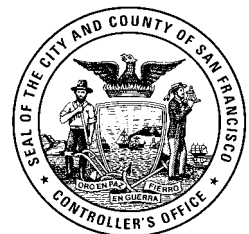


PUBLIC UTILITIES COMMISSION:

Review of Cost and Revenue
Accounting Practices at Water
Quality Bureau Laboratories

PERFORMANCE AUDITS



July 19, 2006
05065



CITY AND COUNTY OF SAN FRANCISCO
OFFICE OF THE CONTROLLER

Ed Harrington
Controller
Monique Zmuda
Deputy Controller

July 19, 2006

Audit Number 05065

Public Utilities Commission
1155 Market Street, 4th Floor
San Francisco, CA 94103

President and Members:

At the request of the Public Utilities Commission (PUC), the Office of the Controller engaged Yano Accountancy Corporation to perform a financial review of the cost structure of the PUC's laboratories, with an emphasis on evaluating certain cost and revenue accounting practices for laboratory tests.

The attached report from Yano Accountancy Corporation presents the results of this review and the responses from the PUC. We have also included an overall summary of the results of the work performed.

We appreciate this opportunity to assist the PUC in its efforts.

Respectfully submitted,

Original signed by:
Ed Harrington
Controller

SUMMARY

BACKGROUND

The Water Quality Bureau (WQB) of the Public Utilities Commission (PUC) of the City and County of San Francisco (City) currently maintains three main laboratories, located at Millbrae, at the Southeast Water Pollution Control Plant, and at the Oceanside Water Pollution Control Plant. Limited laboratory facilities are also located on Treasure Island and at Moccasin, the Sunol Valley Treatment Plant, and the Harry Tracy Water Treatment Plant. The Southeast and Oceanside laboratories primarily conduct wastewater analysis, although the Southeast laboratory conducts metals testing for both drinking water and wastewater. The Millbrae laboratory primarily conducts drinking water analysis, but conducts all microbiological testing for both drinking water and wastewater. Although there are some cross-functions, the WQB laboratories are organized as two groups: Drinking Water Laboratories (DWL) for the PUC's Water Enterprise (Water), and Wastewater Laboratories (WWL) for the PUC's Wastewater Enterprise (Wastewater).

On April 5, 2006, the Controller issued a memorandum summarizing the results of a review of the organizational structure and placement of the WQB laboratories. The City Services Auditor Division (division) of the Office of the Controller performed that review pursuant to a request by the Board of Supervisors during their hearings on the Budget Analyst's 2005 audit of the PUC. The PUC subsequently requested a broader examination that also included a financial review of the cost structure of the laboratories. This report includes the results of that financial review, which focused on evaluating certain cost and revenue accounting practices for laboratory tests.

REVIEW RESULTS

In consultation with the PUC and the division, the consultant selected the fiscal year ended June 30, 2005, the most recent period for which full-year data was available, as the basis for its procedures. The consultant found that:

- All WQB employees charged their labor hours and dollars (including benefits) to one laboratory group or the other. However, there are eight employees who provided significant support to both DWL and WWL. In addition, all employees with administrative-type job titles charged all of their labor hours and dollars to DWL. This resulted in overstatement of DWL, and understatement of WWL, expenses ranging from \$263,105 to \$526,211, based on preliminary estimates.
- Certain expenses that should be allocated between DWL and WWL were charged 100% to DWL. In addition, substantially all travel and education expenses that are identifiable on a specific-employee basis were charged to the Water Quality Administration index code, which, in turn, was charged 100% to DWL. This resulted in overstatement of DWL, and understatement of WWL, expenses ranging from \$36,483 to \$72,966, based on preliminary estimates.

- The PUC has not fully completed the estimation of the direct costs of providing various DWL tests. In addition, direct cost estimation for WWL tests is only in the preliminary stages.
- The PUC charges 180% of direct labor for overhead and general and administrative costs, but this is only an estimate that is not supported by a complete listing of the applicable overhead and indirect costs that need to be considered.
- WQB has both City and non-City external customers, and has written agreements for only a small percentage of the tests it performs for these customers. PUC management should consult with the City Attorney to determine whether its current oral agreements with most WQB customers are adequate and, if necessary, develop standard written agreements for WQB services.
- The PUC uses competitive market pricing for the tests it performs. However, because the direct cost estimation is not complete, there is no assurance that the pricing for each test covers at least the incremental costs of conducting the test.
- Revenues sometimes are credited to one laboratory, but the other laboratory conducts the corresponding tests. Accordingly, certain revenues are not matched with their related costs and expenses.

