

**Final  
Environmental Impact Report**

**Mandatory Recycling and  
Single Use Bag Reduction  
Ordinances**

**State Clearinghouse # 2011042012**



November 2011

## PREFACE

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This document, together with the Draft Environmental Impact Report (Draft EIR), constitutes the Final Environmental Impact Report (Final PEIR) for the Mandatory Recycling and Single Use Bag Reduction Ordinances. The Draft EIR was circulated to affected public agencies and interested parties for a 45-day review period from August 3, 2011 to September 16, 2011. This document consists of comments received by StopWaste.Org (the Lead Agency) on the Draft EIR during the public review period, responses to those comments, and revisions to the text of the Draft EIR.

In conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, the Final EIR provides objective information regarding the environmental consequences of the proposed project. The Final EIR also examines mitigation measures and alternatives to the project intended to reduce or eliminate significant environmental impacts. The Final EIR can be used by StopWaste.Org and any Responsible Agencies in making decisions regarding the project. The CEQA Guidelines advise that, while the information in the Final EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the Draft EIR by making written findings for each of those significant effects. According to the California Public Resources Code Section 21081, no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public agency makes one or more of the following findings with respect to each significant effect:
  - 1) Changes or alterations have been required in, or incorporated into, the project which will mitigate or avoid the significant effect on the environment.
  - 2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
  - 3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities of highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
- (b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

In accordance with CEQA and the CEQA Guidelines, the Final EIR will be made available prior to certification of the EIR. All documents referenced in this Final EIR are available for public review in the office of StopWaste.Org located at 1537 Webster Street, Oakland, California 94612, Monday through Friday from 8:00 a.m. to 5:00 p.m. In accordance with the CEQA Guidelines, the Final EIR will be made available to all public agencies that commented on the Draft EIR for ten days prior to the EIR certification hearing.

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## **SECTION 1. LIST OF AGENCIES RECEIVING A COPY OF THE DRAFT ENVIRONMENTAL IMPACT REPORT**

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### **State Agencies**

State Clearinghouse  
Department of Fish and Game, Region 3  
Department of Parks and Recreation  
Department of Water Resources  
CalRecycle  
California Highway Patrol  
Caltrans, District 4  
Regional Water Quality Control Board, Region 2  
Native American Heritage Commission  
Resources Agency

### **Cities/Local Agencies**

David Rizk, Director, Development Services Department, City of Hayward  
Jeff Bond, Planning and Building Manager, City of Albany  
Albert Lopez, Planning Director, Alameda County  
Fred Osborn, Planning Manager, City of Livermore  
Clay Colvin, Planning Manager, City of Newark  
Jeff Schwob, Interim Community Development Director, City of Fremont  
Dan Marks, Planning and Development Director, City of Berkeley  
Joan Malloy, Director, Economic and Community Development Department, Union City  
Luke Sims, Director, Community Development Department, City of San Leandro  
Brian Dolan, Community Development Director, City of Pleasanton  
Jeff Baker, Planning Manager, City of Dublin  
Jennifer Ott, Deputy City Manager, City of Alameda  
Eric Angstadt, Deputy Director of Planning and Zoning, City of Oakland  
Charles Bryant, Planning and Building Director, City of Emeryville  
Chester Nakahara, Director of Public Works, City of Piedmont

In addition to the above, Notices of Availability of the EIR were sent to stakeholders, representatives of member agencies, and persons who attended the scoping meetings. The Draft EIR was available on the StopWaste.Org website throughout the public review period.

## **SECTION 2. LIST OF COMMENT LETTERS RECEIVED ON THE DRAFT ENVIRONMENTAL IMPACT REPORT**

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### **LOCAL GOVERNMENT AGENCIES**

<b><u>Comment Letter From</u></b>	<b><u>Date</u></b>
A. City of Piedmont	September 7, 2011
B. City of Dublin	September 15, 2011
C. City of Fremont	September 15, 2011
D. City of Livermore	September 15, 2011
E. City of Hayward	September 16, 2011
F. City of Pleasanton	September 16, 2011

### **ORGANIZATIONS AND INDIVIDUALS**

G. Save the Bay	September 15, 2011
H. Save the Plastic Bag Coalition	September 15, 2011
I. California Refuse & Recycling Coalition	September 16, 2011
J. Naomi Scher	September 8, 2011

## **SECTION 3. RESPONSES TO COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL IMPACT REPORT**

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In accordance with CEQA Guidelines Section 15088, this document includes written responses to comments received on the Draft PEIR. This section includes all of the comments contained in the letters/emails received during the public review period for the Draft PEIR, and responses to those comments. The comments are organized under headings containing the source of the letter and its date. Based on the letters received, they are grouped into the following categories.

