

# DRAFT

To: The Palo Alto City Council

From: The Palo Alto Zero Waste Task Force

Re: ***Executive Summary- Palo Alto Zero Waste Strategic Plan***

This summary provides an overview of the current disposition of Palo Alto generated solid wastes, associated challenges that face our community, and key recommendations in the form of a waste reduction strategy, intended to help guide City officials in long range policy formation.

## **Introduction**

Late last year, the City Council made the adoption of “Zero Waste” a guiding principle to create a framework for defining how Palo Alto solid wastes will be managed in the future. Zero Waste is theoretically simple: “a systems approach to avoid the creation of waste in the first place.” In practice, it is far more difficult to achieve. The notion of Zero Waste challenges our basic assumptions, business practices, and day-to-day behavior in making decisions about what we buy and consume, and how we handle the materials and by products left over from those decisions.

A Zero Waste strategy is timely for Palo Alto. The California Integrated Waste Management Board has only recently set 2025 as a target date for achieving zero waste statewide. Other regional municipalities have either established such goals or are in the process of adopting them. Fitting to local needs, the reduction of waste aligns with the imminent loss of our own local landfill in 2011 and the invariable rise in cost in waste hauling rates to other sites if we choose to do nothing.

## **Current Situation**

In 2003, it is estimated that approximately 166,548 tons of materials flowed through Palo Alto. More than half of that was diverted from landfill through various recovery programs.

When waste is disposed of, it has three destinations: slightly more than half goes to the Kirby Canyon landfill, a third to the Palo Alto Landfill, and about ten percent to other disposal sites.

It is currently estimated that most of the waste generation is from businesses and multi-family (58%), followed by single family residential (18%), then city and school operations (17%), and the remaining hauled to the Palo Alto landfill by residents and business (6%).

Palo Alto’s city sponsored recycling programs handled approximately 54 percent of the diverted waste, while non-city commercial recyclers, typically retained by businesses, handle 46 percent of the diverted waste. Generally, what ends up in the landfill is there because there is not a service to recover that material.

## **Challenges facing Zero Waste Adoption**

As the task force considered Zero Waste adoption, several challenges quickly surfaced.

- ◇ **The “Land Use” Challenge.** Any facilities for Zero Waste should honor the City’s commitment not to use park land, especially Bay park land.

- ◇ **The “Low Importance” Challenge.** Recent surveys reflect that the importance of the city’s zero waste recovery programs is low among businesses and residents. This issue resonates only with a minority in the community.
- ◇ **The “Put or Pay” Challenge.** The city’s contract with Kirby Canyon obligates the city to provide a minimum tonnage or the city must pay premiums. A similar tonnage commitment exists between the City and the SMART station in Sunnyvale.
- ◇ **A Challenge Greater than Palo Alto.** Waste generation is designed into the economy, and the city is limited in its capacity to bring about change in consumer habits.
- ◇ **The “Risk Assessment” Challenge.** The way in which environmental risks are calculated today understates the potential for future unforeseen costs to remediate potential releases from degrading landfill sites that the City has a growing stake in.
- ◇ **The “Regional Capacity” Challenge.** Serious capacity limitations exist in necessary processing facilities, within reasonable proximity to Palo Alto, such as food waste composting. This will be exacerbated as demand from other communities that also adopt waste reduction targets are brought to bear.

### **Premises of a Zero Waste Approach**

Several working assumptions, or premises, have emerged as the committee’s basis to guide in the development of a zero waste strategy. These do not form the policy, but represent a basic underlying bias of task force members, drawn from our discussions.

- ◇ **Non-City Recycling is Very Effective.** Given that almost half of the recycling is now performed by non-city managed service providers, it is widely felt that these programs should be encouraged to flourish. Their success relieves the city of the burden of funding them.
- ◇ **Focus on Upstream Purchasing as well as Downstream Recycling.** Zero waste as a comprehensive approach, is distinguished from traditional recycling in that it systematically addresses not just the diversion of materials downstream but also what causes waste in the first place. The City might encourage smarter consumption without overstepping its role in governance so long as it stays clear of discriminatory policies that could be interpreted as limiting consumer choice or exercising unfair restraint of trade.  
  
The city’s educational programs should address this aspect in addition to maximizing recycling choices.
- ◇ **Begin with Recognition and Incentives, then Finally Ban.** After services are created, to compel participation the committee believes that recognition and rate based incentives should be applied before bans are contemplated. Recognition of notable performance should include publicizing those businesses that achieve zero waste goals. Incentives include judicious use of the refuse rate collection structure, or rebates similar to those applied by the utility. Bans may be needed for materials like poly styrene packaging for “to-go” food where recyclable substitutes exist at an equivalent price.
- ◇ **Develop Services for Each Waste Fraction, and then Improve the Services.** Services to provide for the recovery of materials should be identified and developed to reach all sectors, including single-family, multi-family residential, commercial,

and industrial. Ultimately the quality and efficiency of the recovery effort should improve over time.

