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San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

September 15, 2023

To: Barbara Hale, Assistant General Manager, Power
Ramon Abueg, Deputy Manager, Power Operations
Richard Stephens, Utility Services Manager
David Carter, Materials Coordinator
Bart Murphy, Materials Coordinator

Cc: Ronald P. Flynn, Deputy General Manager
Nancy L. Hom, Assistant General Manager, Business Services and Chief Financial Officer
Vivian Chen, Deputy Chief Financial Officer
Laura Busch, Acting Deputy Chief Financial Officer, Budget Director
Irella Blackwood, Audit Director
Jennifer Hopkins, Information Technology Services Director

Subject: Fiscal Year End 2022-2023
Inventory Count – Hetch Hetchy Enterprise, Hetchy Power In-City Warehouse

Dear Ms. Hale, Mr. Abueg, Mr. Stephens, Mr. Carter, and Mr. Murphy:

The San Francisco Public Utilities Commission (SFPUC) engaged Crowe LLP (Crowe) to perform full inventory count services for three enterprise funds including the Wastewater Enterprise, Water Enterprise, and Hetch Hetchy Enterprise.¹ This report represents results of Crowe’s full count of the Hetch Hetchy Enterprise – Hetchy Power In-City inventory.

A. Scope of Inventory Work

The SFPUC requested Crowe to perform an annual full inventory count of these enterprises to test whether significant variances exist between the physical count and the records in the SFPUC’s Maximo Inventory Tracking System (Maximo), to determine the cause of variances, and to determine amounts that need to be adjusted in Maximo. The SFPUC requested reporting of the analysis, findings, and recommendations consistent with the format requested by SFPUC’s Financial Services Bureau.

B. Warehouse Locations

The locations for the Hetchy Power In-City physical inventory were:

Hetchy Power In-City Warehouse
Pier 23
San Francisco, California 94111

Treasure Island
Lot 69 (End of Avenue M)
San Francisco, California 94130

¹ Note that some of the enterprises have multiple warehouse locations.

On June 20 and June 21, 2023, Crowe visited the locations above and conducted the FY 2022-2023 full inventory count that is the subject of this report. The last full inventory count of the locations above was performed by Crowe for FY 2021-2022 on June 21, 2022. In **Table 1** below, we provide key data^{2,3} from both full inventory counts.

Table 1
San Francisco Public Utilities Commission
Hetchy Power In-City Warehouse Inventory Count
Comparison with Prior Physical Inventory Counts⁴
(As of June 21, 2023)

Description	FY 2022-2023		FY 2021-2022	
	Items	Value	Items	Value
Total Inventory (per Maximo)	1,318	\$ 1,372,997	1,364	\$ 1,439,946
Total Inventory Variance (per Crowe's Count)	475	(75,192)	570	(80,224)
Total Inventory Variance (as a percentage of Total Inventory)	36.0%	(5.5%)	41.8%	(5.6%)

Results

As indicated in Table 1, variances were identified between Crowe’s full inventory count and the count reported in the Maximo system. The two findings that follow explain the variances in counts and the difficulty in locating inventory items. Crowe’s recommendations related to those findings are also included. Management responses to each finding were provided by the Hetchy Power In-City management team on August 31, 2023.

Finding #1 – Physical Inventory Counts Differed from Maximo Counts

Condition:

Of the 1,318 items we counted, 475 items, or 36.0%, had a variance between their physical count and their count in Maximo. This is a recurring finding. Based on the physical count, and using the average cost in Maximo, we determined that the total value of the variances in the Hetchy Power In-City inventory was (\$75,192), or (5.5%) of the total inventory value of \$1,372,997 in Maximo.⁵

We found 188 positive variances (where the physical count was greater than the Maximo inventory count) which totaled \$88,878. We found 287 negative variances (where the physical count was less than the Maximo inventory count) which totaled (\$164,071). In **Table 2** below we list 27 items with variances that are either above \$2,000 or below (\$2,000). Together, these 27 items represented (\$53,001), or about 70% of the total variance of (\$75,192).

² In this report, percentages are rounded to one decimal place. Monetary values are rounded to the nearest whole dollar unless doing so would obscure the data, in which case they are presented without rounding.

³ Crowe did not perform any procedures related to the assigned value in the Maximo system.

⁴ The signs of both Total Inventory Variance (per Crowe’s Count) and Total Inventory Variance (as a percentage of Total Inventory) in Table 1 are presented in a different fashion than in the prior year’s report, where they are called Count Discrepancies and Percentage of Discrepancies respectively. In Table 1 of the FY 2021-2022 report, in the FY 2021-2022 Value column, both figures were shown as positive values. Table 1 of this report clarifies this data by presenting the FY 2021-2022 figures as negative inventory adjustments.

⁵ The (\$75,192) variance is the difference between \$676,374.40, which is the total value of the 475 items with variances using Crowe’s physical count for each item, and \$751,566.85, which is the total value of the 475 items with variances using the Maximo count for each item.

Table 2
San Francisco Public Utilities Commission
Hetchy Power In-City Warehouse Inventory Count
List of Items with Variance Above \$2,000 or Below (\$2,000)

Item Number	Description	Item Code	Maximo 6.16.23	Crowe 6.21.23	Variance	Average Cost	Cost of Variance
1	BUSS FUSEHOLDER, HEX-AA	PE-10-0067	137	233	96	\$ 121.99	\$ 11,711.51
2	STEEL POLE, 25.FT, SINGLE ARM	PE-10-0480	11	24	13	750.00	9,750.00
3	4M /66R BULB, PHILIPS, PS40 LAMP	PE-10-1876	46	748	702	12.00	8,424.00
4	BUSS FUSEHOLDER, HEX-BB	PE-10-1414	89	306	217	19.21	4,167.96
5	Bolt Everdur 4" x 1/2"	PE-10-1032	77	329	252	14.04	3,538.41
6	60 AMP FUSES	PE-10-0083	119	430	311	11.21	3,486.09
7	6 FOOT ROUND BASE, ARM ASSEMBLY AMERON #3ST6A	PE-10-0365	11	19	8	395.05	3,160.41
8	STEEL POLE, 33 FT, DOUBLE ARM	PE-10-0488	5	8	3	1,050.00	3,150.00
9	LED PEs	PE-10-0029	202	286	84	28.17	2,366.04
10	N16 STREET LIGHTING CHRISTY BOX LID OLD	PE-10-0351	1,204	1,119	(85)	24.50	(2,082.50)
11	POLES, WOOD 50"	PE-10-0771	11	9	(2)	1,059.30	(2,118.60)
12	POLE, CONCRETE, 28FT, ROUND POE, BASE PLATE, P/N 1C3-28	PE-10-0511	11	10	(1)	2,124.65	(2,124.65)
13	POLE, CONCRETE, 26 FT, OCTAGONAL, DECORATIVE BASE, P/N 5B1-26 (55D)	PE-10-0526	19	18	(1)	2,223.73	(2,223.73)
14	Strain Clamp, Side-Opening-Wedge Deadend 4 Strand Al. to 4/0 Al.	PE-10-0925	30	3	(27)	82.50	(2,227.50)
15	MVR 175/V/BU/PA LAMP	PE-10-0639	110	101	(9)	250.00	(2,250.00)
16	200W INSTANT RESTRIKE LAMP	PE-10-0623	58	0	(58)	39.18	(2,272.27)
17	1000MCMCOP2H LUG PG&E #303461	PE-5935-303461	100	0	(100)	28.55	(2,855.00)
18	High Voltage Sign (Stencil)	PE-10-0959	350	69	(281)	10.20	(2,866.20)
19	Reducing Tap/Stud 15Kv 600/200A PGE 303593	PE-10-1829	25	0	(25)	121.23	(3,030.75)
20	STEEL POLE, 33 FT, SINGLE ARM	PE-10-0487	17	14	(3)	1,050.00	(3,150.00)
21	8 FOOT ROUND BASE, ARM ASSEMBLY, AMERON #3ST8A	PE-10-0364	6	0	(6)	694.26	(4,165.55)
22	STEEL POLE, 28.6, SINGLE ARM	PE-10-0484	7	0	(7)	885.70	(6,199.92)
23	1100 MCM Straight Splice PGE 301434	PE-10-1925	15	0	(15)	556.18	(8,342.70)
24	BUSS FUSEHOLDER, HEJ-BB	PE-10-1394	284	36	(248)	36.43	(9,034.04)
25	POLE, CONCRETE, 29 FT OCTAGONAL, DECORATIVE BASE, P/N 5B129 (56D)	PE-10-0503	22	18	(4)	2,470.61	(9,882.44)
26	6M/66G 6.6A LAMP PS35 LAMP	PE-10-0594	576	46	(530)	30.00	(15,900.00)
27	Tie, Lashing, Nylon	PE-10-1168	569	81	(488)	45.14	(22,029.74)
	Subtotal of Variances Above \$2,000 or Below (\$2,000)						\$ (53,001.17)
	All Other Variances						(22,191.29)
						Total	\$ (75,192.46)

