2017 Refuse Rate Application
Staff Report
April 14, 2017

Contents

1. INTRODUCTION TO THE RATE APPLICATION AND PRODECURES FOR REVIEW

On February 13, 2017, Recology San Francisco, Recology Sunset Scavenger, and Recology Golden Gate (collectively referred to as Recology) filed an Application with the Chair of the Refuse Collection and Disposal Rate Board requesting changes to Recology's residential refuse collection and disposal rates. The Application was referred to the Director of Public Works (the "Director") for hearings, reports and recommendations as required by the Refuse Collection and Disposal Ordinance, as amended (the "Refuse Ordinance").

This report summarizes the Application, the public process responding to the Application, and the results and recommendations of staff review. This report will be the subject of additional Director's hearings that will be held in April and May 2017. At those hearings, staff will present their findings and supporting documentation for the changes recommended in this report.

1.1. Summary of the Recology 2017 Rate Application

Recology submitted a rate Application with supporting analyses prepared by independent experts, proposed rate schedules, descriptions of program and costs, historical information, revenue and expenditure forecasts, and the assumptions underlying these forecasts. In addition, Recology submitted audited financial statements for Recology San Francisco (RSF), Recology Sunset Scavenger (RSS), and Recology Golden Gate (RGG).

Consistent with the Director's 2006 Rate Order, Recology has followed a "combined approach" that aggregates the revenues and expenses of the two collection companies (RSS and RGG) to calculate the proposed rate increase. Staff continues to support this approach. Recology calculates rates based on a 91% operating ratio, resulting in an allowed 9.9% profit, reduced to 89% if they achieve all zero waste incentives. Recology's Application also contains "pass-through" items. Recology is not allowed to calculate any profit on those items, so Recology's effective profit margin is lower.

Recology is requesting a 21.43% average increase in residential refuse collection rates and an increase in the transfer station tip charge of 19.16%, from $156.62 to $186.63 per ton. The proposed rate increase would be partially offset with rebates of amounts paid by ratepayers in prior years. With the proposed rebates, rates would increase 16.4% on average as of July 1, 2017 (or about $5.70 a month for an average single-family home); 4.25% on average as of July 1, 2018 (after most of the proposed rebates have been returned to ratepayers); and an additional increase of 0.78% beginning July 1, 2020 (after the rebates have been completed). Recology has also proposed two contingent schedules that could increase collection rates; the first contingent schedule would fund a replacement Integrated Materials Recovery Facility (*i*MRF) to process construction and demolition (C&D) debris and other materials, resulting in an additional 4.83% rate increase in the tip charge. The second contingent schedule, which would install trash processing equipment at the Transfer Station, would result in a 6.77% rate increase in the tip charge. The Application also seeks annual cost-of-living adjustments using a formula that combines various government indices, which is similar what was approved in prior rate orders. Recology anticipates it will submit a new rate application within three to four years. Future ratemaking procedures are discussed later in this report.

1.2. Procedures

In this rate process, Recology has the burden of proof to demonstrate through evidence on the record that the rate increase it is requesting is "just and reasonable." Pursuant to the Refuse Ordinance, Public Works Order No. 185078 ("Rules of Procedure"), and Public Works Order No. 173617 ("Rate Adjustment Standardized Format"), and in response to Recology's filing an Application, the Director has held a series of workshops and public hearings. Public Works held an informational workshop on the draft Application on October 18, 2016 and offered a technical workshop on the final Application on February 28, 2017. Both workshops were promoted by notifying neighborhood groups and various apartment associations, along with postings at the Library, on the Public Works web site and the Ratepayer Advocate's web site. The Director held public hearings on March 8, 15, 22, and 28, 2017. Public Works advertised these hearings in the San Francisco Chronicle, San Francisco Examiner, posted a notice at the San Francisco Main Library Government Information Center and included information on the Public Works web site. All Director's hearings have been transcribed by a court reporter and these transcriptions have been posted on the Public Works website.

At the Director's hearings, Recology and City staff were given the opportunity to present testimony and cross-examine witnesses. The independent Ratepayer Advocate conducted cross-examinations and public comment was taken at each hearing. The hearing record consists of the documents filed by Recology, City staff, the Ratepayer Advocate, and the public in support of their positions in marked exhibits, as well as in the hearing transcripts. Exhibits are referred to by number in this report. Attachment A contains the list of exhibits that have been entered in the record as of the date of this report.

1.3. Staff Review

Staff from the Department of Public Works and the Department of the Environment (SFE), who have considerable expertise in municipal solid waste management, zero waste, and planning, with assistance from the City Attorney's office and outside advisors and consultants, conducted a thorough review of the Application, beginning with the draft Application submitted by Recology on December 13, 2016. During the 60-day review period for the draft Application, staff examined every schedule and line item of the rate model, reviewing the documentation and justification for the requested increase. Upon request, Recology provided additional information and clarifications in response to numerous rounds of staff and consultant questions. Staff tested the model to validate that Recology's computations and calculations were correct and accurate with no double-counting.

City consultants with specialized financial expertise reviewed the rate model and projection methodologies used by Recology to derive the base year for the rate Application (RY18) from audited financial results for Recology's most recently completed fiscal year (September 30, 2016). The consultants identified the various adjustments and inflation factors applied by Recology and determined their reasonableness.

Both staff and consultants reviewed historical revenues, expenditures, and tons to determine trends and identify potential anomalies. Those findings were then used to validate or adjust projections. Staff also compared elements of the Application to information that SFE has collected through years of working on refuse-related issues and to information obtained from outside sources, including other jurisdictions, to evaluate Recology's Application.

Based on the initial review, staff determined that Recology's draft Application was complete. Recology submitted its final Application on February 13, 2017, which reflected staff findings as well as several corrections of its own.

Staff and consultants continued to review the final Application, including validating that the changes requested in the draft Application were made, and testing other assumptions used by Recology. During the public workshop and the four Director's hearings, staff questioned Recology extensively on their methodology and assumptions, presented additional information, and considered the comments of the Ratepayer Advocate and members of the public. Collectively, the hearing process and information gathered over that period has informed the staff's recommendations, which are summarized in the next section and detailed in subsequent sections of this report.

1.4. Summary of Staff Recommendations

After extensive review, staff is proposing various changes to Recology' rate schedules that affect both the tip charge at RSF and the collection charges levied by RSS and RGG.

For RSF (the operator of Tunnel Avenue and the Recycle Central, the most significant changes are as follows:

Staff Recommended Changes for RSF	**Value of Change**
Remove compostables processing from the operating ratio calculation	TBD
Amortize costs of Port lease for Recycle Central	$159,984

For Recology Sunset Scavenger and Recology Golden Gate, the most significant changes are as follows:

Staff Recommended Changes for RSS/RGG	**Value of Change**
Additional apartment revenue	$165,072
CNG fuel costs	$48,878

In addition to these changes, staff is considering caps on some residential customers to mitigate above average rate increases and allow more time for some customers to reconfigure their services to the extent possible. Staff is also proposing changes to the cost-of-living-adjustment mechanism that would be applied in future rate years and to the zero waste incentives, as described later in this report.

2. REVENUE ANALYSIS

For RSF, the tip charge is calculated by summarizing the operating costs, then subtracting revenues from recyclables and other sources. The remaining costs are divided by the revenue tons processed, which results in a tip charge per ton. For RSS and RGG, the collection services charges are combined with this tip charge to derive collection service charges.

2.1. RSF Revenues and Recyclable Material Sales

Based on projected tonnage, RSF is projected to generate $115 million in tip charge revenue; $105 million is intercompany revenue from the RSS and RGG. RSF receives an additional $10 million in revenue from third party customers. A detail of projected tipping charges can be found in RSF Schedule F.1.

The recycling commodity price assumptions for materials sold by Recology are based on the average of the actual prices received in the previous five annual reports. RSF bears the risk of pricing volatility in the recyclables market. Recycling revenue is based on the projected tons of each commodity multiplied by the prices per ton using the five-year average. Beverage container revenue from the Bottle Bill is included in the revenue calculations. The California legislature and Governor's office are currently considering proposals to restructure the Bottle Bill; should these changes in the funding structure occur, Recology proposed to include these adjustments in the annual cost-of-living adjustment, but provided no specific proposal.

Staff noted that the projected per ton prices of recyclable commodities for RY18 in the draft Application (RSF Sch. F.3) did not match the average actual prices documented in the last five Recology annual reports (RY12-16) per the 2006 Director's Report and 2013 rate process. Recology adjusted the prices in the final Application to reflect an accurate five-year average, resulting in a $1,367,322 increase in projected recycling revenue for RY18 (Ex. 1A RSF, Sch. F.3).

Staff had previously performed a spot audit on a variety of recyclable commodity sales transactions, looking at Recology sales data and requesting backup documentation for random transactions. In each case, the receipts matched the sales data and prices were consistent with the amounts in the corresponding annual reports.

Staff also noted that recycling purchases increased by $757,537 from Recology's draft to the final Application from projected cardboard purchases, which increased by 5,490 tons in RY17 and RY18 (Ex. 1A RSF Sch. K.2). Staff asked for documentation and reasons for the change, and Recology provided cardboard purchase tonnage data for the first 6 months of RY17. Recology based the draft Application on RY16, while the final Application incorporated the RY17 data. Recology also explained that it secured several new large cardboard customers it did not have in RY16.

After thorough review, staff determined that recycling revenue and purchases in the final Application are reasonable and net recycling revenues properly benefit ratepayers.

2.2. RSS/RGG Rate Revenues

Based on existing service levels, RSS/RGG is projected to generate $264 million in collection revenue at current rates. A detail of projected revenue at current rates is provided in Schedule F.1 for RSS/RGG. As shown, RSS/RGG revenues account for small increases in the number of residential, apartment, commercial and compactor accounts. Staff reviewed the revenue projections and determined they were accurate, except it projects a larger increase in apartment accounts.

