

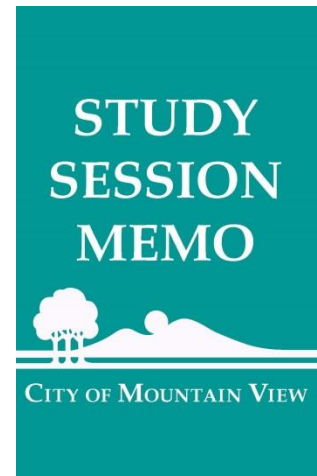
DATE: April 24, 2018

TO: Honorable Mayor and City Council

FROM: Lori Topley, Solid Waste Program Manager
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VIA: Daniel H. Rich, City Manager

TITLE: **Solid Waste Agreements and Zero Waste Policy**



PURPOSE

The purpose of this Study Session is to:

1. Begin preparation for new solid waste collection, processing, and disposal agreements to replace the agreements expiring in 2021; and
2. Provide an update on zero waste planning efforts and introduce a draft Zero Waste Policy.

BACKGROUND

Solid Waste Agreements

Mountain View's solid waste and recycling collection, processing, and disposal system is made up of services provided by three separate entities under different agreements (see Table 1 below). The three agreements are budgeted at over \$22 million annually (representing over 75 percent of Solid Waste Fund expenditures), and all three expire in late 2021. Given the large expenditures and that the processing and landfill agreements have been in place since 1991, this is a significant event in the history of the City's solid waste system.

Table 1 – Current Solid Waste Agreements

Provider	Service Type	Agreement Time Period
Recology Mountain View	<ul style="list-style-type: none"> ▪ Collect garbage, recycling, and organics from residences, businesses, schools, and construction sites and haul to the Sunnyvale Materials Recovery and Transfer (SMaRT®) Station ▪ Compost organics collected from businesses ▪ Operate a local recycling center ▪ 	April 2013 to October 2021
SMaRT Station	<ul style="list-style-type: none"> ▪ Process garbage, bulky goods, and construction debris to remove recyclables ▪ Sort and market recyclables ▪ Transfer remaining waste to landfill 	September 1991 to December 2021
Waste Management	<ul style="list-style-type: none"> ▪ Dispose solid waste from SMaRT Station at Kirby Canyon Landfill 	September 1991 to December 2021

Recology Mountain View provides garbage and recycling collection services to all residential and commercial customers. They also operate a City-owned recycling center located on Terra Bella Avenue, where residents can drop off recycling and redeem bottles and cans for California Redemption Value (CRV).

After collection, Recology hauls Mountain View garbage and recycling to the SMaRT Station in Sunnyvale. The SMaRT Station, which is operated under a Memorandum of Understanding (MOU) between the cities of Mountain View, Palo Alto, and Sunnyvale, provides processing services and determines what items are accepted for recycling based on market demand, diversion potential, and cost efficiency. After sorting the garbage to remove any remaining recyclable materials, the residual is transferred to the Kirby Canyon Landfill in South San Jose for disposal. A material flow diagram and fact sheet (Attachment 1) provide additional information about the SMaRT Station.

Zero Waste Planning

On March 24, 2009, the City Council adopted the first Environmental Sustainability Action Plan (ESAP). Among other actions, the ESAP called for the creation of a Zero Waste Plan (Plan) with the goal of achieving a 90 percent diversion rate, a benchmark

measure of success accepted by the Zero Waste International Alliance. The Plan was started in 2011 with the intention of using it to inform the preparation of a new collection services agreement, which was set to expire in April 2013. On September 27, 2011, the Council reviewed a series of technical memoranda providing the information and analysis that would be the basis of the Plan. The memoranda presented the results of a study to characterize Mountain View waste, documented the results of public input (obtained from community meetings and surveys), and provided key options for increasing diversion.