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller's Accounting Policies and Procedures identifies that Departments shall conduct a physical inventory at least annually and ensure that the inventory management system records accurately reflect inventory on hand. Additionally, Section 6.1 (Policy Guidelines) indicates that inventory system records must be promptly adjusted for any discrepancies identified in the physical counts, Departments must periodically review the inventory records for reasonableness and appropriateness of any changes to inventory unit cost, inventory valuation, and unit of measure, and Departments must periodically review the inventory for obsolescence and reasonableness of inventory classification. The Policy Guidelines also indicate that Departments should investigate significant discrepancies between the physical count, the inventory system records, and the accounting records; document the reasons for discrepancy; and take corrective actions to reduce future discrepancies.

Cause:

Hetchy Power In-City warehouse staff identified the following reasons for the differences in this physical count compared to the count in Maximo:

- The warehouse staff conducted a full inventory count three weeks prior to Crowe's full count and identified discrepancies but did not finish correcting them in Maximo. Other than validating counts of items on the weekly Re-Order report, warehouse staff do not typically conduct counts on a continuous or recurring basis.
- System posting errors, by the individual entering the data, where the quantity entered, unit of measure, or unit cost was incorrect.⁶ Warehouse staff do not periodically review inventory records for changes to unit cost or unit of measure; rather, they address these issues as they are discovered.
- As of June 16, 2023, there were 532 items with a current balance of zero in Maximo. Of these, 428 are items which were moved from one location to another and have two Maximo entries, one for each location, but the Maximo entry for the old location was edited to have a zero balance instead of being deleted. The remaining 104 items are either duplicates, obsolete, or stock. Warehouse staff purposely retains obsolete parts in Maximo as they are occasionally reactivated to be issued out for projects that involve repairs of older equipment.
- Some inventory items were used on a project, and updates for these items were not reflected in Maximo.
- Some items were issued for a project, partially used or consumed, and then returned to the warehouse but not re-added to inventory (trucks were cleaned out, resulting in stock returning to the warehouse).
- During the atmospheric storms which caused extensive damage, many items were taken for emergencies during off hours and not documented for warehouse staff to issue out.
- The warehouse is using a contractor crew to do some work and there have been occasions where the contractor crew has taken items without checking with the warehouse.

Effect:

The Hetchy Power In-City inventory value in the Maximo system is overstated by \$75,192.

Recommendation:

Hetchy Power In-City warehouse staff should update the asset inventory counts in Maximo after management approval. The SFPUC Financial Reporting and Analysis division should adjust the General Ledger to reflect the actual cost of inventory on hand. Hetchy Power In-City should investigate the significant discrepancies between the physical counts noted in Tables 1 and 2, the Maximo system records, and the accounting records; document the reasons for discrepancies; and implement corrective actions to reduce future discrepancies. Warehouse staff should periodically review the inventory records to remove duplicate and obsolete items and to ensure the reasonableness and appropriateness of inventory unit cost and unit of measure. Finally, warehouse staff should conduct regular physical inventory cycle counts and compare results with those in Maximo to ensure Maximo data is up-to-date and accurate.

Management Response:

Management concurs with the findings. The warehouse team is implementing various cycle counts. These counts will be based on re-order reports on a weekly basis and routine counts (monthly) based on items usage and value. Warehouse team will also perform reconciliation and consolidate storerooms in the Maximo system, review and reconcile stock versus non-stock items.

⁶ Subsequent to Crowe's inventory count, warehouse staff identified that the average cost reported for item 27 in **Table 2**, PE-10-1168, Nylon Lashing Tie, was incorrectly reported as \$48.14 when it should have been \$0.50 (the unit cost on the last purchase order for that item).

Finding #2 – Some Inventory Was Difficult to Locate

Condition:

While performing the physical count, we had difficulty locating some of the inventory items identified in the Maximo system. Some of the items were located behind other items and recessed which limited access. Other items were not clearly marked with their item numbers or were in a different bin location than the one noted in Maximo.

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller's Accounting Policies and Procedures identifies that Department's should prepare and organize storage for the inventory count.

Cause:

Hetchy Power In-City moved relatively recently to Pier 23 and has been transitioning its entire inventory to this new storage facility. Additionally, several items that were recently determined to be obsolete were commingled with the current inventory items in Maximo (e.g., significant quantities of light bulbs).

Effect:

A third-party cannot easily perform the full inventory counts without the assistance of storekeeper staff. There also is the potential for some inventory items not to be identified.

Recommendation:

For the next annual inventory, Hetchy Power In-City should clearly label and organize all its inventory, particularly the items outside of the storage shelves, so that a third party can easily identify and count the inventory.

Management Response:

Due to the nature of the parts we carry, differentiated by style, by size, and by primary metal type, there will be some difficulties in identification; we are working on other ways to store materials to be ID'd correctly and consistent in storage structure. There will always be a need for staff to assist with the complex nature of Stock items.

Other Matters

This full inventory count did not constitute an audit, examination, review, or compilation of the historical and prospective financial information conducted in accordance with generally accepted auditing standards or with other standards established by the AICPA. Accordingly, Crowe is unable to express an opinion or any other form of assurance with respect to any of the historical or prospective financial information. Crowe did not perform any procedures to verify the Management Responses and Crowe does not provide any assurance regarding the accuracy or completeness of the responses. Any and all amounts referred to in this letter are preliminary and could change should additional procedures be performed. Additionally, issues that are not mentioned here could develop subsequent to the date of this letter that may have impacted Crowe's analysis or that Crowe may cite should additional procedures be performed.

The inventory services did not contemplate obtaining the understanding of internal controls or assessing control risk, tests of accounting records and responses to inquiries by obtaining corroborating evidential matter, and certain other procedures ordinarily performed during an audit or examination. Thus, this engagement did not provide assurance that we became aware of significant matters that would be disclosed in an audit or examination.

As part of this inventory, the SFPUC agreed to be responsible to make all management decisions and perform all management functions; designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management to oversee our services; evaluate the adequacy and results of the services performed; accept responsibility for the results of the services; and establish and maintain internal controls, including monitoring ongoing activities. The SFPUC has ultimate authority for making changes to inventory reported in its Maximo system and on its financial statements.

Crowe's fees are not dependent upon the outcome of this report and Crowe is independent with respect to any other economic interests.

We appreciate the contribution of SFPUC management and your input and direction on this project. We also thank Hetchy Power In-City management and staff for assisting providing access to the inventory and for timely responses to our requests.

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San Francisco, CA 94102

September 15, 2023

To: Joel Prather, Acting Assistant General Manager, Wastewater Enterprise
Steve Jones, Acting Maintenance Manager
Christian Losno, Materials Coordinator
Jorge Gonzalez, Assistant Supervisor of Stores & Equipment

Cc: Ronald P. Flynn, Deputy General Manager
Nancy L. Hom, Assistant General Manager Business Services and Chief Financial Officer
Vivian Chen, Deputy Chief Financial Officer
Laura Busch, Acting Deputy Chief Financial Officer, Budget Director
Irella Blackwood, Audit Director
Jennifer Hopkins, Information Technology Services Director

Subject: Fiscal Year End 2022-2023
Inventory Count – Wastewater Enterprise Warehouse

Dear Mr. Prather, Jones, Losno, and Gonzalez:

The San Francisco Public Utilities Commission (SFPUC) engaged Crowe LLP (Crowe) to perform full inventory count services for three enterprise funds including the Wastewater Enterprise, Water Enterprise, and Hetch Hetchy Enterprise.¹ This report represents results of Crowe's full count of the Wastewater Enterprise inventory (Inventory).