The attached report from Yano Accountancy Corporation presents in detail the results of the consultant's work. The PUC's responses are included in the report.

Staff: Robert Tarsia, Financial Audit Manager

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION
WATER QUALITY BUREAU**

**Report on Applying
Agreed-Upon Procedures**

Yano Accountancy Corporation

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION
WATER QUALITY BUREAU**

Report on Applying Agreed-Upon Procedures

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Yano Accountancy Corporation

Yano Accountancy Corporation

Litigation and Financial Consulting • Forensic Accounting
Certified Public Accountants

Independent Accountants' Agreed-Upon Procedures Report

Mr. Robert J. Tarsia
Financial Audit Manager
City Services Auditor

City and County of San Francisco
San Francisco, California

We have performed the procedures summarized in the various sections of this report, solely to assist you in evaluating certain cost and revenue accounting practices for laboratory tests in place at the San Francisco Public Utilities Commission ("SFPUC"), a commission of the City and County of San Francisco.

This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the City and County of San Francisco. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The results of the procedures performed are included in the various sections of this report.

We were not engaged to, and did not perform an audit of the financial statements of the SFPUC, San Francisco Water Department, Hetch Hetchy Water and Power, or San Francisco Wastewater Enterprise (formerly known as the San Francisco Clean Water Program), the objective would be the expression of an opinion on these financial statements. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of management of the City and County of San Francisco, and is not intended to be, and should not be, used by any other party.



May 30, 2006

EXECUTIVE SUMMARY

The Water Quality Bureau (“WQB”) of the San Francisco Public Utilities Commission (“SFPUC”) is responsible for evaluating the quality of drinking water throughout the San Francisco Water Department (“SFWD”)/Hetch Hetchy Water and Power (“HHWP”) water transmission system, and the quality of waste water discharges from the City’s sewer system, which is managed by the SFPUC’s Wastewater Enterprise. WQB has two groups – Drinking Water Laboratories (“DWL”) for the Water Enterprise (“Water”), and Wastewater Laboratories (“WWL”) for the Wastewater Enterprise (“Wastewater”).

The following summarizes WQB’s total expenses (excluding depreciation) for the year ended June 30, 2005:

	Drinking Water	Wastewater	Total
Labor and benefits	\$ 8,492,374	\$ 2,013,372	\$ 10,505,746
Non-labor	3,912,717	608,473	4,521,190
Total expenses (excluding depreciation)	<u>\$ 12,405,091</u>	<u>\$ 2,621,845</u>	<u>\$ 15,026,936</u>

The following summarizes WQB’s budgeted headcount for the year ended June 30, 2005:

	Labor and Benefits Charged to		
	Drinking Water	Wastewater	Total
Administration	8.31	-	8.31
Engineering	29.53	-	29.53
Environmental Services	25.51	-	25.51
Drinking Water Laboratories	27.72	-	27.72
Wastewater Laboratories	-	27.22	27.22
Total budgeted headcount	<u>91.07</u>	<u>27.22</u>	<u>118.29</u>

Our understanding is that the WQB must be able to provide a number of the chemical and/or biological tests of drinking water and/or wastewater without any delay since time is of the essence in the completion of such tests. Accordingly, we understand that WQB must build certain excess capacity into its testing systems. WQB uses certain amounts of this excess capacity to provide services to other SFPUC groups, such as the SFPUC’s Bureau of Environmental Regulatory Management (“BERM”), and to certain non-City customers.

Concerns have been raised on various cost and revenue accounting practices. The concerns include the following:

- Is WQB labor accumulation reflective of the employees’ actual activities to support DWL functions, WWL functions, or both?

- Are the non-labor expenses of both laboratory groups being accumulated and charged correctly to either DWL or WWL (or to groups that benefit both groups of laboratories)?
- Has WQB implemented appropriate cost accounting practices to accumulate direct and indirect costs accurately?
- Does WQB have appropriate contracting arrangements for the tests it performs for its customers?
- Are prices for various tests appropriate?
- Are test revenues being matched appropriately to the costs of performing the tests?