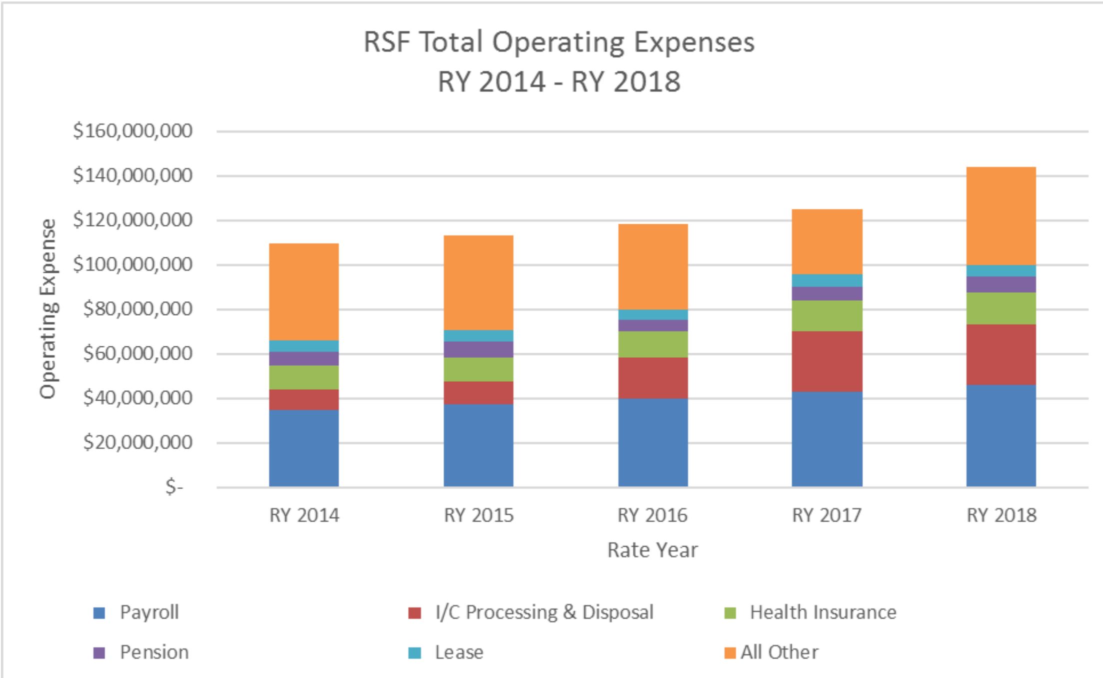
3. EXPENDITURE ANALYSIS

3.1. RSF Operating Expenses

RSF estimates its total operating expenses will grow by a total of $34.7 million (31.7%) from RY14 to projected RY18, representing an average annual increase of approximately $8.7 million (7.9%) over the period. The most significant and growing operating costs are payroll, intercompany processing and disposal, health insurance, pension, and lease expenses, in that order. Combined, these expense categories account for over three quarters (76%) of RSF's total projected operating budget in RY17, and approximately 70% of the projected operating budget in RY18.

- <u>Payroll:</u> Between RY14 and RY17, payroll costs have increased a total of $7.8 million (22.5%), an annual average change of $2.6 million (7.5%). From RY17 to RY18, payroll costs are projected to rise $3 million (7.1%).
- <u>Intercompany Processing and Disposal:</u> From RY14 to RY17, the cost of I/C processing & disposal has increased approximately $18.3 million (201%), and annual average change of $6.1 million (67%). From RY17 to RY18, the cost is projected to decrease approximately $255,000 (-1%), reflecting the projected decrease in disposal tons.
- <u>Health Insurance:</u> From RY14 to RY17, the cost of health insurance increased approximately $3.4 million (32%), an annual average increase of $1.1 million (10.7%). From RY17 to RY18, Recology projects its cost will increase again by approximately $989,000, or about 7%.
- <u>Pension:</u> From RY14 to RY17, pension expenses decreased by a total of $364,000 (5.6%), an annual average change of $121,000 (-2%). Between RY17 and RY18, pension expenses are expected to grow approximately $625,000 (10%).
- <u>Lease Expenses:</u> Between RY14 and RY17, lease expenses grew a total of $340,000 (6.7%), an annual average change of $113,000 (2.2%). From RY17 to RY18, lease costs are projected to decrease by $118,000 (-2.2%).

RSF Total Operating Expenses RY 2014 to RY 2018



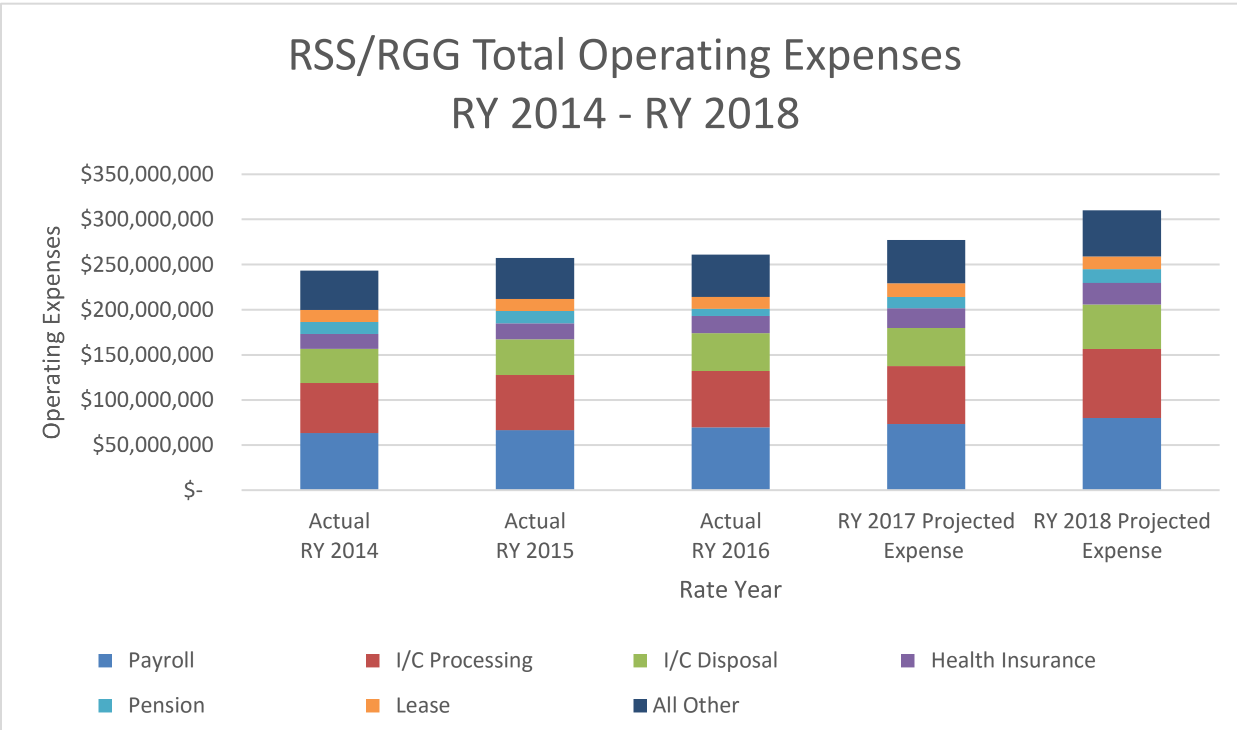
3.2. RSS/RGG Operating Expenses

RSS/RGG project that total operating expenses will grow by a total of $66.7 million (27.4%) from RY14 to projected RY18, representing an average annual increase of approximately $16.7 million (6.8%) over that period. The largest operating costs are payroll, intercompany processing and intercompany disposal, health insurance, pension and lease expenses. Combined, these expense categories account for 83% of RSS/RGG's total projected operating budget in RY17 and approximately 84% of the projected operating budget in RY18.

- Payroll: Between RY14 and RY17, payroll costs have increased a total of $10.5 million (16.6%), an annual average change of $3.5 million (5.5%). From RY17 to RY18, payroll costs are projected to rise $6.7 million (9.1%).
- Intercompany Processing and Disposal: Unlike RSF, I/C processing and I/C disposal are split into two operating expense line items in the RSS/RGG rate model. From RY14 to RY17, the cost of I/C processing has increased approximately $8 million (14.4%), and annual average change of $2.7 million (4.8%), and I/C disposal has increased $4.4 million (12%), an annual average change of $1.5 million (3.9%). From RY17 to RY18, the cost of I/C processing is projected to increase approximately $12.4 million (19.4%), and I/C disposal is projected to increase $7 million (17%).
- Health Insurance: From RY14 to RY17, the cost of health insurance increased approximately $5.3 million (32%), an annual average increase of $1.8 million (10.8%). From RY17 to RY18, RSS/RGG projects its costs will increase by approximately $2.5 million, about 12%.
- Pension: From RY14 to RY17, pension expenses decreased by a total of $546,000 (4.1%), an annual average change of $182,000 (-1.4%). Between RY17 and RY18, pension expenses are expected to grow approximately $2.1 million (17%).

- Lease Expenses: Between RY14 and RY17, lease expenses grew a total of $1.7 million (13%), an annual average change of $5.72 million (4.3%). From RY17 to RY18, lease costs are projected to decrease by $872,000 (-5.8%)

RSS/RGG Total Operating Expenses RY 2014 to RY 2018



3.3. Cost Drivers

To analyze the drivers of Recology's proposed 21.43% rate increase, staff assessed the relative magnitude of operating expense changes presented by Recology in the rate Application and additional supporting documentation. This high-level assessment considers normal, expected changes to the cost of doing business ("business as usual") in comparison to the impacts of operational changes from implementing new programs (e.g., 16-gallon black/64-gallon blue bin roll-out), growth of existing programs in response to increased participation, the cost of new capital infrastructure (e.g., West Wing), and costs relating to the new landfill contract.

