EXHIBIT 1

2017 Refuse Rate Application*

Recology Sunset Scavenger
Recology Golden Gate
Recology San Francisco

* Recology has copied only the Narrative Summary for this Exhibit, but incorporates its complete application by reference. For complete copies of the 2017 Refuse Rate Application and Rate Models, please see http://sfpublicworks.org/refuserates

2017 Refuse Rate Application
Narrative Summary

Recology
Sunset Scavenger
Golden Gate
San Francisco
WASTE ZERO

February 10, 2017

Recology Sunset Scavenger
Recology Golden Gate
Recology San Francisco

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I. OVERVIEW

A. Refuse Collection and Disposal in San Francisco

Recology Sunset Scavenger and Recology Golden Gate (the Collection Companies) provide refuse collection services to residential and commercial customers in the City and County of San Francisco. The Collection Companies hold the permits issued under the Refuse Collection and Disposal Ordinance to collect and transport refuse within San Francisco City Limits.

Recology San Francisco provides disposal and processing for the materials collected by Recology Sunset Scavenger and Recology Golden Gate, and owns and operates the Recology San Francisco Transfer Station at the Tunnel Avenue facility. Additionally, Recology San Francisco operates the Pier 96 Materials Recovery Facility (MRF), called Recycle Central, on property leased from the Port of San Francisco. Recyclable materials are sorted and processed at Recycle Central. Compostables and trash are brought to the Tunnel Avenue facility for transport to composting facilities or the landfill, as applicable. The Tunnel Avenue facility is also the collection point for construction and demolition debris and the public drop-off location for various materials.

The three companies are collectively referred to as "Recology" in this rate application. Recology seeks specific rate adjustments for Recology San Francisco through the tip charge collected at the Tunnel Avenue and Recycle Central facilities, and for Recology Sunset Scavenger and Recology Golden Gate for residential refuse collection services. This Narrative Summary provides an overview of the rate application; more detailed information on the proposed rate adjustments are in summaries separately provided for Recology San Francisco and for the Collection Companies.

B. Proposed Rate Adjustments

The 2017 Refuse Rate Application seeks approval for just and reasonable rates that will account for increased costs and also fund improvements to advance the City toward its goal of zero waste. The rate application process follows the Rules of Procedure outlined in San Francisco Public Works (Public Works) Order No. 185078.

The application proposes that the rate increase Recology seeks for Rate Year (RY) 2018 (beginning July 1, 2017) be partially offset by rebates due to ratepayers under programs previously approved by the Public Works Director and the Refuse Collection and Disposal Rate Board. Specifically, the Collection Companies request an average net increase in collection rates of 16.4% for RY 2018, with an additional increase of 4.98% in RY 2019 once most of the rebates are completed. Recology proposes an additional rate adjustment of 0.62% in RY 2021 upon completion of all the proposed rebates. Without the rebates, Recology's requested average increase for RY2018 would be 22.96%.

For Recology San Francisco, the application seeks an 18.85% increase in the tip charge, from $156.62 to $186.15 per ton. The rate requested for the Collection Companies incorporates that tip charge.

As in past rate proceedings, this application proposes annual cost-of-living adjustments until another rate review process establishes new rates. A detailed description of the calculation of rate adjustments and resulting rates is included in the separate summaries of assumptions for Recology San Francisco, and Recology Sunset Scavenger and Recology Golden Gate.

Recology also proposes contingent rate schedules to take effect at a future date if and when the Director of Public Works approves two new facilities -- a new Industrial Materials Recovery Facility (*i*MRF) for improved processing of construction and demolition materials, and the repurposing of the existing *i*MRF to recover recyclables and organic material from trash. These contingent items and their impact on rates are described in the summary of assumptions for Recology San Francisco.

C. Website

To promote transparency in the rate application review process, Recology maintains a website to make information on the rates easily available to San Francisco residents. Customers can find information at www.recology.com/sfrates.

II. PROGRAMS INCLUDED IN THE RATE APPLICATION

Recology San Francisco provides recovery and disposal services for current programs at Tunnel Avenue and Recycle Central. This includes the transport and sale of recyclables and compostables, and the management of on-site public drop-off programs. Recology Sunset Scavenger and Recology Golden Gate provide material collection services to residents and businesses, and operate special collection programs.

A. Current Programs

This rate application assumes that programs currently provided to the City's residential and commercial customers will continue in the new rate period. These programs play an integral role in achieving the City's disposal targets. The core of the system is the three-stream collection of recyclables, compostables, and trash from residential and commercial customers. In addition, the three-stream program is augmented by a variety of specialized collection and processing operations.

Current programs and operations to be continued include:

1. RECYCLABLES COLLECTION (Blue Stream): Residential and commercial collection of comingled recyclables, including paper, bottles, cans, and hard plastics (e.g., cups, tubs, lids, buckets).