A. Scope of Inventory Work

The SFPUC requested Crowe to perform an annual full inventory count of these enterprises to test whether significant variances exist between the physical count and the records in the SFPUC's Maximo Inventory Tracking System (Maximo), to determine the cause of variances, and to determine amounts that need to be adjusted in Maximo. The SFPUC requested reporting of the analysis findings, and recommendations consistent with the format requested by SFPUC's Financial Services Bureau.

B. Warehouse Location

The location for the Wastewater Enterprise physical inventory was:

2725 Oakdale Avenue
San Francisco, California 94124

On June 28 and June 29, 2023, Crowe visited the location above and conducted the FY 2022-2023 full inventory count that is the subject of this report. The last full inventory count of the location above was

¹ Note that some of the enterprises have multiple warehouse locations.

performed by Crowe for FY 2021-2022 on June 23, 2022. In **Table 1** below, we provide key data^{2,3} from both full inventory counts.

Table 1
San Francisco Public Utilities Commission
Wastewater Inventory Count
Comparison with Prior Physical Inventory Counts⁴
(As of June 29, 2023)

Description	FY 2022-2023		FY 2021-2022	
	Items	Value	Items	Value
Total Inventory (per Maximo)	3,757	\$ 3,356,658	3,871	\$ 2,957,510
Total Inventory Variance (per Crowe's Count)	13	(2,048)	109	(22,955)
Total Inventory Variance (as a percentage of Total Inventory)	0.3%	(0.1%)	2.8%	(0.8%)

Results

As indicated in Table 1, variances were identified between Crowe’s full inventory count and the count reported in the Maximo system. The following finding explains the variances in counts. Crowe’s recommendation related to this finding is also included. A management response was provided by the Wastewater management team on September 11, 2023.

Finding #1 – Physical Inventory Counts Differed from Maximo Report Counts

Condition:

Of the 3,757 items we counted, 13, or 0.3%, had a variance between their physical count and their count in Maximo.⁵ Based on the physical count, and using the average cost in Maximo, we determined that the total value of the variances in the Wastewater Enterprise inventory was (\$2,048), or (0.1%) of the total inventory value of \$3,356,658 in Maximo.⁶

We found 3 positive variances (where the physical count was greater than the Maximo inventory count) which totaled \$121. We found 10 negative variances (where the physical count was less than the Maximo inventory count) which totaled (\$2,168).^{7,8} In **Table 2** below we list the 13 items with variances from the Maximo count.

² In this report, percentages are rounded to one decimal place. Monetary values are rounded to the nearest whole dollar unless doing so would obscure the data, in which case they are presented without rounding.

³ Crowe did not perform any procedures related to the assigned value in the Maximo system.

⁴ The signs of both Total Inventory Variance (per Crowe’s Count) and Total Inventory Variance (as a percentage of Total Inventory) in Table 1 are presented in a different fashion than in the prior year’s report, where they are called Count Discrepancies and Percentage of Discrepancies respectively. In Table 1 of the FY 2021-2022 report, in the FY 2021-2022 Value column, both figures were shown as positive values. Table 1 of this report clarifies this data by presenting the FY 2021-2022 figures as negative inventory adjustments.

⁵ Of the 13 items with a difference between the physical count and the count in Maximo, 8 are non-stock items which should not have been in Maximo. If the total variance in the number of items counted is adjusted to exclude the eight non-stock items, it falls from 0.3% (13 items divided by 3,757 items) to 0.1% (5 items divided by 3,757 items).

⁶ The (\$2,048) variance is the difference between \$1,933, which is the total value of the 13 items with variances using Crowe’s physical count for each item, and \$3,981, which is the total value of the 13 items with variances using the Maximo count for each item.

⁷ The positive variance of \$121 and the negative variance of (\$2,168) are rounded figures which sum to (\$2,047). If the unrounded variances are summed and then rounded, the total is (\$2,048) as shown in Table 1.

⁸ If the negative variance amount is adjusted to exclude the 8 non-stock items, it changes from (\$2,168) to (\$9).

Table 2
San Francisco Public Utilities Commission
Wastewater Inventory Count
List of All Items with Variances

Item Number	Description	Non-stock Item	Item Code	Issue Unit	Maximo Count	Crowe Count	Variance	Average Cost	Variance
1	GLOVES, LATEX, YELLOW, 5280P, MEDIUM	No	ASFTP-0760	PR	216	217	1	\$ 1.90	\$ 1.90
2	TAG (WITH GROMMET), LOCKOUT (DANGER-DO NOT OPERATE-MY LIFE IS ON THE LINE), RED	No	ASFTS-1011	EA	1025	1050	25	1.12	28.07
3	BOTTLE, PLASTIC; "TOLCO"; SPRAY, 32 OZ; MAX ISSUE: 2 EA	No	JSUPP-BT32	EA	80	79	-1	0.56	(0.56)
4	SOAP, HAND, POWDERED, WHITE, W/BORAX, 8/5LB BX/CS	No	JSUPP-SP01	EA	16	26	10	9.09	90.89
5	JUG, 1 GALLON, W/ HANDLE AND CAP, TRANSLUCENT PLASTIC, " ULINE" PN: S-10746, 12/CASE	No	JSUPP-JG10	EA	16	14	-2	4.44	(8.88)
6	Discrete Output module, "Modicon", BMXDAO1605, M340	Yes	SMODI-0001	EA	1	0	-1	425.37	(425.37)
7	GASKET, BUSH CAP, ALFA LAVAL, PD434951	Yes	GGSKT-0273	EA	10	0	-10	7.20	(72.02)
8	BEARING, FAG, 22215 15EAS.MK.C3	Yes	GBRNG-0565	EA	3	0	-3	86.45	(259.35)
9	BEARING, ROLLER, NSK, 6206ZC3E	Yes	ABRG1-1981	EA	3	0	-3	6.24	(18.72)
10	BEARING, SKF, 22207	Yes	GBRNG-0567	EA	2	0	-2	101.57	(203.14)
11	BEARING, 1-15/16 IN	Yes	GBRNG-0572	EA	2	0	-2	180.00	(360.00)
12	BEARING, EXPANSION STEERING	Yes	GBRNG-0573	EA	2	0	-2	270.00	(540.00)
13	REBUILD KIT, ACTUATOR (ST-600), "JAMESBURY" PN: RKT-43	Yes	GACTU-0009	EA	1	0	-1	280.43	(280.43)
									\$ (2,047.61)

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller’s Accounting Policies and Procedures identifies that Departments shall conduct a physical inventory at least annually and ensure that the inventory management system records accurately reflect inventory on hand. Additionally, Section 6.1 (Policy Guidelines) indicates that inventory system records must be promptly adjusted for any discrepancies identified in the physical counts, Departments must periodically review the inventory records for reasonableness and appropriateness of any changes to inventory unit cost, inventory valuation, and unit of measure, and Departments must periodically review the inventory for obsolescence and reasonableness of inventory classification. The Policy Guidelines also indicate that Departments should investigate significant discrepancies between the physical count, the inventory system records, and the accounting records; document the reasons for discrepancy; and take corrective actions to reduce future discrepancies.

Cause:

Variations were caused by minor miscounts during periodic cycle counts and non-stock items which were classified as inventory items in Maximo.

Effect:

The Wastewater Enterprise inventory value in the Maximo system is overstated by \$2,048.

Recommendation:

The Wastewater warehouse staff should update the asset inventory counts in Maximo system after management approval. The SFPUC Financial Reporting and Analysis division should adjust the General Ledger to reflect the actual cost of inventory on hand. The Wastewater Enterprise should investigate the discrepancies between the physical counts noted in Tables 1 and 2, the Maximo system records, and the accounting records; document the reasons for discrepancies; and implement corrective actions to reduce future discrepancies.

Management Response:

WWE concurs with the findings presented in this report and we are pleased to see a marked improvement from last year. One of our goals over the past year was to improve our cycle count processes, with particular focus on high dollar items. We feel that we succeeded here and look forward to continuing our improvements across all WWE warehouse functions.