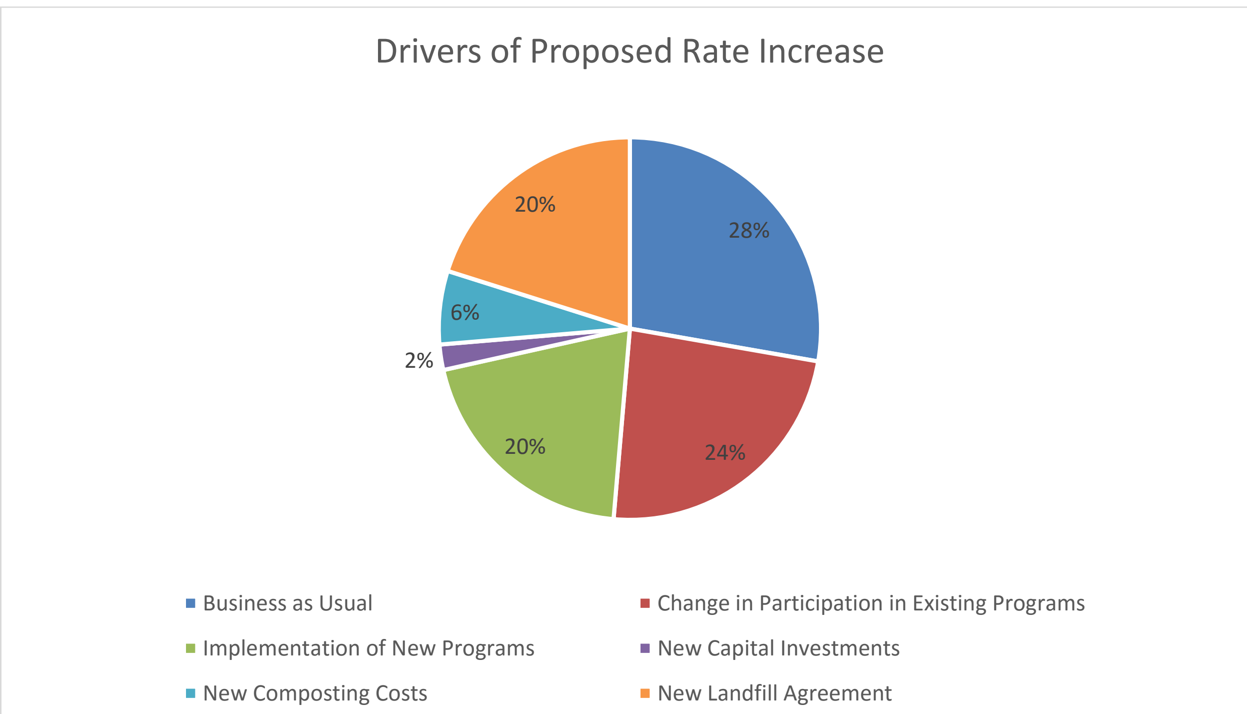
The table and figure below show the major contributors to the rate increase, totaling to $60,683,521 for Recology's increased revenue requirement. As shown, the largest driver is an increase in what could be considered the regular costs to doing business, followed by the maintenance and expansion of existing programs in response to greater participation, and the implementation of new programs in support of the City's goal to achieve zero waste. Costs related to the new landfill agreement are also a substantial contributor, and finally the increased costs for the composting operations and capital investment in the West Wing are also large enough to be considered as main drivers.

Drivers of Proposed Rate Increase

Type of Change	$	%
Business as Usual	$ 16,838,070	6.37%
Change in Participation in Existing Programs	$ 14,331,386	5.42%
Implementation of New Programs	$ 12,231,003	4.63%
New Capital Investments	$ 1,302,460	0.49%
New Composting Costs	$ 3,766,309	1.43%
New Landfill Agreement	$ 12,214,293	4.62%
	$ 60,683,521	**22.96%**

Note: the numbers in this table reflect the rate Application as submitted and have not been updated to reflect the small post filing adjustments.

For these costs, the approximate magnitude and not exact dollar values is what should be taken away from this analysis. This is in large part due to the timing differences in the items being considered, making a high-level view of operating expenses a more suitable means for assessing relative impact.



Another way to look at the rate increase drivers is collection activities (RSS/RGG) versus processing (RSF). The relative amount each contributes to the proposed rate increase is approximately equal, with processing representing just over half the estimated amount of additional revenue needed. See table and figure below.

Collection vs. Processing	$	%
Collection	$ 28,689,540	10.86%
Processing	$ 31,993,981	12.11%

3.4. Collection Routes and Proposed Routing Changes

Recology has stated that the volume of recyclables is exceeding the capacity of the current routing configuration where the trash (black) and recyclables (blue) are collected using split-chamber trucks and the compostables (green) are collected in single-chamber trucks. Recology is proposing to repurpose single-chamber trucks for recyclables and use split-chamber trucks for compostables and trash.

This operational change results in 23 additional collection routes, creating additional capacity for residential, apartment and small business recyclables and compostables. Residential recyclables alone are projected to increase by 7% and compostables 9%, while trash is projected to decrease by 10% (Ex. 1A Narrative Summary pp. 8-9, RSS/RGG Summary of Assumptions p. 2, Ex. 2 p. 11, Ex. 21, 25-26, 58 pp. 1, 7).

Staff evaluated this change with R3 Consulting Group and analyzed if there could be savings by reducing routes and running them marginally longer.

Recology stated it needs 23 new routes because of the length of time it takes to collect all recycling bins using the single-chamber trucks. Recology provided staff with its detailed analysis of the proposed future routing configuration, which included such key assumptions as:

- The amount of time it takes to collect each type of bin using each type of truck (measured by Recology staff conducting time-and-motion studies in the field in 2016);
- The number of stops that can be collected by each type of route in a normal 8-hour workday;
- The tons of materials that can be collected by each truck; and
- The expected tons per day each for trash, recyclables and compostables.

Recology also used its routing software (RouteSmart) to build the future routes based on its operating assumptions, augmented by the pilot project information conducted during the summer of 2016. The results generated by Route Smart were reviewed and vetted by Recology staff to ensure that the routes were workable and considered important information such as geography and the material generating profiles of various neighborhoods.

The projected time that it takes to collect recyclables on the single-chamber routes is the primary variable that drives the need for additional routes. Each 83 single-chamber recycling route is projected to collect just over 4 tons at an average of 8.2 hours per route; given Recology's testimony indicating that the recycling routes could collect up to 6 tons per route, time on route is the primary factor driving the need for 23 additional routes.

Staff conducted an analysis demonstrating the effect that a one route reduction would have on the cost of labor, overtime, and depreciation. As shown, a reduction of one (1) route could result in savings of approximately $42,000 per year; however, as noted, this analysis does not include the potential for increases in worker's compensation costs that Recology has indicated are likely to rise with an increase in overtime spent completing routes.

Estimate of Change in Annual Expenses of Reducing One (1) Single-Chamber Recycling Route

Statistics Provided by Recology		
Proposed Single Chamber Recycling Routes		83
Estimated Average Route Hours Per Day		8.20
Total Average Daily Route Hours		680.60
Reduce by 1 Route		
Single Chamber Recycling Routes		82
Total Average Daily Route Hours		680.60
Estimated Average Route Hours Per Day		8.30
Additional OT Hours Per Route		0.10
Additional OT Hours Per Day		8.2
Cost Per OT Hour	$	71
Additional OT Cost Per Day	$	579
Additional OT Cost Per Week	$	2,895
Additional OT Cost Per Year	**$**	**150,562**
Cost/Benefit Analysis of Reducing 1 Route		
Increased OT Cost Per Year	$	150,562
Decreased Salary and Benefits	$	(147,926)
Decreased Depreciation (1 truck)	$	(45,143)
Net Increase (Decrease) in Annual Expenses	**$**	**(42,507)**
Changes in Worker's Compensation Costs	**UNKNOWN**	

In its testimony, Recology demonstrated that its workers' compensation and overtime trend together (Ex. 60). Staff therefore concludes the additional routes proposed by Recology are the most cost effective way to provide the increased level of service.

3.5. Trash Processing Test

Staff agrees with Recology that to move towards the City's zero waste goal, Recology needs to test technologies and methods to maximize the recovery of compostables (especially food scraps) and recyclables that end up in the trash stream.

Staff has worked with Recology over the years to identify and evaluate technologies and options to recover materials from trash. Using state grant funds, Recology is piloting the use of an OREX press to process trash and recover food scraps for digestion at the transfer station.

Recology has proposed an additional trash processing test program. It expands the current trash processing pilot by recovering and sending large-size screened fractions to a proposed sorting operation at Recycle Central to recover recyclables, and staffs the transfer station and Recycle Central trash processing components for a full shift to process a projected 100 tons per day (TPD) for 25 tons of recovery (Ex. 1A RSF Summary of Assumptions pp. 6-7, Ex. 33, Tr. pp. 211-219). Staff believes this proposal is an important next step in expanding trash processing and to test feasibility of a full-scale trash processing facility as proposed in Contingent Schedule 2.

Over several months, staff evaluated the cost estimates for this test program. Staff believes that the proposed costs are reasonable, including the Trash Processing System capital investment for the Recycle Central sorting portion, which was proposed by the two vendors who completed the successful Recycle Central upgrade, and the related labor for both processing components (Ex. 1A RSF Sch. H.3).

4. RATE-SETTING METHODOLOGY AND APPLICATION OF SURPLUS REVENUES

Recology's methodology for calculating rate increases is illustrated in the Application (Ex. 1A RSF Summary of Assumptions p. 12, RSS/RGG Summary of Assumptions p. 7).

4.1. Recology San Francisco

For RSF, the tip charge is calculated by dividing net expenses (after deducting recycling and other revenues) by revenue tons, as illustrated below:

Recology San Francisco Calculation of Tipping Fee
(Reflects Post-Filing Changes, Exhibit 58)

Projected Costs		
OR Eligible Expenses	$128,436,247	A
Profit on OR eligible Expenses (91% OR)	$12,702,486	B
Non-OR eligible Expenses (pass-throughs)	$15,820,284	C
Zero Waste Incentives (additional 2% OR)	$3,171,657	D
Total Expenses	$160,130,674	E = (A+B+C+D)
Projected Revenues		
Recycling Revenues	$20,694,477	F
Other Commercial Revenues	$2,339,558	G
Total Revenues	$23,034,035	H = (F+G)
Net Revenue Requirement Is Equal To:		
Expenses Minus Applied Revenues	$137,096,639	I = (E-H)
Divide By:		
Revenue Tons	734,597	J
Equals:		
Tipping Charge	$186.63	K = (I/J)

The tip charge is on all revenue tons delivered to RSF facilities, and is passed through to RSS/RGG.

4.2. Recology Sunset Scavenger and Recology Golden Gate

For RSS/RGG, the methodology is similar: revenues at current rates and other revenue adjustments are deducted from total operating expenses; the net revenue requirement is used to calculate the average rate increase (Ex. 1A RSS/RGG Sch. B.1). The requested rate increase is 21.43 % for collection services.

4.3. Application of Surplus Revenues to Offset Rate Increases

In this year's Application, Recology is using reserves to offset a portion of the rate increase through rebates. In 2015, the Refuse Collection and Disposal Rate Board (Rate Board) approved the use of the old Special Reserve Fund to offset the incremental cost of hauling and disposing of San Francisco refuse under a new landfill contract that went into effect in January 2016. The effect of that offset was to suppress what would have been a 3.9% increase in collection rates in RY16. Similarly, under the terms of the 2013 Director's Report, a portion of the Zero Waste Incentives funds was used to offset the 1.9% cost-of-living adjustment (COLA) that would have gone into effect in RY17. As a result, a portion of this year's 21.43% increase is attributable to prior years; without the application of these surplus amounts, the net increase for RY18 would be 17.26%, as shown in Exhibit 69. Note that this exhibit reflects the original Application, and not post filing changes which reduced the rate increase.

