

City and County of San Francisco 2016 Rate Application Request for Information #1

Profit Analysis

1. Please provide a calculation of RSS & RGG's operating ratio (for both Total Revenues (Schedule B.1 and Residential Revenues (Schedule B.2), and associated net profit for 2012, 2013, 2014 and 2015, accounting for Operating Ratio Expenses, Non-Operating Expenses and Revenues. Please provide expenses and revenues at a line item basis similar to that provide on Schedules B.1 and B.2 (Attachment 1).
2. Please provide a calculation of RSF's operating ratio and associated net profit for those same years, accounting for Operating Ratio Expenses, Non-Operating Expenses and Revenues at a line item basis similar to Schedule B (Attachment 1).

Migration Analysis

3. Please provide an updated version of Exhibit 52 (Apartment and Commercial Migration to Date) with the same information for 2014 and 2015 (Attachment 2).

Variance Analysis

4. Attachment 3 provides a comparison of 2013 to 2015 Actual Payroll and Related Line Items as reported for RSS & RGG and for RSF. Please explain the basis for the increases in the following individual line items:
 - a. Payroll
 - b. Pension (also please provide basis for decrease in RSS&RGG and increase in RSF)
 - c. Health Insurance
 - d. Workers Compensation

The above explanations should quantify the portions of the increases due to changes in the following factors, as applicable:

- a. Wage rates
 - b. Staffing levels
 - c. Overtime hours
 - d. Workers Compensation Experience Modification Factors
 - e. Other Factors
5. Please provide copies of the Insurance Modification Factors (Mod Rates) for RSS&RGG and RSF for 2014, 2015 and 2016 (Attachment 4)
 6. Please provide historical (3-5 years +) TIRR and DART Rates for RSS&RGG and RSF.¹

¹ The OSHA Total Recordable Injury Rate (TRIR) is a measure of the "frequency of injuries" of a company relative to the industry, while the Days Away from Work or Job Transfer of Restriction (DART) incident rate represents the "severity of injuries" related to the industry.

City and County of San Francisco
2016 Rate Application
Request for Information #1

7. Please explain the apparent discrepancies between the Revenue and Expense Projections per the Director's Report and those in the RY 2014 Annual Report (Attachment 5). In some cases figures are consistent in others that is not the case. What is the source document used to prepare the Annual Report Projected figures if not the Final Directors Report schedules?

Attachments:

- 1 RSS&RGG Schedules B.1 and B.2; RSF Schedule B
- 2 Exhibit 52 - Apartment and Commercial Migration to Date
- 3 2015 vs. 2013 Payroll & Other Related Variance Analysis
- 4 2006 – 2013 Historical Mod Rates
- 5 2014 DR Projected vs. Annual Report

City and County of San Francisco 2017 Rate Application Request for Information #2

Variance Analysis

Note: The following question is an expansion of RFI #1 Question #7 in the City's January 13th email to the Company.

1. Please explain the basis for the reported "Projections" in the Annual Reports and provide supporting Excel version of an updated Rate Schedule that supports the Company's projections included in Tables 6, 7, 8, 9 & 10 of the 2014 Annual Report. We are unable to tie the Company's Annual Report projections to Final Rate Application (examples):
 - a. FY 2014 Annual Report Table 9 shows projected RSS/RGG expenses of \$242,067,472 vs. Director's Report Schedule D shows \$242,108,274;
 - b. FY 2014 Annual Report Table 6 shows projected RSS/RGG Revenue Subject to Rate – Total = 260,497,811 vs. Director's Report Schedule B.1 Net Revenue Requirement @89% OR = \$262,916,813.
2. Please explain the changes with respect to new or eliminated expense line items and which line items various expenses are charged to in each year (2013, 14 & 15) [See Blue shaded line items]

Table 6 - RSS & RGG Revenue

3. Please provide calculated cumulative rate increases for 2013 through 2015 and compare those to the percentage increase in Residential, Apartments, Commercial, and Compactors and Debris Box revenues (Rows 9, 13, 17, 21, 26).
4. The figures show a decrease in both the number of Apartments (-5% (Row 12)) and Commercial Customers (-17% (Row 16)). Please confirm the accuracy of these figures and provide an explanation for the decreases, if known.
5. What has happened to the Sludge Contract - \$2M projected in 2013 (Row 25), but no expenses reported. Is that no longer happening or is it reported in a different line item?
6. What is the Diversion Incentive Adjustment and how is that calculated?

Table 7 – RSF Tipping Fee Revenues

7. The format in the Table changed from RY 13 to RY 14 and the total revenue figures don't seem to be comparable.
 - a. Can you put the 2013 Data in 2014 Format and RY 15 vs. 13 variance analysis prepared?
 - b. If not please provide an apples-to-apples comparison of 2013, 2014 and 2015 RSF (a) tonnages, and (b) Tipping Fee Revenue by line item.

Table 8 – RSF Recycling Revenues

8. Recycle Central tons down 5% (Row 23) (6,314 out of 132,000 ~ 508 tpd) - Reasons? Future projections?
9. FY 13, 14 and 15 tons exactly the same for Tunnel and Beatty Operations (Rows 57-62)?
10. Recycling Revenue down 18% (Row 75) (\$4.7MM). What if any changes have there been in commodity prices since the 2015 figures were reported?
11. What does Processing Expense cover (Row 76)? How is it calculated?

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City and County of San Francisco
2017 Rate Application
Request for Information #2

12. What does Purchases (Schedule K.2) cover (Row 77)? How is it calculated?
13. Purchases (Schedule K.2) (Row 77) – Figures are exactly the same for FY 13 and 14 decreased 50% in FY 15???

Table 9 – RSS&RGG Operating Expenses

14. Capital Charges (Row 18) (example of change categorizing and reporting expenses (See Item #2 above); same for I/C Disposal etc. (see Blue shaded line items)
15. What is covered in Contract Services (Row 19)?
16. What drove the 13% decrease in Liability Insurance (Row 32)?
17. What specific expenses were covered in Professional Services (Row 40), and please explain variances between Actual and Projected?
18. What is covered in Supplies (Row 46) and please explain the basis for the 71% increase between RY 13 and RY 15?
19. What drove the increase in Sustainability line item (Row 47)?

Table 10 – RSF Operating Expenses

20. Certain Expense line items have been changed, removed, consolidated? Such that it is not possible to make full comparisons of actuals for 2013 vs. 2015. As examples:
 - a. Capital Charges
 - b. Freight
 - c. I/C Disposal
 - d. I/C Processing
 - e. Lease
 - f. Recycling charges
 - g. Recycling processing
21. Please explain how each of those line items that were reported in 2013 but not later years (and vice versa) have been handled (Refer to Item #2 above).
22. What drove the 14% increase in I/C Processing & Disposal (Row 27)?
23. What drove the 13% decrease in Liability Insurance (Row 32)?
24. What specific expenses were covered in Professional Services (Row 38), and please explain the basis for the 22% increase between RY 13 and RY 15?

City and County of San Francisco

2017 Rate Application

Request for Information #3

Operating Expenses

For the following operating expenses listed in Tab D of the Rate Model spreadsheets, R3 would like to request the following clarifications be made and/or supporting documentation be provided by RSF:

Recology San Francisco

1. Please provide a written justification for the change in head count for RY 2017 and RY 2018, and the source data for dollar amounts provided in Schedule G.1.
2. Regarding Schedule G.2, please provide source data for the numbers provided for \$/Hour and No. of Worked Hours, an explanation of calculations for Total Recology Contributions including, and why this approach was taken.
3. For Schedule G.3, please provide an explanation for the number of people removed from the union headcount year to year and as projected (B23:E23). In addition, please provide the source data for monthly rates direct entered in cells D7, E7, B20, C20 and D20.
4. Please provide the source data for workers compensation amounts in cells B9:F9 of Schedule G.4.
5. For Schedule D, please provide source data for Bad Debt, cells D15:H15.
6. Please provide an explanation of assumed toll crossings per load in cells E12:F12 of Schedule L.4. In addition, please provide further clarification for the calculated RY 16 toll crossings per load in cell D12.
7. For Schedule M.2, please explain why 3.10% is used as the inflationary factor.
8. Regarding Schedule H.3, please provide source documentation for hardcoded cells E24:F29 regarding existing depreciation, and hardcoded cells B8:C18 regarding new depreciation expenses. Please correct the formula error for RY 18 projected depreciation expenses (cells F8:F18).
9. Please provide source data for hardcoded cells in the range of B9:F27 of Schedule L.1.
10. Regarding rising disposal costs, R3 understands that there were major decision points we are certain the City and Recology have discussed at length. However, this is not adequately reflected in the Rate Application. To assist the public in understanding, and for posterity, we recommend that a more detailed explanation be provided as part of the Rate Application.
11. In Schedule J.1, cells B8:G18 values are direct entered and require additional information regarding the basis for these projections. Projected Hazardous Waste costs in cells F35 and G35 are also direct entered, and a more detailed explanation for the basis for these projections should also be provided.
12. Please explain the basis for projections in Schedule H.1 for cells E11:F12, E14 and F14. Please provide an explanation of Schedule H.2 Column J.
13. For Schedule I, please provide supporting documentation for projections in cells E8 and F8.
14. Regarding Schedule L.2, please provide the basis for RY 17 projections for Licenses & Permits in Column E.
15. Please explain the calculation of projected HHW disposal costs in RY 18, cell F9 in Schedule J.3. Please provide an explanation for RY 17 projected outside disposal costs in Column E, and for the

City and County of San Francisco

2017 Rate Application

Request for Information #3

cost of EBMUD Anaerobic Digestion in particular. For the Final Rate Application, please include formulas for calculating projected expenses.

16. Please explain and provide supporting information for the increase in postage expenses as entered in Schedule D.
17. For Schedule M.1, please provide the basis for RY 17 Professional Services values in Column E, and further explain the approach taken for calculating RY 18 Professional Services (please provide supporting documentation as necessary).
18. Recology should provide the lease payment schedule with the Port of San Francisco confirming the total amount included in Schedule D.
19. Regarding Schedule L.2, please provide the basis for RY 17 projections and explanation for the increasing trend in Repair expenses, particularly from RY 15 to RY 16.
20. For Schedule L.2, please provide the basis for hardcoded cells B30:E31, and an explanation for the increase in Tires & Tubes costs associated with Recycle Central in RY 16.
21. Please provide supporting documentation for the Other amounts entered in cells G47 and H47 in Schedule D to further explain these projections.

Recology Sunset Scavenger/Recology Golden Gate

1. Please provide a written justification for the change in head count for RY 2017 and RY 2018, and the source data for dollar amounts provided in Schedule G.1.
2. For Schedule G.2, please provide an explanation of calculations for Total Recology Contributions including, and why this approach was taken.
3. Regarding Schedule G.3, please provide the source data for monthly rates in hardcoded cells E7, F7, and E21.
4. Please provide the source data for workers compensation amounts in cells B10:F10 of Schedule G.4.
5. Please provide source data for Bad Debt, cells D16:H16 of Schedule D.
6. For Schedule L.5, please provide source data for direct entered cells in Column E, and an explanation of the approach for calculating the Contract Services expense for Fantastic 3 Recycling in RY 18 (cell F10).
7. Please explain why 3.10% is used as the inflationary factor in Schedule M.2.
8. For Schedule H.1, please provide source documentation for direct entered values in cells E26:F26 regarding Existing Depreciation in 2013 Rate, and direct entered values in cells E27:F27 regarding New Depreciation after 2013 Rate.
9. Please provide the supporting basis for the projected RY 17 Freight expense in cell G23 in Schedule D.
10. For Schedule L.3, please provide supporting documentation for \$/Gallon in Column M, the number of gallons entered for Renewal Diesel, and amount for Oil & Propane Gas in cells K12 and N12.
11. Please provide the basis for projections in Schedule H.1 for cells E11:F12, E15 and F15.

City and County of San Francisco

2017 Rate Application

Request for Information #3

12. Please provide supporting documentation for projections in cells E9 and F9 in Schedule I.
13. Regarding Schedule L.2, please provide supporting documentation for RY 16 Licenses & Permits expenses in cells D11:D24.
14. Please provide the supporting basis for the projected RY 17 O/S Billing Services expense in cell H32 in Schedule D.
15. For Schedule D, please provide the supporting basis for the projected O/S Disposal RY 17 expense in cell H33.
16. Please provide the supporting basis for the projected RY 17 O/S Equipment expense in cell H34 in Schedule D.
17. Please provide supporting documentation for RY 16 Parts expenses in cells D29:D39 of Schedule L.2.
18. Regarding Schedule M.1, please provide the basis for RY 17 Professional Services values in Column E.
19. Please provide the supporting basis for the projected RY 17 and RY 18 Property Rental expenses in cells G39 and H39 in Schedule D.
20. For Schedule L.2, please provide the basis for RY 16 Repairs & Maintenance expenses in cells D58:D59.
21. Please provide the basis for the RY 17 Security & Janitorial expense in cell G41 of Schedule D.
22. Please explain the methodology for projecting the RY 17 and RY 18 Taxes expenses in cells G44 and H44 of Schedule D.
23. Please include the formula for calculating the RY 17 Telephone expense in cell G45 of Schedule D in the Final Rate Application, and provide an explanation for the RY 18 expense calculation in cell H45.

City and County of San Francisco

2017 Rate Application

Request for Information #4

Health Care and Pension Liability

1. Can Recology address the following additional items from the 2013 Director's Report related to any specific changes Recology has made to the following items since the 2013 Director's report was issued:
 - a. Employee health care contributions and co-pays; and
 - b. The pension system to lessen Recology's (rate payer) liability.