Following review of the technical memoranda, Council provided direction on new diversion programs to implement and staff began the extensive undertaking of preparing a new collection agreement. Immediately following adoption of the new agreement, staff and Recology turned full attention to implementation of new programs, most notably commercial food scraps, commercial and multi-family recycling upgrades, and single-family food scraps (see Attachment 2 for a full list of new programs and services). Due to the amount of staff time required for development of the agreement and implementation of the new programs, the Plan was never published in the form of a final document. However, the work completed in 2011 served its purpose of informing Council decision-making and establishing the City solid waste programs firmly on the path toward achieving its zero waste goals.

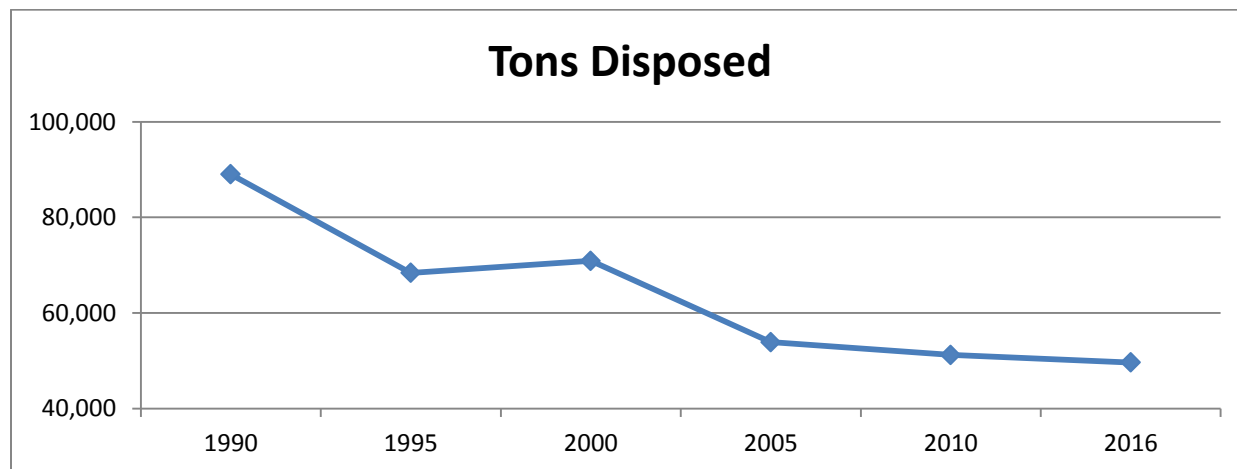
California Waste Diversion Legislation

In addition to the City's sustainability goals, California legislation directs efforts to reduce waste. The first significant legislation was the Integrated Waste Management Act of 1989 (AB 939), mandating cities reduce disposed waste 50 percent by 2000. More recent legislation is related to the State's efforts to reduce Greenhouse Gas (GHG) emissions and includes mandatory recycling for businesses and multi-family residences (AB 341, adopted in 2011), mandatory organic waste diversion for businesses (AB 1826, adopted in 2014), and reduction of short-lived climate pollutants (AB 1383, adopted in 2016). AB 1383 established a very ambitious target of reducing Statewide disposal of organics 75 percent by 2025. The State is currently drafting regulations aimed at actions cities must take to help reach this target. Attachment 3 provides additional information about these State laws and the City's compliance with the requirements.

Since the adoption of AB 939 in 1989, Mountain View's disposal quantities have been steadily declining (see Figure 1). For the first 15 years (1990 through 2005), significant strides were made in reducing tons disposed into the landfill and increasing the diversion rate. However, since 2005, it is taking more and more intensive efforts to continue reducing tons disposed by increasing diversion rates. As a result of recent improvements at the SMaRT Station and the new programs approved by the Council

since 2013, total disposal has declined from 52,910 tons in 2014 to 49,605 tons in 2016, and the City's overall diversion rate increased from 76 percent to 78 percent (2017 disposal and diversion rate numbers are not yet available). This is a significant achievement during a period of strong economic growth.

