December 7, 2010

Ms. Wendy Martin-Miller
Business Manager
Sanitary District No. 1 of Marin County
2960 Kerner Blvd.
San Rafael, CA 94901

Re: Sanitary District No. 1 of Marin County ("District")
GASB 45 Actuarial Valuation as of July 1, 2009

Dear Ms. Martin-Miller:

This report sets forth the results of our GASB 45 actuarial valuation for the District's retiree health insurance program as of July 1, 2009.

In June, 2004 the Government Accounting Standards Board (GASB) issued its final accrual accounting standards for retiree healthcare benefits, GASB 43 and GASB 45. GASB 43/45 require public employers such as the District to perform periodic actuarial valuations to measure and disclose their retiree healthcare liabilities for the financial statements of both the employer and the trust, if any, set aside to pre-fund these liabilities. The District must obtain actuarial valuations of its retiree health insurance program under GASB 43/45 not less frequently than once every three years.

To accomplish these objectives, the District selected Demsey, Filliger and Associates ("DF&A") to perform an actuarial valuation of the retiree health insurance program as of July 1, 2009. We have set forth the results of the valuation in this report, and are available to answer any questions the District may have concerning the report.

Financial Results

We have determined that the amount of actuarial liability for current and future retirees, as of July 1, 2009, is $536,843. This represents the present value of all benefits expected to be paid by the District for its current and future retirees. If the District were to place this amount in a fund earning interest at the rate of 5.0% per year, and all other actuarial assumptions were exactly met, the fund would have exactly enough to pay all expected benefits.

This includes benefits for 9 retirees, as well as 23 active employees who may become eligible to retire and receive benefits in the future. Of the 23 employees, we have assumed that 20% will waive statutory minimum coverage under PERS Health (PEMHCA) after age 65, although it is not known in advance which retirees will waive coverage. The valuation excludes employees hired after the 2009-10 fiscal year.

If the $536,843 is apportioned into past service and future service components under the Projected Unit Credit Cost Method, the past service liability (or "Accrued Liability") component is $302,766 as of July 1, 2009. This represents the present value of all benefits earned to date assuming that an employee earns retiree medical benefits ratably over his or her career. The $302,766 is comprised of liabilities of $113,817 for active employees and $188,949 for retirees. Because the District has not established a trust for pre-funding retiree healthcare benefits, the Unfunded Accrued Liability (also called the UAL, equal to the AL less Assets) is also $302,766.

The District adopted GASB 45 as of July 1, 2008. GASB 43, pertaining to the financial statements of a retiree trust itself, would have taken effect one year earlier (June 30, 2008); however, the District has no trust assets at present so GASB 43 is not yet applicable.

We have determined that the Sanitary District No. 1 of Marin County's "Annual Required Contributions", or "ARC", for the fiscal year 2009-10, is $37,359. The $37,359 is comprised of the present value of benefits accruing in the current year, called the "Service Cost", and a 30-year amortization of the UAL. The District paid $12,269 for the 2009-10 fiscal year in healthcare costs for its retirees, so the difference between the accrual accounting expense (ARC) and pay-as-you-go is an increase of $25,090.

There are two adjustments to the ARC that are required in order to determine the District's Annual OPEB Cost (AOC) for the 2009-10 fiscal year. We have calculated these adjustments based on a Net OPEB Obligation (NOO) of $27,597 as of June 30, 2009, resulting in an AOC for 2009-10 of $36,944.

We show these numbers in the table on the next page and in Exhibit I. All amounts are net of expected future retiree contributions, if any.