- Local Government Agencies
- Organizations and Individuals

The specific comments have been copied from the letters and each is shown in the following section as “Comment” with its response directly following. Copies of the complete letters and emails received, and any attachments to those letters or emails, are found in their entirety in Section 5.0 Comments Received on the Draft PEIR.

The CEQA Guidelines, in Section 15086, require that a local lead agency consult with and request comments on the Draft EIR prepared for a project of this type from responsible agencies (government agencies that must approve or permit some aspect of the project), trustee agencies for resources affected by the project, and any other state, federal and local agencies which have jurisdiction by law with respect to the project or which exercise authority over resources which may be affected by the project. Section 2.0 of this document lists all of the recipients of the EIR.

Comment letters were received from six public agencies that may be Responsible Agencies for parts or subsequent phases of the proposed project. The CEQA Guidelines require that:

A responsible agency or other public agency shall only make substantive comments regarding those activities involved in the project that are within an area of expertise of the agency or which are required to be carried out or approved by the responsible agency. Those comments shall be supported by specific documentation [§15086(c)].

Regarding mitigation measures identified by commenting public agencies, the CEQA Guidelines state:

Prior to the close of the public review period, a responsible agency or trustee agency which has identified what the agency considers to be significant environmental effects shall advise the lead agency of those effects. As to those effects relevant to its decision, if any, on the project, the responsible or trustee agency shall either submit to the lead agency complete and detailed performance objectives for mitigation measures addressing those effects or refer the lead agency to appropriate readily available guidelines or reference documents concerning mitigation measures. If the responsible agency or trustee agency is not aware of mitigation measures that address identified effects, the responsible or trustee agency shall so state [§15086(d)].

For clarity’s sake, the response document distinguishes between comments on the Mandatory Recycling Ordinance and comments on the Single Use Bag Reduction Ordinance by inserting headings within the responses below.

**A. RESPONSES TO COMMENTS FROM CITY OF PIEDMONT, DATED SEPTEMBER 7, 2011:**

**COMMENT A-1:** At its regularly scheduled hearing on September 6, 2011, the Piedmont City Council directed City Staff to provide the following comments on the draft Environmental Impact Report (DEIR) prepared for the proposed Mandatory Recycling Ordinance and Single Use Bag Reduction Ordinance:

Process

We understand: 1) that the DEIR was developed to look at the maximum impact of these two ordinances; 2) that Alameda County residents, businesses and jurisdictions have the opportunity to comment on and influence the decision making process to certify the EIR and then adopt the proposed ordinances or variations thereof; and 3) any ordinance(s) adopted may very well have less restrictive requirements. Therefore, we encourage you to be thorough in your notification of future hearings on the DEIR and consideration of the ordinances and the release of any associated documents so that local governments and the public are fully vested in the decision-making process.

Jurisdictional Scope of the Ordinances

As is practicable for each ordinance, the adoption and implementation of the proposed ordinance should be considered at the local jurisdiction level in order to ensure that local control is maintained and solutions relevant to the local jurisdiction are implemented.

**RESPONSE: A-1:** The recommendations on future processes are acknowledged. They do not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is required.

**Single Use Bag Reduction Ordinance**

**COMMENT A-2:** Project Description Content

Re: DEIR Section 2.1.1.1, paragraph 3: The City of Piedmont includes plastic bags as an accepted material in its recycling program. Plastic bags that are bundled or bagged and tied can be placed in the blue "Recyclables" carts for collection and processing for marketing as a recyclable material. As with all other designated materials, whether or not there is a viable market for this recyclable material is beyond the City's control.