2. COMPOSTABLES COLLECTION (Green Stream): Residential and commercial collection of food scraps, plant materials, and soiled paper.

3. TRASH COLLECTION (Black Stream): Residential and commercial collection of non-recyclable and non-compostable materials.

4. BULKY ITEM RECYCLING (RecycleMyJunk.com): Special collection and recovery of bulky items, such as appliances, electronics, furniture, scrap metal, and wood through scheduled pick-ups to facilitate customer participation and maximize recycling.

5. BATTERY RECYCLING: Customers place household batteries in orange bins or in bags on top of their black bins. Collectors put the batteries in a special container in the collection truck. Workers at the Tunnel Avenue facility then sort the batteries according to Department of Transportation (DOT) rules and ship them to battery recycling facilities.

6. CHRISTMAS TREE RECYCLING: Christmas trees are collected at the curb during the first two weeks of January, chipped, and used at biomass facilities.

7. CONSTRUCTION AND DEMOLITION (C&D) DEBRIS RECYCLING: As buildings are constructed, remodeled or demolished, metal, wood, sheetrock, rigid plastic, and other construction materials are captured in debris boxes, and taken to Recology's C&D recycling facility (iMRF) for sorting. The Recology operation is registered under the City's Construction and Demolition Debris Recovery Ordinance.

8. PUBLIC REUSE AND RECYCLING AREA (PRRA): The Tunnel Avenue facility receives self-haul trash, compostables, recyclables, and reusable items from San Francisco residents and businesses. Material hauled by the public is weighed and processed on a Ptarmigan Sorting line. The facility is open seven days a week.

9. HOUSEHOLD HAZARDOUS WASTE DROP-OFF: Recology operates the San Francisco Household Hazardous Waste Collection Facility (HHWCF), where residential customers can drop off household hazardous wastes (e.g., paint, oil, pesticides, and household chemicals) three days per week for safe recycling and disposal. This facility has been open since 1987 and was among the first permanent HHWCF in the nation.

10. DOOR-TO-DOOR HOUSEHOLD HAZARDOUS WASTE COLLECTION: Recology collects household hazardous wastes directly from homes using specialized trucks for handling and transporting these materials.

11. HOUSEHOLD HAZARDOUS WASTE RETAIL TAKE-BACK PROGRAM: Recology uses the same specialized trucks to collect paint, fluorescent lights, and household batteries at 95 San Francisco retailers who partner with the Department of the Environment and volunteer to "take-back" small quantities of these common HHWs from San Francisco residents. Retail "take-back" HHWs are transported to the HHWCF and consolidated and repackaged there for safe recycling and disposal.

12. VERY SMALL QUANTITY GENERATOR PROGRAM: Qualifying small business generators of hazardous waste located in San Francisco may use the HHWCF by appointment for a fee on designated days each month.

13. E-WASTE RECYCLING: Most electronic waste is banned from landfill in California. Computers, monitors, televisions, computer peripherals, and other electronic devices are collected from bulky item recycling appointments, and at Tunnel Avenue. The material is then shipped to facilities specializing in recycling specific types of e-waste.

14. SAFE NEEDLE PROGRAM: The San Francisco Safe Needle Disposal Program (SFSNDP) provides San Francisco residents with safe, convenient disposal of home-generated sharps at more than 70 pharmacies throughout the City. Residents can pick up empty sharps containers at participating pharmacies, fill them, and then return them for disposal as medical waste.

15. PERFECTLY-GOOD REUSE PROGRAM: Recology pulls items that are in good condition for reuse (e.g., bicycles, furniture, clothing) from loads brought to the PRRA by individuals and small businesses. The re-useable items are either donated directly or given to organizations (e.g., St. Vincent DePaul) that process them for distribution in thrift stores.

16. MATTRESS RECYCLING: Mattresses from residents, hotels, PRRA drop-offs, and designated collection trucks are loaded into trailers at the Tunnel Avenue facility and transported to a local company specializing in mattress recycling.

17. TEXTILE DROP-OFF AND COLLECTION: Residents and businesses can drop off textiles at the PRRA. In addition to the drop-off, Recology collects source-separated textiles from businesses that manufacture clothing and cut garment patterns. Residents can also have textiles collected through Bulky Item Recycling. The textiles are sent to reuse and recycling markets.

18. TOILET RECYCLING: Old toilets are segregated from the waste stream and transferred to a company that specializes in porcelain recycling. Prior to shipment, toilet seats and lids are removed and baled with other rigid plastics for recycling.

19. TIRE RECYCLING: Used tires are handled separately at the Tunnel Avenue facility and then taken to a company that shreds and recycles the rubber.

20. STYROFOAM DROP-OFF: Residents and businesses can drop off clean expanded polystyrene (EPS) at the PRRA for recycling. Recology San Francisco operates a special densifier that compacts loose pieces of EPS into cubes, which are recycled into such products as base boards and moldings.