From 2013 Director's Report - Staff conducted a thorough review of the collection, processing, and disposal operations of the Companies, as detailed in Section 8 of the staff report. Staff found that most of the Companies' proposed expenses were accurate and reasonable, and did not recommend adjustments to those line items. **However, staff also recommended that the Companies do more to control costs in the areas of health care, pensions and workers' compensation.** Staff argued that the Companies could do more to control health care costs if they required employees to make regular contributions for their health care coverage and if they required employees to make co-payments for medical visits. Staff provided evidence that the City requires these sorts of contributions from its own employees for health care, while the Companies do not (Exh. 76) (**SEE Attached**). Staff noted that the City, by voter mandate, also has enacted a number of changes to its pension system that have lessened the City's pension liability. **Staff recommended, and I agree, that the review of future rate applications should consider the reasonableness of overall negotiated pension and health benefits, including requiring co-payments when determining what portion of those expenses are appropriate to include in the rate base.** In future rate reviews staff also may consider recommending excluding from the operating ratio the health care cost increases that are above a reasonable amount.

Pension Expenses

RSF – Schedule G.2

2. Can you please provide support for 2018 Local 3 Pension:
 - a. \$/Hour (Cell 9E)
 - b. No. of Worked Hours (cell 10E)
 - c. Can you clarify where the "Other" 2018 Pension Expense is reported/captured (cell E27)
3. Can the Company clarify the amount of Pension contributions for Oct-Sep 2016. The 2013 Rate Application accounted for \$25 million, but Actuals for that period are shown as \$12 million? (please see attached schedules)

RSS/RGG – Schedule G.2

Can the company please clarify where the "Other" 2018 Pension Expense is reported/captured?

City and County of San Francisco

2017 Rate Application

Request for Information #4

Health and Welfare Expenses

RSF | RSS/RGG – Schedule G.3

4. Support for 2018 Monthly Rates for Health Insurance
5. Support for Local 350 Union Retirement Security Plan:
 - a. 2018 Increase %
 - b. RY 14-17 Total Monthly Rate (Row 22)

Workers Compensation

RSF | RSS/RGG – Schedule G.4

6. Support for % of Payroll figures

COLA and CPI Adjustment

7. Why is the median between 3 yr and 5 yr avg rounded to nearest quartile?
2. Can you provide an explanation of the reason to use the median of the most recent 3 year and 5 year average, considering that this approach weights the most recent three years more heavily (as they are counted twice)?

City and County of San Francisco

2017 Rate Application

Request for Information #5

Health

1. Please provide detailed calculations for RY 2018 projection of 8.2% increase in Local 350 Union Retirement Security Plan, corresponding with the description in your narrative:

“The projected health and welfare benefit costs contained in this rate application is based on anticipated calendar year 2017 costs, inflated by 2.8% for the second half of the year (health insurance rates are set on a calendar year basis and adjusted for the rate years). The inflation factor was developed by RSS and RGG’s outside actuaries and is based on historical cost increases.”

If 2015 is part of these calculations, please provide a corresponding letter “Enhanced RSP – Contribution Rate Increase” such as the one provided for 2017. The provided calculations should clearly answer the questions:

1. What are anticipated calendar year 2017 costs derived from?
2. What is the basis of the inflation factor of 2.8%?
3. Separately calculate the change between RY 2017 and RY 2018 costs using the inflation factor of 2.8%

Pension

2. Please provide a copy of the Towers Allocation.
3. COLA with pension calculation. Regarding the inclusion of pension in the COLA, can you please explain with supporting calculations why the proposed method would be more appropriate than the current methodology?
4. Regarding Data Request #3 response to Request 2, “\$/hour information provided as part of the OE3 contract.” Referring to “2017 Long Haul CBA Signed” and “2017 Driver-Mechanic CBA Signed” (attached), the \$/hour figures do not appear to be directly provided in these contracts. If they are, please provide the page number in each document. If they aren’t, please provide detailed calculations that demonstrate how these figures are calculated.
5. Regarding number of hours worked, can the Companies provide support for the 2017 and 2018 projections from the 2016 actuals?

Corporate Allocations

6. Corporate allocations (administrative overhead and intercompany charges allocated to the SF Companies), including the method of allocation.

Lease Information

RSF

Please provide source documentation for all direct-entered values in Schedules H.1, H.2, and H.3. Specifically, we would like source documentation for:

7. Schedule H.1:
 - o Existing leases in 2013 rate (cells E11:F11)

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City and County of San Francisco

2017 Rate Application

Request for Information #5

- New leases after 2013 rate (cells E12:F12)
 - Existing Depreciation in 2013 rate (cells E28:F28)
8. Schedule H.2:
- Existing leases (cells J49:J54)
 - Salvage value for replacement vehicles (cell J59)

RSS/RGG

Please provide source documentation for all direct-entered values in Schedules H.1, H.2, and H.3. Specifically, we would like source documentation for:

9. Schedule H.1:
- Existing leases in 2013 rate (cells E11:F11)
 - New leases after 2013 rate (cells E12:F12)
 - Salvage value (cell F15)
10. Schedule H.2:
- Existing leases (cells K60:K64)
 - Salvage value for replacement vehicles (cell K68)
11. Schedule H.3:
- Existing depreciation (cells E15:F21)

Other

12. Updated Armanino Analysis (see Exhibit 34 to the 2013 proceedings)
13. Are any new expense items being proposed for inclusion in the rate base?

City and County of San Francisco

2017 Rate Application

Request for Information #6

Corporate Services Expenses

RSF | RSS/RGG – Schedule M.2

1. The “Summary of Assumptions” document appears to state that all Corporate Services expenses (i.e., Schedule M.2 line items) were allocated based on each SF company’s share of Recology Inc.’s total revenue. Please provide the source documentation for allocation of RY 2017 corporate expenses to the SF companies. In addition, please explain why expenses have increased significantly since 2014. Specifically:
 - For RSF:
 - IT Services expense has increased by 15.0 percent (\$99K) (2018 projected vs. 2014 actual)
 - For RSS/RGG:
 - Corporate Management expense has increased by 50.4 percent (\$649K) (2018 projected vs. 2014 actual)
 - Environmental Compliance expense has increased by 33.3 percent (\$151K) (2018 projected vs. 2014 actual)
 - IT Services expense has increased by 23.1 percent (\$470K) (2018 projected vs. 2014 actual)
2. Have there been any changes to “Corporate Services” expense allocations since the 2013 rate review?
3. Please provide a comparison of the allocation % for RSS/RGG and RSF for the 2017 vs. 2013 rate applications.
4. Are any corporate expenses directly assigned to a division rather than allocated, if so please provide support for those assignments?
5. If allocations are based on revenues, the City’s change in disposal sites and the associated increased cost would have increased the % allocation. Should there be some consideration for this one-time revenue impact on the expenses allocated to the City’s operations?
6. Please provide the basis for the projected 3.0% increase in corporate services expenses from RY 2017 to RY 2018 (suggest using COLA).
7. Is the “Technology” line item on Schedule M.2 the same as the “Sustainability” line item that was shown on Schedule M.2 of the previous 2013 Rate Applications?
8. Besides the “Corporate Services” expenses on Schedule M.2, are there any other “intercompany transactions” listed as expenses in the Application?

Non-Allowable / Pass-Through Expenses

RSF | RSS/RGG

9. Please indicate where in the Rate Application any capital investments to improve Pier 96 (i.e., amounts funded by Zero Waste Incentive Funds) are located.
10. Are there any “non-allowable” expenses that have been removed from the rate adjustment calculations?

City and County of San Francisco

2017 Rate Application

Request for Information #6

Pension

11. Can you provide a comparison of the Actual annual Pension payments separately for RSS/RGG and for RSF vs. for 2013 – 2016 vs. the Projected amounts in the Rate Application. The question we need to answer is how has actual funding levels compared to the funding amounts accounted for in the rate application? This should also answer the question we have about the Oct-Sep 2016 actual vs. projected funding variance.
12. Please confirm what if any changes have been made to the Union Pension plan since the last rate application? Did the capping of pension benefits at \$55,000 per year occur prior to the last rate application or is that a change that has been made since then?
13. The Company noted that the change that non-union employees are now covered under a 401(k) plan occurred since the last rate application. This was reported as having already occurred at the time of the last rate application as documented in the Staff Report "Recology has frozen its pension plan with respect to new non-union personnel..." We will revise accordingly unless we hear otherwise.

Workers Compensation

14. (a) When did the Workers Compensation Allocation Process change, and (b) what is the net impact on the 2018 Projection using the New method vs. the old method. The question we need to answer is how much of the 2018 Projected increase is due to the change in the allocation methodology?
15. Please provide requested Modification Factors

Health Insurance

16. Where / How as the ACA Reinsurance cost handled in the Rate Application and what is the projected Reinsurance cost?
17. Can you provide information on the amount of non-union co-pays and employee contributions to vision, dental and medical?
18. Please provide the third party supporting basis for the:
 - a. Detailed H&W Monthly rate for medical, dental and other costs provided for (a) RSS-RGG and (b) RSF in support of Schedule G.3 figures ("RFI #4 – H&W" spreadsheet)
 - b. Schedule G.3 Local 350 - RSP monthly rate.

Revenues

19. Can you provide the basis for the projected increase in residential, commercial and apartment accounts given growth projections for the City?
20. Can you clarify the basis for the Intercompany Dirt, Inerts & Other 2018 revenue projection on Schedule F.4 (Cell F9)?
21. Can you provide the 5 year average data supporting the projected recyclable material sales revenues?

City and County of San Francisco

2017 Rate Application

Request for Information #6

I/C Processing & Disposal

22. For RSF and RSS/RGG, please indicate any processing and/or disposal expenses that are not excluded from the OR and provide an explanation for why these expenses are not excluded. Specifically, indicate whether these processing and/or disposal expense amounts are inclusive of profit to Recology, and provide supporting documentation demonstrating such.

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	A	C	D	E	F	G	H	I	Y	Z	AA	AL	AM	AN
1	Recology Sunset													
2	Scavenger/Recology													
3	Golden Gate													
4	Rate Application, <u>Schedule D</u>													
5	<u>Total Operating Expenses</u>													
6	Inflation 3.00%													
7	Inflation 3.00%													
8	Inflation 3.00%													
9	Inflation 3.00%													
10	Item Description	RY 2014 Projected Expense	Actual			RY 2017 Projected Expense	RY 2018 Projected Expense	2014 Actual vs. 2014 Projected		2018 Projected vs. 2014 Actuals		VARIANCE ANALYSIS		
11			Actual RY 2014	Actual RY 2015	Actual RY 2016			Total Change	Total Change	\$	%	\$	%	\$
12	Payroll	63,776,715	66,436,921	69,746,753	73,652,857	80,318,603	(\$613,289)	-1.0%	17,155,177	27.2%				
13	Payroll Taxes	4,987,548	5,082,700	5,285,936	5,581,970	6,087,151	(\$78,143)	-1.6%	1,177,746	24.0%				
14	Pension	12,886,750	13,644,380	8,134,483	12,712,000	14,855,250	\$370,833	2.9%	1,597,667	12.1%				
15	Health Insurance	18,672,535	17,446,646	19,009,422	21,749,273	24,301,673	(\$2,232,220)	-12.0%	7,861,359	47.8%				
16	Workers Compensation	6,233,805	8,346,431	9,919,456	9,604,568	10,251,321	\$1,964,152	31.5%	2,063,364	25.0%				
17	Total Payroll & Related	\$106,557,353	\$ 110,957,078	\$ 112,096,049	\$ 123,300,668	\$ 135,813,998	(\$588,667)	-0.6%	29,845,313	28.2%				

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	A	AO	AP	AQ	AR	AV	BN	BO	BP	BQ	BR	BS	BT	BU	BV
Recology Sunset Scavenger/Recology Golden Gate															
1	Rate Application, Schedule D														
2	Total Operating Expenses														
3	VARIANCE ANALYSIS														
4															
5															
6	2016 Actual vs. 2014 Actual														
7	2018 Projected vs. 2016 Actual														
8	2018 Projected vs. 2014 Actual														
9															
10	Item Description	Total Change		Annual Average Change		Total Change		Annual Average Change		Total Change		Annual Average Change			
10	Payroll	6,583,327	10.4%	3,291,683	5.2%	\$10,571,851	15.2%	5,285,925	7.6%	\$17,155,177	27.2%	4,288,794	6.8%		
11	Payroll Taxes	376,532	7.7%	188,286	3.8%	\$801,215	15.2%	400,607	7.6%	\$1,177,746	24.0%	294,437	6.0%		
12	Pension	(5,123,101)	-38.6%	(2,561,550)	-19.3%	\$6,720,767	82.6%	3,360,384	41.3%	\$1,597,667	12.1%	399,417	3.0%		
13	Health Insurance	2,569,107	15.6%	1,284,554	7.8%	\$5,292,251	27.8%	2,646,126	13.9%	\$7,861,359	47.8%	1,965,340	12.0%		
14	Workers Compensation	1,721,499	21.0%	860,749	10.5%	\$331,865	3.3%	165,932	1.7%	\$2,053,364	25.0%	513,341	6.3%		
15	Total Payroll & Related	6,127,364	5.8%	3,063,632	2.9%	\$23,717,949	21.2%	11,858,974	10.6%	\$29,845,313	28.2%	7,461,328	7.0%		

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	A	C	D	E	F	G	H	I	Y	Z	AL	AM
	Recology San Francisco											
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

VARIANCE ANALYSIS															
Inflation 3.00%															
	RY 2014			RY 2015			RY 2016			RY 2017			RY 2018		
Item Description	RY 2014 Projected Expense	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2014 Projected Expense	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2014 Projected Expense	RY 2014	RY 2018
Payroll	35,173,524	34,864,213	37,352,466	39,789,488	42,709,306	45,740,821									
Payroll Taxes	2,883,627	2,847,328	2,983,172	3,110,876	3,339,157	3,576,171									
Pension	5,196,114	6,506,452	7,360,406	5,011,357	6,142,450	6,768,047									
Health Insurance	11,251,028	10,496,668	10,973,970	11,834,832	13,863,790	14,852,925									
Workers Compensation	2,583,962	3,077,676	3,154,419	3,784,382	2,856,123	3,643,645									
Total Payroll & Related	\$ 57,088,255	\$ 57,792,337	\$ 61,824,433	\$ 63,530,934	\$ 68,910,825	\$ 74,581,608									

