



ENVIRONMENTAL PROGRAMS DIVISION

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SUSTAINABILITY COMMISSION STAFF REPORT

Meeting: October 17, 2024

Subject

Garbage Post-Collection Services

Recommended Action

Receive presentation and provide recommendation to route collected garbage through a materials recovery facility (MRF) to increase diversion before final disposal.

Reasons for Recommendation

Executive Summary

The City contracts separately for waste hauling and for waste disposal. A long-term hauling contract is in place with Recology. The disposal contract is ending its term in November 2025 and a new agreement needs to be established. That contract handles both garbage and construction and demolition (C&D) materials. Material collected from garbage bins and carts is taken directly to Newby Island Landfill for disposal. Material collected in C&D debris boxes is also taken to Newby Island, but is sorted and processed to recover certain materials for recycling and anything leftover is placed in the landfill. Neither the hauling nor disposal contract directly affects the City of Cupertino's General Fund budget as rate payers (residents and businesses) pay for the associated costs through their garbage bills. The City's role is to set standards, establish contracts for the service, and monitor performance.

The end of this long-term disposal agreement gives the City an opportunity to align post-collection services with the City's Climate Action Plan 2.0, specifically action W 1.2: *Route collected landfilled waste through a materials recovery facility (MRF) to increase diversion before final disposal.*

Staff requests the Sustainability Commission's recommendation on routing collected garbage to a MRF for processing to "rescue" recyclable and compostable materials from being sent to landfill.

Background

Cupertino City Council directed staff to explore and present options for post-collection. One decision point will be whether to route collected garbage through a MRF or continue to take it directly to landfill. The other decision will be which facility to take collected C&D materials to for sorting.

To address the needed services, City staff is conducting two branches of work:

1. Staff issued an RFP to solicit proposals for two services:
 - a. Garbage disposal
 - b. Construction & demolition (C&D) debris processing and disposal services
2. Separately, the City began discussions with the City of Sunnyvale to explore routing Cupertino's garbage through the Sunnyvale Materials Recovery and Transfer Station (the SMaRT Station).

There are only two facilities in Santa Clara County that process garbage, the City of Sunnyvale's and a privately owned facility. At the time the post-collection options were being considered, the privately owned facility did not have permitted capacity to accept additional tons of garbage. Additionally, per City municipal code 3.22.070(B)(1), purchases of services from another public agency are exempt from the City's competitive bid process and the decision was made to focus on Sunnyvale's SMaRT Station as the MRF option.

Cupertino City Council will be presented with the outcome of both of these efforts and will be asked to decide which services to finalize agreements for.

In May 2023, Cupertino City Council was presented with the concepts for post-collection and the expected rate increase impacts. The anticipated extra cost to send the City's garbage to a processing facility would vary for different rate categories, but preliminary estimates suggest that it could result in an estimated 7%-15% (\$5 - \$8/month) increase in the cost of garbage service for most single-family ratepayers. Processing garbage from all sectors could divert one-third to one half of what is currently going to landfill and recover those tons for recycling or composting.

Current Arrangement

Garbage, organics, and recyclable materials generated in City and placed into carts, bins, or rented debris boxes are collected by Recology South Bay under a 10-year franchise agreement that was approved by City Council in December 2020. Garbage and C&D debris is taken by Recology to Newby Island Landfill under an agreement with Republic Services that has been in place for 35-years and which is set to expire in November 2025.

Cupertino residents and businesses generate around 15,000 tons of material that goes to landfill per year, and that is expected to increase as the City's working and residential population increases. The C&D debris tons can vary widely depending on the size and number of construction projects, but in the last three years the number of tons to landfill from Recology-collected debris boxes ranged from 2,000 to almost 4,000 tons. The diversion rate for C&D debris taken to Newby Island by Recology was approximately 51% in calendar year 2023.

As noted above, recyclables (blue bin) and organics (green bin) collected by Recology trucks are taken to different locations and are outside the scope of this project.