21. FILM PLASTIC DROP-OFF: Residents and businesses drop off clean polyethylene film plastic (e.g., plastic bags) at Recycle Central and the PRRA for recycling. The film plastic is baled and shipped to plastic recycling markets.

22. PUBLIC REFUSE RECEPTACLE COLLECTION: Recology collects from over 3,000 public bins distributed around the City. Each bin is emptied at least once per day, and some bins are regularly emptied as many as three times per day. Bins emptied more than once are emptied outside of the regular route service and on demand within 2 hours of notification of service necessity by the City.

23. PUBLIC REFUSE RECEPTACLE MAINTENANCE: Recology replaces/repairs liners and doors for bins, as needed.

24. DISTRICT CLEAN-UP EVENTS: Special clean-up events are held at least annually in each of the City's eleven Supervisorial Districts to allow residents to drop off items too big to fit in the regular collection bins, including all three refuse streams. Motor oil, batteries, and fluorescent lamps are also accepted.

25. EVENT RECYCLING: Recology provides recycling, composting and trash collection services to neighborhood festivals and major functions such as the Chinese New Year Parade and the Pride Parade.

26. ABANDONED MATERIALS COLLECTION: Recology collects non-hazardous abandoned materials identified through the City's 311 reporting system, as well as abandoned material identified by Recology personnel. Drivers are assigned to a specific service area, and are routed to collect abandoned materials. The Collection Companies respond to abandoned materials requests within a four-hour window on weekdays and an eight-hour window on weekends and holidays.

27. CONCRETE AND ASPHALT RECYCLING: Recology's Sustainable Crushing operation crushes and recycles concrete, asphalt, bricks, and porcelain into recycled construction products. The aggregate and engineered-fill products not only displace virgin materials, but they play an integral role in a closed-loop recycling system, whereby old City streets and structures are recycled back into similar construction uses within the City by local companies.

28. CONCRETE REUSE: Recology also utilizes excess wet concrete from cement companies for creating building-block products as well as on-site construction applications.

29. BUY-BACK CENTERS: Recology operates buy-back centers for customers who want to bring in bottles and cans for redemption.

30. ARTISTS IN RESIDENCE: Recology sponsors an artist in residence program to demonstrate the possibilities of creative reuse of materials and to promote recycling. Recology sponsors about eight residencies per year through this award-winning

program, providing work space, access to materials, administrative support, and exhibition opportunities.

31. EDUCATIONAL TOUR PROGRAM: Recology provides educational tours to thousands of children and adults annually. The focus of the tour is recycling, composting, reuse, and resource conservation. The tour includes visits to Recycle Central and Tunnel Avenue facilities.

32. COMPOST GIVEAWAY: Periodically, Recology provides free compost to San Francisco residents at various locations. In addition, free compost is provided at District Clean Up events. The compost is derived from food and garden materials generated in San Francisco, collected by Recology, and composted at one of Recology's composting facilities.

Recology and the City have worked together for many years to provide the public education and outreach needed to support these programs, and the continued success of the programs requires ongoing public education and outreach efforts. General outreach and specialized, targeted outreach programs will continue through the rate period and beyond.

B. Infrastructure Upgrades and Collection Service Changes

San Francisco has been a model of sustainability for municipalities worldwide. The City set a goal of 75% landfill diversion by 2010 and reached the goal two years early. The City has now challenged itself to reach zero waste by 2020 as a part of its 0-50-100 Climate Action Plan.

Recology is proud to partner with the City on such goals. Although the City continues to make great strides towards zero waste, approximately 1,100 tons of unprocessed material is sent to the landfill every day. Much of this material has the potential to be diverted from the landfill and put to better use.

To help the City move toward its zero waste goal, Recology proposes to:

1. Implement capital improvements to existing infrastructure, giving the City greater capacity to divert material.
2. Adjust aspects of its collection services to facilitate greater diversion by customers.
3. Utilize a new, disposal-based methodology to measure and communicate progress.

The costs associated with these changes are included in this application. Details of the new upgrades and programs are described below. Recology endeavors to hire qualified San Francisco residents whenever possible to staff these new initiatives.

1. Capital Improvements to Existing Infrastructure

In support of the City's zero waste goal, Recology has updated the processing infrastructure at Recycle Central, embarked on designing a new West Wing to replace the existing Organics

Annex, and proposes to increase its trash processing efforts to divert more material from the landfill.

Recycle Central upgrade

Recology has completed an $11.3 million upgrade to the sort lines and equipment at Recycle Central at Pier 96. The upgrade has improved the recovery of recyclable materials and landfill diversion by increasing the throughput capacity of the system, upgrading recovery efficiency, and enabling the recovery of additional material not previously diverted, such as aseptic containers, gable-topped cartons, bagged textiles, bagged film plastic, small pieces of metal, and unpainted wood.

