3.1%	\$9,920
San Mateo	\$8,886	15.7	\$1,440	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,996	2.5%	\$8,000
SD No. 5 of Marin Co.(Paradise Cove)	\$184	0.04	\$0	\$0	\$176	\$0	\$0	\$0	\$0	\$0	\$0 ⁽²⁾	0.0%	\$0
SD No. 5 of Marin County (Tiburon)	\$3,886	0.98	\$640	\$592	\$176	\$800	\$0	\$0	\$0	\$0	\$2,208	0.7%	\$2,240
Sausalito-Marín City Sanitary District	\$3,886	1.8	\$640	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,196	2.3%	\$7,360
Sewerage Agency of Southern Marin	\$4,886	3.6	\$1,440	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,996	2.5%	\$8,000
SFO	\$8,886	3.4	\$1,440	\$592	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$8,588	2.7%	\$8,640
SFPUC Southeast	\$9,726	85.4	\$1,440	\$1,332	\$396	\$3,200	\$560	\$740	\$610	\$2,960	\$11,238	3.5%	\$11,200
Silicon Valley Clean Water	\$9,726	29	\$1,440	\$1,332	\$396	\$3,200	\$0	\$740	\$610	\$2,960	\$10,678	3.3%	\$10,560
Sonoma Valley County SD	\$8,886	3	\$1,440	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,996	2.5%	\$8,000
South SF-San Bruno	\$8,886	13	\$1,440	\$0	\$396	\$3,200	-\$280	-\$592	-\$488	\$2,960	\$6,636	2.1%	\$6,720
Sunnyvale	\$9,726	29.5	\$1,440	\$1,332	\$396	\$3,200	\$560	\$740	\$610	\$2,960	\$11,238	3.5%	\$11,200
Treasure Island	\$7,466	2	\$640	\$0	\$396	\$3,200	\$0	\$0	\$0	\$2,960	\$7,196	2.3%	\$7,360
Vallejo Flood and Wastewater District	\$9,726	15.5	\$1,440	\$1,332	\$396	\$3,200	\$560	\$740	-\$488	\$2,960	\$10,140	3.2%	\$10,240
West County Agency Dischargers	\$10,820	28.5	\$1,440	\$2,368	\$396	\$9,600	\$1,120	\$592	\$1,220	\$2,960	\$19,696	6.1%	\$19,520
Yountville	\$184	0.55	\$0	\$0	\$176	\$400	\$0	\$0	\$0	\$0	\$576	0.2%	\$640
Total	\$289,027	830	\$39,680	\$26,196	\$13,332	\$122,800	\$6,090	\$11,840	\$8,296	\$91,766	\$319,648	100%	\$320,960

Notes

1. This discharger's NPDES permit cannot be amended at this time because the expiration date has passed. The fee shown above would be applied once the individual NPDES permits is reissued. In the interim, the 2016 Order will continue to apply for this discharger. This approach has been shared with SFEI staff.
2. The total for this discharger was set to \$0 to reduce the administrative burden for tracking these dischargers, which are not core RMP participants.