	2014 Actual vs. 2014 Projected		2018 Projected vs. 2014 Actuals	
	Total Change	%	Total Change	%
	\$	%	\$	%
	(\$309,311)	-0.9%	10,876,608	31.2%
	(\$36,299)	-1.3%	728,843	25.6%
	\$1,310,338	25.2%	261,595	4.0%
	(\$754,359)	-6.7%	4,356,256	41.5%
	\$493,714	19.1%	565,969	18.4%
	\$704,082	1.2%	16,789,272	29.1%

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	A	C	D	E	F	G	H	I	Y	Z	AA	AL	AM	AN
1	Recology Sunset													
2	Scavenger/Recology													
3	Golden Gate													
4	Rate Application, Schedule D													
5	Total Operating Expenses													
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

VARIANCE ANALYSIS	
2014 Actual vs. 2014 Projected	2018 Projected vs. 2014 Actuals
Total Change	Total Change
\$	\$
%	%
(\$613,289)	17,155,177
-1.0%	27.2%
(\$78,143)	1,177,746
-1.6%	24.0%
\$370,833	1,597,667
2.9%	12.1%
(\$2,232,220)	7,861,359
-12.0%	47.8%
\$1,964,152	2,063,364
31.5%	25.0%
(\$588,667)	29,845,313
-0.6%	28.2%

Item Description	Actual			RY 2017 Projected Expense	RY 2018 Projected Expense	Inflation 3.00%
	Actual RY 2014	Actual RY 2015	Actual RY 2016			
Payroll	63,163,426	66,436,921	69,746,753	73,652,857	80,318,603	3.00%
Payroll Taxes	4,909,405	5,082,700	5,285,936	5,581,970	6,087,151	
Pension	13,257,583	13,644,380	8,134,483	12,712,000	14,855,250	
Health Insurance	16,440,315	17,446,646	19,009,422	21,749,273	24,301,673	
Workers Compensation	8,197,957	8,346,431	9,919,456	9,604,568	10,251,321	
Total Payroll & Related	\$ 105,968,585	\$ 110,957,078	\$ 112,096,049	\$ 123,300,668	\$ 135,813,998	

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	A	C	D	E	F	G	H	I	Y	Z	AL	AM	
	Recology San Francisco												
1	Rate Application Scheduled												
2	Total Operating Expenses												
3													
4													
5													
6													
7	Inflation 3.00%												
8	Item Description	RY 2014 Projected Expense	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018						2018 Projected vs. 2014 Actuals
9													Total Change
10									\$	%	\$	%	
11	Payroll	35,173,524	34,864,213	37,352,466	39,789,488	42,709,306	45,740,821		(\$309,311)	-0.9%	10,876,608	31.2%	
12	Payroll Taxes	2,883,627	2,847,328	2,983,172	3,110,876	3,339,157	3,576,171		(\$36,299)	-1.3%	728,843	25.6%	
13	Pension	5,196,114	6,506,452	7,360,406	5,011,357	6,142,450	6,768,047		\$1,310,338	25.2%	261,595	4.0%	
14	Health Insurance	11,251,028	10,496,668	10,973,970	11,834,832	13,863,790	14,852,925		(\$754,359)	-6.7%	4,356,256	41.5%	
15	Workers Compensation	2,583,962	3,077,676	3,154,419	3,784,382	2,856,123	3,643,645		\$493,714	19.1%	565,969	18.4%	
16	Total Payroll & Related	\$ 57,088,255	\$ 57,792,337	\$ 61,824,433	\$ 63,530,934	\$ 68,910,825	\$ 74,581,608		\$704,082	1.2%	16,789,272	29.1%	

From: [John Porter](#)
To: [Garth Schultz](#); [Emily Ginsburg](#)
Subject: FW: Mod Factors
Date: Monday, April 3, 2017 3:28:28 PM

John F Porter

Recology™ | 250 Executive Park, Suite 2100
San Francisco, CA 94134
t: 415.715.6241 |c: 415.215.8444|e: jporter@recology.com

WASTE ZERO

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From: John Porter
Sent: Monday, April 03, 2017 2:14 PM
To: William Schoen <wschoen@r3cgi.com>
Subject: Mod Factors

Hi William,

Please see the mod factor information you requested below.

Regards,

John Porter

	2012	2013	2014	2015	2016
Sunset Scavenger	1.731	1.497	1.679	1.720	1.490
Golden Gate	1.370	1.031	0.926	1.038	0.932
Recology SF	1.206	0.854	0.881	0.915	0.715

John F Porter

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San Francisco, CA 94134
t: 415.715.6241 |c: 415.215.8444|e: jporter@recology.com

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	A	C	D	E	F	G	H	I	Y	Z	AA	AL	AM	AN																																																																						
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	A	AO	AP	AQ	AR	AM	AN	BO	BP	BQ	BR	BS	BT	BU	BV	
1	Recology Sunset															
2	Scavenger/Recology															
3	Golden Gate															
4	Rate Application, Schedule D															
5	Total Operating Expenses															
6	VARIANCE ANALYSIS															
7																
8																
9																
		2016 Actual vs. 2014 Actual					2018 Projected vs. 2016 Actual					2018 Projected vs. 2014 Actual				
		Total Change		Annual Average Change			Total Change		Annual Average Change			Total Change		Annual Average Change		
		\$	%	\$	%	%	\$	%	\$	%	%	\$	%	\$	%	
10	Payroll	6,583,327	10.4%	3,291,663	5.2%		\$10,571,851	15.2%	5,285,925	7.6%		\$17,155,177	27.2%	4,288,794	6.8%	
11	Payroll Taxes	376,532	7.7%	188,266	3.8%		\$801,215	15.2%	400,607	7.6%		\$1,177,746	24.0%	294,437	6.0%	
12	Pension	(5,123,101)	-38.6%	(2,561,550)	-19.3%		\$6,720,767	82.6%	3,360,384	41.3%		\$1,597,667	12.1%	399,417	3.0%	
13	Health Insurance	2,569,107	15.6%	1,284,554	7.8%		\$5,292,251	27.8%	2,646,126	13.9%		\$7,861,359	47.8%	1,965,340	12.0%	
14	Workers Compensation	1,721,499	21.0%	860,749	10.5%		\$331,865	3.3%	165,932	1.7%		\$2,053,364	25.0%	513,341	6.3%	
15	Total Payroll & Related	6,127,364	5.8%	3,063,682	2.9%		\$23,717,949	21.2%	11,858,974	10.6%		\$29,845,313	28.2%	7,461,328	7.0%	

R:\Projects\San Francisco - 2017 Rate Review - 116047\Task Order 2\Task 2.1 - Expense Analysis\Letter Report - Workers Comp, H&W, Pension\Reports\Table 2 - Attachment - Labor Analysis - RSF / D

	A	C	D	E	F	G	H	I	Y	Z	AL	AM
	Recology San Francisco											
1	Rate Application Scheduled											
2	<u>Total Operating Expenses</u>											
3												
4												
5												
6	Inflation 3.00%											
7												
8	Item Description	RY 2014 Projected Expense	Actual				RY 2017 Projected Expense	RY 2018 Projected Expense	2014 Actual vs. 2014 Projected		2018 Projected vs. 2014 Actuals	
9			RY 2014	RY 2015	RY 2016	RY 2017			\$	%	\$	%
10	Payroll	35,173,524	34,864,213	37,352,466	39,789,488	42,709,306	45,740,821		(\$309,311)	-0.9%	10,876,608	31.2%
11	Payroll Taxes	2,883,627	2,847,328	2,983,172	3,110,876	3,339,157	3,576,171		(\$36,299)	-1.3%	728,843	25.6%
12	Pension	5,196,114	6,506,452	7,360,406	5,011,357	6,142,450	6,768,047		\$1,310,338	25.2%	261,595	4.0%
13	Health Insurance	11,251,028	10,496,668	10,973,970	11,834,832	13,863,790	14,852,925		(\$754,359)	-6.7%	4,356,256	41.5%
14	Workers Compensation	2,583,962	3,077,676	3,154,419	3,784,382	2,856,123	3,643,645		\$493,714	19.1%	565,969	18.4%
15	Total Payroll & Related	\$ 57,088,255	\$ 57,792,337	\$ 61,824,433	\$ 63,530,934	\$ 68,910,825	\$ 74,581,608		\$704,082	1.2%	16,789,272	29.1%

VARIANCE ANALYSIS

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	A	AN	AO	AP	AQ	AR	BB	BS	BT	BU	BV	BW	BX	BY	BZ	CA
Recology San Francisco																
1																
2																
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Item Description	2016 Actual vs. 2014 Actual		2018 Projected vs. 2016 Actual		2018 Projected vs. 2014 Actual	
	Total Change	Annual Average Change	Total Change	Annual Average Change	Total Change	Annual Average Change
Payroll	4,925,275	14.1%	1,231,319	7.1%	2,719,152	7.8%
Payroll Taxes	263,548	9.3%	65,887	4.6%	182,211	6.4%
Pension	(1,495,095)	-23.0%	(373,774)	-11.5%	65,399	1.0%
Health Insurance	1,338,163	12.7%	334,541	6.4%	1,089,064	10.4%
Workers Compensation	706,707	23.0%	176,677	11.5%	141,492	4.6%
Total Payroll & Related	5,738,598	9.9%	1,434,649	5.0%	4,197,318	7.3%

Task Order #2 | Memorandum | Attachment I | Schedule F.1 - Historical and Projected Revenues RSS/RGG

	A	B	C	D	E	F	G	H
1	Recology Sunset Scavenger/Recology Golden Gate							
2	Rate Application, <u>Schedule F.1</u>							
3	Historical and Projected Revenues							
4								
5								
6		Actual			Projected		Rate Application	
7		RY 2014	RY 2015	RY 2016	Change	RY 2017	Change	RY 2018
8	Residential							
9	Number of Customers	140,922	141,192	140,781	70	140,851	200	141,051
10								
11	Annual Revenue	\$ 65,363,186	\$ 68,002,240	\$ 69,078,753	\$ 1,098,352	\$ 70,177,106	\$ (935,648)	\$ 69,241,457
12	Revenue per Customer	\$ 464	\$ 482	\$ 491		\$ 498		\$ 491
13								
14	Apartment							
15	Number of Customers	8,499	8,286	8,311	20	8,331	25	8,356
16								
17	Annual Revenue	\$ 50,254,173	\$ 54,047,614	\$ 54,876,399	\$ 989,261	\$ 55,865,660	\$ (734,815)	\$ 55,130,845
18	Revenue per Customer	\$ 5,913	\$ 6,523	\$ 6,603		\$ 6,706		\$ 6,598
19								
20	Commercial							
21	Number of Customers	16,679	16,860	16,171	399	16,570	200	16,770
22								
23	Annual Revenue	\$ 105,594,056	\$ 110,329,966	\$ 114,423,735	\$ 3,583,864	\$ 118,007,599	\$ 1,503,710	\$ 119,511,309
24	Revenue per Customer	\$ 6,331	\$ 6,544	\$ 7,076		\$ 7,122		\$ 7,126
25								
26	Compactor Commercial							
27	Number of Customers	225	222	223	2	225	3	228
28								
29	Annual Revenue	\$ 22,577,096	\$ 23,663,416	\$ 25,750,842	\$ 604,672	\$ 26,355,514	\$ (63,015)	\$ 26,292,500
30	Revenue per Customer	\$ 100,343	\$ 106,379	\$ 115,475		\$ 117,136		\$ 115,318
31								
32	REVENUE SUBJECT TO RATE - TOTAL:	\$ 243,788,511	\$ 256,043,236	\$ 264,129,730	\$ 6,276,149	\$ 270,405,879	\$ (229,767)	\$ 270,176,111
33								
34	Revenue not Subject to Rate Increase:							
35	Sludge Contract	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
36	Debris Box Revenue	16,231,729	18,735,909	20,265,534	1,131,067	21,396,601	2,139,660	23,536,261
37	Equipment & Supply Sales	956,463	1,267,711	1,689,816	124,522	1,814,338	54,430	1,868,768
38	Miscellaneous Income	266,891	290,445	277,166	39,281	316,447	-	316,447
39	CalRecycle Payment	526,139	510,133	533,210	4,262	537,472	16,124	553,596
40	Impound Account	-	-	-	-	-	-	-
41								
42	REVENUE NOT SUBJECT TO RATE - TOTAL:	\$ 17,981,221	\$ 20,804,198	\$ 22,765,726	\$ 1,299,133	\$ 24,064,858	\$ 2,210,214	\$ 26,275,073
43								
44	TOTAL REVENUE:	\$ 261,769,732	\$ 276,847,434	\$ 286,895,456	\$ 7,575,281	\$ 294,470,737	\$ 1,980,447	\$ 296,451,184
45								
46	Less: Other Commercial Revenues	(17,981,221)	(20,804,198)	(22,765,726)		(24,064,858)		\$ (26,275,073)
47	Contract Revenues	(4,139,713)	(4,203,934)	(4,503,018)		(5,895,493)		(5,895,493)
48								
49	Subtotal:	(22,120,935)	(25,008,133)	(27,268,743)		(29,960,352)		\$ (32,170,566)
50								
51	Revenue at Current Rates Per Application:	\$ 239,648,797	\$ 251,839,301	\$ 259,626,713		\$ 264,510,386		\$ 264,280,618
52								
53								
54	Residential							
55	Projected RY 2017 Revenue							\$ 70,177,106
56	Projected Growth							190,056
57	Reduce for RY 2017 ZWI COLA funding							(1,125,704)
58	Projected RY 2018 Residential Revenue							\$ 69,241,457
59								
60	Apartment							
61	Projected RY 2017 Revenue							\$ 55,865,660
62	Projected Growth							165,072
63	Reduce for RY 2017 ZWI COLA funding							(899,887)
64	Projected RY 2018 Apartment Revenue							\$ 55,130,845
65								
66	Commercial							
67	Projected RY 2017 Revenue							\$ 118,007,599
68	Projected Growth							3,350,399
69	Reduce for RY 2017 ZWI COLA funding							(1,846,689)
70	Projected RY 2018 Commercial Revenue							\$ 119,511,309
71								
72	Compactor							
73	Projected RY 2017 Revenue							\$ 26,355,514
74	Projected Growth							346,424
75	Reduce for RY 2017 ZWI COLA funding							(409,438)
76	Projected RY 2018 Compactor Revenue							\$ 26,292,500
77								
78	Total ZWI reduction							\$ 4,281,718