Approximately $9.2 million of the cost of the upgrade was paid with Tier 3 and 4 Zero Waste Incentive (ZWI) funds. The rates approved in 2013 included funding for the ZWI program to reward Recology if it was able to reach certain numerical landfill diversion targets. The 2013 Rate Order also provided that if Recology failed to meet the most challenging of those goals in any year -- the Tier 3 and 4 goals -- the ZWI funds that had been set aside could be used for landfill diversion projects approved by SF Public Works and SF Environment. Recology did not meet the Tier 3 and 4 goals for Rate Years 2014, 2015 and 2016, and thereafter requested and received approval to use those funds -- a total of $9.2 million -- for the Recycle Central upgrade. Recology does not expect to meet the Tier 3 or 4 incentive goals for RY 2017, and therefore proposes that the remaining $2.2 million project balance be funded through the Tier 3 and 4 funds that will become available July 1, 2017.

Use of the RY 2017 ZWI funds for this purpose will leave $1.1 million in the RY 2017 Tier 3 and 4 account. Recology proposes that those funds be used for additional Recycle Central equipment enhancements, including a new drum feeder, a new cross belt magnet, and a new motor control center. This new equipment will allow for more efficient and effective sorting by metering of inbound material, improving the quality of the outgoing glass commodities, and allowing for better control of screen speeds and angles. Each of these upgrades will improve the overall recovery and uptime of the facility.

West Wing Construction

Currently, Recology recovers more than 650 tons per day of compostable material collected in the City. Participation in the composting collection program has been so successful that the Organics Annex is no longer capable of handling this volume. The proposed West Wing facility will replace the outmoded Organics Annex and enable Recology to meet the growing volumetric needs of organics processing while also minimizing potential negative impacts in the immediate neighborhood. The new facility will provide 14,546 square feet of space and include a state-of-the-art Best Available Control Technologies (BACT) odor control system.

Trash Processing

Recology has begun piloting a program to determine how best to recover recyclables and organics deposited in trash bins. The process begins with selecting organics-rich trash loads,

which are then shredded and screened. The screened material, such as paper, plastic, bottles and cans, is set aside for further processing to recover recyclable material. The remaining material is compressed under high pressure in an OREX Press to extract an organic-rich paste. As part of the pilot program, Recology sends the resulting organic mix to the East Bay Municipal Utility District (EBMUD) to generate electricity and digestate through anaerobic digestion. If funding to expand this effort is approved, Recology expects to begin processing 100 tons per day (TPD) of trash in RY 2018.

Approximately 10% of the trash is anticipated to be retrieved as organics-rich paste, while 15% of the trash retrieved will consist of recyclables that may be marketable. Proposed installation of additional equipment will enable Recology to sort and recover the potentially recyclable material that is recovered.

2. Adjustments to Collection Services

Since the passage of the Mandatory Recycling and Composting Ordinance in 2009, Recology has witnessed an increase in the amount of recyclables and compostables collected in the City, paired with a decrease in the overall volume of trash.

To meet the City's evolving needs, Recology proposes the following adjustments to its collection practices and base service levels for customers, with the goal of continuing to facilitate greater participation in recycling and composting services.

Service level adjustments: Single family, multi-family, and commercial customers will be encouraged to divert more material through targeted adjustments to their service levels, with a focus on downsizing trash and increasing recycling and composting.

Under the new service levels, single family homes will receive a default 16-gallon trash bin in place of their current 32-gallon black bin, with the option to request a 32-gallon or 64-gallon trash bin instead, and will also receive a default 64-gallon recyclables bin and be given the opportunity to retain their smaller 32 gallon recycling and composting bins.

These adjustments are designed to encourage greater participation in the recycling and composting programs. The single family service level changes are expected to be implemented over a two-year period beginning in July 2017. Upon completion of the rollout, Recology estimates 10% of currently landfilled materials from single family homes will be recycled or composted, totaling 16,681 tons per year.

	RY 2018	RY 2019	RY 2020
Landfill reduction (Tons Per Year)	4,170	12,511	16,681

Recology will similarly encourage multi-family and commercial customers to downsize their trash service and increase their recycling and composting service.

Routing changes: Currently, Recology employs split-chamber vehicles to collect recyclables and trash in the City; the trucks have separate compartments for recyclables and trash. Single-chamber trucks are used to collect compostables.

However, the volume of recyclables collected has begun to exceed the capacity of the split-chamber vehicles. Therefore, Recology proposes to redesign existing routes to repurpose its single-chamber vehicles for recyclables only, and its split-chamber trucks for compostables and trash. Under this proposal, a total of 190 Fantastic 3 collection routes would be necessary for RY 2018, an increase of 23 collection routes in total. These new routes would also be rolled out over a two-year period, beginning in July of 2017.