Sanitary District No. 1 of Marin County

Annual Liabilities and Expense under

GASB 45 Accrual Accounting Standard

<u>Projected Unit Credit Cost Method</u>

Item	**Amounts for Fiscal 2009-10**
Present Value of Future Benefits (PVFB)	
Active	$347,894
Retired	188,949
Total: PVFB	**$536,843**
Accrued Liability (AL)	
Actives	$113,817
Retired	188,949
Total: AL	**$302,766**
Assets	(0)
Total: Unfunded AL	**$302,766**
Annual Required Contributions (ARC)	
Service Cost At Year-End	$17,664
30-year Amortization of Unfunded AL	19,695
Total: ARC	**$37,359**
Adjustments to ARC	
Interest on Net OPEB Obligation*	1,380
Adjustment to Net OPEB Obligation*	(1,795)
Total: Annual OPEB Cost (AOC) for 2009-10	**$36,944**

*Amounts based on June 30, 2009 Net OPEB Obligation of $27,597.

The ARC of $37,359, shown above, should be used for the fiscal years 2009-10, 2010-11, and 2011-12, but the Annual OPEB Cost for the 2010-11 and 2011-12 fiscal years must each include adjustments based on the ending Net OPEB Obligations (NOO) for the immediately preceding fiscal year, which are not known at this point. Our estimate of the Annual OPEB Cost for the 2010-11 fiscal year is given in Exhibit I. The estimate may be taken as final if and when the June 30, 2010 Net OPEB Obligation of $52,272 is published.

When the District begins preparation of the June 30, 2011 government-wide financial statements, DF&A will provide the District and its auditors with complimentary assistance in preparation of footnotes and required supplemental information for compliance with GASB 45 (and GASB 43, if applicable).

GASB 43 and GASB 45 Compliance Issues

There are two considerations regarding GASB 43 and GASB 45 that we would like to mention at this point:

(1) Both statements specify that in order for a retiree fund to be counted as "assets" for purposes of the statements, the fund must be set aside in a separate, irrevocable trust, that may not be used for any purpose besides the payment of plan benefits to retirees. The trust must also be beyond the reach of creditors of both the employer and/or the plan administrator, if any. For example, an earmarked reserve within the General Fund is not expected to meet this definition of "assets". We recommend that the District consider taking steps to establish a retiree fund that meets the GASB requirements, as soon as possible.

(2) There has been some confusion among public agencies throughout California over what GASB 45 does and does not require. Specifically, many agencies initially believed that GASB 45 required pre-funding of retiree healthcare plans. This is not the case - the standard applies only to the expense to be charged to the agencies' income statements. Contributing to the confusion is the terminology used in both GASB 43 and GASB 45 for the annual expense - it's called the "Annual Required Contributions", even though it's neither required nor (necessarily) contributed.

Relationship between GASB 45 And District Funding Policy

We do not believe that it is necessary or even desirable for an agency to establish a policy of funding exactly the ARC on a cash basis each year. The reasons for this are a bit complex and beyond the scope of this report, but the important thing to understand is that GASB 45 pertains to the income statement, and funding pertains to cash flow, and there is no need for the two to be directly linked, at least for now.

Despite these concerns, we do recommend that the District adopt a policy of pre-funding its retiree healthcare plan as soon as possible. The benefits of pre-funding into an irrevocable retiree trust are numerous. To name a few, the District can expect the establishment of an irrevocable trust to result in:

(1) improved return on investments;
(2) healthier District financial statements;
(3) lower ARC in future years (since pre-funded amounts reduce future years' amortization charges on the Unfunded AL, and the actuary may be able to use a higher discount rate);
(4) more predictable and manageable cash flows; and
(5) greater economic security for District employees and retirees.

Funding Schedules

There are many ways to approach the pre-funding of retiree healthcare benefits. In the *Financial Results* section, we determined the annual expense for all District-paid benefits. The expense is an orderly methodology, developed by the GASB, to account for retiree healthcare benefits. This amount will fluctuate from year to year based on the asset performance and as the population matures. It will eventually reach zero when the last eligible retiree dies. The GASB 45 expense has no direct relation to amounts the District may set aside to pre-fund healthcare benefits.

The table on the next page provides the District with three alternative schedules for funding (as contrasted with expensing) retiree healthcare benefits. The schedules all assume that the retiree fund earns 5.0% per annum on its investments, and that contributions and benefits are paid mid-year. All numbers are net of expected retiree contributions.