**RESPONSE A-2:** The referenced paragraph states that "No municipal recycling program was identified that diverts substantial percentages of plastic bags from landfill and litter, particularly not any serving a major city." While the City of Piedmont's recycling program accepts plastic bags, we are not aware of evidence that the City of Piedmont's recycling program diverts and sends to a remanufacturing plant a substantial percentage of the plastic bags used within the City. Thus, the City of Piedmont's comment is not inconsistent with the Draft EIR statement. As discussed in the referenced paragraph, the City of San José accepted plastic bags for recycling for 15 years and never succeeded in diverting a substantial percentage of the bags used in the City to another useful purpose (see also Photo 13).

**Mandatory Recycling Ordinance**

**COMMENT A-3:** Re: DEIR Section 2.3.1, paragraph 5: Both, the collection of recyclables (bottles, cans, paper, etc.) and the collection of source-separated organics (yard trimmings, food

scraps and food-soiled paper) from multi-family residences is readily available and provided in the City of Piedmont.

**RESPONSE A-3:** This comment is acknowledged. It does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is required.

**COMMENT A-4:** The agency's efforts to develop this document to assist local jurisdictions' compliance with state regulations and to meet the waste reduction goals of the county and its jurisdictions are greatly appreciated and the City looks forward to participating in future ACWMA hearings on the EIR and proposed ordinances.

**RESPONSE A-4:** The comment is acknowledged. No other response is required.

**B. RESPONSES TO COMMENTS FROM THE CITY OF DUBLIN, DATED SEPTEMBER 15, 2011:**

**COMMENT B-1:** Thank you for the opportunity to provide comments on the Draft Environmental Impact Report (EIR) for the Mandatory Recycling and Single Use Bag Reduction Ordinances. The City understands that the Draft EIR is designed to analyze the maximum impacts of a Countywide program, and that the final ordinances considered will not be as comprehensive as this analysis. While the City's response contained herein is focused on the Draft EIR, it will only touch lightly the implementation concerns, which are of primary interest to the City. With that being said, the City's comments on the Draft EIR are outlined below.

**Mandatory Recycling:**

The Draft EIR does not appear to fully detail the impacts of increased services that will result from the additional collection of materials. For example, within the City of Dublin, there is a three bin system consisting of garbage collection, recycling collection, and organics collection. Each of these services has their own routes, trucks, and drivers. If recycling and organics participation were to be mandated, there would be a significant increase in the vehicle miles traveled from the added truck routes to compensate for the additional collection of recycling and organics. Simply, the City does not currently have every business participating in all three services. This impact should be fully analyzed within the report.

**RESPONSE B-1:** Regarding the comments on Mandatory Recycling, as explained in the Draft EIR, the total amount of material collected in each jurisdiction will remain constant. In addition, as stated in this letter, most of the services required by this proposed ordinance are already provided in most of the jurisdictions, they are just not fully utilized by all of the businesses and may not be utilized as completely by residents as would occur if recycling is required by an ordinance. It is assumed that adoption of the proposed ordinance would produce different results in each jurisdiction, depending on (1) the type and range of businesses within the jurisdiction and what kind of waste they generate; (2) the number, size, and design of multi-family developments in each jurisdiction and how they are provided with waste and recycling services now; and (3) the existing levels of participation in organics and non-organics recycling programs occurring within each sector. Depending on those existing levels of participation, adoption of the mandatory recycling ordinance could result in a substantial percentage of material currently hauled in garbage trucks to transfer stations and landfills being instead hauled in recycling trucks to transfer stations and processing facilities (many of which are at the same location as the transfer stations).

Within each jurisdiction, it is anticipated that there would be a measurable *decrease* in garbage collected, just as there would be substantial *increases* in the separate recycling and compostables streams. If the decrease does not occur, then by definition, neither will the increases. With full implementation of this ordinance, most of the material left in the waste stream (especially for commercial generators) will be non-putrescibles, which can be collected less frequently.

Even if some garbage trucks continue to pick up that remaining waste as frequently as under existing conditions, each truck will pick up less waste at each stop and will therefore be able to serve more businesses on each route than it does currently, making it possible to serve the same number of businesses with fewer trucks, eliminating the need for some routes.