Recology San Francisco
 Rate Application, Schedule F.1
Historical and Projected Tipping Charge Revenues

	Actual			Projection	Rate Application
	RY 2014	RY 2015	RY 2016		
Tonnage Charged					
Recology Sunset Scavenger/Golden Gate					
Recycle Central	139,402	143,574	143,687	143,786	145,738
Compostables	161,869	168,365	169,830	171,756	172,766
iMRF	64,812	74,318	75,768	73,114	72,834
Trash	256,616	261,418	269,223	269,339	264,137
Other	9,189	10,919	12,235	13,455	13,404
Subtotal (Recology Sunset Scavenger/Golden Gate)	631,889	658,593	670,744	671,451	668,879
Public Customers	33,271	35,200	38,376	38,632	38,484
Commercial Customers	18,035	20,416	22,860	24,714	24,619
Total San Francisco Tons	683,196	714,209	731,979	734,798	731,982
Non-San Francisco Tons	1,881	2,221	2,727	2,615	2,615
Total Tons Charged	685,077	716,430	734,706	737,412	734,597
Rate Per Ton	\$ 147.13	\$ 151.47	\$ 154.06	\$ 156.62	\$ 166.15
Transfer and Processing Revenue					
Recology Sunset Scavenger/Golden Gate					
Recycle Central	20,510,216	21,747,123	22,136,408	22,519,841	27,129,053
Compostables	23,815,845	25,502,247	26,164,005	26,900,460	32,160,420
iMRF	9,535,848	11,256,917	11,672,894	11,451,138	13,558,053
Trash	37,755,912	39,596,954	41,476,565	42,183,927	49,169,175
Other	1,351,978	1,653,901	1,884,887	2,107,349	2,495,083
Subtotal (Recology Sunset Scavenger/Golden Gate)	92,969,799	99,757,142	103,334,761	105,162,716	124,511,783
Public Customers	4,895,221	5,331,714	5,912,156	6,050,580	7,163,836
Commercial Customers	2,653,548	3,092,442	3,521,829	3,870,697	4,582,873
Total San Francisco Revenue from Tipping Charge	100,518,569	108,181,298	112,768,745	115,083,993	136,258,493
Non-San Francisco Revenue from Tipping Charge	276,752	336,389	420,123	409,543	486,760
Total Revenue from Tipping Charge	100,795,320	108,517,687	113,188,868	115,493,535	136,745,253

Recology San Francisco
 Rate Application, Schedule F.3
 Recycling Revenue

Recycle Central	Actual						Projection	Rate Application
	RY 2011	RY 2012	RY 2013	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018
Tons								
Mixed Paper	77,049	71,609	68,683	67,600	68,585	73,687	74,900	76,350
Cardboard	37,855	38,247	36,113	36,889	27,258	29,689	30,600	31,560
White Ledger	1,949	359	170	193	24	20	-	-
Coated Book Stock	700	439	215	94	25	-	-	-
Aluminum	567	527	456	453	274	373	380	400
Metal/Ferrous	1,978	1,815	1,755	1,751	1,520	1,513	1,550	1,600
PET	1,685	1,423	1,498	1,502	1,231	1,308	1,330	1,400
HDPE Blend	1,614	1,485	1,366	1,319	1,153	1,176	1,220	1,300
Mixed Plastics 3-7	207	216	640	1,015	859	954	1,010	1,100
Flint Glass	1,325	832	634	526	457	316	325	350
Amber Glass	1,175	742	528	525	386	294	300	325
Green Glass	859	590	348	306	205	189	200	215
Mixed Glass	17,311	17,125	18,196	22,376	22,637	22,628	22,700	23,000
Glass Fines	700	1,154	1,289	1,124	997	1,347	1,400	1,450
Total Tons	144,973	136,563	131,928	135,673	125,611	133,496	135,915	139,050
Price Per Ton								
Mixed Paper	\$ 145.03	\$ 138.14	\$ 107.59	\$ 108.98	\$ 95.36	\$ 107.04	\$ 135.31	\$ 111.42
Cardboard	194.77	182.62	155.44	166.08	138.93	146.62	165.22	157.94
White Ledger	276.52	293.14	234.92	249.92	270.00	188.00	-	247.20
Coated Book Stock	235.26	195.36	151.34	143.80	150.00	-	-	128.10
Aluminum	4,214.02	4,106.64	4,220.76	4,098.11	4,275.69	3,641.30	3,831.61	4,068.50
Metal/Ferrous	185.71	196.79	143.28	145.52	92.72	48.67	109.05	125.40
PET	2,255.20	2,259.79	2,030.22	1,845.74	1,826.45	1,876.62	1,652.66	1,967.76
HDPE Blend	613.46	659.18	627.01	802.64	822.38	614.14	459.88	705.07
Mixed Plastics 3-7	61.69	58.53	46.65	28.16	95.54	77.62	97.68	61.30
Flint Glass	241.28	155.59	311.60	201.88	241.90	243.00	243.00	230.79
Amber Glass	296.96	150.59	315.49	190.19	236.93	238.00	238.00	226.24
Green Glass	264.48	141.59	303.01	180.53	227.92	229.00	278.40	216.41
Mixed Glass	108.28	120.58	118.31	133.03	112.42	126.35	127.18	122.14
Glass Fines	106.10	120.59	106.27	132.05	109.24	127.40	148.00	119.11
Revenue								
Mixed Paper	\$ 11,174,370	\$ 9,892,077	\$ 7,389,677	\$ 7,367,423	\$ 6,540,266	\$ 7,887,337	\$ 10,134,391	\$ 8,507,137
Cardboard	7,373,079	6,984,671	5,613,596	6,126,597	3,786,954	4,352,961	5,055,706	4,984,564
White Ledger	538,911	105,241	39,910	48,135	6,480	3,839	-	-
Coated Book Stock	164,586	85,771	32,572	13,569	3,750	-	-	-
Aluminum	2,388,927	2,164,528	1,926,709	1,858,450	1,171,539	1,357,550	1,456,011	1,627,400
Metal/Ferrous	367,393	357,180	251,491	254,775	140,934	73,628	169,034	200,635
PET	3,799,239	3,215,363	3,040,416	2,771,699	2,248,360	2,454,037	2,198,033	2,754,870
HDPE Blend	989,988	978,913	856,371	1,058,409	948,204	722,394	561,050	916,593
Mixed Plastics 3-7	12,752	12,647	29,878	28,577	82,069	74,071	98,658	67,430
Flint Glass	319,807	129,504	197,666	106,202	110,548	76,846	78,975	80,778
Amber Glass	348,998	111,676	166,726	99,915	91,455	70,005	71,400	73,528
Green Glass	227,175	83,599	105,541	55,331	46,724	43,375	55,679	46,528
Mixed Glass	1,874,448	2,064,927	2,152,705	2,976,672	2,544,852	2,859,086	2,887,016	2,809,166
Glass Fines	74,229	139,171	136,989	148,389	108,912	171,641	207,198	172,709
Recycle Central Revenue	\$ 29,653,901	\$ 26,325,268	\$ 21,953,396	\$ 22,914,142	\$ 17,831,047	\$ 20,146,770	\$ 22,973,151	\$ 22,241,339
Other Recycling Operations								
Tons								
Metal	7,893	6,968	7,031	8,409	10,424	13,189	13,189	13,189
Wood	11,985	13,194	13,693	13,484	14,318	13,325	13,325	13,325
Mixed Rigid Plastic	2,011	1,936	2,039	2,128	1,774	1,686	1,686	1,686
SB20/50 E-Waste	887	438	432	514	513	450	450	450
Total Tons	22,776	22,536	23,195	24,535	27,029	28,650	28,650	28,650
Price Per Ton								
Metal	\$ 204.80	\$ 232.11	\$ 193.79	\$ 189.84	\$ 118.48	\$ 52.16	\$ 67.82	\$ 157.28
Wood	14.90	18.20	19.60	20.46	19.86	16.25	7.59	18.87
Mixed Rigid Plastic	161.94	137.63	123.13	176.32	201.57	141.07	137.81	155.94
SB20/50 E-Recycling	216.36	336.60	345.84	302.94	222.29	145.18	106.20	270.57
Revenue								
Metal	\$ 1,616,492	\$ 1,617,389	\$ 1,362,537	\$ 1,596,476	\$ 1,235,036	\$ 687,951	\$ 894,479	\$ 2,074,351
Wood	178,586	240,130	268,383	275,822	284,355	216,492	101,112	251,472
Mixed Rigid Plastic	325,644	266,411	251,062	375,248	357,585	237,901	232,401	262,981
SB20/50 E-Recycling	191,914	147,298	149,403	155,776	114,035	65,331	47,791	121,759
Recycle Central Revenue	\$ 2,312,636	\$ 2,271,228	\$ 2,031,385	\$ 2,403,321	\$ 1,991,011	\$ 1,207,676	\$ 1,275,783	\$ 2,710,564
Sustainable Crushing Revenue	\$ 1,504,677	\$ 1,673,810	\$ 1,684,272	\$ 1,907,844	\$ 1,685,168	\$ 1,448,481	\$ 705,600	\$ 705,600
Miscellaneous Recycling	\$ 32,837	\$ 22,614	\$ 17,186	\$ -	\$ -	\$ -	\$ -	\$ -
Total Recycling Revenue	\$ 33,504,051	\$ 30,292,921	\$ 25,686,239	\$ 27,225,308	\$ 21,507,226	\$ 22,802,927	\$ 24,954,534	\$ 25,657,502
Processing Expenses	(420,490)	(422,666)	(459,796)	(520,965)	(936,487)	(1,512,755)	(991,271)	(977,050)
Purchases (Schedule K.2)	(8,412,838)	(7,148,323)	(6,048,174)	(6,127,025)	(3,045,786)	(3,927,008)	(4,435,350)	(4,085,976)
Net Recycling Revenues	\$ 24,670,733	\$ 22,721,732	\$ 19,178,267	\$ 20,577,298	\$ 17,524,943	\$ 17,363,164	\$ 19,637,913	\$ 20,694,477

	A	B	C	D	E	F	G	H	U	V	W	X	
Recology Sunset Scavenger/Recology Golden Gate													
Rate Application, Schedule M.I.2													
Corporate Services Expenses													
Inflation 3.30%													
7	Item Description	RY 2014 Projected Expense	Actual			RY 2017 Projected Expense	RY 2018 Projected Expense						
8			RY 2014	RY 2015	RY 2016	RY 2017	RY 2018						
9													
10	Corporate Management	\$ 1,199,336	\$ 1,288,696	\$ 1,669,464	\$ 1,816,124	\$ 1,876,056	\$ 1,937,966						
11	Sustainability	\$ 232,246											
12	Technology		\$ 225,681	\$ 263,342	\$ 289,192	\$ 288,736	\$ 308,594						
13	Human Resources	\$ 467,356	\$ 809,108	\$ 829,246	\$ 717,399	\$ 739,375	\$ 763,774						
14	Corporate Accounting Services	\$ 1,835,514	\$ 1,781,550	\$ 1,676,792	\$ 1,752,254	\$ 1,810,079	\$ 1,869,811						
15	Environmental Compliance	\$ 421,369	\$ 454,186	\$ 576,200	\$ 567,237	\$ 585,956	\$ 605,292						
16	IT Services	\$ 1,849,599	\$ 2,033,785	\$ 2,431,962	\$ 2,347,116	\$ 2,424,571	\$ 2,504,581						
17	Total Corporate Services	\$ 6,005,440	\$ 5,593,006	\$ 7,447,006	\$ 7,489,323	\$ 7,734,771	\$ 7,990,019						
		2014 Actual vs. 2014 Projected		2018 Projected vs. 2014 Actual									
		Total Change		Total Change									
		\$	%	\$	%	\$	%						
		\$ 89,360	7.5%	\$ 649,270	50.4%	\$ -	#DIV/0!						
		\$ (232,246)	-100.0%	\$ -	#DIV/0!	\$ 225,681	#DIV/0!	\$ 82,913	36.7%				
		\$ 341,752	73.1%	\$ (45,334)	-5.6%	\$ (53,964)	-2.9%	\$ 88,261	5.0%				
		\$ 32,797	7.8%	\$ 151,106	33.3%	\$ 184,186	10.0%	\$ 470,796	23.1%				
		\$ 587,566	9.8%	\$ 1,397,013	21.2%								

R:\Projects\San Francisco - 2017 Rate Review - 116047\Task Order 2\Task 2.3 - Corporate Allocations and Profit Analysis\Variance Analysis - RSF - 032717.xlsx / M.2 - DP

	A	B	C	D	E	F	G	H	U	V	W	X
1	Recology San Francisco											
2	Rate Application, Schedule M.2											
3	Corporate Services Expenses											
4												
5	Inflation 3.30%											
6	Item Description	RY 2014 Projected Expense	Actual			RY 2017 Projected Expense	RY 2018 Projected Expense	2014 Actual vs. 2014 Projected		2018 Projected vs. 2014 Actual		
7			RY 2014	RY 2015	RY 2016			Total Change	Total Change	\$	%	%
8	Corporate Services											
9	Corporate Management	\$ 137,787	\$ 106,831	\$ 91,226	\$ 126,561	\$ 130,737	\$ 135,052	\$ (30,956)	\$ 28,221	-22.5%	26.4%	
10	Sustainability	\$ 18,214						\$ (18,214)	\$ -	-100.0%	#DIV/0!	
11	Technology		\$ 18,968	\$ 14,417	\$ 20,132	\$ 20,796	\$ 21,482	\$ 18,988	\$ 2,485	#DIV/0!	13.1%	
12	Human Resources	\$ 351,965	\$ 537,563	\$ 551,764	\$ 472,856	\$ 487,338	\$ 503,420	\$ 185,618	\$ (34,164)	52.7%	-6.4%	
13	Corporate Accounting Services	\$ 183,138	\$ 149,573	\$ 92,240	\$ 123,377	\$ 127,448	\$ 131,654	\$ (33,565)	\$ (17,919)	-18.3%	-12.0%	
14	Environmental Compliance	\$ 42,260	\$ 37,855	\$ 30,501	\$ 40,654	\$ 41,995	\$ 43,381	\$ (4,365)	\$ 5,486	-10.3%	14.5%	
15	IT Services	\$ 582,252	\$ 659,165	\$ 819,570	\$ 710,550	\$ 733,999	\$ 758,220	\$ 76,914	\$ 99,055	13.2%	15.0%	
16	Total Corporate Services	\$ 1,315,617	\$ 1,510,035	\$ 1,599,717	\$ 1,494,130	\$ 1,542,313	\$ 1,593,209	\$ 194,418	\$ 83,174	14.8%	5.5%	