The schedules are:

1. A level contribution amount for the next 20 years.
2. A level percentage of the Unfunded Accrued Liability (UAL).
3. A constant percentage (3%) increase in contribution each year for the next 20 years.

We provide these funding schedules to give the District a sense of the various alternatives available to it to pre-fund its retiree healthcare obligation. The three funding schedules are simply three different examples of how the District may choose to spread its costs.

By comparing the schedules, you can see the effect that early pre-funding has on the amount the District will eventually have to pay. Because of investment earnings on fund assets, the earlier contributions are made, the less the District will have to pay in the long run. Of course, the advantages of pre-funding will have to be weighed against other uses of the money.

The table on the next page shows the required annual outlay under the pay-as-you-go method and each of the above schedules. The three funding schedules represent the District's total expected outlay, including "pay-as-you-go" costs; therefore, the amount remaining each year to build up the fund is the excess over the "pay-as-you-go" amount. All numbers shown on the next page are on a closed group basis; therefore, they do not consider employees hired after the valuation date.

Sanitary District No. 1 of Marin County

Sample Funding Schedules (Closed Group)

Fiscal Year Beginning	Pay-as-you-go	Level Contribution for 20 years	Level % of Unfunded Liability	Constant Percentage Increase
2009	$12,269	$42,040	$57,526	$32,816
2010	13,929	42,040	51,026	33,801
2011	15,109	42,040	45,607	34,815
2012	13,752	42,040	41,067	35,859
2013	12,321	42,040	37,075	36,935
2014	10,824	42,040	33,550	38,043
2015	12,361	42,040	30,430	39,184
2016	14,144	42,040	27,889	40,360
2017	16,142	42,040	25,856	41,571
2018	18,733	42,040	24,267	42,818
2019	21,206	42,040	23,092	44,102
2020	24,015	42,040	22,252	45,425
2021	26,881	42,040	21,712	46,788
2022	30,516	42,040	21,420	48,192
2023	34,575	42,040	21,379	49,638
2024	38,861	42,040	21,562	51,127
2025	40,087	42,040	21,934	52,661
2026	44,200	42,040	22,265	54,240
2027	45,661	42,040	22,724	55,868
2028	42,956	42,040	23,123	57,544
2029	46,862	0	23,230	0
2030	43,773	0	23,457	0
2031	47,668	0	23,401	0
2032	49,951	0	23,474	0
2033	48,545	0	23,557	0
2034	51,450	0	23,461	0
2035	47,922	0	23,417	0
2036	41,530	0	23,112	0
2037	42,606	0	22,471	0
2038	43,508	0	21,888	0
2039	44,431	0	21,342	0
2040	45,420	0	20,823	0
2041	46,479	0	20,324	0
2042	45,204	0	19,840	0
2043	45,957	0	19,278	0
2044	46,539	0	18,725	0
2045	44,992	0	18,166	0
2046	45,019	0	17,533	0
2047	41,193	0	16,889	0
2048	40,384	0	16,124	0
2049	39,341	0	15,351	0
2050	38,035	0	14,568	0
2055	26,760	0	10,419	0
2060	15,635	0	6,519	0

Actuarial Assumptions

In order to perform the valuation, it is necessary for the actuary to make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding healthcare inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar valuations, modified as appropriate for the District. For example, turnover rates were taken from a standard actuarial table, T-5, multiplied by a factor of 1.4 at all ages. This was found to provide a good match for historical District turnover experience.

Retirement rates were also based on recent District experience, but are less reliable due to the small size of the retiree group. 20% of future retirees were assumed to waive coverage under PEMHCA when the District contributes the statutory minimum only. All three assumptions should be reviewed in the next valuation to make sure they are tracking well with experience.

The discount rate of 5.0% is based on our best estimate of expected long-term plan experience and is in accordance with our understanding of the guidelines for selection of these rates under GASB 45 for unfunded plans such as the District's. The healthcare trend rates are based on our knowledge of the general healthcare environment and the specific coverages offered by the District.

Please see the "Actuarial Assumptions" section of the report for further details.