Other Matters


This full inventory count did not constitute an audit, examination, review, or compilation of the historical and prospective financial information conducted in accordance with generally accepted auditing standards or with other standards established by the AICPA. Accordingly, Crowe is unable to express an opinion or any other form of assurance with respect to any of the historical or prospective financial information. Crowe did not perform any procedures to verify the Management Responses and Crowe does not provide any assurance regarding the accuracy or completeness of the responses. Any and all amounts referred to in this letter are preliminary and could change should additional procedures be performed. Additionally, issues that are not mentioned here could develop subsequent to the date of this letter that may have impacted Crowe's analysis or that Crowe may cite should additional procedures be performed.

The inventory services did not contemplate obtaining the understanding of internal controls or assessing control risk, tests of accounting records and responses to inquiries by obtaining corroborating evidential matter, and certain other procedures ordinarily performed during an audit or examination. Thus, this engagement did not provide assurance that we became aware of significant matters that would be disclosed in an audit or examination.

As part of this inventory, the SFPUC agreed to be responsible to: make all management decisions and perform all management functions; designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management to oversee our services; evaluate the adequacy and results of the services performed; accept responsibility for the results of the services; and establish and maintain internal controls, including monitoring ongoing activities. The SFPUC has ultimate authority for making changes to inventory reported in its Maximo system and on its financial statements.

Crowe's fees are not dependent upon the outcome of this report and Crowe is independent with respect to any other economic interests.

We appreciate the contribution of SFPUC management and your input and direction on this project. We also thank Wastewater Enterprise management and staff for assisting providing access to the inventory and for timely responses to our requests.



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September 15, 2023

To: Steve Ritchie, Assistant General Manager, Water Enterprise
Margaret Hannaford, Division Manager, Hetch Hetchy Water/Moccasin
Cheryl Sperry, Administrative Services Manager
Ray Emerald, Assistant Materials Coordinator

Cc: Ronald P. Flynn, Deputy General Manager
Nancy L. Hom, Assistant General Manager, Business Services and Chief Financial Officer
Vivian Chen, Deputy Chief Financial Officer
Laura Busch, Acting Deputy Chief Financial Officer, Budget Director
Irella Blackwood, Audit Director
Jennifer Hopkins, Information Technology Services Director

Subject: Fiscal Year End 2022-2023
Inventory Count – Hetch Hetchy Enterprise, Moccasin Warehouse

Dear Mr. Ritchie, Ms. Hannaford, Ms. Sperry, and Mr. Emerald:

The San Francisco Public Utilities Commission (SFPUC) engaged Crowe LLP (Crowe) to perform full inventory count services for three enterprise funds including the Wastewater Enterprise, Water Enterprise, and Hetch Hetchy Enterprise.¹ This report represents results of Crowe's full count of the Hetch Hetchy Enterprise – Moccasin Warehouse inventory.

A. Scope of Inventory Work

The SFPUC requested Crowe to perform an annual full inventory count of these enterprises to test whether significant variances exist between the physical count and the records in the SFPUC's Maximo Inventory Tracking System (Maximo), to determine the cause of variances, and to determine amounts that need to be adjusted in Maximo. The SFPUC requested reporting of the analysis, findings, and recommendations consistent with the format requested by SFPUC's Financial Services Bureau.

B. Warehouse Location

The location for the Hetch Hetchy Enterprise physical inventory was:

Moccasin Warehouse
10390 Moccasin Switchback Road
Moccasin, CA 95347

On June 22, 2023, Crowe visited the location above and conducted the FY 2022-2023 full inventory count that is the subject of this report. The last full inventory count of the location above was performed by

¹ Note that some of the enterprises have multiple warehouse locations.

Crowe for FY 2021-2022 on June 28, 2022. In **Table 1** below, we provide key data^{2,3} from both full inventory counts.

Table 1
San Francisco Public Utilities Commission
Hetch Hetchy Moccasin Warehouse Inventory Count
Comparison with Prior Physical Inventory Counts⁴
(As of June 22, 2023)

Description	FY 2022-2023		FY 2021-2022	
	Items	Value	Items	Value
Total Inventory (per Maximo)	2,339	\$ 470,945	2,370	\$ 422,044
Total Inventory Variance (per Crowe's Count)	34	(220)	20	85
Total Inventory Variance (as a percentage of Total Inventory)	1.5%	(0.05%)	0.8%	0.02%

Results

As indicated in Table 1, minor variances were identified between Crowe’s full inventory count and the count reported in the Maximo system. The following observation explains the variances in counts. Crowe’s recommendation related to this observation is also included. A management response was provided by the Moccasin management team on August 28, 2023.

Observation #1 – Physical Inventory Counts Differed from Maximo Report Counts

Condition:

Of the 2,339 items we counted, 34, or 1.5%, had a variance between their physical count and their count in Maximo. Based on the physical count, and using the average cost in Maximo, we determined that the total value of the variances in the Moccasin Warehouse inventory was (\$220), or (0.05%) of the total inventory value of \$470,945 in Maximo.⁵

We found 15 positive variances (where the physical count was greater than the Maximo inventory count) which totaled \$412. We found 19 negative variances (where the physical count was less than the Maximo inventory count) which totaled (\$632). In **Table 2** below we provide a summary of variances.

² In this report, percentages are rounded to one decimal place unless they would round to 0.0%, in which case they are rounded to two decimal places. Monetary values are rounded to the nearest whole dollar unless doing so would obscure the data, in which case they are presented without rounding.

³ Crowe did not perform any procedures related to the assigned value in the Maximo system.

⁴ The signs of both Total Inventory Variance (per Crowe’s Count) and Total Inventory Variance (as a percentage of Total Inventory) in Table 1 are presented in a different fashion than in the prior year’s report, where they are called Count Discrepancies and Percentage of Discrepancies respectively. In Table 1 of the FY 2021-2022 report, in the FY 2021-2022 Value column, both figures were shown as negative values. Table 1 of this report clarifies this data by presenting the FY 2021-2022 figures as positive inventory adjustments.

⁵ The (\$220) variance is the difference between \$35,478.49, which is the total value of the 34 items with variances using Crowe’s physical count for each item, and \$35,698.74, which is the total value of the 34 items with variances using the Maximo count for each item.

Table 2
San Francisco Public Utilities Commission
Hetch Hetchy Moccasin Warehouse Inventory Count
Summary of Variances

Description	Item Count	Amount
Fuel Variances		
Positive	4	\$ 344
Negative	2	(380)
Total Fuel Variance	6	\$ (36)
Other Variances		
Positive	11	68
Negative	17	(252)
Total Other Variances	28	\$ (184)
Total Variance	34	\$ (220)

As shown in **Table 3** below, based on the fuel dip procedures Crowe performed for this physical count, we found the actual quantities of fuel contained in the eleven tanks varied slightly, or by (\$36), from those in the Maximo system. **Table 4** provides the other (\$184) in non-fuel count variances.

Table 3
San Francisco Public Utilities Commission
Hetch Hetchy Moccasin Warehouse Inventory Count
Summary of Fuel Count Variances

Item Number	Description	Item Code	Issue Unit	Maximo 6.22.23	Crowe 6.22.23	Variance	Average Cost	Cost of Variance
1	GASOLINE,unlead,EARLY INTAKE,#05	091-30-3212	GAL	2,414	2,458	44	\$ 4.35	\$ 191.47
2	GASOLINE, UNLEADED, MOCCASIN,#01.-2	091-30-3270	GAL	2,321	2,256	(65)	4.34	(280.16)
3	GASOLINE, MOCCASIN , # 4-5 tanks	091-30-3271	GAL	1,887	1,898	11	4.44	49.33
4	GASOLINE, UNLEADED, O'S,#04	091-30-3180	GAL	414	429	15	4.47	67.12
5	GASOLINE,UNLEAD,SOUTH FORK,#09.	091-30-3239	GAL	268	246	(22)	4.55	(99.99)
6	FUEL, RENEWABLE DIESEL,SOUTH FORK,#10 (CHANGED FROM #2 DIESEL 4/12/16)	091-40-3150	GAL	377	385	8	4.47	35.74
Total								\$ (36.49)

Table 4
San Francisco Public Utilities Commission
Hetch Hetchy Moccasin Warehouse Inventory Count
Summary of Non-Fuel Count Variances