Task Order #2 | Memorandum | Attachment N | Operating Ratio Overview

	B	C	D	E	F	G
1	Recology Inc.					
2	Operation Ratio Analysis					
3	2017 Rate Application					
4	Prepared By: John F Porter					
5						
6	Recology San Francisco					
7		RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
8	Operating Ratio Expenses	\$ 102,306,567	\$ 105,777,746	\$ 107,587,182	\$ 110,499,084	\$ 127,649,587
9	Allowed Operating Ratio	91.00%	91.00%	91.00%	91.00%	91.00%
10	Operating Expense with Operating Ratio	\$ 112,424,798	\$ 116,239,282	\$ 118,227,673	\$ 121,427,564	\$ 140,274,272
11	Non-Operating Ratio Expenses / Revenues					
12	Recology Hay Road/ Altamont Disposal	4,578,927	4,999,230	8,350,999	12,608,222	12,725,578
13	Impound Account	3,359,138	3,506,118	2,322,942	-	-
14	License & Permits	2,386,855	2,422,538	2,453,897	2,515,248	3,406,889
15	Other Revenues	(1,548,534)	(1,724,449)	(7,550,978)	(5,188,467)	(2,339,558)
16	Recycling Revenues	(20,577,298)	(17,868,832)	(17,363,164)	(18,173,490)	(20,084,692)
17	Diversion Incentive	2,414,045	2,485,259	2,527,752	2,527,752	\$ 3,152,231
18						
19						
20	Net Revenue Requirement	\$ 103,037,931	\$ 110,059,146	\$ 108,969,121	\$ 115,716,829	\$ 137,134,719
21	Rate Revenue	\$ 98,381,275	\$ 106,032,488	\$ 110,661,116	\$ 112,862,977	\$ 133,985,061
22	Difference	(4,656,656)	(4,026,657)	1,691,995	(2,853,851)	(3,149,658)
23	Revenue less non-operating ratio expenses	\$ 110,182,187	\$ 114,697,883	\$ 122,447,419	\$ 121,101,465	\$ 140,276,845
24	Operating Ratio	92.9%	92.2%	87.9%	91.2%	91.0%
25						
26	Recology Sunset Scavenger & Recology Golden Gate					
27		RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
28	Operating Ratio Expenses	\$ 148,393,507	\$ 154,861,094	\$ 155,499,782	\$ 169,556,419	\$ 181,791,911
29	Allowed Operating Ratio	91.00%	91.00%	91.00%	91.00%	91.00%
30	Operating Expense with Operating Ratio	\$ 163,069,788	\$ 170,177,026	\$ 170,878,882	\$ 186,325,735	\$ 199,771,331
31	Non-Operating Ratio Expense					
32	Disposal Cost	37,755,912	39,596,954	41,476,565	42,350,048	50,330,661
33	Processing Cost	55,832,048	61,255,697	62,741,858	63,849,418	75,744,234
34	Impound Account	14,614,399	14,941,762	15,094,164	15,334,161	19,702,820
35	License Expenses	1,556,646	1,562,598	1,592,394	1,640,166	1,646,705
36	Non Rate Revenue	(22,120,935)	(25,008,133)	(27,268,743)	(30,542,452)	(32,810,877)
37	Diversion Incentive	3,736,734	3,820,437	3,859,404	3,920,760	4,489,243
38	New Rate Items (RY 2018)	-	-	-	-	7,986,645
39						
40						
41	Net Revenue Requirement	254,444,592	266,346,342	268,374,524	282,877,835	318,874,117
42	Rate Revenue	254,263,196	266,781,063	274,720,877	279,844,547	322,371,518
43	Variance to revenue requirement	(181,396)	434,721	6,346,352	(3,033,289)	3,497,401
44	Revenue less non-operating ratio expenses	166,625,126	174,432,184	181,084,638	187,213,207	199,771,331
45	Operating Ratio	89.1%	88.8%	85.9%	90.6%	91.0%
46						
47	Consolidated					
48		RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
49	Operating Ratio Expenses	\$ 250,700,074	\$ 260,638,840	\$ 263,086,964	\$ 280,055,503	\$ 309,441,499
50	Revenue less non-operating ratio expenses	\$ 276,807,314	\$ 289,130,067	\$ 303,532,057	\$ 308,314,672	\$ 340,048,176
51	Operating Ratio	90.6%	90.1%	86.7%	90.8%	91.0%
52						
53	Rate Term Average:	89.6%				
54						
55	Note: This spreadsheet was provided as part of Recology's Draft Rate Application; RY 2017 and 2018 figures have not yet					
56	been updated based on Rate Application revisions.					

Rate Year COLA Mechanism

Recology Sunset Scavenger/Recology Golden GateEffective with the Rate Increase **July 1, 2015**

Fixed Labor	
Percent change per agreements	3.20%
Weight	42.34%
Adjustment	1.35%
Variable Labor	
SF CPI-U, April of the Prior Year	251.495
SF CPI-U, April of the Commencing Year	257.622
Percent change	2.44%
Weight	25.93%
Adjustment	0.63%
Variable H&W	
Mercer analysis	4.70%
Weight	11.83%
Adjustment	0.56%
Biodiesel Fuel	
Gasoline and Diesel Fuel, April of the Prior Year	4.089
Gasoline and Diesel Fuel, April of the Commencing Year	3.098
Percent change	-24.24%
Weight	2.84%
	-0.69%
CNG Fuel	
PG&E Series G-NGV1, April of the Prior Year	0.706
PG&E Series G-NGV1, April of the Commencing Year	0.476
Percent change	-32.62%
Weight	0.71%
	-0.23%
Pension	
Percent change per Towers Report	0.31%
Weight	7.23%
	0.02%
Capital	
No Inflation	-
Weight	9.12%
	0.000%
COLA before Adjustment for Apartment Cap	
	1.65%
Adjustment for Apartment Cap	
Removal of Apartment Cap	(1,687,155)
Net Revenue Requirement	268,756,412
	-0.63%
Net COLA Increase	
	1.02%

Rate Year COLA Mechanism
Recology San Francisco
 Effective with the Rate Increase **July 1, 2015**

Fixed Labor	
Percent change per agreements	3.20%
Weight	42.34%
Adjustment	1.35%
Variable Labor	
SF CPI-U, April of the Prior Year	251.495
SF CPI-U, April of the Commencing Year	257.622
Percent change	2.44%
Weight	25.93%
Adjustment	0.63%
Variable H&W	
Mercer analysis	4.70%
Weight	11.83%
Adjustment	0.56%
Biodiesel Fuel	
Gasoline and Diesel Fuel, April of the Prior Year	4.089
Gasoline and Diesel Fuel, April of the Commencing Year	3.098
Percent change	-24.24%
Weight	2.84%
	-0.69%
CNG Fuel	
PG&E Series G-NGV1, April of the Prior Year	0.706
PG&E Series G-NGV1, April of the Commencing Year	0.476
Percent change	-32.62%
Weight	0.71%
	-0.23%
Pension	
Percent change per Towers Report	1.25%
Weight	7.23%
	0.09%
Capital	
No Inflation	-
Weight	9.12%
	0.000%
Total COLA Increase	1.71%

Rate Year COLA Mechanism

Recology Sunset Scavenger/Recology Golden GateEffective with the Rate Increase **July 1, 2014**

Fixed Labor	
Percent change per agreements	3.00%
Weight	42.34%
Adjustment	1.27%
Variable Labor	
SF CPI-U, April of the Prior Year	244.675
SF CPI-U, April of the Commencing Year	251.495
Percent change	2.79%
Weight	25.93%
Adjustment	0.72%
Variable H&W	
Mercer analysis	6.50%
Weight	11.83%
Adjustment	0.77%
Biodiesel Fuel	
Gasoline and Diesel Fuel, April of the Prior Year	4.134
Gasoline and Diesel Fuel, April of the Commencing Year	4.089
Percent change	-1.09%
Weight	2.84%
	-0.03%
CNG Fuel	
PG&E Series G-NGV1, April of the Prior Year	0.595
PG&E Series G-NGV1, April of the Commencing Year	0.706
Percent change	18.65%
Weight	0.71%
	0.13%
Pension	
Percent change per Towers Report	0.31%
Weight	7.23%
	0.02%
Capital	
No Inflation	-
Weight	9.12%
	0.000%
COLA before Adjustment for Apartment Cap	
	2.89%
Adjustment for Apartment Cap	
Removal of Apartment Cap	(1,687,155)
Net Revenue Requirement	262,868,165
	-0.64%
Net COLA Increase	
	2.24%

Rate Year COLA Mechanism

Recology San FranciscoEffective with the Rate Increase **July 1, 2014**

Fixed Labor	
Percent change per agreements	3.00%
Weight	42.34%
Adjustment	1.27%
Variable Labor	
SF CPI-U, April of the Prior Year	244.675
SF CPI-U, April of the Commencing Year	251.495
Percent change	2.79%
Weight	25.93%
Adjustment	0.72%
Variable H&W	
Mercer analysis	6.50%
Weight	11.83%
Adjustment	0.77%
Biodiesel Fuel	
Gasoline and Diesel Fuel, April of the Prior Year	4.134
Gasoline and Diesel Fuel, April of the Commencing Year	4.089
Percent change	-1.09%
Weight	2.84%
	-0.03%
CNG Fuel	
PG&E Series G-NGV1, April of the Prior Year	0.595
PG&E Series G-NGV1, April of the Commencing Year	0.706
Percent change	18.65%
Weight	0.71%
	0.13%
Pension	
Percent change per Towers Report	1.25%
Weight	7.23%
	0.09%
Capital	
No Inflation	-
Weight	9.12%
	0.00%
Total COLA Increase	2.95%

A	B	C	D	E	F	G
1	Recology Inc.					
2	Operation Ratio Analysis					
3	2017 Rate Application					
4	Prepared By: John F Porter					
5						
6						
7		Recology San Francisco				
8	Operating Ratio Expenses	RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
9	Allowed Operating Ratio	\$ 102,305,567	\$ 105,777,746	\$ 107,587,182	\$ 110,499,084	\$ 127,649,587
10	Operating Expense with Operating Ratio	91.00%	91.00%	91.00%	91.00%	91.00%
11	Non-Operating Ratio Expenses / Revenues	\$ 112,424,798	\$ 116,239,282	\$ 118,227,673	\$ 121,427,564	\$ 140,274,272
12	Recology Hay Road/ Altamont Disposal	4,578,927	4,999,230	8,350,999	12,608,222	12,725,578
13	Impound Account	3,359,138	3,506,118	2,322,942	-	-
14	License & Permits	2,385,855	2,422,538	2,453,897	2,515,248	3,406,889
15	Other Revenues	(1,548,534)	(1,724,449)	(7,550,978)	(5,188,467)	(2,339,558)
16	Recycling Revenues	(20,577,298)	(17,868,832)	(17,363,164)	(18,173,490)	(20,084,692)
17	Diversion Incentive	2,414,045	2,485,259	2,527,752	2,527,752	3,152,231
18						
19						
20	Net Revenue Requirement	\$ 103,037,931	\$ 110,059,146	\$ 108,969,121	\$ 115,716,829	\$ 137,134,719
21	Rate Revenue	\$ 98,381,275	\$ 106,032,488	\$ 110,661,116	\$ 112,862,977	\$ 133,985,061
22	Difference	(4,656,656)	(4,026,657)	(1,691,995)	(2,853,851)	(3,149,658)
23	Revenue less non-operating ratio expenses	\$ 110,182,187	\$ 114,697,883	\$ 122,447,419	\$ 121,101,465	\$ 140,276,845
24	Operating Ratio	92.9%	92.2%	87.9%	91.2%	91.0%
25						
26						
27		Recology Sunset Scavenger & Recology Golden Gate				
28	Operating Ratio Expenses	RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
29	Allowed Operating Ratio	\$ 148,393,507	\$ 154,861,094	\$ 155,499,782	\$ 169,556,419	\$ 181,791,911
30	Operating Expense with Operating Ratio	91.00%	91.00%	91.00%	91.00%	91.00%
31	Non-Operating Ratio Expenses	\$ 163,063,788	\$ 170,177,026	\$ 170,876,882	\$ 186,325,735	\$ 199,771,331
32	Disposal Cost	37,755,912	39,596,954	41,476,565	42,350,048	50,330,661
33	Processing Cost	55,832,048	61,255,697	62,741,958	63,849,418	75,744,234
34	Impound Account	14,614,399	14,941,762	15,094,164	15,334,161	19,702,820
35	License Expenses	1,555,646	1,562,598	1,592,394	1,640,166	1,646,705
36	Non Rate Revenue	(22,120,935)	(25,008,133)	(27,268,743)	(30,542,452)	(32,810,877)
37	Diversion Incentive	3,736,734	3,820,437	3,859,404	3,920,760	4,489,243
38	New Rate Items (RY 2018)	-	-	-	-	7,986,645
39						
40						
41	Net Revenue Requirement	\$ 254,444,592	\$ 266,346,342	\$ 268,374,524	\$ 282,877,835	\$ 318,874,117
42	Rate Revenue	\$ 254,263,196	\$ 266,781,063	\$ 274,720,877	\$ 279,844,547	\$ 322,371,518
43	Variance to revenue requirement	(181,396)	434,721	6,346,352	(3,033,289)	3,497,401
44	Revenue less non-operating ratio expenses	\$ 166,625,126	\$ 174,432,184	\$ 181,084,638	\$ 187,213,207	\$ 199,771,331
45	Operating Ratio	89.1%	88.8%	85.9%	90.6%	91.0%
46						
47		Consolidated				
48		RY 2014	RY 2015	RY 2016	Projected RY 2017	Application RY 2018
49	Operating Ratio Expenses	\$ 250,700,074	\$ 260,638,840	\$ 263,086,964	\$ 280,055,503	\$ 309,441,499
50	Revenue less non-operating ratio expenses	\$ 276,807,314	\$ 289,130,067	\$ 303,532,057	\$ 308,314,672	\$ 340,048,176
51	Operating Ratio	90.6%	90.1%	86.7%	90.8%	91.0%
52						
53	Rate Term Average (RY 14-RY 17):	89.5%				

San Francisco Rate Application

COST OF LIVING ADJUSTMENT (COLA) MECHANISM

Prepared by: .