The City Services Auditor therefore requested that we investigate these concerns. We used the fiscal year ended June 30, 2005 (the most recent period for which full-year data is available) as the basis for our procedures performed and our findings.

Summary of Findings and Recommendations

The following is a summary of our findings and recommendations:

- All WQB employees charge their labor (including benefits) hours and dollars to one laboratory group or the other (i.e., no WQB employee has labor charged to both DWL and WWL). However, SFPUC identified eight employees who provide significant support to both DWL and WWL. We also found that all employees with administrative-type job titles charged all of their labor hours and dollars to DWL. Our preliminary estimate of the overstatement of DWL (and understatement of WWL) expenses ranges from \$263,105 to \$526,211.

We therefore recommend that SFPUC evaluate the actual responsibilities of all administrative employees to identify those that should either charge directly to WWL or have their time allocated on some reasonable basis to both DWL and WWL.

- Certain expenses that should be allocated between DWL and WWL were charged 100% to DWL. In addition, substantially all travel and education expenses that are identifiable on a specific-employee basis are charged to the Water Quality Administration index code (which, in turn, is charged 100% to DWL). Our preliminary estimate of the overstatement of DWL (and understatement of WWL) expenses ranges from \$36,483 to \$72,966.

We therefore recommend that SFPUC evaluate all significant WQB non-labor expenses charged (almost) exclusively to DWL to determine the amount that should be re-classified to WWL index codes.

- SFPUC has partially, but not fully, completed the estimation of direct costs of providing various DWL tests. In addition, direct cost estimation of WWL tests is only in the preliminary stages.

We therefore recommend that SFPUC complete its direct cost estimation of providing the various DWL and WWL tests. We also recommend that SFPUC reconcile these estimates to actual costs to ensure their reasonableness.

- SFPUC charges 180% of direct labor for overhead and general and administrative costs, but this is only an estimate that is not supported by a complete listing of the applicable overhead and indirect costs (such as the applicable SFPUC bureaus).

We recommend that SFPUC develop appropriate indirect cost rate(s) that are based on an appropriate allocation of all applicable indirect costs of WQB, other SFPUC bureaus and indirect costs allocated from the City.

- WQB has written agreements for only a small percentage of the tests it performs for its customers. Current SFPUC management does not have knowledge of whether the City Attorney has evaluated the need for written agreements for all WQB tests performed for customers.

We therefore recommend that SFPUC consult with the City Attorney to determine whether its current oral agreements with most WQB customers are adequate and, if necessary, to develop standard written agreement(s) for WQB services.

- SFPUC uses competitive market pricing for the tests it performs. However, because the direct cost estimation is not complete, SFPUC can't be sure that pricing of each and every test covers at least the incremental costs of conducting the test.

We therefore recommend that SFPUC compare the costs of providing each test (after they are both developed and tested for reasonableness) to the prices to ensure that the pricing of all tests exceeds the incremental costs of conducting the tests.

- Revenues sometimes are credited to one laboratory, but the other laboratory conducts the corresponding tests. Accordingly, certain revenues are not matched with their related costs and expenses.

We therefore recommend that SFPUC implement procedures to ensure that test revenues are properly matched with the corresponding costs and expenses.

In addition to the observations and recommendations included in the following sections, we also have developed a suggested format for documenting costs of performing various tests (see recommendations 2, 3, 4 and 6). This suggested format is included in the Appendix.

DISTRIBUTION OF LABOR AND NON-LABOR EXPENSES TO INDEX CODES

Background

SFPUC has established specific index codes for labor and non-labor cost accumulation. All WQB index codes are assigned directly to either DWL or WWL.