Projected Pay-as-you-go Costs

As part of the valuation, we prepared a projection of the expected annual cost to the District to pay benefits on behalf of its retirees on a pay-as-you-go basis. These numbers are on a closed group basis. Projected pay-as-you-go costs for selected future years are as follows:

FYB	Pay-as-you-go
2009	$12,269
2010	13,929
2011	15,109
2012	13,752
2013	12,321
2014	10,824
2015	12,361
2020	24,015
2025	40,087
2030	43,773
2035	47,922
2040	45,420
2045	44,992
2050	38,035
2055	26,760
2060	15,635

Net OPEB Obligation (NOO) and Annual OPEB Cost (AOC)

Exhibit I, attached at the end of the report, shows a development of the District's Net OPEB Obligation ("NOO") as of June 30, 2009 and 2010, and the Annual OPEB Cost ("AOC") for the fiscal years 2009-10 and 2010-11.

Certification

The actuarial certification, including a caveat regarding limitations of scope, if any, is contained in "Actuarial Certification" section at the end of the report.

We have enjoyed working with the District on this report, and are available to answer any questions you may have concerning any information contained herein.

Sincerely,
DEMSEY, FILLIGER AND ASSOCIATES

T. Louis Filliger, FSA, EA, MAAA
Partner & Actuary

Benefit Plan Provisions

This report analyzes the actuarially projected costs of the Sanitary District No. 1 of Marin County's retiree health insurance program.

Medical coverage is provided through CalPERS under the Public Employees' Medical and Hospital Care Act (PEMHCA), also referred to as PERS Health. A monthly dollar amount is contributed to a Section 125 plan, a portion of which the District designates as its contribution rate for health insurance. The designated contribution for healthcare is set equal to the PEMHCA statutory minimum ($101.00/month for calendar 2009 and $105.00/month for calendar 2010.) The statutory minimum is indexed (increased) in all future years according to the rate of medical inflation.

Post-Retirement Coverage

The District also offers PEMHCA to its retirees.. For calendar year 2010, the District contributes $57.75 per month to PEMHCA on behalf of each retiree eligible for PEMHCA. This contribution is increased each year pursuant to the "unequal contribution method" under PEMHCA, as amended by AB2544, whereby the amount for retirees is set equal to 5% of the District's contribution for active employees multiplied by years the District has participated in PEMHCA.

District employees who attain age 55 with at least 20 years of service are eligible to retire and receive an additional District contribution towards PEMHCA coverage equal to 40% of the retiree-only rate for the least expensive plan offered in the District's region. This amount is $181.26 for 2009 and $203.40 for 2010. When these benefits cease at age 65, the District contribution is limited to the $57.75 per month (as increased) toward PEMHCA coverage only for the retiree's remaining lifetime. The District pays a 0.43%-of-premium administrative fee to CalPERS for each retiree.

2010 Medical Premiums under PEMHCA

The following table shows 2010 monthly premiums for retirees in the "Bay Area" CalPERS region:

	Blue Shield HMO	Kaiser HMO	PERS Care PPO	PERS Choice PPO
Basic Plan				
Retiree	$577.33	$532.56	$868.17	$508.74
Retiree + 1	1,154.66	1,065.12	1,736.34	1,017.48
Family	1,501.06	1,384.66	2,257.24	1,322.72
Medicare Supplement				
Retiree	$299.53	$298.36	$410.60	$356.09
Retiree + 1	599.06	596.72	821.20	712.18
Family	898.59	895.08	1,231.80	1,068.27

Valuation Data

Age distribution of retirees included in the valuation

Age	Supplement + Minimum	Minimum Only	Total
Under 50	0	0	0
50-54	0	1	1
55-59	0	0	0
60-64	3	1	4
65-69	0	2	2
70-74	0	2	2
75+	0	0	0
All Ages	3	6	9
Average Age	61.00	64.33	63.22