Figure 1 – Tons Disposed in Landfill



DISCUSSION

Solid Waste Agreements

Establishing new collection, processing and disposal agreements for the post-2021 time period will be a multi-year effort involving two separate, but related, evaluation processes:

1. **SMaRT Station Evaluation** – Consistent with the terms of the current MOU, staff from the SMaRT partner cities held a series of meetings in 2017 to begin discussing post-2021 arrangements. A consultant team led by HDR Engineering, Inc. (funded through the SMaRT Station budget and managed by the City of Sunnyvale) has been engaged to perform a number of tasks, including multi-jurisdictional SMaRT Station strategic planning, facility inspection, needs assessment, identification of post-2021 improvements, and conceptual design for priority improvements. The consultant work will determine which of the participating agencies wish to continue in an MOU arrangement, identify potential new partners, and define a collective vision among the partners as to the facilities and services the SMaRT Station should provide in the future. The resulting vision would then be translated into a new MOU and a final design for a new or updated facility, which is beyond the scope of HDR's current contract. Some Council action may be required in late 2018 or early 2019 to determine the City's interest to continue

using the SMaRT Station for processing in order for the discussions to proceed to the next stage of planning.

- 2. Evaluation of City Needs**—The second process involves evaluation by the City of Mountain View of its own future collection, processing, and disposal needs. Staff anticipates this process will begin in early fall 2018 with the retention of a consultant. Funding for the consultant is available in CIP 18-57 and proposed CIP 19-45. Initial tasks will include updating the City’s zero waste analysis, identifying diversion needs, developing processing and disposal options, and choosing criteria for evaluating those options. Options might include continuing with the SMaRT Station partnership and the Recology collection agreement, obtaining new agreements for all services, or some combination of continued and new service agreements. Once it has been determined what the City’s service needs are, the process of developing necessary bid solicitations, agreement extensions, or modifications will be undertaken.

Zero Waste Planning

Continued planning for zero waste will be important as the City heads into the extensive process of renewing the solid waste agreements. Because much of the zero waste planning work done in 2011 and 2012 is out of date and several new State laws have been adopted since that time, staff proposes to not publish a Zero Waste Plan in the format originally envisioned. Instead, staff proposes a two-step process that will provide clear direction for the post-2021 service agreements while allowing a more flexible approach to ongoing planning efforts: (1) formalize the City’s zero waste goals in a Zero Waste Policy; and (2) develop a focused set of actions (Action Plan) based on current analysis and data obtained as part of the City evaluation process described above.

A Zero Waste Policy would memorialize many of the practices the City has been embracing since the first Environmental Sustainability Action Plan was adopted in 2009. It would serve as a long-term guide for the City’s commitment to reducing waste and provide a structure for the development of the new solid waste agreements. A draft Zero Waste Policy is provided in Attachment 4.

The draft policy proposes an overall quantitative goal to reduce generated and disposed waste such that 90 percent of materials are diverted from landfill by 2030. Table 2 below illustrates the challenge of this goal.

Table 2— Per Capita Disposal and Division Rates

Year	Population	Tons Disposed	Change from Prior Year	Per Capita Rate	Equivalent Diversion Rate
2014	76,781	52,910		3.8	76%
2015	77,914	51,435	-2.8%	3.6	77%
2016	78,396	49,605	-3.6%	3.5	78%
Tons Disposed and Per Capita Rate required for 80% and 90% diversion rates in 2016					
	78,396	44,350	-13.8%	3.1	80%
	78,396	22,900	-55.5%	1.6	90%

The Per Capita Rate is the measurement officially used by the State to gauge the City’s progress against waste reduction requirements. A per capita rate of 7.8 pounds per person per day to the landfill is equivalent to 50 percent diversion. While small gains in disposal reduction have been made steadily over the last few years, the amount of reduction needed to reduce per capita disposal and reach both 80 percent and 90 percent diversion are substantial. In 2016, Mountain View’s per capita rate was 3.5, which represented a 78 percent division rate. To have achieved 80 percent diversion in 2016, disposal would have to have been 5,200 tons less than it was. For 90 percent diversion, disposal would have to have been half of what it actually was.