There will likely be a period of adjustment during which existing inefficiencies can be eliminated from the collection systems. Since inefficiency is costly, it is anticipated that service providers will expedite the rerouting and handling changes necessary to minimize unnecessary travel and handling. Some franchising agencies (cities, the county, special districts) may decide to expedite the transition by adjusting rates (upward or downward on refuse or recycling) to reflect new or expanded use of services.

It is not possible to predict the extent, timing, or type of redundancies and unnecessary movements that might exist temporarily. This EIR evaluates full compliance and implementation of the proposed ordinances; it would not be meaningful, or possible, to speculate about what might happen in each jurisdiction during the ramp-up periods prior to full implementation.

Even if complete and accurate baseline data could be compiled about all of the routes driven by all of the trucks (including non-franchised collectors) collecting all of the waste materials in all of the jurisdictions, the data about future VMT would simply be projections about what might hypothetically be different from the current VMT; the information cannot be precise, since the calculations must be based on speculative projections.

Given the parameters described on pages 82-83 of the Draft EIR particularly the fact that there is no increase in material tonnages (i.e., the total quantity of waste collected remains the same), plus the need for service providers to create as efficient a routing system as possible in order to minimize costs for extra trucks and drivers, this evaluation indicates that full implementation would not result in significant increases in VMT in collection or in the air emissions associated with collection within individual jurisdictions.

This assumption is supported by information in the *Staff Report: Initial Statement of Reasons (ISOR) for the Proposed Rulemaking* circulated by CalRecycle and the Air Resources Board, released on August 31, 2011. The discussion of what the agencies are assuming as the initial stages of implementation focuses on just recycling with minimal inclusion of organics. Regarding VMT from collection, the ISOR says:

There could be an increase, decrease, or possibly no change in the VMT. In the event that there is an increase in VMT associated with additional recycling, an increase in emissions of criteria pollutants (mainly NOx) and diesel PM which is a TAC may result. The potential increases in VMT...was calculated to be 40,000 miles per day at full implementation.

This language is very similar to that in the Draft EIR (see especially discussion on pages 82 and 83). The increase in emissions that might result from that hypothetical increase in VMT associated with collection of recyclables is also identified as less than significant *for the entire state* (see page IV-8 of the ISOR).<sup>1</sup>

The changes in VMT within Alameda County from implementing the Mandatory Recycling Ordinance were calculated to be a decrease, a *negative* 215,806 VMT per year. This improvement in VMT is primarily resulting from not having to take so much garbage to

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<sup>1</sup> This number does not reflect estimated VMT increases associated with collecting recyclables from single family houses. Since the collection of recycling from single family residential is the most mature service and the least likely to experience substantial changes in Alameda County, it is also the least likely to generate increased VMT.

distant landfills. The number does reflect the transport of organics within Alameda County (albeit, not the additional miles in the San Joaquin Valley, which is a different air basin).

Although the Draft EIR acknowledges that there is no way to predict exactly what, if any incremental changes in VMT might occur as a result of the mandatory collection and transport of organics and recyclables to processing facilities, available information indicates that the impact would be less than significant. Specifically:

- The mandatory recycling ordinance would *not* result in any increase in total materials collected.
- The Draft EIR identifies a significant decrease in VMT countywide resulting from fewer trips to the landfills; this could result in an improvement in emissions because of a *decrease* in VMT compared to existing conditions.

Based on BAAQMD thresholds, a significant adverse air quality impact would occur if VMT within the Bay Area were to *increase* by approximately 800,000 VMT per year. Combining these two numbers – the anticipated reduction/improvement in VMT and the number necessary to result in an adverse impact – local collection VMT would have to increase by approximately one million miles per year beyond the difference identified in the EIR to result in a significant air quality impact.

A reorganization of material collection systems within Alameda County cities that includes *no* increase in material quantities and utilizes existing facilities (such as that which is currently proposed) *may* result in incremental increases in VMT within some jurisdictions, but there is no basis for assuming that VMT could increase by an amount approaching the threshold for a significant impact (i.e., 1 million VMT more than the reduction calculated).