Armanino LLC

On behalf of:

Recology Sunset Scavenger, Recology Golden Gate and Recology San Francisco

March 8, 2017

I. Introduction

This report summarizes the Cost of Living Adjustment (COLA) mechanism that is included in the Companies' rate application for the Rate Year July 1, 2017 through June 30, 2018. The COLA Mechanism would be applied to all subsequent rate years until new rates are set as a result of a rate proceeding. The Companies have filed a rate application using their projected costs for the rate year ending June 30, 2018. The COLA would be applied to future rate years in order to produce additional revenue sufficient to account for inflationary increases in the Companies' costs. Without the COLA, the Companies would likely need to submit notice of a new rate application by the end of rate year 2018.

The COLA proposed by the Companies is based on the COLA approved by the Director of the Department of Public Works ("the Director") in 2001 and incorporated into the rates for the period 2002 - 2006 and carried over, with a modification to include a fuel index, for the rate period 2007 - 2011, then subsequently modified to better reflect current labor contractual requirements and a separate Health & Welfare component for the rate period 2012 - 2017. The Company is not recommending any modifications to the COLA structure other than including Pension expense as a component of fixed versus variable labor. This change from the approved 2013 COLA mechanism is consistent with previous rate filings and reflects management's belief that Pension expense, as a component of the current labor agreements is more fixed in nature and should be reflected as such in the annual COLA calculation. This modification, along with updated expenses included in the rate application, require an adjustment of the COLA component weighting. Table 1 provides the calculated COLA weight rate for each of the components. For illustrative purposes only, a weighted COLA was calculated for rate years 2017 and 2018.

II. The COLA Methodology Used in Previous Rate Submissions

In the 2001 Director's Report, the Director followed the Department of Public Works (DPW) Staff's recommendation and approved a Cost of Living Adjustment (COLA) proposed by the Companies using a three component weighting system (first three bulleted components noted below). That COLA modified rates so as to recover cost increases resulting from inflation over the five-year rate period 2002-2006. In the subsequent rate submission, the COLA mechanism was modified to include both fuel and capital cost indexes (Bullets four and five noted below). That COLA modified rates to cover cost increases over the five-year rate period 2007 - 2011. In 2013, the COLA mechanism was modified to include a separate Health and Welfare component as well as tie future labor related COLA adjustments to the new labor agreement. The 2013 COLA mechanism modified rates to cover cost increases over the five-year rate period 2012 - 2016.

The COLA mechanism approved during the last rate proceeding includes the following components:

- A fixed labor cost inflation rate reflecting the Companies fixed labor contracts.
- A variable cost inflation rate based on the Consumer Price Index for Urban/San Francisco ("CPI-U/SF")

- A variable materials cost inflation rate based on the Producer Price Index for Industrial Commodities ("PPI").
- A California Diesel Fuel Index
- Capital cost - zero inflation

- Health & Welfare cost inflation rate based on a five-year historical weighted average as calculated by the Companies third-party insurance carrier

The weights assigned to these components were designed to reflect the proportions associated with the types of cost incurred by the Companies, and therefore to reflect the expected increases the Companies were to incur due to inflation.

III. Modifications of the COLA

The Companies are not proposing the addition of any new components to the COLA mechanism in this Rate Order. The one proposed change is to allocate pension related costs as a component of the fixed labor attribute. Under the current labor agreement, the Company must make an annual minimum fixed payment that is not based on any variable attribute but rather by employee. The Companies do not anticipate material variation in the number of employees and, accordingly, consider pension costs largely fixed in nature. This is consistent with the previous rate filings.

IV. Calculation of Weights

The COLA is a composite inflation factor that is calculated as the weighted average of the specific inflation indices. As the weights reflect the Companies' projected costs as they are included in the rate application, the COLA will correctly adjust the rates for inflation in costs. The COLA weights have been calculated based on the estimated costs of the rate year July 1, 2017 - June 30, 2018. Once approved, the component weights will not change for the duration of the period until a new rate is approved.

V. Conclusion

The Companies believe the City should adopt the proposed modification to the COLA mechanism and include pension cost as an allocation within fixed costs. Under the current labor agreement, the Company must make a minimum pension contribution annually not based on hours worked or other variable attributes but rather by employee, working or not. Applying the COLA with pension reflected as a fixed cost will allow the Companies to recover inflationary increases during interim periods before new rates are set.

**Recology Sunset Scavenger/ Recology Golden Gate
Historical COLA Increases**

Table 1. COLA Mechanism with H & W with Fixed Labor Inflation Factor at 2.75%

	1	2	3
	2016	2017	2018
1 Year Ending June 30			
2 Fixed Labor Inflation Factors (a)		2.75%	2.75%
3 Fixed Labor COLA Rate Weight		59.18%	57.94%
4 Weighted Fixed COLA Increase (line 2 x line 3)		1.63%	1.59%
5 Variable Labor COLA Rate (b)			
6 SF-CPI (U) Index February 2016	262.600		
7 SF-CPI (U) Index February prior to Rate Year		270.531	278.701
8 Annual Percent Change From March- February		3.02%	3.02%
9 Variable COLA Rate Weight		6.50%	7.43%
10 Weighted Variable COLA Increase (line 8 x line 9)		0.20%	0.22%
11 Variable H &W Rate (c)			
12 Mercer Analysis		5.50%	5.50%
13 Variable COLA Rate Weight		12.29%	12.16%
14 Weighted Variable COLA Increase (line 12 x line 13)		0.68%	0.67%
15 Variable Materials PPI Rate (d)			
16 PPI Index February 2016	191.800		
17 PPI Index February prior to Rate Year		187.964	184.205
18 Annual Percent Change From March- February		-2.00%	-2.00%
19 Variable PPI Rate Weight		13.52%	14.73%
20 Weighted Variable PPI Increase (line 18 x line 19)		-0.27%	-0.29%
21 Diesel Fuel Forecasted Rate (e)			
22 EIA Diesel Fuel Price February 2016	2.399	2.944	2.944
23 Annual Percent Change From March- February		22.72%	22.72%
24 Fuel Rate Weight		2.44%	2.40%
25 Weighted Forecasted Fuel Increase (line 23 x line 24)		0.55%	0.55%
26 Capital Cost Inflation Factor			
27 Capital cost assumed to be constant			
28 Annual Percent Change From March- February		0.00%	0.00%
29 Cost of Capital Weight		6.07%	5.33%
30 Weighted Forecasted Fuel Increase (line 28 x line 29)		0.00%	0.00%
31 COLA Increase (Lines 4+10+14+20+25+30)		<u>2.78%</u>	<u>2.74%</u>

Notes:

(a) 2.75% has been used base on current collective bargaining agreements which provide for a range between 2.25% and 3.25% for 2017 - 2018 based on CPI for the Bay Area.

(b) The Bureau of Labor Statistics (BLS) Index San Francisco-Oakland-San Jose Consumer Price index - All Urban Consumers, All items, 1982-84=100, Series ID: CUURA422SA0 will be provided for in each year. The use of the April index number assumes that the rate increase is in effect July 1. The example above uses the twelve months ending February 262.600/254.910).

(c) The Vairable H & W index was developed by MERCER. MECER received historical rate data that included fully insured medical and dental renewal rate increase as well as the self insured medical fully equivalent rate increases for the years 2012-2016. The rates related to medical and dental plans cover Recology's active San Francisco population.

(d) The BLS Index Producer Price Index-Industrial Commodities les Fuels, Base: 1982 Series ID: WPU03T15M05 will be provided for in each year. The use of the April index number assumes that the rate increase is in effect July 1. The example above uses twelve months ending February.

(e) The U.S. Energy Information Administration, Petroleum & Other Liquids, Weekly California No 2 Diesel Retail Prices will be provided for in each year. The use of the April index number assumes that the rate increase is in effect July 1. The example above uses twelve months ending February.

Recology Sunset Scavenger/Recology Golden Gate Summary COLA Weights

Percentage Weights for Combined Companies

	Weights RY 2017		Weights RY 2018	
	Unadjusted	Adjustment Adjusted	Unadjusted	Adjustment/Adjusted
1 Fixed COLA Adjustment Factor (Fixed Labor)	59.18%	59.18%	57.94%	57.94%
2 Variable COLA Adjustment Factor (Variable Labor)	6.50%	6.50%	7.43%	7.43%
3 Health and Welfare	12.29%	12.29%	12.16%	12.16%
4 Variable PPI (Materials)	13.52%	13.52%	14.73%	14.73%
5 Fuel	2.44%	2.44%	2.40%	2.40%
6 Total	93.93%	0.0%	94.66%	0.0%
7 Capital Costs	6.07%	6.07%	5.33%	5.33%
8 Total Capital	6.07%	0.0%	5.33%	0.0%
9 Total Percentage COLA	100.00%	100.00%	99.99%	99.99%

**Recology Sunset Scavenger/Recology Golden Gate
Percentage Weighted Allocated Expenses Summary**

RSF COLA Rate Weight

	Fixed Labor	Variable Labor	H & W	Other Material	New Capital	Fuel	Existing Capital
RY 2017	48.67%	12.76%	11.59%	22.84%	0.00%	2.70%	1.45%
RY 2018	45.48%	14.33%	10.71%	25.32%	0.00%	2.42%	1.73%

RSS and RGG Combined - COLA Rate Weight

	Fixed Labor	Variable Labor	H & W	Other Material	New Capital	Fuel	Existing Capital
RY 2017	59.18%	6.50%	12.29%	13.52%	0.00%	2.44%	6.07%
RY 2018	57.94%	7.43%	12.16%	14.73%	0.00%	2.40%	5.33%

Calculate the COLA Rate Weight for RSF, SSC/GGD Combined

Recycling & Disposal COLA Rate Weight

	Fixed Labor	Variable Labor	H & W	Other Material	Fuel	Existing Capital	Total
RY 2017	48.67%	12.76%	11.59%	22.84%	2.70%	1.45%	100.01%
RY 2018	45.48%	14.33%	10.71%	25.32%	2.42%	1.73%	99.99%

RSF Processing & Disposal Costs	Total From spreadsheet	Fixed Labor	Variable Labor	H & W	Other Material	Fuel	Existing Capital	Total
	RY 2017	119,641,925	58,231,348	15,263,821	13,863,790	27,330,447	3,224,920	1,727,598
RY 2018	138,648,662	63,057,644	19,873,809	14,852,925	35,099,872	3,360,523	2,403,889	138,648,662

RSS and RGG Alloc disposal costs	SSC I/C disp & proc costs	Fixed Labor	Variable Labor	H & W	Other Material	Fuel	Existing Capital	Total
	RY 2017	106,028,786	51,604,210	13,529,273	12,288,736	24,216,975	2,862,777	1,537,417
RY 2018	125,403,836	57,033,665	17,970,370	13,430,751	31,752,251	3,034,773	2,169,486	125,391,296

RSS & RGG Costs	Fixed Labor	Variable Labor	H & W	Other Material	Fuel	Existing Capital	Total
	RY 2017						
Expenses before recycling alloc (from SS tab)	112,344,510	4,473,968	21,749,273	13,238,622	3,890,304	15,282,831	170,979,509
Allocated I/C disp & proc costs	<u>51,604,210</u>	<u>13,529,273</u>	<u>12,288,736</u>	<u>24,216,975</u>	<u>2,862,777</u>	<u>1,537,417</u>	<u>106,039,389</u>
Total	163,948,721	18,003,241	34,038,009	37,455,597	6,753,081	16,820,249	277,018,898
COLA Rate Weight	59.18%	6.50%	12.29%	13.52%	2.44%	6.07%	100.00%
RY 2018							
Expenses before recycling alloc (from SS tab)	122,698,809	5,079,457	24,301,673	13,939,493	4,418,155	14,369,117	184,806,704
Allocated I/C disp & proc costs	<u>57,033,665</u>	<u>17,970,370</u>	<u>13,430,751</u>	<u>31,752,251</u>	<u>3,034,773</u>	<u>2,169,486</u>	<u>125,391,296</u>
Total	179,732,474	23,049,827	37,732,424	45,691,745	7,452,928	16,538,603	310,198,001
COLA Rate Weight	57.94%	7.43%	12.16%	14.73%	2.40%	5.33%	100.00%



345 California Street
Suite 2000
San Francisco, CA 94104

T +1 415 733 4100
towerswatson.com

March 25, 2013

Mr. Adam Tabak
Corporate Controller
Recology
50 California Street, 24th Floor
San Francisco, CA 94111

Re: Pension Plan Funding Projection

Dear Adam:

As requested, this letter provides a description of the 10-year funding and accounting projections sent on November 27, 2012 for the Recology Defined Benefit Pension Plan including assumptions and methodologies used in developing the projections.