Age/Years of service distribution of active employees included in the valuation

Years→	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Age								
20-24	1							1
25-29	3	0						3
30-34	1	0	0					1
35-39	3	2	0	0				5
40-44	3	0	1	1	1			6
45-49	2	1	1	1	0	1		6
50-54	1	0	0	0	0	0	0	1
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0
All Ages	14	3	2	2	1	1	0	23

Average Age: 40.09
Average Service 6.30

Actuarial Assumptions

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Valuation Date: July 1, 2009

Actuarial Cost Method: Projected Unit Credit

Amortization Method: 30-year level dollar, open period

Discount Rate: 5.0% per annum

Return on Assets: 5.0% per annum

Pre-retirement Turnover: According to 140% of the Crocker-Sarason Table T-5 less mortality. Sample rates are as follows:

Age	Turnover (%)
25	10.8%
30	10.1
35	8.8
40	7.2
45	5.6
50	3.6
55	1.3

Pre-retirement Mortality: 1994 Group Annuity Mortality, Male and Female tables. Sample deaths per 1,000 employees are as follows:

Age	Males	Females
25	0.71	0.31
30	0.86	0.38
35	0.92	0.51
40	1.15	0.76
45	1.70	1.05
50	2.77	1.54
55	4.76	2.47
60	8.58	4.77

Post-retirement Mortality: 1994 Group Annuity Mortality, Male and Female tables. Sample deaths per 1,000 retirees are as follows:

Age	Males	Females
65	15.63	9.29
70	25.52	14.73
75	40.01	24.39
80	66.70	42.36
85	104.56	72.84
90	164.44	125.02

Actuarial Assumptions (Continued)

Retirement Rates:

Age	Percent Retiring*
50-54	5.0%
55	8.0
56	9.0
57	10.0
58	10.0
59	15.0
60	20.0
61	25.0
62	30.0
63	40.0
64	50.0
65	100.0

* Of those having met eligibility to receive PERS statutory minimum retirement benefits. The percentage refers to the probability that an active employee who has reached the stated age will retire within the following year.

Trend Rates:

Year	Medical/Rx	Medical CPI
2009	7.0%	4.0%
2010	6.0	4.0
2011+	5.0	4.0

Percent Waiving Coverage: 20% (applies to PEMHCA statutory minimum coverage only).

Percent of Retirees with Spouses:

Future Retirees: 50% of future retirees were assumed to have spouses at the time of retirement. Female spouses assumed three years younger than male spouses.

Current Retirees: Based on actual spousal data.

Actuarial Certification

The liabilities set forth in this report are based on our actuarial valuation of the District's retiree health insurance program as of July 1, 2009.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the District in November, 2010. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the District.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 43 and GASB 45, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits.

Throughout the report, we have used unrounded numbers, because rounding and the reconciliation of the rounded results would add an additional, and in our opinion unnecessary, layer of complexity to the valuation process. By our publishing of unrounded results, no implication is made as to the degree of precision inherent in those results. Clients and their auditors should use their own judgment as to the desirability of rounding when transferring the results of this valuation report to the clients' financial statements.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

T. Louis Filliger

T. Louis Filliger, FSA, EA, MAAA Date: 12/7/10
Partner & Actuary

Sanitary District No. 1 of Marin County
Development of Annual OPEB Costs

Exhibit I

	Amount
Net OPEB Obligation 6/30/2008	**-**
ARC for 2008-9	34,000
Interest adjustment to ARC	-
Amortization adjustment to ARC	-
Annual OPEB Cost 2008-9	**34,000**
Employer Contribution	(6,403)
Net OPEB Obligation 6/30/2009	**27,597**
ARC for 2009-10	37,359
Interest adjustment to ARC	1,380
Amortization adjustment to ARC	(1,795)
Annual OPEB Cost 2009-10	**36,944**
Employer Contribution	(12,269)
Change in Net OPEB Obligation 2009-10	24,675
Net OPEB Obligation 6/30/2009	27,597
Net OPEB Obligation 6/30/2010	**52,272**
ARC for 2010-11	37,359
Interest adjustment to ARC	2,614
Amortization adjustment to ARC	(3,400)
Annual OPEB Cost 2010-11	**36,573**