- The well-established programs for collecting recycling and organics from single family houses, and the existing services for multi-family and commercial uses means that the existing services can be expanded, minimizing the likelihood of there being significant increases in VMT associated with those services.
- The analysis done by the Air Resources Board and CalRecycle did not identify significant increases in emissions associated with increased collection of recycling statewide.

Although there may be incremental increases in vehicle miles traveled (VMT) by collection vehicles, the only substantial increases identified would be in transporting organics to a distant processing facility and the VMT necessary to transport organics to existing facilities is reflected in the impacts identified in the DEIR. As discussed on pages 82-83 of the DEIR, there will not be substantial increases in the numbers of collection vehicles on any single road. It is not envisioned that the program will require three vehicles (two new) stopping every day at every business, for example. Since almost all commercial waste in Alameda County goes through a transfer station/MRF, some of the loads that are almost entirely recyclables or organics will be hauled to the same location by the same truck, but the contents will be processed differently. Loads that currently contain minor quantities of organics can be picked up less frequently once the organics are separated (and collected at least once a week).

The same quantity of materials will continue to be hauled to the same or similar locations by the collection vehicles. Once the various collection systems have been resolved and stabilized, it is not anticipated that there will be substantial increases in VMT traveled on local streets, public or private. (See also Responses E-2 and E-3.)

**COMMENT B-2:** While it may be beyond the scope of the EIR, the real concern for cities is what economic impacts will result from mandated recycling within the County. The cost to the ratepayer could be severe as well as the cost and time impacts to the local jurisdictions. Up to this point, it does not appear that such analysis has been completely explored. In particular, there are an abundance of impacts that should be looked at including enforcement, outreach, increased collection, franchise amendments, enclosure concerns, processing capacity, etc. Exploration and presentation of these topics will be crucial to help the Waste Management Authority Board make informed decisions on the future proposed ordinances.

**RESPONSE B-2:** The comment is correct that economic impacts are beyond the scope of the EIR. The EIR does, however, speak to the issue of processing capacity. While there may need to be modifications made to some of the existing processing facilities, there appears to be sufficient capacity available within existing facilities for the maximum impact volume of materials likely to be diverted within Alameda County from landfills (see page 62 of the Draft EIR).

### **Single Use Bag Reduction Ordinance**

**COMMENT B-3:** Single-use Bag Reduction:  
The City of Dublin's major concern in this area is that we share a border with Contra Costa County and the City of San Ramon. This ordinance could have an impact on stores within the community resulting from the new fee for the bags and a perceived inconvenience in needing to bring bags to the store for the shopper. As there are shopping alternatives in surrounding jurisdictions that will not be affected by such an ordinance, which are within a reasonable driving distance, the City and its business sector could be negatively impacted by this ordinance.

**RESPONSE B-3:** This comment postulates a situation in which residents of Dublin drive to Contra Costa County to avoid paying ten cents apiece for paper bags. While such behavior may occur, it is not sufficiently predictable to be considered a likely source of a significant environmental impact. Rather, the high price of gas and the convenience of shopping near one's home will encourage shoppers to shop in Dublin and bring their own bags rather than driving to Contra Costa County to avoid paying an additional ten cents for a bag.

StopWaste.Org staff has also been contacted by staff from RecycleMore (West Contra Costa Integrated Waste Management Authority) who stated that a countywide ordinance is under consideration in Contra Costa County. This is consistent with similar actions being evaluated all over the state.

**C. RESPONSES TO COMMENTS FROM THE CITY OF FREMONT, DATED  
SEPTEMBER 15, 2011:**

**Single Use Bag Reduction Ordinance**

**COMMENT C-1:** The City generally supports the development of a countywide ordinance to restrict the distribution of single use bags, specifically single use plastic bags. Fremont staff looks forward to supporting the development of a specific ordinance, and providing input as policies around this issue evolve.

**RESPONSE C-1:** This comment is acknowledged. No other response is required.

**Mandatory Recycling Ordinance**

**COMMENT C-2:** In regards to the proposed project for countywide mandatory recycling, the following comments are submitted:

- Staff is concerned the DEIR does not fully identify the impacts of the mandatory recycling project on the service infrastructure, such as loss of collection efficiency and the likely need for added truck routes. An incomplete assessment of environmental impacts of service changes in the DEIR may place the burden of further environmental analysis on local jurisdictions when implementing mandated recycling programs.