Recology is proposing to use the remaining balances in the Special Reserve and the Zero Waste Incentives funds to offset a portion of the increase in collection services, as illustrated below:

Schedule of Proposed Rate Increases

	RY2018	RY2019	RY2020	RY2021	Total
Application*	16.40%	4.25%	0.00%	0.78%	21.43%

* Table reflects post-filing changes to the total rate increase.

Staff agrees with the methodology of rebating $2.5 million of surplus revenues from a portion of the old Special Reserve Fund to customers over the three-year period, as proposed in the Application. This approach is consistent with the direction given by the Rate Board to consider the use of the balance in the old Special Reserve Fund in the next rate proceeding and meets the requirement that surplus revenues be used to the benefit of ratepayers.

4.4. Transfer of Surplus Revenues to New Reserve Fund

The Application proposes to use a portion of the old Special Reserve Fund to build up the new Reserve Fund required under the City's new landfill disposal contract. In 2015 and 2016, the Rate Board approved the transfer of $3.75 million to the new Reserve Fund, and directed staff to consider how to bring the balance of the new Reserve Fund to $10 million by 2020. Recology proposes to transfer an additional $2 million at the beginning of each of the next three rate years to the new Reserve Fund. Together with interest earnings, these transfers are projected to achieve approximately the $10 million balance.

Staff agrees with the gradual transfer of funds as proposed for several reasons. First, it establishes a new Reserve Fund of approximately $10 million within four years of the new landfill agreement without imposing a 1% surcharge on disposal rates. Second, it retains a positive balance in the old Special Reserve Fund for a defined period. Staff agrees that the risk of claims diminishes as time passes, and that the declining balance in the old Special Reserve Fund should be sufficient to protect Recology against unanticipated claims.

Staff proposes to prepare new procedures for making these transfers each year; any balances remaining at the end of RY20 would be transferred to the new Reserve Fund.

4.5. Use of Zero Waste Incentives to Offset Capital Expenditures

Staff agrees with Recology's proposed $11,587,896 Zero Waste Incentives (ZWI) rebate for RY18. Previously unearned ZWI funds have been used to pay $9.2 million of the $11.3 million Recycle Central upgrade (see Recycle Central section), which reduced the proposed rate increase by not including those costs in the Application. Because of the Recycle Central upgrade, Recology can add and recover new materials, such as aseptic and gable top cartons, textiles, film plastic, small pieces of metal and untreated wood (Ex. 1A Narrative Summary p. 7, RSF Summary of Assumptions p. 3, RSS/RGG Summary of Assumptions p. 1).

Distribution of Zero Waste Incentives Funds

Deposits

	Available for Rebate		Available for Redirection		
Year	Tier 1	Tier 2	Tier 3	Tier 4	Total
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

5. PROPOSED RESIDENTIAL RATE STRUCUTRE

Recology is proposing to modify the residential rate structure established in the 2013 rate proceedings, continuing to encourage customers to downsize trash and increase recycling and composting service (Ex. 1A Narrative Summary pp. 8, 14, RSS/RGG Summary of Assumptions pp. 1-2, Ex. 2 pp. 7, 11).

This structure includes a fixed monthly charge per residential unit, and volume-based charges for collection and processing of trash (black bin), recyclables (blue bin), and compostables (green bin). To evolve closer to the true cost of service, Recology is proposing to increase the unit charge for residential customers (single family homes and two to five-unit buildings) from the current $5.16 to $20.00 per month; the volumetric charge for the black bin would decrease from $25.90 to $10.44 (per 32 gallons);

while the charge for recyclables and compostables would increase from the current $2.06 to $5.22 (per 32 gallons), or one-half the volumetric rate for trash. According to Recology, a typical household, with three 32-gallon bins, would see a monthly increase of $5.70, from $35.18 to $40.88 per month in the first year.

After conducting collection tests, Recology is also proposing to implement new service levels over two years, shifting single family homes from 32-gallon bins for trash and recyclables to 16-gallon trash bins and 64-gallon recycling bins (Ex. 18-20). This service level will decrease the size of the trash bin while increasing the capacity for recyclables, reflecting the increasing volume of cardboard and new recyclables that can be collected and processed with the improvements at Recycle Central.

This rate structure has the advantage of offering common pricing for residential customers with three 32-gallon containers and the new service level, so customers at the beginning of the new service rollout will be paying the same rates as current 32-gallon customers at the end of the two-year rollout period.

Recology proposes to maintain the way apartment customer service charges are currently calculated, which is like the discounted-volumetric structure used for the commercial sector. Apartment customers are charged for each type of service (trash, recyclables, and compostables) based on volume; these charges are then discounted based on the amount of diversion service (i.e., blue and green bin volume) that is provided. Recology is proposing to increase the diversion discount floor to 25%. The fixed monthly fee remains $5 per unit.

Recology has proposed to shift the balance between fixed and volumetric charges to move the rates charged closer to the actual cost of providing residential and apartment services. The rate structures are also designed to mitigate against the impact of declining trash volumes on total revenues, as the City moves towards its goal of zero waste.

Staff agrees with these rate structure changes but is concerned that customers who may be small generators (e.g., single family customers with 20-gallon trash service and two to five-unit buildings) would bear a larger proportional rate increase than the average customer due to the significant increase in the unit charge. To partially mitigate the increase for these customers, Recology is proposing a $5 credit against the unit charge for one year. Staff has requested additional analysis from Recology identifying the most impacted customer types and how to mitigate their increases with additional credits. It is worth noting that customers that have shifted to 20-gallon trash bins and will receive the same charge as 16-gallon bins, so they will receive 25% more capacity for the same price.

Staff explored other possible rate scenarios that would continue the transition to higher fixed and lower volumetric charges but provide a more even distribution for the increase between ratepayers. These rate models included a smaller fixed charge and preserved a greater volumetric pricing differential between trash and recyclables and compostables. Some of these rate scenarios offered a tighter distribution for the rate increase across the customer base but would require more targeted credits to mitigate the above-average rate impact for some customers. It also did not offer the advantage of maintaining common pricing structure for customers between the three 32-gallon containers and the new default service of 16-gallon trash, 64-gallon recyclables, and 32-gallon compostables over the two-year rollout period.

6. REVENUE ADJUSTMENTS

6.1. Apartment Customer and Migration Assumptions

Recology proposes to raise the diversion floor from 10% to 25%, encouraging apartment customers to increase recycling and composting service (Ex. 1A Narrative Summary p. 15, RSS/RGG Summary of Assumptions pp. 15-16, Ex. 44-45). Apartment buildings complying with the Mandatory Recycling and Composting Ordinance would divert more than 25% of their refuse, so staff concurs with this rate structure change.

Recology will encourage multi-family customers to downsize their trash service and increase their recycling and composting service. It will also start a new Apartment Diversion Program beginning in RY18 with the goal of decreasing the amount of material sent to the landfill, reducing contamination, and increasing recycling and composting tonnage. The Application includes all program costs, including any structural modifications (such as extra bins), tenant incentives, education and outreach, social media group platform development, and one full-time employee (Ex. 1A Narrative Summary pp. 8-9, RSS/RGG Summary of Assumptions pp. 2-4).

The Application also projects an increase of 25 apartment customers in RY 18 (Ex. 1A RSS/RGG Sch. F.1). Staff obtained documents from the San Francisco Planning Department and San Francisco Business Times showing the number of apartment buildings under construction (Ex. 77). This data indicates that 50 apartment customers will initiate service during the rate period. Staff therefore recommends adding 25 more apartment customers and $165,072 in revenue.

Recology's Application assumes of a loss of revenue as apartment customers downsize their service levels in response to the proposed rate increase (Ex. 1A RSS/RGG Sch. B.1). The assumed migration rate is equal to 1.0%, or $641,723 in lost revenues for RSS/RGG. Based on information provided by Recology reports, the average decline in apartment revenue due to changes in service levels since the last rate application was 0.2% (two-tenths of one percent). Given this information, staff questions whether Recology will truly see a higher level of migration in apartment customer service levels going forward and a comparable loss in revenues.

Nevertheless, staff agrees that shifting apartment customers to higher diversion service levels is an important step toward achieving the City's zero waste goal and supports increasing outreach to apartment customers as described in the Application. To encourage this effort, staff does not recommend making an adjustment in projected apartment migration revenues to reflect historical experience. Rather, staff proposes that Recology report actual apartment migration revenues and service levels in their annual reports. If actual apartment migration revenue loss is less than projected in the Application, then any excess revenues (up to $641,723) would be returned to ratepayers in the annual COLA adjustment process for the following year and, if losses are greater, the adjustment would go in the other direction.

7. EXPENDITURE ADJUSTMENTS

Based on a comprehensive review of Recology's projected expenditures, staff has identified the following items for adjustment.

7.1. Intercompany Processing, Operating Ratio and Profit

Both RSF and RSS/RGG's allowable operating ratio for RY8 is set at 91 percent for the purposes of this rate review, and is further reduced to 89 percent as an incentive for achieving high diversion of materials from landfill. Between 2014 and 2017, RSF and RSS/RGG combined achieved operating ratios of 86.7% to 90.8%, which is equivalent to a profit on allowable expenses of 10.1% to 15.4%.

RSS/RGG includes disposal and processing expenses from RSF as non-operating ratio expenses. RSF includes disposal expenses from Recology Hay Road landfill as non-operating ratio expenses, and has stated that this is consistent with historical treatment of these expenses, and reflective of the risk associated with this fixed cost arrangement under a long-term landfill disposal agreement. However, RSF includes processing expenses from affiliate composting facilities as operating ratio expenses, again stating that this is consistent with historical treatment of these expenses and reflective of the risk associated with this rapidly evolving industry. In support of including intercompany processing expenses eligible for operating ratio, Recology cited regulatory changes and increased environmental compliance costs for Recology's composting operations, Jepson Prairie Organics and Blossom Valley Organics North, which were also discussed during the Director's hearings.