	Current	Proposed	Change
Trash/Recyling	119	-	(119)
Composting	48	1	(47)
Trash/Composting	-	106	106
Recycling	-	83	83
Total	167	190	23

Route Management System: Recology proposes to install onboard Route Management Systems (RMS) in all collection vehicles. The system electronically processes and records service data, including details on individual stops, thus eliminating the need for manual data entry and manual processing of driver service tickets.

Apartment Diversion Program: Apartments, defined as buildings with six or more dwelling units, face barriers to diversion, including lower tenant participation, program accessibility, and quality control. Beginning in RY 2018, Recology proposes to commence an Apartment Diversion Program, focusing on new buildings (2010 and newer) with 50 or more units, as well as other apartment buildings with large volumes of potentially divertible material.

Improved Household Hazardous Waste (HHW) Collection and Management: Recology proposes to expand service to support the Department of the Environment's goal of increasing the weight of HHW collected for safe management and diversion from customer bins by 25% over RY 2016 amounts.

In addition, Recology proposes to contract directly with PaintCare Inc., a product stewardship organization, beginning in RY 2018 for certain paint recycling and disposal services, with the goal of increasing paint recycling and offsetting some of the cost of HHWCF paint handling.

Outreach and Education: Customer education is essential to the successful implementation of the new collection practices. Recology therefore proposes to offer additional outreach and education materials to increase levels of interest, enthusiasm and participation.

Recology proposes to add staff to distribute and publicize the new information with introductory letters, follow-up postcards, cart-hanger notices, website information, and other resources.

3. Methodology to Measure Progress

Until 2010, the City measured the success of its programs based on the percentage of material diverted. The calculation included material recycled, composted, reused or otherwise diverted, including construction and demolition (C&D) debris and other industrial recovery. Using this methodology, the City exceeded its goal of achieving 75% diversion by 2010. In 2007, the State changed the methodology for measuring progress toward reducing disposal. Recology therefore proposes to realign its methodology to current California Department of Resources Recycling and Recovery (CalRecycle) standards.

Calculating diversion rates is a complicated process with many variables. For example, the average home or business in the City is diverting at a lower rate than the citywide rate. This is because the citywide rate takes into consideration C&D debris and other industrial recovery. The high recovery rates and heavy weights of these materials increase the citywide diversion rate.

This dissonance does not help motivate people to better separate their material. Voters in the City are divided in regards to the credibility of the citywide diversion rate: 42% of voters surveyed in 2014 believed the metric was exaggerated. Others believe the City is performing well, and are therefore less motivated to improve. Cities and counties in California and around the country, as well as media outlets and other commentators, are increasingly questioning diversion rates in part because measurement methodologies are not consistent around the world.

CalRecycle's current methodology measures jurisdictional progress based on program implementation and per capita disposal reductions. This simpler, more timely, and less costly measurement system better aligns with the City's goal to achieve zero waste by 2020. It should also be easier for residents, businesses and other stakeholders to follow as compared to the current system, which has sometimes generated questions and confusion.
Under the adjusted reporting methodology, Recology proposes to streamline its quarterly reports to the City, detailing inbound tons by customer type and diversion by facility. The quarterly reports may no longer need to itemize diversion by program, a metric that sometimes requires estimation and allocation. In all events, Recology's adjustments to the reporting process will meet the City and State's reporting requirements.

Between 2000 and 2012, San Francisco cut its disposal in half, to the lowest level on record. State-approved numbers show San Francisco disposing 3.3 pounds per resident per day (half the State target) and 4.4 pounds per employee per day (42% of the State target). Since 2012, on the other hand, citywide disposal has increased. The likely explanation is two-fold. First, the City is now experiencing one of the largest construction and economic booms in its history. Second, too many building contractors take their waste to non-Recology C&D facilities where the materials are not properly recycled and instead are disposed in landfills. Since the materials originate in San Francisco, state recordkeeping unfortunately adds these tons to the City's landfill numbers.

Achieving zero waste by 2020 will require further commitment from consumers, producers, the City, and Recology. Using the proposed disposal metrics will better communicate progress to all stakeholders.

C. Contingent Schedules

Recology is proposing two contingent schedules, which would go into effect upon receiving the necessary permitting approvals. Costs for these programs are not included in the base rate application.

The first project involves relocating the *i*MRF from Tunnel Avenue to a new permitted industrial site. This would allow Recology to install updated C&D debris sorting technology to handle larger volumes of material, while creating more space for trash processing at the Tunnel Avenue facility. The second project is the construction of a trash processing operation modeled on what is learned from the pilot program described above. See Appendix A for the timeline and sequential nature of the capital improvements.

1. *i*MRF Relocation and Improvements

Recycling C&D material presents one of the greatest opportunities for increased diversion. However, Recology's current processing capacities are not adequate to meet current and growing demands. Constructed in 2003, the existing 46,000 square foot facility was designed to process only 400 tons per day and largely depends on antiquated technology and manual sorting. Because C&D debris is heavy and represents a significant volume of the waste stream, recovery of this material has great immediate potential for additional diversion.