Summary of Procedures Performed

The following summarizes the procedures performed in our evaluation of labor and non-labor costs:

- Obtained an electronic copy of the SFPUC's Report 74301, which summarizes WQB expenses by index and sub-object for the year ended June 30, 2005.
- Obtained an electronic copy of all of the transaction data file ("TDF") entries (e.g., general ledger entries) for WQB for the year ended June 30, 2005.
- Calculated TDF entry totals by index and sub-object and compared them to the totals from Report 74301.
- Obtained an electronic copy of all WQB time report input for the year ended June 30, 2005.
- Calculated time report input totals by index, and compared these totals to totals by index for sub-objects 00101-01299 and 01521.
- Calculated time report input totals by person, job classification and index.
- Obtained the names of individuals who provide management/administrative support to both DWL and WWL.
- Identified all individuals with administrative-type job classifications from the time report input and table of City job classification numbers and names.
- Analyzed the Water Quality Administration (WQ Admin) index code non-labor expenses to identify significant amounts and whether these amounts represented a substantial percentage of WQB's total expenses for the particular sub-object.

Observation 1

We confirmed from our summarization of time report input that each WQB employee charged 100% of his or her time to either DWL or WWL during the year ended June 30, 2005 (we did not find any employees who charged time to both DWL and WWL). However, the SFPUC identified eight WQB employees who provide significant support to both labs. Two of these WQB employees charged 100% of their labor (including all benefits) dollars to WWL, while the other six WQB employees charged 100% of their labor dollars to DWL.

Five of the six employees identified above who charged 100% of their labor to DWL include a Program Manager II (leader of this group), Laboratory Services Manager (second highest

classification within this index code), Supervising Chemist, Business Analyst – Principal and Secretary II. The Program Manager II estimates that he spends approximately 45% of his time on WWL activities. The sixth employee specifically identified above who charged 100% of his labor dollars to DWL is the WQB Bureau Manager, who charged his time to WQ Admin.

From our evaluation of WQB’s summarization by person by index code, we also found that all 16 WQB employees with administrative-type job titles (e.g., partial job titles included “clerk,” “typist,” “secretary,” or “analyst”) charged their labor hours and dollars to DWL-specific index codes. No labor was charged to WWL by employees with administrative-type job titles during the year ended June 30, 2005.

The following is a summary of total WQB labor (including benefits) dollars, together with DWL and WWL labor dollars charged by employees that appear to support both laboratory groups:

	<u>Drinking Water</u>	<u>Wastewater</u>	<u>Total</u>
Total WQB labor and benefits	<u>\$ 8,492,374</u>	<u>\$ 2,013,372</u>	<u>\$ 10,505,746</u>
Labor and benefits of employees that appear to support both laboratory groups	<u>\$ 1,444,677</u>	<u>\$ 129,150</u>	<u>\$ 1,573,827</u>
Percentage of labor dollars that support both laboratory groups	<u>17.01%</u>	<u>6.41%</u>	<u>14.98%</u>

Several SFPUC employees identified different percentages for reclassifying the labor dollars from one laboratory group to the other. These percentages are preliminary and need to be verified. We therefore have calculated the following range of estimated increases or (decreases) in DWL and WWL labor and benefits, assuming reclassification percentages of between 20% and 40%. For example, if 30.00% of the expenses should have been reclassified, the calculation is $(\$1,444,677 - \$129,150) * 30.00\% = \$394,658$.

<u>Percent of Labor to be Reclassified</u>	<u>Total Expense Impact on</u>	
	<u>Drinking Water</u>	<u>Wastewater</u>
<u>20.00%</u>	<u>\$ (263,105)</u>	<u>\$ 263,105</u>
<u>25.00%</u>	<u>\$ (328,882)</u>	<u>\$ 328,882</u>
<u>30.00%</u>	<u>\$ (394,658)</u>	<u>\$ 394,658</u>
<u>35.00%</u>	<u>\$ (460,434)</u>	<u>\$ 460,434</u>
<u>40.00%</u>	<u>\$ (526,211)</u>	<u>\$ 526,211</u>

Recommendation 1

We recommend that SFPUC develop and implement appropriate methods to allocate the costs of the eight specifically-identified employees to DWL and WWL. We also recommend that SFPUC evaluate the activities of all employees with administrative-type job titles not specifically identified above to determine whether any of these employees either should charge 100% of their time to WWL or should have their time allocated on a reasonable basis to both DWL and WWL.

One possible method of developing estimates is to have the affected employees keep detailed time records for specific periods (as an example, one or two selected pay periods each calendar quarter). These detailed time records for the specific periods would then be the basis for the full-year estimates.