Item Number	Description	Item Code	Maximo 6.22.23	Crowe 6.22.23	Variance	Average Cost	Cost of Variance
1	KNIFE, PLASTIC, HVY.,	085-50-8847	1	2	1	\$ 42.00	42
2	BAG, BURLAP, CLOSE WEAVE, (100 LB SACK)	081-05-0535	340	345	5	3.16	16
3	UTILITY KNIFE BLADE, LENNOX GOLD # 5C, 5/PK,(3KJC7)	051-10-5000	4	5	1	4.29	4
4	Nuts, Bolts, Screws, and Washers with Positive Variances (8 Items)	Various	1,014	1,100	86	0.07	6
5	Nuts, Bolts, Screws, and Washers with Negative Variances (14 Items)	Various	1,275	1,213	(62)	0.26	(16)
6	14x20x1 PLEATED HVAC FILTER (MERV 8) 6B970	066-01-1420	14	11	(3)	4.61	(14)
7	HVAC FILTER, 10X20X1, MERV 13, ADMIN (785TK1)	066-01-102013	12	-	(12)	7.36	(88)
8	TIE, CABLE, NYLON, 15" (36J166)	059-78-3998X	9	4	(5)	26.85	(134)
						Total	\$ (184)

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller’s Accounting Policies and Procedures identifies that Departments shall conduct a physical inventory at least annually and ensure that the inventory management system records accurately reflect inventory on hand. Additionally, Section 6.1 (Policy Guidelines) indicates that inventory system records must be promptly adjusted for any discrepancies identified in the physical counts, Departments must periodically review the inventory records for reasonableness and appropriateness of any changes to inventory unit cost, inventory valuation, and unit of measure, and Departments must periodically review the inventory for obsolescence and reasonableness of inventory classification. The Policy Guidelines also indicate that Departments should investigate significant discrepancies between the physical count, the inventory system records, and the accounting records; document the reasons for discrepancy; and take corrective actions to reduce future discrepancies.

Cause:

Moccasin Warehouse staff indicated several reasons for the differences in this physical count compared to the count in Maximo, including miscounting, data entry errors, and small variances due to weighing nuts and bolts with a scale instead of individually counting them.

Regarding the fuel volumes variance valued at (\$36), we determined that the Moccasin Warehouse uses the automated fuel tracking information system, E.J. Ward, to record fuel usage. The SFPUC information technology department developed an interface designed to periodically upload the fuel usage data to the Maximo system. There may be delays in updating data because of poor network communication systems. The small variances from the quantities we observed during our physical count and those current in Maximo were caused by rounding errors as a result of using a manual dip process and a conversion formula to determine fuel quantities.

Effect:

The Moccasin Warehouse inventory value in the Maximo system is overstated by \$220.

Recommendation:

The Moccasin warehouse staff should update the asset inventory counts in Maximo after management approval. The SFPUC Financial Services Unit should adjust the General Ledger to reflect the actual cost of inventory on hand.

Management Response:

Hetch Hetchy Water concurs with the recommendation, and we have made the corresponding adjustments.

Other Matters


This full inventory count did not constitute an audit, examination, review, or compilation of the historical and prospective financial information conducted in accordance with generally accepted auditing standards or with other standards established by the AICPA. Accordingly, Crowe is unable to express an opinion or any other form of assurance with respect to any of the historical or prospective financial information. Crowe did not perform any procedures to verify the Management Responses and Crowe does not provide any assurance regarding the accuracy or completeness of the responses. Any and all amounts referred to in this letter are preliminary and could change should additional procedures be performed. Additionally, issues that are not mentioned here could develop subsequent to the date of this letter that may have impacted Crowe's analysis or that Crowe may cite should additional procedures be performed.

The inventory services did not contemplate obtaining the understanding of internal controls or assessing control risk, tests of accounting records and responses to inquiries by obtaining corroborating evidential matter, and certain other procedures ordinarily performed during an audit or examination. Thus, this engagement did not provide assurance that we became aware of significant matters that would be disclosed in an audit or examination.

As part of this inventory, the SFPUC agreed to be responsible to make all management decisions and perform all management functions; designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management to oversee our services; evaluate the adequacy and results of the services performed; accept responsibility for the results of the services; and establish and maintain internal controls, including monitoring ongoing activities. The SFPUC has ultimate authority for making changes to inventory reported in its Maximo system and on its financial statements.

Crowe's fees are not dependent upon the outcome of this report and Crowe is independent with respect to any other economic interests.

We appreciate the contribution of SFPUC management and your input and direction on this project. We also thank Moccasin Warehouse management and staff for providing access to the inventory and for timely responses to our requests.



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San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102

September 15, 2023

To: Steven Ritchie, Assistant General Manager, Water Enterprise
Ellen Levin, Deputy Assistant General Manager, Water
Angela Cheung, Water Supply & Treatment Manager
Annette Devincenzi, Warehouse Manager

Cc: Ronald P. Flynn, Deputy General Manager
Nancy L. Hom, Assistant General Manager, Business Services and Chief Financial Officer
Vivian Chen, Deputy Chief Financial Officer
Irella Blackwood, Audit Director
Laura Busch, Acting Deputy Chief Financial Officer, Budget Director
Jennifer Hopkins, Information Technology Services Director

Subject: Fiscal Year End 2022-2023
Inventory Count – Water Enterprise, Millbrae Warehouse and Sunol Yard Fuel Station

Dear Mr. Ritchie, Ms. Levin, Ms. Cheung, and Ms. Devincenzi:

The San Francisco Public Utilities Commission (SFPUC) engaged Crowe LLP (Crowe) to perform full inventory count services for three enterprise funds including the Wastewater Enterprise, Water Enterprise, and Hetch Hetchy Enterprise.¹ This report represents results of Crowe's full count of the inventory at the Water Enterprise's Millbrae warehouse and fuel inventory at the Millbrae and Sunol Yards.

A. Scope of Inventory Work

The SFPUC requested Crowe to perform an annual full inventory count of these enterprises to test whether significant variances exist between the physical count and the records in the SFPUC's Maximo Inventory Tracking System (Maximo), to determine the cause of variances, and to determine amounts that need to be adjusted in Maximo. The SFPUC requested reporting of the analysis, findings, and recommendations consistent with the format requested by SFPUC's Financial Services Bureau.

B. Warehouse Locations

The locations for the Water Enterprise physical inventory were:

Millbrae Warehouse
1000 El Camino Real
Millbrae, CA 94030

Sunol Yard
505 Paloma Way
Sunol, CA 94586

¹ Note that some of the enterprises have multiple warehouse locations.

On June 27, 2023, Crowe visited the above sites and conducted the inventory observation that is the subject of this report. The last full inventory count was performed by Crowe for Post FY 2021-2022 on June 30, 2022, at the above identified sites. In **Table 1** below, we provide key data^{2,3} from both full inventory counts.

Table 1
San Francisco Public Utilities Commission
Water – Millbrae Warehouse and Sunol Yard Inventory Count
Comparison with Prior Physical Inventory Counts⁴
(As of June 27, 2023)

Description	FY 2022-2023		FY 2021-2022	
	Items	Value	Items	Value
Total Inventory (per Maximo)	1,132	\$ 642,514	1,117	\$ 581,378
Total Inventory Variance (per Crowe's Count)	15	(6,839)	13	441
Total Inventory Variance (as a percentage of Total Inventory)	1.3%	(1.1%)	1.2%	0.1%

Results

As indicated in Table 1, variances were identified between Crowe’s full inventory count and the count reported in the Maximo system. The following observation explains the variances in counts. Crowe’s recommendation related to this observation is also included. A management response was provided by the Millbrae Warehouse and Sunol Yard management team on August 28, 2023.

Observation #1 – Physical Inventory Counts Differed from Maximo Counts

Condition:

Of the 1,132 items we counted, 15, or 1.3%, had a variance between their physical count and their count in Maximo. Based on the physical count, and using the average cost in Maximo, we determined that the total value of the combined variances in the Millbrae Warehouse and Sunol Yard inventories was (\$6,839), or (1.1%) of the total inventory value of \$642,514 in Maximo.⁵

We found 6 positive variances (where the physical count was greater than the Maximo inventory count) which totaled \$129. We found 9 negative variances (where the physical count was less than the Maximo inventory count) which totaled (\$6,968). In **Table 2** below we provide a summary of variances which shows that most of the variance dollar amount is fuel related.