Summary Exhibits

- Exhibit 1: 10-Year Funding Projection and Allocation
 - Includes key assumptions, funded status, contribution information
- Exhibit 2: 10-Year Accounting Projection and Allocation
 - Includes key assumptions, reconciliation of funded status, net period pension cost in addition to fiscal year contribution information
- Assumptions and Notes

The projection has been prepared on a deterministic basis; that is, assuming a specific set of assumptions are met – other scenarios are possible that have not been reflected here.

Assumptions and Methodology

Funding Policy

The following considerations are reflected in the contribution projection:

- Contribute at least \$25 million per fiscal year until reaching 110% funded on an accounting basis
- Meet minimum contribution requirements under the Pension Protection Act (PPA)
- Meet contribution requirements outlined in union agreements
- Avoid "at-risk" status. The plan being considered "at-risk" would increase funding obligations and contribution requirements.

Based on the selected economic scenario, Recology is projected to make an annual contribution of \$25 million each year, from fiscal year ending September 30, 2013 through fiscal year ending September 30, 2019. See Assumptions CF1, CF2 and CF15 for additional details.



Mr. Adam Tabak
March 25, 2013

Plan changes

Recent plan changes for benefit group C and D participants have been reflected as of October 1, 2012 (see Assumption CF17 for additional details). Note that no IRC Section 436 contribution is assumed to be made for the amendment as the plan is assumed to be over 80% funded as of October 1, 2012, both before and after the plan change.

Population

Census data for current participants is projected from October 1, 2011 with no demographic actuarial gains or losses, with the following exceptions:

- Terminating union employees are assumed to be replaced so the total active union participant count remains level in all years. See Assumption CF8 for details.
- Because the plan was closed to non-union new entrants effective February 1, 2011, no new non-union participants have been included in the projection.

Interest Rates

For funding purposes under PPA, Recology uses 24-month average three-segment interest rates with June look-back for the October 1, 2012 and later valuations, switching to the full yield curve when advantageous. In this projection, the switch to the full yield curve occurs in the plan year beginning October 1, 2018.

Under the full yield curve, the effective interest rate is assumed to be the ASC 715 discount rate minus 50 basis points to reflect the difference in methodologies between the IRS prescribed interest rates and the methodology used in determining the ASC 715 discount rate using corporate bonds. Note that the effective interest rate is the single rate which would produce the present value of accrued benefits equal to the funding target. The effective interest rate for valuing liabilities will depend on current interest rates, provisions of current law, and overall changes in corporate bond rates.

The ASC 715 discount rate is selected using Towers Watson's BOND:Link model, which assists plan sponsors in the selection of discount rates that reflect the characteristics of their employee benefit plans. Discount rates are derived by identifying a theoretical settlement portfolio of high quality corporate bonds sufficient to provide for a plan's projected benefit payments.

Overall interest rates are assumed to increase over the 10-year period, and the provisions of the Funding Stabilization law outlined below are reflected in the projection. See Assumptions CF4, CF6 and FR1 for additional details.

Funding Stabilization Under MAP-21

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was enacted. Beginning in 2012, MAP-21 modifies the 24-month average segment rates under Internal Revenue Code (IRC) §430 (but not the full yield curve) so that they will not fall outside a corridor which surrounds the 25-year average of such segment rates. Due to the current low level of interest rates, this will have the effect of immediately improving the funding status as of October 1, 2012 used in the funding projections for the Recology Defined Benefit Pension Plan.



Mr. Adam Tabak
March 25, 2013

The MAP-21 corridors are established as follows:

For Plan Years Beginning in	Corridor around the 25-year average
2012	90% – 110%
2013	85% – 115%
2014	80% – 120%
2015	75% – 125%
2016 and later	70% – 130%

If a segment rate that otherwise would be used as of a valuation date is outside the corridor, it is changed to the endpoint of the corridor nearest to it. So, for example, segment rates for 2012 plan years will be increased to equal the lowest rate in the corridor. The corridors apply to all plan years beginning within a calendar year, irrespective of the look-back month (if any) otherwise used to select segment rates for the actuarial valuation.

The IRS is to publish the corridors for each calendar year, based on the average of the segment rates for the 25-year period ending on September 30 of the prior calendar year. The three corridor rates (i.e., the lower boundary of the 90%-110% corridor around the 25-year average of segment rates) which apply to 2012 plan years are 5.54%, 6.85% and 7.52%.

PBGC Premiums

MAP-21 provides for significant increases in PBGC flat-rate and variable rate premiums, as follows:

- Flat rate premiums will increase to \$42 per participant in 2013 (from \$35 in 2012) and to \$49 in 2014, and will be indexed thereafter in proportion to increases in national average wages (NAW).
- The variable rate premium (VRP) will be indexed with increases in the National Average Wage (NAW) starting in 2013 (rounded to the nearest 0.1%).

In addition to indexation, the rate will increase by 0.4% of unfunded vested benefits (UVB) in 2014 (from 0.9% in 2012 and 2013 to 1.3% in 2014) and by another 0.5% for 2015 (to 1.8%).

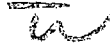
Unfunded vested benefits are based on rates which ignore the MAP-21 interest rate corridors, whether the standard or alternative variable rate premium method is used. These changes have been reflected in the estimated PBGC premiums included in the funding projections in Exhibit 1.

Methodology Overview

The Employee Retirement Income and Savings Act (ERISA) requires sponsors of defined benefit pension plans to fund their plans through periodic cash contributions. The specific amount of each required contribution is determined annually by performing an actuarial valuation of the plan. In each valuation, the value of plan assets is compared to the liabilities of the plan (determined according to actuarial principles). From these amounts a range of allowable contributions is determined, from minimum required to maximum deductible, according to rules stipulated in prevailing pension law.

The last funding valuation of the Recology Defined Benefit Pension Plan was as of October 1, 2011, which determined the required contribution for the 2011-2012 plan year. In order to estimate contribution requirements for future plan years, we projected the results of the October 1, 2011 funding valuation to future years using standard actuarial projection techniques. This entails projecting both assets and

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Mr. Adam Tabak
March 25, 2013

liabilities one year at a time and applying the applicable pension funding rules to determine the contribution required for that year. The projection techniques are described in greater detail below.

Projecting Assets

Although the PPA funding liabilities as of October 1, 2012 are estimates, the October 1, 2012 market value of assets is the actual amount. Asset values on October 1, 2013 and later are projected by taking the prior year's value, adding employer contributions and investment return (at an assumed rate of 7.50%), and subtracting expected benefit payments to retirees.

Recology has elected to use a smoothed asset valuation method for funding purposes. See assumption CF7 for additional details.

Projecting Liabilities

The liability of a pension plan is the present value of future benefits expected to be paid from the plan. The determination of liability requires numerous assumptions, such as interest (or discount) rate, mortality, decrement timing, and more.

Funding and accounting liabilities have been projected using standard actuarial techniques reflecting adjustments for the assumptions outlined above.

Determination of Contributions

The annual required contributions are determined in accordance with our understanding of the Pension Protection Act of 2006.

The minimum required contribution equals the target normal cost plus 7-year amortizations of the excess of funding target liability over actuarial value of assets. Each year, an additional payment would be added if the funding shortfall was greater than anticipated (i.e., if the plan experienced an actuarial loss). These amortization bases would not be reduced or eliminated until the plan becomes fully funded.

Depending on funded status, funding balance can be used to offset minimum required contributions; however, Recology is assumed not to create funding balances in future years.

Conclusion

By contributing \$25 million each fiscal year through fiscal year end 2019, based on the data, assumptions, methods, and provisions outlined in this letter and attachments, Recology is able to:

- Meet the plan's minimum required contributions
- Meet union negotiated contribution requirements
- Remains above certain key funded status thresholds under PPA
- Improve the overall financial well-being of the pension plan

Except as otherwise provided herein, the results included in this letter are based on the data, assumptions, methods, plan provisions and other information, outlined in the actuarial valuation report to determine funding requirements for the plan for the plan year beginning October 1, 2011 dated June 2012 and the actuarial valuation report to determine year-end 2012 accounting requirements dated October 2012. Therefore, such information, and the reliances and limitations of the valuation reports and their use, should be considered part of this letter. The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to pension plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc.

TOWERS WATSON 

Mr. Adam Tabak
March 25, 2013

Please let us know if you have any questions.



Laura Daizell, F.S.A.
Senior Consulting Actuary



Si Man Lei, A.S.A.
Consulting Actuary

LD:SML:jt

cc: Mark Lomele

Attachments: Exhibit

Recology Defined Benefit Pension Plan
Ten-Year Projection of Fiscal Year Contributions

	10/1/2011 - 9/30/2012	10/1/2012 - 9/30/2013	10/1/2013 - 9/30/2014	10/1/2014 - 9/30/2015	10/1/2015 - 9/30/2016	10/1/2016 - 9/30/2017	10/1/2017 - 9/30/2018	10/1/2018 - 9/30/2019	10/1/2019 - 9/30/2020	10/1/2020 - 9/30/2021	10/1/2021 - 9/30/2022
Golden Gate Disposal											
Union	6,586,000	4,283,000	4,288,000	4,288,000	4,285,000	4,301,000	4,301,000	4,294,000	0	0	0
Non-Union	2,095,000	1,307,000	1,283,000	1,283,000	1,250,000	1,221,000	1,221,000	1,255,000	0	0	0
West Coast Recycling											
Union	31,000	18,000	17,000	17,000	16,000	15,000	15,000	16,000	0	0	0
Non-Union	54,000	31,000	30,000	30,000	27,000	25,000	25,000	28,000	0	0	0
Sunset Scavenger											
Union	9,377,000	6,231,000	6,302,000	6,306,000	6,389,000	6,485,000	6,484,000	6,385,000	0	0	0
Non-Union	1,544,000	1,020,000	1,029,000	1,030,000	1,042,000	1,053,000	1,053,000	1,040,000	0	0	0
SF Recycling & Disposal											
Union	5,300,000	3,596,000	3,671,000	3,676,000	3,775,000	3,866,000	3,865,000	3,760,000	0	0	0
Non-Union	933,000	621,000	628,000	628,000	638,000	647,000	647,000	637,000	0	0	0
Other	12,530,000	7,893,000	7,752,000	7,742,000	7,558,000	7,387,000	7,389,000	7,585,000	0	0	0
Total	38,550,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	0	0	0

Notes:

1. Normal cost (and expenses) portion on contribution allocated by normal cost of subsidiary as of October 1, 2011. Remainder (amortization payments, excess contributions) allocated by target liability as of October 1, 2011.
2. Active target liability and normal cost at West Coast have been moved to Sunset based on participant data as of October 1, 2011.

Recology Defined Benefit Pension Plan
Ten-Year Projection of ASC 715 Expense

	Fiscal Year										
	10/1/2011 - 9/30/2012	10/1/2012 - 9/30/2013	10/1/2013 - 9/30/2014	10/1/2014 - 9/30/2015	10/1/2015 - 9/30/2016	10/1/2016 - 9/30/2017	10/1/2017 - 9/30/2018	10/1/2018 - 9/30/2019	10/1/2019 - 9/30/2020	10/1/2020 - 9/30/2021	10/1/2021 - 9/30/2022
Discount Rate	5.70%	4.50%	4.50%	4.80%	4.80%	5.05%	5.05%	5.30%	5.30%	5.30%	5.30%
Expected Long-Term Return on Assets	7.75%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Reconciliation of Funded Status											
(1) Projected Benefit Obligation (PBO)	319,628,262	433,591,000	446,754,000	443,015,000	458,345,000	456,348,000	470,055,000	466,184,000	477,678,000	488,155,000	497,519,000
(2) Fair Value of Assets	210,595,015	278,488,000	308,302,000	341,620,000	374,713,000	408,848,000	444,348,000	481,729,000	521,032,000	535,656,000	549,833,000
(3) Funded Status	(129,033,243)	(152,102,000)	(137,452,000)	(101,395,000)	(83,532,000)	(47,501,000)	(25,707,000)	15,535,000	43,354,000	47,501,000	52,314,000
(4) Unrecognized Actuarial (Gain)/Loss	180,562,052	217,620,000	204,349,000	171,584,000	161,182,000	134,460,000	127,228,000	103,641,000	99,265,000	96,040,000	93,276,000
(5) Unrecognized Transition (Asset)/Obligation	0	0	0	0	0	0	0	0	0	0	0
(6) Unrecognized Prior Service Cost	7,153,287	15,070,000	12,961,000	10,955,000	9,143,000	7,730,000	6,316,000	4,903,000	3,869,000	3,056,000	2,243,000
(7) Accumulated Other Comprehensive Income	187,715,333	232,660,000	217,310,000	182,538,000	170,325,000	142,190,000	133,544,000	108,544,000	103,134,000	95,096,000	95,519,000
(8) (Accrued)/Prepaid Pension Cost	58,662,086	80,588,000	79,858,000	81,144,000	86,693,000	94,689,000	107,837,000	124,079,000	146,488,000	146,597,000	147,833,000
Components of Net Periodic Pension Cost											
(9) Net Periodic Pension Cost:											
(a) Service Cost	9,357,492	11,555,000	11,428,000	10,811,000	11,118,000	10,530,000	10,195,000	8,886,000	8,371,000	8,211,000	8,053,000
(b) Interest Cost	18,971,376	19,072,000	19,778,000	20,895,000	21,610,000	22,802,000	23,266,000	24,149,000	24,712,000	25,223,000	25,684,000
(c) Expected Return on Assets	(21,521,854)	(21,407,000)	(23,428,000)	(25,552,000)	(27,785,000)	(30,543,000)	(33,317,000)	(36,464,000)	(38,207,000)	(39,257,000)	(40,264,000)
(d) Amortization of Transition (Asset)/Obligation	0	0	0	0	0	0	0	0	0	0	0
(e) Amortization of Prior Service Cost	1,641,334	2,109,000	2,007,000	1,811,000	1,414,000	1,414,000	1,414,000	1,034,000	813,000	813,000	813,000
(f) Amortization of Actuarial (Gain)/Loss	8,155,236	4,492,000	13,631,000	11,485,000	10,546,000	7,848,000	7,211,000	4,987,000	4,201,000	3,767,000	3,395,000
(g) Net Periodic Pension (Credit)/Cost	16,643,644	25,731,000	23,715,000	19,490,000	17,005,000	11,861,000	8,759,000	2,592,000	(110,000)	(1,237,000)	(2,318,000)
Supplemental Information											
Market-Related Value of Assets	261,137,332	283,675,000	308,780,000	338,427,000	368,679,000	408,368,000	443,898,000	481,420,000	520,871,000	535,600,000	549,800,000
Expected Benefit Payments	11,175,259	11,760	15,438,000	15,566,000	17,867,000	19,170,000	20,557,000	22,055,000	23,512,000	25,008,000	26,604,000
Average Future Service	11,778	11,760	11,489	11,360	11,305	11,236	11,186	11,180	11,269	11,291	11,291
Assumed Contributions:											
• Contribution for prior plan year	17,400,000	6,900,000	9,400,000	6,600,000	3,600,000	3,800,000	6,600,000	25,000,000	0	0	0
• Contribution for current plan year	21,150,000	16,000,000	15,600,000	18,400,000	24,400,000	24,200,000	18,400,000	0	0	0	0
• Total Contributions	38,550,000	22,900,000	25,000,000	25,000,000	28,000,000	28,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000