<u>Expenses Not Subject to Profit Calculation</u>

"Non-allowable" expenses and "pass-through" expenses are not included for purposes of calculating profit using the operating ratio. Non-allowable expenses are costs for which no compensation is allowed as part of the rate adjustment process, and pass-through expenses are costs which can be recovered through the rate adjustment, but for which no profit is allowed (i.e., these expenses are "passed through" to ratepayers without profit). Although the Application does not appear to contain expenses that have been previously designated non-allowable for the purposes of calculating operating ratio, the following costs are designated as pass-through expenses that are not subject to the operating ratio/profit calculation:

- <u>RSF Pass-Through Expenses</u>
  - Recology Hay Road/Altamont Disposal
  - Impound Account (through RY16 only, zero as of projected RY17)
  - License & Permits

- <u>RSS/RGG Pass-Through Expenses</u>
  - Disposal Costs
  - Processing Costs
  - Impound Account
  - License Expenses

In the review of the Application, staff determined that RSS/RGG appropriately excludes costs including intercompany processing (both for RY18 and for the Contingent Schedules), that should not be subject to the operating ratio. However, Recology includes $14,181,155 in intercompany processing expenses that staff believes should be excluded from operating ratio expenses. Per public testimony made by Recology, these expenses currently include profit for the related Recology company; staff recommends that these expenses be excluded from the operating ratio to prevent double profit on those costs.

Intercompany processing of compostables, brush, processed fines, sheetrock, wood and concrete and "out-of-county" (totaling $14,181,155) should be removed from the RSF Operating Ratio Expenses – this change results in a reduction in the proposed tip charge, which would also flow through to the collection service charges of RSS/RGG.

7.2. CPI Inflation Factor

Recology uses a CPI inflation factor of 3.00% to escalate several operational expenses from RY17 to RY18. The 3.00% factor was derived from the averaging of 3- and 5-year index calculations (average of three-year and five-year averages) using a month-to-month comparison in the index calculation period (e.g., October to October), and set at the calculated value rounded to the nearest quartile. Some adjustments could be made to improve upon the inflation factor's calculation.

Staff recommends the following CPI inflation factor methodology for the rate Application:

A. Index Calculation Period

12-month rolling average, (October - September).

B. Averaging of 3-Year and 5-Year Index Calculations

Average of 3-year and 5-year averages to determine CPI adjustment factor.

C. Rounding of Calculated Index Adjustment

Index is set at calculated value rounded to two (2) decimal points (e.g., 2.07%) – (not rounded up to nearest quartile).

Using the above methodology results in an annual CPI inflation factor of 2.67% versus Recology's calculated 3.00%.

7.3. COLA Formula

The current COLA mechanism incorporates recommendations from the 2013 Director's Report, including a specific component for pension expense. Recology has proposed to continue to use the COLA formula approved in the 2013 Rate Order with two modifications:

(1) Adjust the weighting of the cost components to reflect Recology's current cost structure, based on the cumulative costs reported for the quarter ending March 31st of the previous year; and

(2) Remove the pension component of the COLA calculation as an individual item and incorporate it instead into the variable labor component of the formula.

To help gauge the impact of these modifications, staff consultants ran an alternative calculation for the July 1, 2016 COLA with the percentage change in the pension expense set equal to the labor percentage change, which is one of the changes to the COLA mechanism that Recology is proposing. If Recology's proposed methodology had been used for the July 1, 2016 COLA calculation, the RSS/RGG COLA adjustment would have resulted in a rate increase of approximately $523,000 (0.19%), with the prior labor (payroll) floor of 3.00%, and $376,694 higher with current floor of 2.25%. The RSF COLA adjustment would also have resulted in a higher rate increase.

Recology reported that the proposed modified COLA is designed to ensure that Recology fairly recovers costs that increase after RY18 until a new rate is established through another rate proceeding. This annual adjustment will protect both ratepayers and Recology by increasing or decreasing rates in conjunction with economic trends. A COLA mechanism eliminates the need for Recology to submit a new rate application absent significant new programs, facilities, or significant changes in costs.

In support of this change, Recology submitted an historical COLA trend that shows the relationship between the Bay Area CPI and the COLA with the pension as part of payroll, and with the current COLA with pension as a separate component. Recology's also submitted a historical profit analysis, which shows the average operating ratio (profit level) for the past three years (Rate Term RY14 – RY16), was 89.1% versus the target of 89.0% with the ZWI.

<u>Adjusting the Weighting Factors</u>

As noted above, Recology is proposing the following method for adjusting the COLA weighting factors:

> *Adjusting the weighting of the cost components to reflect Recology's current cost structure, based on the cumulative costs reported for the quarter ending March 31, of the previous year.*

Staff believes that Recology is recommending to present consolidated costs for both RSS/RGG and RSF rather than break them out separately, and base those costs on the nine months ending March 31st expense data.

The more information is consolidated, the less specificity and understanding you have of individual components. In general, providing more specificity is beneficial, provided the additional information has value to the City and the ratepayers and does not place an unreasonable administrative burden on Recology for the additional benefit that results.

In the case of the COLA, because the RSS/RGG and RSF COLA adjustments apply to their respective rates, it seems that maintaining separate COLA adjustments are reasonable, and we see no benefit to combining the two as the difference in the time to make separate calculations rather than a single combined would appear to be minimal.

Pension

A report prepared by Armanino LLC summarizes the COLA mechanism that is included in Recology's final Application for RY18 and states the following:

> *"Under the current labor agreement, Recology must make an annual minimum fixed payment that is not based on any variable attribute but rather by employee. [Recology] does not anticipate material variation in the number of employees, and accordingly, consider pension costs largely fixed in nature*."

For additional context, the Towers Watson Pension Funding Projection prepared in March 2013 was included as part of the 2013 rate application. As noted on page 1 of that document: *"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…"* And as noted in the "Conclusion" section on page 4:

> *By contributing $25 million each fiscal year through fiscal year end 2019, based on the data, assumptions, method, and provisions outline 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 well-being of the pension plan*

Recology reported that its Local 3 pension obligation, which it estimates accounts for approximately 20% of pension expenses, is not fixed. That cost increased 6.1% in 2015, and 5.8%, and they have projected that cost does not change in 2017 and then increases by 6.0% in 2018. If we assume that 20% portion of Recology's pension liability increases at 6%, and that the other 80% is "largely fixed", the overall annual pension adjustment factor would be 1.2% (20% x 6% = 1.2%), which we suggest is not an unreasonable figure to use as part of the next two COLA adjustments pending further cost projections.

Staff understands one of Recology's concerns with the current COLA methodology is the cost to have actuarial projections prepared annually. As noted above, we suggest that fixing the pension adjustment at 1.2% for the next two COLA adjustments is not unreasonable based on available data, however, we recommend that Recology develop a long-term Local 3 pension funding projection. At the time that information is available, the City and Recology may wish to reconsider the weighting used for the pension portion of the COLA adjustment as part of future COLA adjustments.

Pension is an existing COLA category, and the change in pension costs is anticipated to become more of a fixed cost over time, distinct from the annual change in the labor expenses. As such, we see no benefit of putting the pension cost back into the overall Labor expense category. We do, however, suggest that Recology provide the City with updated pension funding projections covering all pension liabilities as part of all future rate applications. That data can serve as a basis for setting the interim year Pension COLA adjustments, rather than conducting annual actuarial projections.

<u>Recommended Annual COLA Calculation</u>

Staff recommends the following for the Annual COLA Calculation methodology:

A. Index Calculation Period

12-month rolling average (March - February).

B. Rounding of Calculated Index Adjustment

Index is set at calculated value rounded to two (2) decimal points (e.g., 2.07 %) – (do not round up to nearest quartile).

C. Pension

Maintain pension portion of COLA (do not roll these costs into Labor).

D. Weighting of Indices | Separate Weightings for RSS/RGG vs. RSF

§ Base weighting of indices on Exhibit D values in Directors Report (i.e., estimated costs of the rate year July 1 2017 – June 30, 2018, which once approved, the component weights will not change for the duration of the period until a new rate is approved.[1]

§ Maintain separate index weightings for RSS/RGG and RSF (rather than a single blended weighting).

7.4. Natural Gas Fuel

Recology projected compressed natural gas (CNG) fuel cost of $2.88 per gallon for RY18 (Ex. 1A RSS/RGG Sch. L.3), Staff requested verification of the price Recology is paying for CNG in RY17. Recology provided PG&E bills from the Tunnel Avenue CNG station, as well as calculations converting CNG to diesel gallon equivalents (DGE) that also included the cost of electricity used to compress and deliver the fuel to vehicles at the site. This yielded a total price per gallon figure. Staff shared historical data on CNG fuel from PG&E that also forecast prices for CY17 (Ex.75).

Recology revised the fuel cost to $2.02 in RY18 (Ex. 58 p. 25) without detailed calculations to support this change. Based on the PG&E historical data and the forecast for CY17 showing the fuel portion of the DGE will average $1.12, rather than the $1.18 which is used in Recology's projection, staff recommends reducing the DGE for CNG to $1.84/gallon for the 271,543 gallons, saving $48,878. Staff also recommends both COLAs match actual fuels types used as much as possible (Ex. 47).

7.5. Pier 96 Lease

Recology includes in the Application a $39,996 Recycle Central monthly rent adjustment to the Port of San Francisco that will no longer be due after RY19 (Ex. 1A RSF Sch. D Property Rental). Staff recommends that this be amortized over 36 months for an annual decrease in Property Rental of $159,984.

8. CAPITAL EXPENDITURES AND ADJUSTMENTS

Recology's Application includes four major capital investments to advance toward the City's zero waste goal:

(1) Recycle Central – $3.2 million for processing equipment improvements;

(2) West Wing – $18.9 million to relocate and expand compostables receiving and transfer area at Tunnel Avenue (includes air quality control mechanism for entire transfer station);

(3) *i*MRF – a $63.4 million investment for a new facility located on Port property capable of improving recovery of construction and demolition (C&D) debris and other materials;

(4) Trash Processing – a $19 million investment in black bin processing, to be located at the site of the old *i*MRF.

The first two projects (Recycle Central and West Wing) are under way or in the permitting phase and are included in the base rate. The other two projects are proposed as "contingent schedules," that is, the value of these projects would not be included in the rate base until Recology achieves some certainty that the project will be completed (which is generally permit issuance).

Staff agrees that all four projects are integral to improving recovery rates and landfill diversion. However, staff has concerns with the two contingent schedules given the uncertainties in technologies, effectiveness, timing, and costs. Each of these projects and proposed changes in how they are treated in the rates are addressed below.

8.1. Recycle Central

Recology recently completed an $11.3 million upgrade to the sorting equipment at Recycle Central at Pier 96 to increase recovery of blue bin recyclables. This upgrade was necessary to meet the increased capacity and processing needs of Recycle Central for the next decade as the recycling stream continues to change. This project came in on time, on budget and is exceeding its recovery projections. Recology, with the Director's approval in January and September 2016, used available Tier 3 and 4 ZWI from RY16 to cover $9,195,321 of the upgrade (Ex. 3-6).