The draft policy also calls for a continual improvement approach to reducing waste that is based on relevant data and current scientific research. Recent research using life cycle analysis suggests that the total environmental impact of materials must be considered, rather than simply focusing attention on recyclability. Other ways to measure progress besides simple weight-based diversion may be developed based on this research and should be incorporated into future waste reduction planning efforts.

Other important policy points include maintaining a focus on education and services that encourage residents to reduce overall waste generation, including that which can be recycled or composted; supporting efforts to rescue edible food to feed hungry people; and working to reduce the proliferation of single-use disposable products and packaging.

The next step in the zero waste planning process would be to develop an Action Plan that will guide the development of new collection, processing, and disposal agreements. This effort would be the initial focus of the consultant’s work. The Action Plan would include suggested measures the City could implement to increase diversion, including

evaluation of any proposals put forth by the Environmental Sustainability Task Force 2. The Action Plan, in conjunction with review of collection, processing, and disposal needs, will help the City identify the most cost-effective and desirable diversion programs. Areas to be addressed would include:

- Complying with any mandatory regulation imposed by the State under AB 1383.
- Increasing participation in established curbside collection programs.
- Implementing new programs to target remaining problem materials, such as textiles.
- Evaluating how new processing technologies can be utilized.

However, getting from 78 percent to 90 percent diversion will require actions in addition to programs that the City has direct control over implementing. Changes are required in private-sector practices related to product design, purchasing, use, and “end-of-life” management, whether voluntary or in response to State or national regulatory mandates. These changes are already beginning to happen (for example, recent California legislation requiring manufacturer responsibility for paint, mattress, and carpet recycling and disposal) but, for the most part, the City cannot exert direct control over decisions regarding these practices. Neither Mountain View nor any other community can achieve zero waste (90 percent diversion) on its own.

RECOMMENDATION

Staff seeks input from Council on the following:

1. Is the Council comfortable with the approach of adopting a Zero Waste Policy and a focused Action Plan to inform the decision-making related to the future solid waste agreements?
2. Any there any revisions desired to the draft Zero Waste Policy?
3. Does Council have any initial thoughts about the future of the SMaRT partnership, existing or possible new diversion programs, or the solid waste agreements?

NEXT STEPS

A general order of work completion and estimated timeline is presented below. This could change once the consultant is retained and the tasks are refined. For example,

review of possible zero waste actions and decisions related to the collection, processing, and disposal options could be more intertwined than implied by this draft schedule.

Task	Council Action	Timeline
Finalize Zero Waste Policy	Adopt Policy	May/June 2018
Retain Consultant	Approve consultant contract	September 2018
Possible Action Related to Ongoing Participation in SMaRT Station	TBD	TBD – possibly Winter 2018/19
Develop Zero Waste Action Plan	Approve Action Plan	Spring 2019
Review Collection, Processing and Disposal Options	Provide staff direction	Summer 2019
Prepare Agreement Extensions or Modifications or Issue New Service Solicitations	Provide staff direction on service inclusions	Fall 2019
Select Service Providers and Finalize Agreements	Approve final agreements	Fall/Winter 2020*
New Agreements Begin		January 2022

* New agreements should be in place 12 months prior to their start date to allow for capital purchases and transition.

PUBLIC NOTICING – Agenda posting.

LT-DSC-MAF/2/CAM
 944-04-24-18SS-E

- Attachments:
1. SMaRT Station Material Flow Diagram
 2. Mountain View Waste Diversion Programs
 3. California Waste Diversion Legislation
 4. Draft Zero Waste Policy