² In this report, percentages are rounded to one decimal place. Monetary values are rounded to the nearest whole dollar unless doing so would obscure the data, in which case they are presented without rounding.

³ Crowe did not perform any procedures related to the assigned value in the Maximo system.

⁴ The signs of both Total Inventory Variance (per Crowe’s Count) and Total Inventory Variance (as a percentage of Total Inventory) in Table 1 are presented in a different fashion than in the prior year’s report, where they are called Count Discrepancies and Percentage of Discrepancies respectively. In Table 1 of the FY 2021-2022 report, in the FY 2021-2022 Value column, both figures were shown as negative values. Table 1 of this report clarifies this data by presenting the FY 2021-2022 figures as positive inventory adjustments.

⁵ The (\$6,839) variance is the difference between \$41,804, which is the total value of the 15 items with variances using Crowe’s physical count for each item, and \$48,643, which is the total value of the 15 items with variances using the Maximo count for each item.

Table 2
San Francisco Public Utilities Commission
Water – Millbrae Warehouse and Sunol Yard Inventory Count
Summary of Variances

Description	Item Count	Amount
Fuel Variances		
Positive	0	\$ -
Negative	4	(5,515)
Total Fuel Variance	4	\$ (5,515)
Other Variances		
Positive	6	129
Negative	5	(1,453)
Total Other Variances	11	\$ (1,324)
Total Variance	15	\$ (6,839)

As shown in **Table 3** below, based on the fuel dip procedures Crowe performed for this physical count, we found the actual quantities of fuel contained in the four tanks varied from those in the Maximo system. We believe that the quantities we observed during our physical count using a manual dip process and a conversion formula were reasonably accurate as they closely matched quantities registered by an electronic measurement system contained in the fuel tanks that the Water Enterprise generated that day (referred to as the System Status Report). **Table 4** provides the other (\$1,324) in non-fuel count variances.

Table 3
San Francisco Public Utilities Commission
Water – Millbrae Warehouse and Sunol Yard Fuel Inventory
Summary of Fuel Gallon and Cost Variances

Item Number	Description	Item Code	Unit	CURBAL 6.26.23	Crowe 6.27.23	Variance	Average Cost	Variance
1	GASOLINE, AUTO, UNLEADED, SUNOL	091-30-3260	GAL	1,966	1,647	(319)	\$ 4.17	\$ (1,331)
2	GASOLINE, DIESEL, SUNOL	091-40-3147	GAL	1,254	1,167	(87)	4.22	(366)
3	GASOLINE, AUTO, UNLEADED, MILLBRAE	091-30-3255	GAL	5,300	4,609	(691)	4.04	(2,794)
4	GASOLINE, DIESEL FUEL, MILLBRAE	091-40-3146	GAL	2,518	2,257	(261)	3.93	(1,024)
Total								\$ (5,515)

Table 4
San Francisco Public Utilities Commission
Water – Millbrae Warehouse and Sunol Yard Fuel Inventory
Summary of Non-Fuel Count Variances

Item Number	Description	Item Code	Unit	Maximo 6.26.23	Crowe 6.27.23	Variance	Average Cost	Cost of Variance
1	VALVE, BALL, 3/4", NIBCO S-685-80-LF	048-22-1004	EA	14	16	2	\$ 52.62	\$ 105.24
2	BOLT, HEX, STEEL, N.C., 5/8"X 4-1/2"	053-06-4467	EA	214	223	9	0.99	8.91
3	SCRUB, POISON IVY, TECHNEX EXTREME - 144/CASE	065-75-1612	EA	47	50	3	1.90	5.70
4	MORTAR, MASON MIX, QUICKCRETE, #3002, 60 LB. BAG	080-30-7950	EA	54	55	1	5.48	5.48
5	NUT, PLN, NC, THRD, 1/4"	053-10-2089	HUN	1	1.7	0.7	4.62	3.23
6	BOLT, HEX, STL., GR-5, NC, 1/2" X 3-1/2"	053-00-3598	EA	248	249	1	0.74	0.74
7	CHAIN, WELDED, PROOF COIL, 3/16"	040-10-1650	FT	75	73	(2)	2.12	(4.24)
8	CHAIN, WELDED, COIL, GALV, 1/4 IN	040-10-1540	FT	180	178	(2)	2.16	(4.31)
9	STEEL BAR, 5/8" ROUND, HOT ROLLED, 20FT.	095-10-8358	EA	8	7	(1)	23.53	(23.53)
10	JACKET, RAIN, YELLOW (XXX LARGE)	084-05-3668	EA	9	-	(9)	54.04	(486.40)
11	POLY, POLY CLEAN, HAND CLEANER	072-00-1006	TUB	106	15	(91)	10.27	(934.41)
Total							\$ (1,323.59)	

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller’s Accounting Policies and Procedures identifies that Departments shall conduct a physical inventory at least annually and ensure that the inventory management system records accurately reflect inventory on hand. Additionally, Section 6.1 (Policy Guidelines) indicates that inventory system records must be promptly adjusted for any discrepancies identified in the physical counts, Departments must periodically review the inventory records for reasonableness and appropriateness of any changes to inventory unit cost, inventory valuation, and unit of measure, and Departments must periodically review the inventory for obsolescence and reasonableness of inventory classification. The Policy Guidelines also indicate that Departments should investigate significant discrepancies between the physical count, the inventory system records, and the accounting records; document the reasons for discrepancy and take corrective actions to reduce future discrepancies.

Cause:

Non-fuel variances were primarily caused by minor miscounts during periodic cycle counts and occasional system posting manual errors by the individual entering the quantity or unit of measure. Regarding the fuel variances observed, we determined that the Water Enterprise uses the automated fuel tracking information system, E.J. Ward, to capture fuel usage and the SFPUC Information Technology Services Bureau has developed an interface designed to periodically upload the E.J. Ward fuel usage data to the Maximo system. However, based on problems with the system interface between the E.J. Ward system and the Maximo system, actual Water Enterprise fuel usage data was not consistently and accurately uploaded into Maximo causing the variances.

Effect:

The combined Millbrae and Sunol inventory value in the Maximo system is overstated by \$6,839. Regarding the fuel usage discrepancies, absent periodic monitoring of the fuel levels, the Millbrae Warehouse and Sunol Yard will have difficulty reconciling future inventories and identifying variances that are the result of missing fuel (e.g., theft), delivery errors, data entry errors, tank leaks, or shrinkage.

Recommendation:

The Millbrae Warehouse staff should update the asset inventory counts in Maximo after management approval. The SFPUC’s Financial Services Bureau should adjust the General Ledger to reflect the actual

cost of inventory on hand. The SFPUC Information Technology Services Bureau and warehouse staff should work together to make the EJ Ward system and Maximo interface correctly to minimize discrepancies.

Management Response:

The audit recommendation has been implemented at the SFPUC Millbrae Warehouse regarding updated inventory. All inventory items are updated on a regular basis. A quarterly report is issued from SFPUC Financial Services Bureau reflecting any changes and a response is submitted reflecting the nature of the adjustments. The EJ Ward system is outdated; other options are being explored by the SFPUC.

Other Matters

This full inventory count did not constitute an audit, examination, review, or compilation of the historical and prospective financial information conducted in accordance with generally accepted auditing standards or with other standards established by the AICPA. Accordingly, Crowe is unable to express an opinion or any other form of assurance with respect to any of the historical or prospective financial information. Crowe did not perform any procedures to verify the Management Responses and Crowe does not provide any assurance regarding the accuracy or completeness of the responses. Any and all amounts referred to in this letter are preliminary and could change should additional procedures be performed. Additionally, issues that are not mentioned here could develop subsequent to the date of this letter that may have impacted Crowe's analysis or that Crowe may cite should additional procedures be performed.

The inventory services did not contemplate obtaining the understanding of internal controls or assessing control risk, tests of accounting records and responses to inquiries by obtaining corroborating evidential matter, and certain other procedures ordinarily performed during an audit or examination. Thus, this engagement did not provide assurance that we became aware of significant matters that would be disclosed in an audit or examination.