Since it has not met the ZWI targets in RY17, Recology is proposing to use $3,247,569 from Tiers 3 and 4 RY17 funds to reimburse the $2,104,598 balance of the Recycle Central upgrade and do additional enhancements of $1,142,971. There will still be $71,084 of funding needed that Recology is proposing to pay without using ratepayer funds (Ex.7). The additional enhancements are planned to increase the efficiency of backup processing capabilities, avoid the risk of a prolonged main system shutdown, and further improve overall material recovery. Staff recommends the approval of the proposed funding to allow completion of the Recycle Central enhancements as soon as possible.

8.2. West Wing

Recology has proposed to build a new West Wing as a 14,500 square foot organics (compostables) transfer facility with 1,000 TPD capacity (Ex. 1A RSF Summary of Assumptions pp. 4-6, Sch. H.3, Ex. 32. 38, Tr. pp.195-211). In their 2013 rate application, Recology included a contingent schedule to build a 11,500 square-foot West Wing facility to provide more space for research and development of trash processing technologies. Recology did not proceed with the work to trigger that contingent schedule due to the more pressing need to manage the increasing quantities of organics it receives and transfers, as well as a changed strategy for continuing trash processing (see Trash Processing Test Program and Trash Processing Contingent Schedule 2).

Staff believes that the 37-year-old, 7,500 square foot facility used as the Organics Annex is no longer adequate in size, design or condition to receive and transfer the almost 700 TPD of compostables it currently receives, not including any future growth. Staff agrees that the proposed redesigned West Wing is critical to sustain the City's composting program and allow it to grow for another 20 years. The proposed new building will provide a sufficiently large tip and load-out areas to reduce traffic congestion and safety risks, high speed doors to keep the facility sealed, liquid processing and storage, and a state-of-the art odor management system that will treat the entire transfer station's air flow.

Staff evaluated cost estimates over several months for the proposed West Wing (Ex. 1A RSF Summary of Assumptions pp. 4-6, Tab K, Ex. 32, 38, Tr. pp. 210, 221, 272-278, 294-297, 299-330). Staff notes that Recology followed a thorough cost estimating process with competitive bids based on Public Works advice for bidding procedures. Staff finds that the resulting estimated construction cost is reasonable.

Recology modified their proposal (Ex. 1A RSF Sch. H.3, Ex. 58 pp. 1, 10-14, Tr. p. to treat construction cost as a lease versus a depreciation cost to allow them to pass through the cost of financing this capital investment and avoid a loss in a potentially increasing interest rate environment. Staff requests that Recology provide further justification demonstrating their need for this change in financial treatment and to certify that the leases are booked at market comparable rates with zero profit accruing to Recology's leasing company, as was recommended in the 2006 Director's Report for future rate applications. Staff recommends that lease costs not be included in rates until RY19 when the facility is expected to start being used to the benefit of ratepayers.

8.3. Integrated Materials Recovery Facility (Contingent Schedule 1)

Recology is proposing to build a new, larger state-of-the-art *i*MRF to process C&D debris and other material delivered to the facility. The new facility is projected to cost $63.4 million; annual operating expenses will also increase to reflect an increase in staffing levels, a new lease with the Port of San Francisco, and fuel and equipment (Ex. 1A RSF Contingent Schedule 1 – *i*MRF). The incremental impact of the iMRF on collection rates is 1.47% (Ex. 1A RSS/RGG Contingent Schedule 1 – *i*MRF).

Staff agrees that the existing *i*MRF with a 400 TPD capacity is too small and outdated in design to meet current needs. The facility's technology has reached the end of its useful life and needs to be replaced.

The current facility also relieves heavily on manual sorting and is currently recycling quantities that exceed its intended capacity by more than half.

Staff believes that current advanced sorting technology can process and recover this heavy and large sized material stream better and significantly increase diversion. The proposed 1,000 TPD new *i*MRF would adequately process current quantities and allow for continued growth in processing C&D debris and other materials. Recology proposes to redirect materials currently being sorted manually on the outdated Ptarmigan Line to the new *i*MRF, including some items from the Abandoned Materials Collection and Bulky Item Recycling programs, and materials delivered to the Public Reuse and Recycling Area (PRRA), which will improve recovery.

Recology proposes relocating the *i*MRF to connect to the west end of Recycle Central at Pier 96 (Ex. 1A RSF Summary of Assumptions pp. 7-8, Ex. 35-36, Tr. pp. 250-257). This design provides a combined truck entrance with an upgraded scale system for the *i*MRF and Recycle Central for a more flexible and increased receiving and staging area to accommodate both operations' anticipated increases in incoming quantities. Relocating the *i*MRF also frees up the current space next to the Transfer Station at Tunnel Avenue so it can be used to process all the trash arriving at the transfer station, which is critical to moving toward zero waste, as proposed in Contingent Schedule 2.

Staff evaluated the cost estimates for the new *i*MRF (Ex. 1A RSF and RSS/RGG Contingent Schedule 1, Ex. 40, 42, 53-54, Tr. pp. 278-286). Staff finds that Recology followed a thorough cost estimating process, with competitive estimates and staff input, reducing initial cost estimates by one third. Staff believes the estimated construction and operational costs are reasonable for the scale and benefit of this project.

Recology modified their proposal to treat the construction cost as a lease versus a depreciation cost to allow them to pass through the cost of financing this capital investment better and avoid a loss in a potentially increasing interest rate environment (Ex. 58 pp. 2, 26-31, 38-41, Tr. p. 423). Staff requests that Recology provide further justification demonstrating their need for this change and to certify that the leases are booked at market comparable rates with zero profit accruing to Recology's leasing company as was recommended in the 2006 Director's report for future rate applications.

Recology proposes that the costs associated with the *i*MRF would be factored into the rate base upon receipt of all necessary permit approvals. To protect ratepayer interests, staff proposes several conditions be placed on approval of the *i*MRF contingent schedule:

(1) The final capital and operating costs cannot exceed the amounts included in the Application;
(2) Recology must demonstrate that the facility will be able to achieve a minimum 70% recovery of C&D debris and significantly increased recovery for other materials currently processed;
(3) The terms of the new lease with the Port of San Francisco are consistent with the depreciation and/or lease schedules for the facility; and
(4) The annualized expense would not be added to the rate base until the facility goes into service.

Recology has expressed confidence in the estimated capital and operating costs for the new *i*MRF, as has staff who reviewed those estimates. Nevertheless, Recology has also requested that the City consider a streamlined approval process should the costs come in higher than estimated. The issue of a streamlined rate process is addressed later in this report.

8.4. Trash Processing (Contingent Schedule 2)

Recology is proposing to repurpose the current *i*MRF space for full scale trash processing, if Recology successfully completes the proposed relocated *i*MRF (Contingent Schedule 1) and demonstrates from the trash processing pilot program, or other programs or reference facilities, the feasibility of recovering materials from the trash. Recology proposes to use the existing transfer station pit area to collect and convey the trash into the adjacent repurposed space equipped with state-of-the-art technology for processing the entire trash stream received at the transfer station. With this facility, all materials handled by Recology would be subject to some level of processing, further increasing recovery and reducing the amount of materials going to landfill (Ex. 1A RSF Summary of Assumptions pp. 7-8, Tr. pp. 258-266). The new trash processing equipment (including facility improvements) is projected to cost $19.0 million; annual operating expenses will also increase to reflect the addition of 50 new positions for trash processing, materials and supplies, and repairs and maintenance (Ex. 1A RSF Contingent Schedule 2 –Trash Processing). The incremental impact of trash processing on collection rates is 2.60% (Ex. 1A RSS/RGG Contingent Schedule 2 – Trash Processing, Ex. 58).

Recology projects a 15% minimum recovery from processing all trash, however, Recology shows this reduction in disposal as 13% in RY21 because the facility would be not operational until August 2020. Recology stated in its testimony that the 15% decrease in disposal is a conservative projection based on recovering recyclables from the trash; the facility will also be separating out organics for potential recovery through additional processing such as anaerobic digestion. Since the proposed facility does not include anaerobic digestion or other additional organics processing for end market use, that diversion is not counted in Recology's rate application projections. Recology stated that if organics diversion were included and additional markets developed, the decrease in landfill could be up to 50% of the processed material.

Recology's proposed engineering fees include preliminary engineering design and permitting for an anaerobic digestion facility at Tunnel Avenue to process and divert recovered organics from trash. Staff also understands that Recology is currently pursuing permitting for an anaerobic digestion facility at its Hay Road landfill location that could also be used to divert organics recovered from trash (Ex. 1A RSF Sch. M.1, Ex. 37, 39, 64).

Staff evaluated cost estimates for full scale trash processing (Ex. 1A RSF and RSS/RGG Contingent Schedule 2, Ex. 40-42, Tr. pp. 278-286). Staff finds that Recology undertook a sufficient cost estimating process, with competitive estimates and staff input. Staff believes the estimated construction and operational costs are reasonable for the scale and benefit of this project.

Recology modified their proposal (Ex. 58 pp. 2, 32-7, 42-45, Tr. p. 423) to treat the construction cost as a lease versus a depreciation expense to allow them to pass through the cost of financing and avoid a loss from potentially rising interest rate environment. Staff requests that Recology provide further justification demonstrating their need for this change and to certify that the leases are booked at market comparable rates with zero profit accruing to Recology's leasing company as was recommended in the 2006 Director's report for future rate applications.

Recology proposes that the costs associated with expanded trash processing would be factored into the rate base upon receipt of all necessary permit approvals. To protect ratepayer interests, staff proposes several conditions be placed on approval of the trash processing contingent schedule:

(1) The final capital and operating costs cannot exceed the amounts included in the Application;
(2) Recology demonstrates that the facility will be able to achieve a minimum 15% diversion from the entire trash stream to be processed, and the feasibility of increasing to a minimum 30% diversion within three years of operation;
(3) Recology provides an update on the availability of anaerobic digestion capacity to handle processed organics, or other potential end markets; and
(4) The annualized expense would not be added to the rate base until the facility and equipment goes into service.

Recology has expressed confidence in the estimated equipment and operating costs for expanded trash processing, as has staff who reviewed those estimates. Nevertheless, Recology has also requested that the City consider a streamlined approval process should the costs come in higher than estimated. Recology has also testified that the technology for trash processing, and the potential recovery rates is evolving rapidly. As such, there is some uncertainty on what the final proposal for trash processing and the resulting materials recovery rates will be. Per Recology's testimony, there is currently no end market for the organics fraction that could be extracted from trash, which represents as much as 30% of the trash waste stream.