Recology is currently working on plans to build a new *i*MRF. Plans call for a 100,000 square foot facility in an enclosed building with mechanical sorting equipment. The facility is expected to be capable of processing 1,000 tons per day and capable of diverting 70% of delivered material (including PRRA and other material), as compared to the current rate of about 50%. Pending permitting approval, construction is anticipated to be completed by December 2019. There will be no interruption of C&D or other processing during construction.

Based upon current volumes, the chart below depicts the anticipated landfill diversion.

	Year	Received	Diverted	Disposal	Diverted
***i*MRF**	RY 2016	86,673	44,530	42,143	51.4%
New *i*MRF	Est. RY 2020	86,673	60,671	26,002	70% *
Difference			16,141	(16,141)	18.6%
	Note: RY 2020 inbound material based on current volumes.				
	* Diversion rate estimate based on capabilities of proposed processing equipment.				

Relocation of the *i*MRF will free up 46,000 square feet of space at the Tunnel Avenue facility for other use. Recology proposes to repurpose this space for trash processing to capture additional organics and recyclables from the trash (black bin) stream. Recology's contingent schedule for trash processing is described below.

2. Trash Processing

To continue progress toward zero waste, the City must process its trash to capture additional recoverable material. Recology proposes to construct a trash processing system in the space currently occupied by the *i*MRF at Tunnel Avenue. Recoverable materials will be identified, sorted and transported off-site for further processing.

The proposed facility would be capable of handling 1,100+ tons per day of trash generated by residential and commercial customers. Recent waste characterization studies indicate that:

- Approximately 30% of black bin material is organic matter, consisting primarily of food and soiled paper, that could be put to productive use through anaerobic digestion and/or composting;
- An additional 10% of black bin material is recyclable glass, metal, and hard plastics;
- Another 10% is soiled film plastic; and
- The remaining 50% is a mixture of materials with little to no market value.

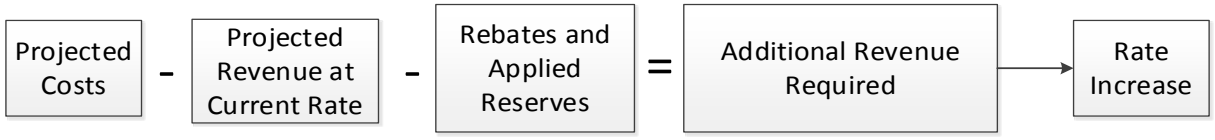
If approved, Recology proposes to complete build-out of the new trash processing facility by December 2020, following the completion of the proposed new *i*MRF.

III. RATE SETTING METHODOLOGY

A. Rate-Setting Basis

The rate application presents the revenues and expenses, both historic and projected, of Recology San Francisco and, separately, of Recology Golden Gate and Recology Sunset Scavenger combined. Projected expenses, together with an Operating Ratio (OR) of 91% and an additional 2% for Zero Waste Incentive funding, yields a revenue requirement to calculate a proposed tip charge for Recology San Francisco and proposed collection rates for Recology Sunset Scavenger and Recology Golden Gate. The collection rates charged by the Collection Companies incorporate the tip charge Recology San Francisco charges them. See Section K supporting documents.

Methodology: Total projected costs, minus projected revenues at current rates, minus rebates and applied reserved = additional revenue required = % required rate increase.



Revenues and expenses are provided in 2017 dollars.

1. Total Operating Costs

Following is an approximate description and breakdown of current operating costs for Recology San Francisco and the Collection Companies:

- Labor represents the largest cost. Labor and benefits amount to nearly 65% of total costs. For FY 2018, labor costs are projected to increase by 9.5% based on the collective bargaining agreement recently negotiated with Teamsters Local 350, and for the service changes and improvements described in this application.

- The next largest category is truck operating costs, representing approximately 16% of total costs. Truck operating costs include fuel, oil, repair and maintenance, licenses, and City permits. Truck operating costs are projected to increase 2.2% in the base year.

- Disposal and processing costs (exclusive of labor and benefits costs) account for about 7% of total costs. Disposal costs are projected to increase 41.5% in the base year, primarily due to the new landfill agreement that went into effect in January 2016.

- Facility operating and maintenance costs represent about 4% of costs. Facility costs cover Recycle Central and the Tunnel Avenue facility, including the *i*MRF, Public Reuse and Recycling Area, Household Hazardous Waste Collection Facility, scale facilities, administrative offices, and maintenance and related operational facilities. Operating and maintenance costs are projected to increase 24%.

- The remaining 7% of total costs consist of supplies, professional services, contract services, information technology, environmental and safety compliance, human resources, and accounting. The increase in these categories by 7% largely reflects inflation.