As part of this inventory, the SFPUC agreed to be responsible to: make all management decisions and perform all management functions; designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management to oversee our services; evaluate the adequacy and results of the services performed; accept responsibility for the results of the services; and establish and maintain internal controls, including monitoring ongoing activities. The SFPUC has ultimate authority for making changes to inventory reported in its Maximo system and on its financial statements.

Crowe's fees are not dependent upon the outcome of this report and Crowe is independent with respect to any other economic interests.

We appreciate the contribution of SFPUC management and your input and direction on this project. We also thank Millbrae Warehouse and Sunol Yard management and staff for providing access to the inventory and for timely responses to our requests.



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September 15, 2023

To: Steve Ritchie, Assistant General Manager, Water Enterprise
Ellen Levin, Deputy Assistant General Manager, Water Enterprise
William Teahan, CDD Division Manager
William Toman, CDD Materials Coordinator
Andy O'Brien, CDD Materials Coordinator

Cc: Ronald P. Flynn, Deputy General Manager
Nancy L. Hom, Assistant General Manager Business Services and Chief Financial Officer
Vivian Chen, Deputy Chief Financial Officer
Laura Busch, Acting Deputy Chief Financial Officer, Budget Director
Irella Blackwood, Audit Director
Jennifer Hopkins, Information Technology Services Director

Subject: Fiscal Year End 2022-2023
Inventory Count – Water Enterprise, CDD Main Warehouse, AWSS Warehouse, and
6 Satellite Warehouses (Auto, Carpentry, Electrical, Ground, LMPS, and Machine Shops)

Dear Mr. Ritchie, Ms. Levin, Mr. Teahan, Mr. Toman and Mr. O'Brien:

The San Francisco Public Utilities Commission (SFPUC) engaged Crowe LLP (Crowe) to perform full inventory count services for three enterprise funds including the Wastewater Enterprise, Water Enterprise, and Hetch Hetchy Enterprise.¹ This report represents results of Crowe's full count of the Water Enterprise inventory at the CDD Main and AWSS Warehouses and 6 Satellite Warehouses but excluding the Millbrae Warehouse and Sunol Yard, which are addressed in a separate report.

A. Scope of Inventory Work

The SFPUC requested Crowe to perform an annual physical inventory of these enterprises to test whether significant variances exist between the physical count and the records in the SFPUC's Maximo Inventory Tracking System (Maximo), to determine the cause of variances, and to determine amounts that need to be adjusted in Maximo. The SFPUC requested reporting of the analysis, findings, and recommendations consistent with the format requested by SFPUC's Financial Services Bureau.

B. Warehouse Locations

The locations for the Water Enterprise physical inventory were:

CDD Main (and 6 Satellites)
1990 Newcomb Ave
San Francisco, California 94124

¹ Note that some of the enterprises have multiple warehouse locations.

AWSS
 1980 Oakdale Ave
 Twin Peaks Reservoir
 San Francisco, California 94124

LPMS Satellite
 991 Lake Merced Blvd.
 San Francisco, California 94132

From June 12 through June 14, 2023, Crowe visited the locations above and conducted the full inventory count that is the subject of this report. The last full inventory count of the locations above was performed by Crowe for FY 2021-2022 between June 7 and June 9, 2022. In **Table 1** below, we provide key data^{2,3} from both full inventory counts.

Table 1
San Francisco Public Utilities Commission
Water CDD (MAIN, AWSS, and 6 Satellite Shops) Inventory Count
Comparison with Prior Physical Inventory Counts⁴
(As of June 14, 2023)

Description	FY 2022-2023		FY 2021-2022	
	Items	Value	Items	Value
Total Inventory (per Maximo)	1,648	\$ 7,271,844	2,030	\$ 5,859,909
Total Inventory Variance (per Crowe's Count)	253	(153,390)	472	235,043
Total Inventory Variance (as a percentage of Total Inventory)	15.4%	(2.1%)	23.3%	4.0%

Results

As indicated in Table 1, variances were identified between Crowe’s full inventory count and the count reported in the Maximo system. The following finding explains the variances in counts. Crowe’s recommendation related to this finding is also included. A management response to the finding was provided by the Water Enterprise management team on August 25, 2023.

Finding #1 – Physical Inventory Counts Differed from Maximo Counts

Condition:

Of the 1,648 items we counted, 253, or 15.4%, had a variance between their physical count and their count in Maximo. This is a recurring finding. Based on the physical count, and using the average cost in Maximo, we determined that the total value of the variances in the Water Enterprise inventory locations specified above was (\$153,390), or (2.1%) of the total inventory value of \$7,271,844 in Maximo.⁵

² In this report, percentages are rounded to one decimal place. Monetary values are rounded to the nearest whole dollar unless doing so would obscure the data, in which case they are presented without rounding.

³ Crowe did not perform any procedures related to the assigned value in the Maximo system.

⁴ In the FY2021-2022 report, the Table 1 value for Count with No Discrepancies for FY2021-2022 was shown as \$5,624,865 (Total Inventory Counted – Count Discrepancies). The last sentence on the bottom of page 2 in the FY2021-2022 report shows the total value of the inventory was equal to \$5,859,909 (Total Inventory Counted) + \$235,043 (Count Discrepancies), or \$6,094,952. Total Inventory Counted and Count Discrepancies in the FY2021-2022 report correspond to Total Inventory (per Maximo) and Total Inventory Variance (per Crowe’s count) respectively in this report.

⁵ The (\$153,390) variance is the difference between \$1,281,257, which is the total value of the 253 items with variances using Crowe’s physical count for each item, and \$1,434,647, which is the total value of the 253 items with variances using the Maximo count for each item.

We found 125 positive variances (where the physical count was greater than the Maximo inventory count) which totaled \$41,760. We found 128 negative variances (where the physical count was less than the Maximo inventory count) which totaled (\$195,149). In **Table 2** below we list 6 items with variances that are either above \$5,000 or below (\$5,000). Together, these 6 items sum to (\$137,196), or about 89.4% of the total variance of (\$153,390).

Table 2
San Francisco Public Utilities Commission
Water (CDD and AWSS and 6 Satellite Shops) Inventory Count
List of Items with Variances Above \$5,000 or Below (\$5,000)

Item Number	Description	Shop	Item Code	Unit	Maximo 6.9.23	Crowe 6.14.23	Variance	Average Cost	Cost of Variance
1	PIPE, D.I., CLASS 53, BELL & SPIGOT, TYPE 2, 16" PUSH ON, ZINC COATING	CD-MAIN	047-10-4571	FT	171	234	63	\$ 94.47	\$ 5,951.69
2	FLANGE, COMPANION SCREWED, BRONZE, 2", 150#	CD-MAIN	047-31-8240	EA	52	20	(32)	171.74	(5,495.82)
3	TEE, 14" MJB X MJB BELL 10"	AWSS	047-34-6414	EA	2	1	(1)	5,552.35	(5,552.35)
4	PLYWOOD, DOUGLAS FIR, 4' X 8' X 1 1/8", CDX	CARP	055-30-4046	EA	124	18	(106)	72.67	(7,703.38)
5	GASOLINE, AUTO, UNLEADED, C.D.D.	CD-MAIN	091-30-3250	GAL	23,207	5,511	(17,696)	3.97	(70,215.38)
6	DIESEL, RENEWABLE (99%)	CD-MAIN	091-40-3151	GAL	15,357	2,237	(13,120)	4.13	(54,181.20)
Subtotal of Variances									\$ (137,196.44)
7	Above \$5,000 or Below (\$5,000)								
8	All Other Variances								(16,193.17)
Total									\$ (153,389.61)

As shown in **Table 3** below, based on the fuel dip procedures Crowe performed for this physical count, we found the actual quantities of fuel contained in the two tanks varied from those in the Maximo system. We believe that the quantities we observed during our physical count using a manual dip process and a conversion formula were reasonably accurate as they closely matched quantities registered by an electronic measurement system contained in the fuel tanks that the Water Enterprise generated that day (referred to as the System Status Report).