Given these uncertainties, staff proposes that Recology submit a report describing the selected technologies for trash processing and the anticipated recovery rates, along with final capital and operating costs, prior to proceeding with the project. The issue of a streamlined rate process to consider a revised proposal for trash processing is addressed later in this report.

9. PROGRAM ADJUSTMENTS

9.1. Bulky Item Recycling Program and Abandoned Materials Collection

Bulky Item Recycling (BIR), which also includes Recycle My Junk (commercial and extra residential services for a charge), recovers items such as appliances, electronics, furniture, scrap metal and wood through scheduled pick-ups to facilitate customer participation and maximize recycling. Abandoned Materials Collection (AMC) picks up non-hazardous abandoned materials identified through the City's 311 reporting system, Public Works Radio Room and Recology personnel.

Recology manages BIR as a scheduled pick-up service; appointments may be scheduled more than 48 hours in the future (Ex. 50). The service runs from 6 am to 2 pm, Monday through Friday. Abandoned

Materials Collection responds to calls for service from the City's 311 call center and from Public Works from 8 am to 4:30 pm seven days-a-week. Calls received after 4:30 are routed for collection the next day. From Monday through Friday, Recology has a response time goal of 4 business hours; on weekend days, Recology has a response time goal of 8 business hours.

Due to the growing number of requests from customers for BIR and the increasing number of service requests for the AMC, Recology has proposed to add two full time equivalents (FTEs) to the BIR program and two FTEs for the AMC program, for a total increase of four FTEs in RY18. AMC is projected to handle 4,512 tons with 14 FTE in RY18. BIR is projected to handle 7,506 tons with 13.2 FTE, making it a more efficient and cost-effective program than AMC (Ex. 1A RSF Sch. E, RSS/RGG Sch. G.1 pp. 13-14, Ex. 27-29).

Recology has proposed that the two programs could run more efficiently and effectively if they were combined, eliminating the need for additional FTEs to support both programs. Because all BIR service requests are scheduled in advanced, they can be picked up more efficiently than the AMC program calls, which are mostly routed on demand as calls are received during the program's operating hours. By shifting AMC to a greater percentage of routed service, it would operate more efficiently. Combining both programs, Recology can concentrate its crew work into the areas with the most demand for service and could shorten the request time for BIR, ideally to at least as fast as AMC response time. To achieve greater program efficiency, Recology is proposing to shift operating hours for the both programs to 6 am to 12 noon. Service calls for both programs received after noon would be routed for the next service day. Recology is also requesting potential changes to the weekend schedule for the AMC program due to the lower service call volumes on weekend days. Recology has indicated they are open to operating such a program two shifts on Saturday and prefers to not operate on Sunday where they must pay double time and it can affect Monday operations.

Staff is currently working with Recology to evaluate the benefits of combining these two programs. Having the same response time for both will encourage people to schedule pickups (rather than put items out for AMC when a BIR appointment is not immediately available) and further increase efficiency.

However, staff has some concerns on the need to balance program efficiency with service demand; 73% of the daily calls for service for abandoned materials are received between the hours of 8 am and 4:30 pm. Shifting the program hours would mean that only 54% of the daily calls would receive same day service. Staff and Recology will propose changes to one or both programs, including potentially combining pickups and changing service hours and response time, and any staffing reductions, prior to the conclusion of the Director's hearings.

9.2. Hazardous Waste Programs

Household Hazardous Waste (HHW) encompasses a wide variety of consumer products which contain toxic and other dangerous materials. Current estimates indicate that less than 50% of these products are being captured in the City's three-stream collection system. San Francisco's HHW collection volumes have remained static over the past three years while the City's population has grown. A 2016 survey of San Francisco residents on HHW showed that many residents, especially new arrivals, are unaware of the need for separate collection and recycling of HHW. Residents were also generally unaware of the availability of existing special HHW programs. Staff has determined that outreach on HHW and HHW programs needs to be implemented on an ongoing basis.

Recology proposed that one additional HHW technician/driver FTE and one additional HHW collection vehicle are needed to meet the City's RY19 HHW collection goals while maintaining retail take-back site and home collection service levels (Ex. 1A RSF Summary of Assumptions pp. 8-11). Staff reviewed these projections and concur with the need for one additional HHW driver and vehicle starting RY18.

Historically, almost half of all HHW collected in San Francisco has been leftover and unwanted architectural paint. California legislation, passed in 2011, required the paint manufacturing industry to establish a Product Stewardship Program to pay for collection and disposal of architectural paint. The PaintCare Program was approved by the California Department of Resources Recycling and Recovery (CalRecycle) in July of 2012. PaintCare seeks to contract with local governments and their vendors who have existing well developed paint management infrastructure such as RSF provides. PaintCare reimbursements to RSF will provide a new source of revenue to help offset the costs to ratepayers for waste paint management. Staff has reviewed the stewardship Income revenue projection included in RSF Schedule F.3 and determined that the annual cost of the Hazardous Waste Programs will decline by 8-9% over RY16 costs, starting in RY18 due to cost savings and revenue received through the PaintCare Program. Staff encourages Recology to continue to explore working with other and future product stewardship organizations to secure additional savings for refuse ratepayers.

10. ZERO WASTE INCENTIVES

Recology is currently allowed a 91% operating ratio (OR), which results in a 9.9% profit, assuming revenues and expenses meet the projected amounts in the Application. The ZWI allow Recology to earn an additional 2% OR if it meets disposal reduction targets.

Since setting the ZWI program targets in the 2013 rate process, Recology has not achieved any of the targets (Ex. 49). Strong economic growth in San Francisco has helped result in increased tonnage to landfill. The goal, however, remains reducing the amount of material to disposal, so staff still supports ZWI based on actual tons disposed by Recology. However, staff also recognizes that the tonnage targets need to be reset to reflect the current state in San Francisco and the growing challenge that the City faces to achieve its zero-waste goal.

Staff agrees that disposal reductions will be more challenging in future years (Ex. 1 Narrative Summary p. 18). While staff would like to see disposal way below that in the ZWI table, it believes Recology has proposed the best achievable disposal reduction programs and the ZWI tiers are appropriately ambitious.

Recology is proposing to continue ZWI with some modifications (Ex. 1, Narrative Summary p. 17). As revised in Exhibit 58, the targets for the four tiers (each worth one-half of one percent OR, or 0.5%) are shown below. Consistent with past ZWI, staff recommends that the first tier should start with Total Tons Disposed in RSF Schedule E, which reflect collection program changes and the trash processing pilot.

Recology's Proposed ZWI Disposal Tonnage Targets

Rate Year	Tier 1	Tier 2	Tier 3	Tier 4
2018	395,087	390,906	382,544	370,000
2019	387,372	382,810	373,686	360,000
2020	383,515	377,929	366,758	350,000
2021	377,929	369,108	351,465	325,000
2022	369,108	357,590	334,554	300,000

For rate years beyond 2022, Tier 2 of the previous year will become Tier 1 of the next year and Tier 4 will drop 25,000 tons each year with same percent proportion between the tiers as Recology has proposed.

Staff recommends that if Recology completes and operates the additional processing facilities in Contingent Schedules 1 or 2, with their costs added to refuse rates as proposed, that the ZWI be adjusted down to reflect the projected reduced disposal in those schedules. Staff proposes that the adjustment would occur starting in the rate year that the facilities begin operating for the full rate year. Tier 4 would be decreased by the projected reduced disposal tons in the schedules with the other Tiers then adjusted to the same percent proportions between the tiers as Recology has proposed.

The table below shows how the ZWI would be adjusted if both contingent schedule facilities became operational on the projected timeline in Schedule 39.

Revised ZWI Disposal Tonnage Targets including Contingent Schedules 1 and 2 in RY21 and RY22

Rate Year	Tier 1	Tier 2	Tier 3	Tier 4
2018	389,072	386,072	380,072	370,000
2019	380,372	376,232	369,232	360,000
2020	376,561	371,561	362,561	350,000
2021	371,561	362,090	342,555	312,365
2022	362,090	341,897	300,250	235,885

Staff agrees that as the amount of disposal decreases, additional reductions are harder to achieve. But this challenge must be balanced with ZWI that truly are stretch performance incentives subject to some loss if targets are not attained. Staff recommends that the first two tiers not be eligible for reinvestment. If not achieved, these tiers should be rebated to the ratepayers as in the past. The other two tiers are more challenging to achieve and can be used to support new programs that reduce disposal.

If Recology is projecting to exceed targets before the end of that rate year, it may coordinate a process to rebate ratepayers through the next COLA adjustment or submit a request as described below. Recology can submit a request to SFE and Public Works to withdraw any earned amounts or request unearned Tiers 3-4 for a project that reduces disposal. Any proposal submitted by Recology must include a detailed budget, timeline, and the annual disposal tons reduced because of the project. Recology's proposal will be posted on the Public Works website to allow for a 30-day public review period. SFE will perform the initial evaluation of the proposal. If it is recommended, Public Works may grant approval or reject the proposal.

Recology proposes that funds beyond eliminating any cost-of-living adjustment the next year would remain available to them for investment in diversion programs for a second rate year (Ex. 1 Narrative Summary p. 18). Given the disposal reduction challenges and need for new diversion program flexibility as we approach our goal of zero waste by 2020, staff agrees this is reasonable. Otherwise, funds are to be rebated at the annual COLA adjustment one year after targets are not achieved.

11. ADMINISTRATIVE ITEMS

11.1. Low-Income Discount

Recology's rate schedule includes a provision for discounts on collection services for low-income households. Per Schedule A in the Application, "Households with income less than or equal to 150% of the poverty level may qualify for 25% base and volume discounts." Staff compared these provisions to similar programs offered by the San Francisco Public Utilities Commission (SFPUC) for water and sewer service, and Pacific Gas and Electric for electricity. Both of those programs use household income thresholds equal to 200% of the federal poverty guidelines established annually by the Federal Department of Health and Human Services. Staff recommends that Recology increase the household income threshold to 200% of the poverty level, comparable to other utility programs.

Recology also offers a discount of 10% to qualifying non-profit housing organizations, which is like programs offered by the SFPUC and PG&E for electricity bills. Staff recommends that Recology work with the Mayor's Office of Housing and Community Development to publicize this program more broadly.