B. Projected Revenues at Current Rates

Based on existing service levels, Recology Sunset Scavenger and Recology Golden Gate are projected to generate $264 million in collection revenue at current rates. A detail of projected revenue at current rates can be found in Schedule F.1 of the Recology Sunset Scavenger and Recology Golden Gate Rate Schedules.

Based on projected tonnage, Recology San Francisco is expected to generate $115 million in tip fee revenue of which $105 million is intercompany revenue from the Collection Companies. The remaining revenue of $10 million is from third party customers. A detail of projected tipping fee revenue can be found on Schedule F.1 of the Recology San Francisco Rate Schedules.

C. Application of Rebates and Special Reserve Funds

Recology proposes to offset part of its requested rate increase for collection services with funds available from the Zero Waste Incentives (ZWI) and the Special Reserve Fund (SRF). More detail on the available ZWI and SRF can be found in the Recology Sunset Scavenger and Recology Golden Gate Narrative Rate Summary.

D. Net Revenue Requirement and Required Rate Increase

	RY 2018	RY 2019	RY 2020	RY 2021
Revenue at Current Rates	$ 264,280,618	$ 307,631,006	$ 322,964,140	$ 322,964,140
Cost-of-living-adjustment	N/A	TBD	TBD	TBD
Revenue Requirement	324,964,140	324,964,140	324,964,140	324,964,140
Zero Waste Incentive Rebate	(11,587,896)	-	-	-
Special Reserve Fund Rebate	(2,500,000)	(2,000,000)	(2,000,000)	-
RY 2018 Tier 3 & 4 Pier 96 Improvement Reimbursement	(3,245,238)	-	-	-
Net revenue requirement	307,631,006	322,964,140	322,964,140	324,964,140
Change ($)	$ 43,350,388	$ 15,333,134	$ -	$ 2,000,000
Increase (%)	16.40%	4.98%	0.00%	0.62%

IV. PROPOSED RATE STRUCTURES

A. Residential Rate Structure

To encourage recycling and composting, and to decrease the amount of trash, Recology proposes to transition single family residential customers to new default service levels that include a 16-gallon black trash bin, 64-gallon blue recycling bin, and a 32-gallon green composting bin. Recology will also encourage multi-family customers to decrease their trash subscription levels while increasing recycling and composting.

Recology's proposed rate structure continues the current practice of base and volumetric charges. For residential customers, Recology proposes to increase the unit charge from $5.16 to $20.00 to cover fixed costs, such as capital, regulatory, and administrative costs.

Recology also proposes to increase the charge related to volumetric service from $2.06 to $5.22 per 32-gallons of capacity for the recycling and composting streams, and from $5.16 to $10.44 for each 32-gallons of trash.

The proposed increase in unit charges brings collection rates more in line with Recology's actual cost structure, where about 50% of costs are fixed regardless of the volume collected.

The proposed rates seek to encourage greater recycling by doubling the size of the blue recycling bin for those who receive the default service. The net result is a 16.4% increase in the total volume of service (112 gallons vs. 96 gallons under the current default service).

The rate increase for individual residential customers will vary depending on their service levels. The table below is an example of current rates and the proposed rates.

	Current Default Service Level and Rates		**Current Default Service Levels with New Rates**		**Proposed Default Service Levels with New Rates**	
Component	Volume (gallons)	Charge	Volume (gallons)	Charge	Volume (gallons)	Charge
Unit Charge	N/A	$5.16	N/A	$20.00	N/A	$20.00
Trash (black)	32	25.90	32	10.44	16	5.22
Recycling (blue)	32	2.06	32	5.22	64	10.44
Composting (green)	32	2.06	32	5.22	32	5.22
Monthly charge	--	$35.18	--	$40.88	--	$40.88

B. Apartment Rate Structure

During the 2013 rate-setting process, Recology implemented a discounted volumetric apartment rate structure modeled after the commercial rate structure adopted in 2006. This structure includes a base unit charge, plus volumetric charges that are partially offset by discounts for the proportional amount of recycling and composting service.

To encourage apartment customers to downsize their trash service and increase recycling and composting service, Recology proposes to require more recycling and composting service to qualify for a rate discount, while at the same time decreasing per-gallon volumetric charges.

The proposed structure includes volumetric charges of $24.50 per 32 gallons of weekday service, irrespective of the type of service. The base unit charge would remain at $5.00 per unit.

The principal structural change is to increase the diversion discount floor from 10% to 25% to match the level of diversion service required by the Mandatory Recycling and Composting Ordinance. To illustrate, if a customer has three equal size bins (one each for trash, recycling and composting) their gross volumetric discount is 67% (because 67% of the service is recycling and composting). The price discount that the customer would receive on its volumetric charges is 42% (67% minus the 25% floor). If the same customer added another recycling bin, the discount would grow to 50% (75% minus 25%). Thus, changing the discount floor from 10% to 25% is designed to encourage apartment customers to increase their recycling and composting service as a way of mitigating the cost impact of the change.