Table 3
San Francisco Public Utilities Commission
Water (CDD and AWSS and 6 Satellite Shops) Inventory Count
Summary of Fuel Gallon and Cost Variances

Item Number	Description	Shop	Item Code	Unit	Maximo 6.9.23	Crowe 6.14.23	Variance	Average Cost	Cost of Variance
1	GASOLINE, AUTO, UNLEADED, C.D.D.	CD-MAIN	091-30-3250	GAL	23,207	5,511	(17,696)	\$ 3.97	\$ (70,215.38)
2	DIESEL, RENEWABLE (99%)	CD-MAIN	091-40-3151	GAL	15,357	2,237	(13,120)	4.13	(54,181.20)
Total									\$ (124,396.58)

Examples of errors identified in our assessment of a sample of recent E.J. Ward fuel transaction data include the following:

- Transactions where a vehicle had the same odometer reading as the previous transaction for the same vehicle and fuel card.
- Duplicate vehicles identified within the system.
- Multiple vehicles with the same make and model sometimes resulted in fuel transactions assigned to the wrong vehicle.
- Vehicles without a specific year, make, or model identified in the system.

Criteria:

Chapter 6 of the City and County of San Francisco Office of the Controller's Accounting Policies and Procedures identifies that Departments shall conduct a physical inventory at least annually and ensure that the inventory management system records accurately reflect inventory on hand. Additionally, Section 6.1 (Policy Guidelines) indicates that inventory system records must be promptly adjusted for any

discrepancies identified in the physical counts, Departments must periodically review the inventory records for reasonableness and appropriateness of any changes to inventory unit cost, inventory valuation, and unit of measure, and Departments must periodically review the inventory for obsolescence and reasonableness of inventory classification. The Policy Guidelines also indicate that Departments should investigate significant discrepancies between the physical count, the inventory system records, and the accounting records; document the reasons for discrepancy; and take corrective actions to reduce future discrepancies.

Cause:

The Water Enterprise identified several reasons for the differences in this physical count compared to the count in Maximo, including:

- Occasional manual system posting errors by the individual entering the quantity or unit of measure.
- Miscounted items from periodic cycle counts, including use of different counting methods and items not being fully separated to make accurate counts.
- For some Satellite shop counts, e.g., the Carpentry shop, the inventory users had not submitted issue tags to warehouse management when items were used.
- Fuel variances, which are further explained below.

The Water Enterprise uses the automated fuel tracking information system, E.J. Ward, to capture fuel usage and the SFPUC information technology department has developed an interface designed to periodically upload the E.J. Ward fuel usage data to the Maximo system. However, based on problems with the interface between the E.J. Ward system and the Maximo system, actual Water Enterprise fuel usage data is not consistently and accurately uploaded into Maximo. In addition, between Crowe's FY 2021-22 and FY 2022-23 inventory counts, warehouse staff only adjusted the Maximo fuel balances once, after a physical fuel dip on October 27, 2022.

Effect:

The Water Enterprise inventory value in the Maximo system is overstated by \$153,390. Regarding the fuel usage discrepancies, absent periodic monitoring of the fuel levels, the Water Enterprise will have difficulty reconciling future inventories and identifying variances that are the result of missing fuel (e.g., theft), delivery errors, data entry errors, unrecorded transactions, tank leaks, or shrinkage.

Recommendation:

The Water warehouse staff should update the asset inventory counts in Maximo after management approval. The SFPUC Financial Reporting and Analysis division should adjust the General Ledger to reflect the actual cost of inventory on hand. The Water Enterprise should investigate the significant discrepancies between the physical counts noted in Tables 1 and 2, the Maximo system records, and the accounting records; document the reasons for discrepancies; and implement corrective actions to reduce future discrepancies.

If the E.J. Ward system cannot be made to work consistently it should be replaced or upgraded. The E.J. Ward system is not currently capable of accurately recording all fuel transactions. Examples of potential solutions include:

- Add an in-tank fuel level monitoring system with a satellite interface which could transmit timestamped fuel tank level data. Warehouse staff could then accurately monitor fuel variances at the transaction level and validate exact fuel delivery amounts, both of which are not possible with the current system.

- Purchase additional hardware or reconfigure the existing system to automatically record mileage⁶ from vehicle odometers instead of requiring employees to enter the odometer reading and vehicle ID manually as part of the fueling process. This upgrade would reduce instances of data entry errors and fuel transactions associated with incorrect vehicles.

If SFPUC cannot replace or upgrade the E.J. Ward system, the Water Enterprise and the SFPUC Information Technology Services bureau should work toward fixing the fuel usage interface between the E.J. Ward system and the Maximo system such that manual reconciliations are not necessary. SFPUC staff also should frequently review the vehicle data in the Fuel View / E.J. Ward software to remove duplicate entries and ensure the make, model, and year fields are populated for all vehicles. In addition, SFPUC should minimize use of the manual override process, or site card S-51, if possible, as it can lead to data entry errors and fuel transactions associated with incorrect vehicles.

Finally, until the system matters are resolved, Water warehouse staff should begin tracking fuel tank levels and fuel usage for gasoline and diesel using a weekly process similar to the following:

- Process all outstanding fuel invoices in Maximo and determine the week-over-week fuel level change for both fuel types (i.e., fuel level increase from deliveries/inflows).
- Perform a weekly fuel dip for each tank and determine the week-over-week fuel level change for both fuel types (i.e., net change in fuel level).
- Determine the total amount of fuel dispensed per E.J. Ward system data and paper logs, including cross-referencing the two to remove any duplicate transactions.
- Compare the fuel level change based on fuel dips with the net fuel level change per Maximo, E.J. Ward, and paper logs, calculated as Maximo balance change (inflows) minus total fuel dispensed per E.J. Ward and paper logs (outflows).
- Attempt to determine the cause of any variances greater than the margin of error associated with the fuel dip conversion formula.

Management Response:

The CDD Warehouse team concurs with these findings and commits to taking corrective actions to reduce future discrepancies. The CDD Warehouse Team will be extra careful in observing unit of measure discrepancies and correcting the conversions in the Maximo system before issue transactions post. Satellite shop supervisors will begin to conduct cycle counts in their respective areas. The CDD Warehouse Team will work with Satellite Shop Supervisors on having shop employees submit issue tags in a timely manner and on a consistent basis to accurately reflect the inventory that has been removed from the respective storage bins. Finally, fuel variances will be addressed by collaborative efforts between the CDD Management Team, the CDD Warehouse, and the Maximo IT Team.

Other Matters

This full inventory count did not constitute an audit, examination, review, or compilation of the historical and prospective financial information conducted in accordance with generally accepted auditing standards or with other standards established by the AICPA. Accordingly, Crowe is unable to express an opinion or any other form of assurance with respect to any of the historical or prospective financial information. Crowe did not perform any procedures to verify the Management Responses and Crowe does not provide any assurance regarding the accuracy or completeness of the responses. Any and all amounts referred to in this letter are preliminary and could change should additional procedures be performed. Additionally, issues that are not mentioned here could develop subsequent to the date of this letter that may have impacted Crowe's analysis or that Crowe may cite should additional procedures be performed.

The inventory services did not contemplate obtaining the understanding of internal controls or assessing control risk, tests of accounting records and responses to inquiries by obtaining corroborating evidential

⁶ The E.J. Ward CANceiver, which is installed on numerous CDD vehicles, is capable of wirelessly transmitting vehicle odometer data and appears to be doing so for some CDD vehicles; however, per the E.J. Ward website, this and other features may not be compatible with all vehicles, particularly older ones.

matter, and certain other procedures ordinarily performed during an audit or examination. Thus, this engagement did not provide assurance that we became aware of significant matters that would be disclosed in an audit or examination.

As part of this inventory, the SFPUC agreed to be responsible to make all management decisions and perform all management functions; designate an individual who possesses suitable skill, knowledge, and/or experience, preferably within senior management to oversee our services; evaluate the adequacy and results of the services performed; accept responsibility for the results of the services; and establish and maintain internal controls, including monitoring ongoing activities. The SFPUC has ultimate authority for making changes to inventory reported in its Maximo system and on its financial statements.

Crowe's fees are not dependent upon the outcome of this report and Crowe is independent with respect to any other economic interests.

We appreciate the contribution of SFPUC management and your input and direction on this project. We also thank Water Enterprise management and staff for assisting providing access to the inventory and for timely responses to our requests.

Crowe LLP

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