Views of Responsible Officials

SFPUC management concurs with the recommendation and is currently implementing methods to allocate cost of the employees between the labs. The SFPUC has reorganized and DWL and WWL are budgeted and recording cost with in their respective enterprise. In addition, management will evaluate administrators' time spent on both labs.

Observation 2

We identified a number of WQB non-labor expense categories that were charged completely or almost completely to WQ Admin. Several of these joint expense categories appeared to benefit both DWL and WWL. Total expenses by expense category for WQB in total, WQ Admin and the percentage of WQ Admin expenses to WQB total expenses for the particular expense category are listed below.

Expense Category	WQB Total	Charged to WQB Admin	Percent of WQB Admin to Total
Telephone	\$ 82,121	\$ 82,121	100%
Travel	54,790	52,822	96%
Training	34,514	32,643	95%
Other	14,887	14,829	100%
Totals	<u>\$ 186,312</u>	<u>\$ 182,415</u>	<u>98%</u>

We calculated the following range of expenses that should be reclassified from DWL to WWL, assuming that between 20% and 40% of the \$182,415 identified above should be reclassified:

Percent of Non-Labor to be Reclassified	Total Expense Impact on	
	Drinking Water	Wastewater
20.00%	\$ (36,483)	\$ 36,483
25.00%	\$ (45,604)	\$ 45,604
30.00%	\$ (54,725)	\$ 54,725
35.00%	\$ (63,845)	\$ 63,845
40.00%	\$ (72,966)	\$ 72,966

Recommendation 2

We recommend that SFPUC analyze all significant non-labor expenses charged to WQ Admin to evaluate whether certain of these expenses should be reclassified from DWL to WWL. For example, telephone could be allocated between DWL and WWL on the number of handsets.

In conjunction with recommendations 2, 3, 4 and 6, we have developed a suggested format for documenting costs of performing tests. This suggested format is included in the Appendix.

Views of Responsible Officials

Management concurs with the observation and will review significant non-labor expenses for possible allocation between enterprises. However, any allocation of these expenses would be immaterial.

DIRECT AND INDIRECT COST ESTIMATION

Background

SFPUC has identified the number of each type of test performed at each of the four laboratory locations. Only three of the four locations need to be considered for further analysis, since the Moccasin laboratory supports only SFWD and HHWP.

We understand that tests are often run in batches of 10-15 tests per batch. In many, but not all, cases, adding one more test to the batch results in little additional (or incremental) cost in terms of labor/benefits or non-labor. In addition, because test batches often require substantial processing time in specialized pieces of equipment, one scientist/technician can monitor multiple tests at the same time.

SFPUC has estimated its costs of providing certain, but not all, DWL services at Millbrae. These estimates include estimated hours, estimated labor dollars, plus 180% of estimated labor dollars to cover estimated overhead and general and administrative expenses.

Summary of Procedures Performed

The following summarizes the procedures performed in our evaluation of direct and indirect cost estimation:

- Obtained a report that includes the calculations of direct and indirect costs for certain DWL tests.
- Inquired of the WQB Program Manager as to how this report was developed and of its completeness.
- Inquired of how the overhead rate was developed.
- Analyzed depreciation of WQB assets.

Observation 3

Estimated hours and labor dollars represent management's best current estimate of the effort necessary to perform these tests. As indicated above, cost estimates have not been developed for all DWL tests. In addition, cost estimates for WWL tests have not been developed at the level of detail of the DWL cost estimates. Finally, because the cost estimates have not been prepared for all tests, SFPUC is not able to reconcile the estimated total effort to total actual labor hours and dollars reflected in the SFWD, HHWP and Wastewater financial statements. (Reconciliation of the estimates to actual labor hours and dollars assists in ensuring the reasonableness of the estimates.)