C&D Debris Diversion

Under the City's franchise agreement with Recology, construction projects in Cupertino have two options for handling C&D debris:

1. Rent Recology debris boxes: These are serviced by Recology, and contents are taken to Newby Island where sorting and recovery happens.
2. Self-haul: A project's licensed construction and demolition contractor can collect and remove debris as part of a total service offered by that contractor.

Construction projects are required to provide their C&D debris disposal weight tags to City staff and calculate the diversion rate achieved by the project. Per CalGreen and City Municipal Code 16.72.040, construction projects are required to divert at least 65% of their materials.

Processing vs Not Processing Garbage

The end of the current agreement presents an opportunity to decide between continuing with the same model of direct disposal to landfill or to consider the option of processing the garbage at a MRF to recover organics and other recyclables that were thrown away into a gray garbage cart or bin. Depending on the amount of recoverable material in the gray cart or bin, one third to one half by weight of the incoming garbage could be recovered, reducing the overall waste tonnage going to landfill by 5000 to 7500 tons.

Much of the diverted material would be organics, which generate methane in the landfill environment. CalRecycle notes that 20% of the methane generated in California comes from landfills. Because processing would result in fewer organic materials reaching the landfill, as well as recovering other marketable plastic, glass, paper, and metal, incorporating a MRF for processing would align with the City's adopted Climate Action Plan (CAP) 2.0 and would complete action item W 1.2.

How Well Does Cupertino Sort Materials Before Collection?

As determined by community-wide waste characterizations done in 2018 and 2019, roughly one half (by weight) of residential and commercial garbage collected in Cupertino is food scraps and other organics. This is despite messaging, education, and site visits since 2011 to encourage residents and businesses to put food scraps and food-

soiled paper into the green bins and carts. Current California State (State) regulations and corresponding local municipal code now require all generators of organic materials to keep them out of the landfill. However, regular visits to businesses and lid-flips in residential areas continue to find food scraps, food-soiled paper, and other organic materials in the garbage.

Processing Garbage and the Cost Impact to Ratepayers

Additional processing of solid waste to remove additional recyclables and compostables will increase the cost of service to ratepayers (residents and businesses). The cost of disposal is just one part of the overall equation in determining the garbage service rates for Cupertino's residents and businesses. A preliminary evaluation of cost for sending garbage to a MRF could result in single-family residents with 32-gallon bin garbage service paying an additional \$5 - \$8/month or about 7% to 15% more than they would if the garbage was sent directly to landfill without processing.

In 2020, a survey of residents was conducted on topics relating to garbage, organics, and recyclables collection services. One question asked about the willingness to pay more for materials to be sorted after collection. Results showed 43.2% of people would be willing to pay more for that service, 44.3% said they would not, and 12.4% did not know or did not answer.¹

Based on Council direction, the City team will either:

- Execute an agreement for C&D material processing plus execute an agreement with Sunnyvale for MSW processing and a separate agreement with the landfill that takes residuals from the SMaRT Station; OR
- Execute an agreement for C&D material processing plus execute an agreement for direct disposal to landfill.

Sustainability Impact

Routing garbage through a Material Recovery Facility for processing is a recommended climate change mitigation strategy identified in the City's adopted Climate Action Plan (CAP) 2.0 under action item W1.2: *Route collected landfilled waste through a materials recovery facility (MRF) to increase diversion before final disposal.*

Fiscal Impact

The City manages waste disposal on behalf of the ratepayers (residents and businesses). Costs are incurred by the ratepayers and not the City. There will not be an impact to the City's General Fund from these changes.

Any change in the cost of disposed or processed tons collected in Cupertino will be factored into the rates paid by the customers. The City's current rate per ton to send garbage to Newby Island Landfill is \$50.27/ton, and it adjusts annually per CPI.

California Environmental Quality Act

The appropriate level of CEQA review, if any, will be determined before the City makes a commitment to proceed with one of the options for waste disposal presented.

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