- ◇ **Apply a Regional Approach.** Palo Alto's tradition has been to have all recovery services within its boundaries. Given the land use constraints, this is not possible. Palo Alto should strive to create new services and develop stronger regional alliances.
- ◇ **Zero Waste is the Solid Waste Management Plan.** The committee's efforts began with the theory that Zero Waste was an adjunct to the City's program. Along the way, it became clear that Zero Waste permeates all elements of waste management from facilities to disposal. The interrelationship is demonstrated by the "put or pay" challenge and incorporation of the programs will assure that contracts involving minimum tonnages are properly drafted to allow for successful waste reduction.

### **The Zero Waste Strategic Plan**

The Zero Waste Strategic Plan should guide the city's solid waste management programs and the way future waste management decisions are made. Hopefully, in the future, such financial barriers as the creation of new "put or pay" contractual constraints will be avoided.

- ◇ **Objective 1. Encourage All Sectors to Implement Zero Waste.** Zero waste programs should be configured to service all generator categories including residential, commercial, industrial, and government. For example a "commercial" program must differentiate between restaurant zero waste and grocery stores, as residential must differentiate between multi-family and single family. Encouragement should initially be by education, then economic incentives with the use of a rate based system, and then finally ban and mandates.
- ◇ **Objective 2. Develop Infrastructure Beyond Recycling.** Palo Alto now relies upon regional infrastructure such as the SMART station and Kirby Canyon. Beyond 2011, the need for local infrastructure is lessened so long as the City promotes both expanded independent service provider programs coupled with city contracted collections to aggressively pursue a much higher diversion of recyclable materials. Future well placed infrastructure could compliment regional programs by providing services that do not exist today. Given the existing success of non-city recycling, a Resource Recovery Park could offer a major source of opportunity for new businesses to emerge that provide specialized reuse or recycling services. A current example is the business emerging to provide recycling of antiquated computers.
- ◇ **Objective 3. The City Should Lead by Example and Advocate Zero Waste.** City operations are a major waste generator. The City could demonstrate its commitment to the policy through changes in its own operations, such as moving more aggressively towards reducing paper in its operations. The City generates large quantities of waste through capital improvement and maintenance projects. More extensive reuse and recycling of all waste could show business and residents the way.
- ◇ **Objective 4. Update Waste Data and Develop Zero Waste Operations Plan.** The strategic plan was developed with best estimates of waste generation data; however the data was five to ten years old. Any zero waste programs should have effective metrics, and regular collection of waste data to guide program development. The Strategic Plan is meant to form a basis for a Zero Waste Operations Plan (ZWOP).

The ZWOP would provide descriptions of the program elements that spring from this strategy. It is expected that the ZWOP would provide a description, budget and facility requirements, consideration of whether the program is city or non-city operated, and the education and incentives to secure adoption. While the ZWOP may need to consider new facility locations, given the closure of the Palo Alto Landfill, an ongoing assessment of the effectiveness of non-city programs and the utilization of regional programs may ease some of the difficult land use choices.

## **Conclusion**

City consideration of a zero waste policy is timely but also critical to addressing its changing priorities to convert its lands to park use. Palo Alto must either embark on a “capacity replacement strategy” to service its ongoing locally generated waste stream or alternatively, reduce its dependency on land filling by addressing reductions at the source of generation, with residents and businesses. The economic consequences of taking policy action now are both real and compelling. Hauling costs will rise. Long-term landfill capacity within reasonable hauling distance is not guaranteed, putting the community at risk to significantly higher rates in the future. Continued long term dependence on land filling our present waste stream only adds to the uncertainty of the environmental liabilities we carry that are associated with those landfills far into the future. Well conceived long range waste reduction policies are a logical and economically viable and important alternative today to help free Palo Alto of its current dependence on land filling its wastes. But this requires time to change. In order to be effective, it is vital to undertake this with careful planning. Moreover, these policies must be phased in slowly to allow both businesses and residents time to adjust if they are to avoid economic disruption from abrupt change. Palo Alto is only now beginning to emerge from a serious economic down cycle. In order to be successful, the City must develop strong community support for this endeavor, with clear ongoing communications and well reasoned and executed programs. If done correctly, Palo Alto will reassert its position as an environmental leader in both the region and the state. No action, on the other hand, will allow a window of opportunity to close as we approach 2011, making solutions far more difficult and costly to implement while exposing Palo Altans to the vagaries of a far more uncertain and shrinking landfill market.