Recommendation 3

We recommend that SFPUC develop estimated direct labor hours and dollars for all tests performed by the Millbrae, Oceanside and Southeast laboratories (and also for Moccasin if it is

determined that a significant number of tests are performed for other than SFWD and HHWP operations). We further recommend that, as part of developing the estimates, SFPUC track its actual activities. The following are examples of what to consider (and is not intended to be an all-inclusive list):

- Tracking the frequency in which batches of particular tests are run (for example, are certain batches of tests run on an ongoing, periodic basis versus only on an as-needed basis?).
- Tracking the number of tests run in each batch.
- Tracking actual time spent performing and/or monitoring one or more batches of tests run concurrently.
- Tracking actual materials spent on each batch of tests (particularly to assist in determining incremental costs of additional tests).
- Comparing total costs of each batch of tests to each other to assist in estimating the incremental costs of adding one more test to a particular batch.

After cost estimates are developed, we then recommend that SFPUC evaluate the reasonableness of the estimates by comparing total calculated costs to total actual costs. If any estimates are determined to be unreasonable, then SFPUC should make the necessary revisions to these estimates to ensure their reasonableness.

In conjunction with recommendations 2, 3, 4 and 6, we have developed a suggested format for documenting costs of performing tests. This suggested format is included in the Appendix.

Views of Responsible Officials

Management concurs and will review estimates for reasonableness.

Observation 4

The overhead 180% overhead rate on direct labor is not supported by an indirect cost plan that identifies and allocates overhead and general administrative costs, which include, but are not limited to, the following:

- | | |
|--|--|
| • Equipment depreciation | • Water Quality administration |
| • PUC bureau expenses (General Manager, Finance, Information Technology Services, Human Resources) | • City overhead (commonly known as “COWCAP”) |

We also noted that certain specific laboratory assets accounted for substantial percentages of laboratory equipment depreciation. Specifically, we noted that:

- Fourteen out of 508 pieces of DWL laboratory equipment accounted for \$1,219,843, or 27% of total DWL acquisition cost of \$4,475,679.
- Four out of 58 pieces of DWL laboratory equipment with FY 2005 depreciation expense accounted for \$78,359, or 34% of total DWL depreciation expense of \$232,281.
- Six out of 23 pieces of WWL laboratory equipment accounted for \$1,162,744, or 85% of total WWL acquisition cost of \$1,362,910.
- Three out of 21 pieces of WWL laboratory equipment with FY 2005 depreciation expense accounted for \$79,125, or 76% of total WWL depreciation expense of \$115,768.

Recommendation 4

We recommend that SFPUC develop appropriate support for the overhead/general and administrative expense rate. This is typically, but not necessarily, done through the development of an indirect cost plan.

We also recommend that SFPUC consider the appropriateness of having several indirect cost rates (depending on the particular test) to reflect depreciation expense of equipment with significant annual depreciation expense.

In conjunction with recommendations 2, 3, 4 and 6, we have developed a suggested format for documenting costs of performing tests. This suggested format is included in the Appendix.

Views of Responsible Officials

Management concurs with the observation and will develop support for an overhead rate.

ACCOUNTING FOR AND PRICING OF TESTS PERFORMED

Background

We understand that WQB uses market pricing for the tests it performs for certain City and non-City customers, and that BERM provides a fixed amount each year for WWL testing, regardless of the number of tests performed. The market pricing reflects normal lead times (which can be several days) for the completion of the tests by commercial laboratories.

We note that WQB's operations philosophy and capacity planning may differ from that of a commercial testing laboratory. A commercial testing laboratory often control over the timeliness of providing its services (e.g., a commercial testing laboratory may not promise to meet WQB's timeliness requirements and, as such, can lower its costs of providing the services).

WQB must ensure that its capacity is adequate to meet timeliness of completion requirements (which is not unreasonable given WQB's responsibilities to protect drinking water quality and to monitor the quality of waste water discharges). WQB performs tests for third parties principally to utilize certain portions, but not necessarily all, of its excess capacity since portions of laboratory capacity must remain available for short-notice tests. This also means that WQB probably will have a higher cost per test than a commercial testing laboratory.

Summary of Procedures Performed

The following summarizes the procedures performed in our evaluation of accounting for and pricing of tests performed:

- Obtained an understanding of how WQB contracts for the services it provides to customers.
- Obtained an understanding of how SFPUC accounts for revenues from City and non-City customers for tests performed by the WQB.
- Obtained an understanding of how SFPUC developed its prices for the various tests performed.
- Obtained and read a copy of the price list.

Observation 5

WQB has written agreements with only a few, but not most of its customers, for the services it provides. SFPUC's current management does not have any knowledge of whether the City Attorney has been consulted on the need for agreements with all WQB customers.