C. Commercial Rate Structure

Discounts on the variable component of each commercial bill will still be available based on the proportion of recycling and composting service. The first 25% will no longer be eligible for a discount, again, to match the level of recycling and composting service required by the Mandatory Recycling and Composting Ordinance.

For example, if a commercial customer has three 96-gallon bins (one for trash, one for recycling, and one for composting service), all collected once a week, the total diversion service volume is 67%. The discount for this customer would be 42% (67% minus 25%). If a customer has a 2-cubic yard bin for trash, a 1-cubic yard bin for recycling, and a 1-cubic yard bin for composting, all collected once a week, total diversion service volume is 50% and the discount would be 25% (50% minus 25%).

D. COLA

Recology proposes to continue to use the Cost of Living Adjustment (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 31 of the previous year.
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.

The proposed modified COLA is designed to ensure that Recology fairly recovers costs that increase after RY 2018 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 also eliminates the need for Recology to submit an application for new rates absent significant new programs, facilities or changes in costs.

	Recology Sunset Scavenger & Recology Golden Gate	
	Estimated COLA Weights	
	RY 2017	RY 2018
Fixed COLA Adjustment Factor (Fixed Labor)	60.0%	58.7%
Variable COLA Adjustment Factor (Variable Labor)	7.0%	7.3%
Health and Welfare	12.0%	12.1%
Variable PPI (Materials)	14.0%	15.5%
Fuel	1.0%	1.0%
Total	94.0%	94.7%
Capital Costs	6.0%	5.3%
Total Capital	6.0%	5.3%
Total Percentage COLA	100.0%	100.0%

E. Discount for E-Bill Customers

To encourage source reduction, E-bill customers will continue to be credited $1 for each bill presented and paid electronically. Costs associated with providing this discount to existing customers are included in the rate application as a reduction to existing revenue. Costs for discounts provided to additional customers that sign up for paperless billing will be borne by Recology, as the cost will be partially offset by savings in printing and postage costs.

V. ZERO WASTE INCENTIVES

Under the 2013 Director's Report and Rate Order, a portion of Recology's collection revenues are deposited in a Zero Waste Incentive (ZWI) account. Recology was able to earn those funds to the extent it was able to meet four tiers of disposal goals set forth in the 2013 Director's Report. Meeting any of those tiers earned 0.5% in additional OR, for a possible total of 2% additional OR in a year. The ZWI approved in 2013 required that any unearned Tier 1 and 2 funds be rebated to ratepayers, but that unearned Tier 3 and 4 funds could be used to fund diversion projects approved by the City's Public Works and Environment Departments. The ZWI, therefore, not only incentivized Recology to reduce disposal, but also provided Recology and the City a mechanism to increase investment in services and infrastructure to increase diversion.

This application proposes to continue the ZWI program with the following modifications:

Tier 1 would be equal to projected total disposal tons in Recology San Francisco Schedule E for RY 2018, adjusted to account for the transition to 16-gallon trash service in RY 2019 and 2020, and using Tier 2 of the previous year for RY 2021 and RY 2022; (2) Tiers 2 and 3 would be approximately 16% and 33% of the difference between the Tier 1 and Tier 4 goals, respectively; and (3) Tier 4 disposal would be 370,000 tons for RY2018 and decrease 10,000 tons per year in RY 2019 and RY 2020, and 25,000 tons each year thereafter. Recology proposes that the ZWI continue in rate years after RY2018 until a new rate order is issued. Recology's proposal is shown in the following chart.

Proposed ZWI Disposal Tonnage Goals				
Rate Yea	Tier 1	Tier 2	Tier 3	Tier 4
2018	389,072	386,072	380,072	370,000
2019	380,732	376,232	369,232	360,000
2020	376,561	369,561	355,561	335,000
2021	369,561	359,561	339,561	310,000
2022	359,561	346,561	321,561	285,000
Note: 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 an even spread between a year's Tiers.				

The collection and distribution of ZWI funds when targets are met would remain the same as the current incentives under the 2013 Director's Report and Rate Order. Since disposal

reductions, and consequently ZWI targets, will be more challenging in future years, Recology proposes that when ZWIs for any of the four tiers are not achieved, Recology could use those funds for new diversion programs, subject to approval from the Environment and Public Works departments.

Additionally, Recology proposes that it be allowed twelve months after completion of a rate year to present to the City a proposal for the use of unearned ZWI funds. For example, any unearned RY 2018 ZWI funds would remain available for one rate year and, if unused, would be rebated to customers as an offset to the RY 2020 cost-of-living adjustment. In the event that the rebated funds exceed any cost-of-living adjustment, the funds would remain available to Recology for investment in diversion programs for an additional rate year.