12. FUTURE RATE-MAKING PROCEDURES

In 2005, the Director instituted new procedures to improve the rate review process. The rules of procedure for the 2017 Application are consistent with the improvements instituted in 2005, with only modest revisions to provide clarity on the requirements for submission (Public Works Order No. 185078). Among other things, the procedures require Recology to submit a notice of intent to file a rate application at least 120 days in advance of the application itself. This pre-application period allows for greater review by staff to determine the completeness of the application, and more meaningful participation by the public via workshops. Once a final rate application has been filed, the Director must adhere to the 150-day schedule specified in the Refuse Ordinance (90 days for the Director to issue a final report and recommended order, and another 60 days for potential appeals and consideration by the Rate Board).

This year, Recology is proposing two contingent schedules to go into effect when those projects are ready to proceed. Staff has proposed conditions under which those contingent schedules, and the resulting adjustments in rates, would be approved. Staff cannot approve either contingent schedule if it would result in an increase greater than the amounts proposed in the Application (i.e., collection rate increases of 1.47% for the *i*MRF and 2.60% for trash processing). While Recology is confident in their estimated costs for the two contingent projects, nevertheless, they have also requested that the City adopt a streamlined process for considering one or both contingent schedules, should the final costs turn out to be higher than estimated.

Staff agrees that streamlining the process for consideration of a single rate issue, such as either of the two contingent schedules, is in the interest of all parties as it will advance these projects that are vital to helping the City achieve its zero-waste goal. Staff recommends that the Director adopt procedures that streamline the pre-application period, reducing the current requirement of 120 days to 30-60 days, depending on the issue and the magnitude of the change in the project and estimated costs. Staff also recommends that the format of the rate application be revised depending on the issue under consideration. Any future application would still be subject to the 150-day review period specified in the Refuse Ordinance.

13. ADDITIONAL REPORTING REQUIREMENTS

In accordance with prior Directors' orders, Recology submits quarterly and annual reports to the City. These reports include information on the amount of materials disposed and diverted, commercial recycling and composting accounts, toxics collection, revenues and expenses, and the various accounts (the Special Reserve, Impound, and ZWI). The City uses this information to monitor Recology' efforts to achieve disposal targets and other objectives established during the rate proceedings. Staff is examining potential changes in reporting requirements consistent with the program changes proposed in the Application and will recommend additional reporting requirements in advance of the Director's Report.

14. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT

The Environmental Planning Division of the San Francisco Planning Department has evaluated Recology's rate Application under the requirements of the California Environmental Quality Act (CEQA). The Environmental Planning Division has determined that the actions contemplated in the Application are statutorily exempt under California Public Resources Code Section 21080(b)(8) and State CEQA Guidelines §15273 (Ex. 73).

Staff proposes the following related findings, required by Public Resources Code Section 21080(b)(8) and State CEQA Guidelines Section 15273, be reflected in the Director's Report and Recommended Order:

(1) Planning has determined that the Application is statutorily exempt from environmental review under California Public Resources Code Section 21080(b)(8), which provides that CEQA does not apply to the establishment, modification, structuring, restructuring or approval of certain rates, tolls, fares and charges by public agencies which the public agency finds are for the purpose of (A) meeting operating expenses, including employee wage rates and fringe benefits, (B) purchasing or leasing supplies, equipment, or materials, (C) meeting financial reserve needs and requirements, (D) obtaining funds for capital projects necessary to maintain service within existing service areas, or (E) obtaining funds necessary to maintain those intracity transfers as are authorized by City charter.

(2) The City has closely reviewed the Application and supporting schedules and the testimony at the Director's hearings. Based on this information, the City finds that the purpose of the rates approved herein is to help Recology (a) meet operating expenses, including employee wage rates and fringe benefits, (b) purchase or lease supplies, equipment, or materials, (c) meet financial reserve needs and requirements, and (d) obtain funds for capital projects necessary to maintain service within existing service areas.

15. PUBLIC COMMENT

Members of the public offered comments on the Application at the Public Works workshops, during public comment at the Director's hearings, and through the Ratepayer Advocate. Staff considered all the comments received from the public and the Ratepayer Advocate during reviewing the Application; in several instances those comments influenced our recommendations. The work of the Ratepayer Advocate on behalf of the public was vital in ensuring that these concerns were heard and addressed in the Director's hearings.

ATTACHMENT A
REFUSE RATES 2017
DIRECTOR'S HEARING EXHIBIT LIST

Ex.	Description	Introduced by	Hearing Date
1	2017 Refuse Rate Application (Narrative Summary only)	Recology	3/8/2017
1A	2017 Refuse Rate Application (complete, on CD)	Recology	3/15/2017
2	2017 Rate Application Technical Workshop Presentation (corrected)	Recology	3/15/2017
3	Recycle Central Material Recovery Facility Upgrade Proposal (12/8/15)	Recology	3/8/2017
4	DPW Director letter to Recology (1/29/16) re ZWI Funds	Recology	3/8/2017
5	Recology letter to DPW Director (8/25/16) re ZWI Funds	Recology	3/8/2017
6	DPW Director letter to Recology (9/1/16) re ZWI Funds	Recology	3/8/2017
7	Recology letter to DPW Director (2/15/17) re ZWI Funds	Recology	3/8/2017
8	Rate Board Resolution (12/16/15)	Recology	3/8/2017
9	Letter to Rate Board (10/30/15) (corrected)	Recology	3/15/2017
10	Rate Board Resolution (8/17/16)	Recology	3/8/2017
11	Memo from Dept of Env. to Rate Board (6/24/16) re Status of Claims on Special Reserve	Recology	3/8/2017
12	Tonnage overview	Public Works	3/8/2017
13	Hay Road Landfill Agreement (7/22/15)	Recology	3/8/2017
14	Hay Road Landfill Agreement - First Amendment (5/1/16)	Recology	3/8/2017
15	2013 Director’s Report	Recology	3/8/2017
16	Rate Board Resolution (7/23/13)	Recology	3/8/2017
17	Photos of recyclables sorting	Recology	3/8/2017
18	Zero Waste Collection Tests Summary Results (12/31/15)	Recology	3/8/2017
19	Photo of bins (current)	Recology	3/8/2017
20	Photo of bins (proposed)	Recology	3/8/2017
21	Photos of split/single chamber vehicles	Recology	3/8/2017
22	Ratepayer Advocate Powerpoint Presentation	Ratepayer Advocate	3/15/2017
23	Recology San Francisco Historical and Projected Headcount	Public Works	3/15/2017
24	Route Modeling Methodology	Recology	3/15/2017
25	Routes/Accounts/Tonnages Slide	Recology	3/15/2017
26	Weight Migration Slide	Recology	3/15/2017
27	Abandoned Materials Collection Table	Recology	3/15/2017
28	Bulky Item Recycling	Recology	3/15/2017
29	Recology Sunset Scavenger/Golden Gate Historical and Projected Headcount	Public Works	3/15/2017
30	Photograph of driver materials	Recology	3/15/2017
31	Photograph of Routesmart tablet	Recology	3/15/2017
32	West Wing rendering	Recology	3/15/2017
33	Trash processing equipment rendering	Recology	3/15/2017
34	Anti-theft warning	Mark Christensen	3/22/2017
35	iMRF facility rendering	Recology	3/22/2017
36	iMRF equipment rendering	Recology	3/22/2017
37	Trash processing equipment rendering	Recology	3/22/2017
38	West Wing Project Costs Estimate	Recology	3/22/2017
39	San Francisco Facilities Timeline	Recology	3/22/2017
40	iMRF facility cost estimate	Recology	3/22/2017
41	Trash processing facility cost estimate	Recology	3/22/2017
42	Cost estimates for contingent schedule equipment	Recology	3/22/2017
43	Fixed Versus Variable Cost Analysis	Recology	3/22/2017
44	Average Apartment Increase (v1)	Recology	3/22/2017
45	Average Apartment Increase (v2)	Recology	3/22/2017
46	Historical COLA Trend	Recology	3/22/2017
47	COLA Mechanism (3/8/17)	Recology	3/22/2017
48	Sample Changes in Single Family Residential Monthly Service Charges	Recology	3/22/2017
49	Distribution of Zero Waste Incentive Funds	Recology	3/22/2017
50	Abandoned Material Collection / Bulky Item Recycling	Recology	3/22/2017
51	Department of the Environment Impound Expenses	Department of the Environment	3/22/2017
52	Department of the Environment Impound Account Funded Projects Summary	Department of the Environment	3/22/2017
53	Memo from Port Exec Director to Port Commission (3/10/17) re iMRF	David Pilpel	3/22/2017
54	Recology Presentation to Port Commission (3/14/17) re Pier 96	David Pilpel	3/22/2017
55	Memo from DPW Staff to DPW Director (3/21/17) re Impound Account	Public Works	3/28/2017
56	City Attorney letter to Planning Department (3/10/17) re CEQA	City Attorney	3/28/2017
57	Staff Report re 2013 Refuse Rate Application (5/10/13)	Recology	3/28/2017
58	Post-Filing Modifications to Final Application	Recology	3/28/2017
59	Comparison of Final Application and Post-Filing Changes	Public Works	3/28/2017

60	Chart re Workers Comp and Overtime Trend	Recology	3/28/2017
61	Table re COLA Increases	Recology	3/28/2017
62	Recology screenshot re Lifeline Rates	Recology	3/28/2017
63	Lifeline rate application	Recology	3/28/2017
64	Estimated Disposal Tons & Percentage of Tons Processed	Recology	3/28/2017
65	Board of Supervisors Resolution for 75% Waste Diversion Goal (No. 679-02)	Recology	3/28/2017
66	Environment Commission Resolution re Zero Waste Goal (No. 002-03-COE)	Recology	3/28/2017
67	Organic Waste Processing Capacity Study (Dec 2016)	Recology	3/28/2017
68	Number of Accounts by Percentage Change in Monthly Rates	Public Works	3/28/2017
69	Impact of Adjusted and Projected Revenues and Application of Surplus	Public Works	3/28/2017
70	Tipping Fee Methodology	Public Works	3/28/2017
71	Refuse Projected Tons Diverted and Disposed	Public Works	3/28/2017
72	Rate Survey Select Cities	Recology	3/28/2017
73	Proposition 218 Notice	Recology	3/28/2017
74	Pilfering Analysis	Recology	3/28/2017
75	PG&E Energy Statement	Recology	3/28/2017
76	Emails with Recology (2/28/17) re rates	Department of the Environment	3/28/2017
77	Emails with Recology (3/23/17) re Pipeline Report & Business TIme excerpt	Department of the Environment	3/28/2017