Recommendation 5

We recommend that SFPUC consult with the City Attorney to determine whether its current oral agreements are adequate and appropriate. If necessary or desirable, we also recommend that SFPUC work with the City Attorney to develop appropriate standard agreement(s).

Views of Responsible Officials

Management concurs and will work to standardize agreements.

Observation 6

As noted in the Background of this section, WQB's cost per test is probably higher than that of a commercial testing laboratory because of the need for timeliness. Certain tests are performed for third parties solely to utilize certain portions of excess capacity. In such cases, market pricing often will not cover fully-allocated costs of service, but should be equal to or greater than the incremental costs of providing the services.

On the other hand, if WQB is performing tests for third parties because commercial testing laboratories cannot meet timeliness of service requirements, then fully allocated costs of services are appropriate bases for determining prices because the commercial marketplace does not offer the particular services.

Recommendation 6

Our recommendations for developing cost estimates of performing laboratory tests are included in recommendations 3 and 4. After the cost estimates are developed, we have the following recommendations on the pricing of services:

- We recommend that WQB periodically compare its price list to prices charged by commercial testing laboratories and update its prices accordingly. All incremental costs of performing tests should be compared to current prices to ensure that all prices are greater than the incremental costs of providing the tests. If market prices are less than incremental costs, then WQB should determine whether to increase the prices or no longer offer the test to third parties.
- If timeliness of requirements of certain tests performed for third parties cannot be met by commercial testing laboratories, then separate fully-allocated cost-base prices should be developed for tests that commercial testing laboratories cannot perform. This means that tests may have multiple prices – one price for standard timing and a higher price for “rush” timing.

In conjunction with recommendations 2, 3, 4 and 6, we have developed a suggested format for documenting costs of performing tests. This suggested format is included in the Appendix.

Views of Responsible Officials

Management will review the pricing structure of its tests.

Observation 7

We understand from our conversations with SFPUC that all revenues from drinking water tests are credited to DWL, even if WWL performs the test, and that all revenues from wastewater tests

are credited to WWL, even if DWL performs the test. This results in non-matching of revenues and related expenses for specific laboratory tests.

Recommendation 7

We recommend that SFPUC develop methodologies to do either of the following in order to comply with the matching principle of accrual accounting that matches revenues and expenses:

- Credit revenues to the laboratories actually performing the tests, or
- Identify tests performed by one laboratory for another, and implement procedures to accurately transfer costs from the group conducting the test to the group receiving the revenue.

Views of Responsible Officials

Management concurs and plans to implement procedures to record revenue in respective laboratory's accounts for work actually performed.

Test Name	Incremental Direct Costs			Non-Incremental Direct Costs			Total Direct Costs	Laboratory Overhead	SFPUC and City OH/G&A	Total Costs
	Labor	Non-Labor	Total	Labor	Non-Labor	Total				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]

- [1] Name or other identification of test.
- [2] Includes only the incremental labor (and related) costs of performing a test for a third party. For example, if WQB normally runs 10 replications of a particular test for SFPUC use, then the incremental labor would be the additional labor necessary to perform the 11th, 12th, 13th, etc. test.
- [3] Includes only the incremental non-labor costs of performing a test for a third party.
- [4] Sum of [2] and [3] (***Total incremental costs option for pricing***).
- [5] Reflects total direct labor (and related) costs of performing a batch of tests, less the labor identified in [2].
- [6] Reflects total direct non-labor costs of performing a batch of tests, less the labor identified in [3].
- [7] Sum of [5] and [6].
- [8] Sum of [4] and [7] (***Total direct costs option for pricing***).
- [9] Reflects laboratory overhead, either in dollars or as a percentage of total direct costs. Depending on the results of SFPUC's analysis of laboratory overhead, different tests may have different overhead rates.
- [10] Reflects the allocation of SFPUC overhead/general and administrative costs, including a pro-rata share of City central overhead/general and administrative costs allocated to SFPUC.
- [11] Sum of [8], [9] and [10] (***Total fully-loaded costs option for pricing***).

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cc: Mayor
Board of Supervisors
Civil Grand Jury
Budget Analyst
Public Library