Exhibit 2
Allocation

Recology Defined Benefit Pension Plan
Ten-Year Projection of ASC 715 Expense

	10/1/2012 - 9/30/2013	10/1/2013 - 9/30/2014	10/1/2014 - 9/30/2015	10/1/2015 - 9/30/2016	10/1/2016 - 9/30/2017	10/1/2017 - 9/30/2018	10/1/2018 - 9/30/2019	10/1/2019 - 9/30/2020	10/1/2020 - 9/30/2021	10/1/2021 - 9/30/2022
Golden Gate Disposal										
Union	3,746,000	3,433,000	2,832,000	2,476,000	1,728,000	1,275,000	377,000	(16,000)	(180,000)	(338,000)
Non-Union	1,353,000	1,217,000	1,023,000	894,000	623,000	461,000	136,000	(6,000)	(65,000)	(122,000)
West Coast Recycling										
Union	10,000	9,000	8,000	7,000	5,000	4,000	1,000	0	0	(1,000)
Non-Union	24,000	22,000	18,000	16,000	11,000	8,000	2,000	0	(1,000)	(2,000)
Suncoast Scavenger										
Union	7,737,000	7,131,000	5,849,000	5,113,000	3,564,000	2,634,000	779,000	(33,000)	(372,000)	(697,000)
Non-Union	1,330,000	1,226,000	1,006,000	879,000	613,000	453,000	134,000	(6,000)	(64,000)	(120,000)
SF Recycling & Disposal										
Union	4,862,000	4,481,000	3,675,000	3,213,000	2,239,000	1,655,000	480,000	(21,000)	(234,000)	(438,000)
Non-Union	853,000	717,000	645,000	564,000	393,000	291,000	86,000	(4,000)	(41,000)	(77,000)
Other	5,816,000	5,339,000	4,394,000	3,843,000	2,677,000	1,978,000	587,000	(24,000)	(280,000)	(524,000)
Total	25,731,000	23,715,000	19,450,000	17,005,000	11,851,000	8,759,000	2,592,000	(110,000)	(1,237,000)	(2,319,000)

Notes:

1. ASC 715 expense allocated using same percentages as FY12 cost provided October 8, 2012.

Recology Defined Benefit Pension Plan
Assumptions and Notes for Ten-Year Deterministic Projections (November 2012)

Cash Funding Projection

(Subject to ERISA minimum funding requirements)

- CF1 The funding policy of the plan is to contribute at least \$25 million per year until reaching 110% funded on an accounting basis (as proposed in our October 18, 2012 meeting) while meeting minimum requirements under PPA, union agreements, and avoiding "at-risk" status.
- CF2 Recology is assumed to not create credit balance in any future years (all remaining credit balance has been forfeited effective October 1, 2011).
- CF3 Return on plan assets = 7.50% annually. Assets have been projected based on an amount of \$278.5 million as used for September 30, 2012 disclosure.
- CF4 Recology uses the 24-month average three-segment interest rates with June lookback for the 10/1/2012 and later valuations, switching to the full yield curve when advantageous. Under the full yield curve, the effective interest rate is assumed to be the FAS 87 discount rate minus 50 basis points.
- CF5 Funding stabilization under the Moving Ahead for Progress in the 21st Century Act (MAP-21) has been incorporated (first effective for the plan year beginning 10/1/2012). For 2012, the 25-year average of historical segments rates (after application of the corridor) are 5.54%, 6.85% and 7.52%.
- CF6 Effective interest rate for valuing liabilities will depend on current interest rates, MAP-21 provisions and overall increases in corporate bond rates through September 30, 2018 (see assumptions CF-4 and FR-1).
- CF7 Recology continues to use a smoothed asset valuation method. For purposes of determining the limit on expected asset return in the manner required by law, the third segment rate is assumed to equal the effective interest rate plus 75 basis points each year. This results in actuarial asset gains each year since actual asset return is assumed to equal 7.50% (see CF3), but recognition of these gains is spread over a three-year period leading to a smoothed value that tends to be lower than market value.
- CF8 Terminating union employees are replaced so the total active union participant count remains level in all years. Envirocal union employees who terminate are replaced by new hires benefiting under the Recology formula. Non-union employees who terminate are not replaced in the DB plan (Note: new hires at locations not currently benefiting under the Pension Plan are ignored).
- CF9 Salary increases are assumed to be 3.00% annually.
- CF10 Average age/pay of new hires are assumed to be 38/\$52,500 for Recology union participants (including SF R&D career average participants).
- CF11 Mortality as mandated by IRC §430, static tables with separate rates for annuitants and non-annuitants, males and females.
- CF12 Administrative expenses paid from plan assets are assumed to be \$200,000 for each year, plus an additional load for estimated PBGC variable-rate premiums reflecting MAP-21 increases.
- CF13 Census data for current participants projected from 10/1/2011 with no demographic actuarial gains or losses other than population adjustments noted in CF8.
- CF14 Any effect of potential future benefit restrictions under IRC §436 has been ignored, and the plan is not subject to deemed credit balance forfeitures under IRC §436. (See TW letter dated 8/17/2010 for details)
- CF15 Higher contribution requirements under "at-risk" funding rules are reflected (plan is subject to at-risk funding rules in the following year if the FTAP is less than 80% and the FTAP determined under additional at-risk assumptions is less than 70%). However, Recology is assumed to avoid at-risk status by forfeiting credit balance and making additional cash contributions.
- CF16 All other assumptions are the same as those used for the annual ERISA funding valuation for the plan year beginning 10/1/2011.
- CF17 Current Group C and D participants and retirees/deferreds who terminated after 1/1/2006 and who were covered under the Group C or D formulas are assumed to be moved from the career average formula to the 1.6% final average pay formula effective October 1, 2012. In addition, current transferred actives who have former service under Group C or D are assumed to receive the Group B formula for their service while under the Group C or D formula. No additional 436 contribution is assumed to be made for the amendment as the plan is assumed to be over 80% funded as of October 1, 2012 both before and after the plan change.

Financial Reporting Projection

(Subject to ASC 715, fka SFAS 87)

- FR1 The discount rate is 4.50% for FY13 and FY14, 4.80% for FY15 and FY16, 5.05% for FY17 and FY18, and 5.30% in subsequent years.
- FR2 Expected long-term return on plan assets (for computing net periodic pension cost) = 7.50% annually.
- FR3 Mortality = RP-2000 projected with Scale AA to the valuation date.
- FR4 Projected cash contributions taken from output of funding projection.
- FR5 All other assumptions are consistent with those used for the cash funding projection and/or the same as those used for the ASC 715 valuation for the 10/1/2011 - 9/30/2012 fiscal year.

Towers Watson

11/27/2012

**Consumer Price Index - All Urban Consumers
Original Data Value**

Series Id: CUUR422SA0.CUUS422SA
Not Seasonally Adjusted
Area: San Francisco-Oakland-San
Item: All items
Base Period: 1982-84=100
Years: 2006 to 2016

Source: http://data.bls.gov/pdq/SurveyOutputServlet?series_id=CUUR422SA0.CUUS422SA03

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2	YoY	Oct	3 Year Avg	5 Year Avg	Annual YoY	Oct - Sep	3 Year Avg	5 Year Avg	October-September	
2006	207.1	208.9	209.1	210.7	210.7	211.0	211.0	210.7	210.7	210.6	210.4	209.5	207.9	210.6											
2007	213.688	215.842	216.123	216.240	217.949	217.949	217.949	217.949	217.949	217.949	218.485	216.048	214.736	217.361	3.36%										
2008	219.612	222.074	225.181	225.411	225.824	225.824	225.824	225.824	225.824	225.824	218.628	222.767	221.730	223.804	3.61%										
2009	222.166	223.854	225.992	225.801	226.051	226.051	226.051	226.051	226.051	226.051	224.239	224.395	223.305	225.484	0.10%										
2010	226.145	227.697	228.110	227.954	228.907	228.907	228.907	228.907	228.907	228.907	227.658	227.469	226.994	227.944	0.91%										
2011	229.981	234.121	233.646	234.608	235.331	235.331	235.331	235.331	235.331	235.331	234.327	233.390	232.082	234.699	3.17%										
2012	236.880	238.985	239.806	241.170	242.834	242.834	242.834	242.834	242.834	242.834	239.533	239.650	238.099	241.201	3.19%										
2013	242.677	244.675	245.935	246.072	246.617	246.617	246.617	246.617	246.617	246.617	245.711	245.023	243.894	246.152	1.56%										
2014	248.615	251.495	253.317	253.354	254.503	254.503	254.503	254.503	254.503	254.503	252.273	251.465	250.507	253.463	3.20%										
2015	254.910	257.622	259.117	259.917	261.019	261.019	261.019	261.019	261.019	261.019	260.298	258.572	256.723	260.421	2.56%										
2016	262.600	264.565	266.041	267.853	270.306	270.306	270.306	270.306	270.306	270.306	266.344	263.911			3.56%										

Rate App 2018 Inflation	3.00%
Rate App 2018 Inflation per Oct - Sep	2.67%

Note: Median between 3 yr and 5 yr avg rounded to nearest quartile

Distribution of Zero Waste Incentive Funds

Rate Years 2013-2017

Director's Hearing, March 22, 2017

Deposits

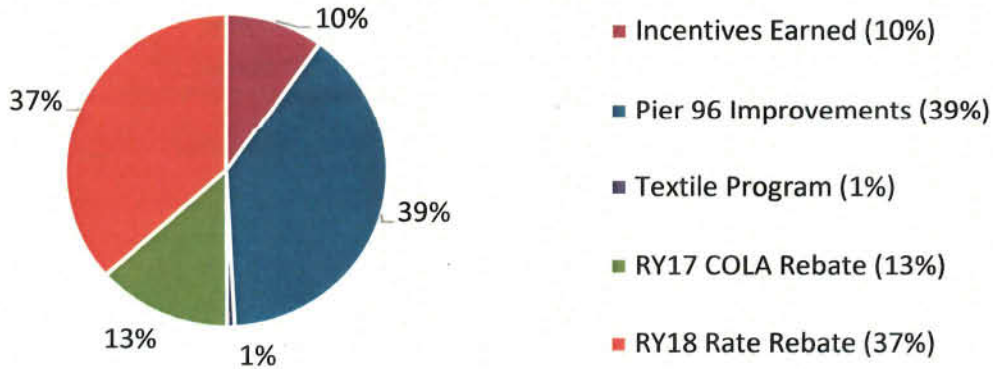
Year	Available for Rebate		Available for Redirection		Total
	Tier 1	Tier 2	Tier 3	Tier 4	
RY13	\$1,559,881	\$1,559,881	\$1,570,776	\$1,570,776	\$6,261,314
RY14	\$1,550,331	\$1,550,331	\$1,542,786	\$1,541,892	\$6,185,340
RY15	\$1,586,117	\$1,586,117	\$1,578,845	\$1,578,846	\$6,329,925
RY16	\$1,603,799	\$1,603,799	\$1,600,275	\$1,600,275	\$6,408,148
RY17	\$1,623,785	\$1,623,785	\$1,623,785	\$1,623,785	\$6,495,140
Total	\$7,923,913	\$7,923,913	\$7,916,467	\$7,915,574	\$31,679,867

Proposed Distribution

Incentives Earned (10%)	\$1,559,881	\$1,559,881			\$3,119,762
Pier 96 Improvements (39%)			\$6,345,691	\$6,097,200	\$12,442,891
Textile Program (1%)				\$247,597	\$247,597
RY17 COLA Rebate (13%)	\$1,140,165		\$1,570,776	\$1,570,777	\$4,281,718
RY18 Rate Rebate (37%)	\$5,223,866	\$6,364,032			\$11,587,898
	\$7,923,912	\$7,923,913	\$7,916,467	\$7,915,574	\$31,679,866

Distribution of Zero Waste Incentive Funds

Rate Years 2013-2017



Source: Recology 2017 Rate Application, Section K, "Zero Waste Incentive Account"

Zero Waste Incentives Tonnage and Goals

Director's Hearing, March 29, 2017

Rate Year	Actual	Tier 1	Tier 2	Tier 3	Tier 4	Over/Under Tier 1
2013*	363,598	401,830	354,391			-9.5%
2014	373,774	355,980	345,036	334,091	323,147	5.0%
2015	389,559	355,980	334,091	312,202	290,313	9.4%
2016	409,849	355,980	323,147	290,313	257,480	15.1%
2017		355,980	312,202	268,424	224,646	
2018		389,072	386,072	380,072	370,000	
2019		380,732	376,232	369,232	360,000	
2020		376,561	371,561	362,561	350,000	
2021		371,561	363,561	347,561	325,000	
2022		363,561	352,561	331,561	300,000	

Goal met

Goal NOT met

* The Tier 1 and Tier 2 targets and methodology for calculating tonnages in RY 2013 was different than that used in RY 2014-2016.