**RESPONSE C-2:** It is accurate to state that individual jurisdictions should take the unique circumstances of their own community into account when considering a local ordinance. There is, however, no basis for assuming that there would be a substantial adverse environmental effect from the proposed ordinance other than what is discussed in the Ddraft EIR. As discussed in the responses to the City of Dublin (see Responses B-1 and B-2), the total quantity of material collected remains the same within each jurisdiction and most of the processing facilities can also be the same. As discussed in Section 3.2.2.1 (starting on page 79) of the Draft EIR, there may be incremental increases in total vehicle miles traveled by individual collection vehicles that travel on longer routes because they are picking up less garbage at each stop, but collection of garbage can also be done by fewer vehicles, whether they pick up less frequently or on longer routes.

For the same reasons discussed in Response B-1, the relatively minor changes in VMT that might occur in some communities would not approach the substantial increase (one million VMT/year more than the changes analyzed) that would or could result in a significant impact.

**D. RESPONSES TO COMMENTS FROM THE CITY OF LIVERMORE, DATED SEPTEMBER 15, 2011:**

**COMMENT D-1:** The purpose of this letter is to provide comments related to the Mandatory Recycling and Single-Use Bag Reduction Ordinances Draft Environmental Impact Report (DEIR) released by StopWaste.Org in August 2011. The DEIR examines two potential policies that would, once developed, be evaluated and considered independently of the other. The DEIR analyses the “maximum impact” scenarios that could occur with the adoption of these two ordinances, meaning that the set of assumptions about the scope and design of each of the two policies would likely result in the greatest environmental impact.

It should be noted that the Livermore City Council is scheduled to discuss these policies at the October 24, 2011 Council meeting, so the City Council has not yet adopted a formal position. However, given the timeline and absent any specific policies to evaluate, Livermore staff has taken this opportunity to prepare feedback assuming both potential policies intend to capture a “maximum impact” scenario as presented in the DEIR.

**Proposed Single-Use Bag Reduction Ordinance**

Staff has reviewed the information pertaining to a Single-Use Bag Reduction Ordinance; observations are listed below.

1. An ordinance that would apply county-wide would reduce the need for retailers to comply with slightly different rules in each City, and allay concerns about the economic impacts resulting from consumers shopping at neighboring out-of-county jurisdictions to avoid paying for single-use bags.
2. This ordinance could help Livermore comply with Regional Water Quality Control Board requirements to abate litter.
3. A phased-in, all inclusive policy could ensure that no retailer is unnecessarily disadvantaged by the ordinance. Phased applicability beginning with larger vendors may be desirable; any ordinance should be as inclusive as possible to include all large grocery and large retail, or all retail.
4. Adequate lead time should be incorporated to allow vendors to exhaust current supplies of plastic bags and prepare to comply.
5. Responsibility for enforcement should be at the jurisdiction’s sole discretion; a funding source for costs related to enforcement should be identified prior to finalizing any ordinance.

**RESPONSE D-1:** These comments express the jurisdiction’s position on policy aspects of the proposed Single-Use Bag Reduction Ordinance. The recommendations on future processes are acknowledged. They do not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is required.

**Proposed Mandatory Recycling Ordinance**

**COMMENT D-2:** Proposed Mandatory Recycling Ordinance

The City of Livermore staff have a number of concerns related to a Mandatory Recycling Ordinance, particularly if a “maximum impact” scenario is approved. These concerns, along with suggestions for consideration, are listed below.

- 1 Recycling and organics collection is heavily subsidized by garbage rates in Livermore. Therefore, shifting materials away from the garbage stream may result in hauler revenue shortfalls and additional rate increases for generators. An in-depth economic analysis should be completed to better understand the impacts of the proposed ordinance to rate payers.

2 If an opt-out provision is included, ordinance requirements could potentially be tied to Measure D funding via a proposed definition of “adequate commercial recycling”, in effect forcing jurisdictions to adopt the ordinance or face becoming ineligible for Measure D funding. Measure D monies are an important source of funding for City recycling programs. Livermore would like to avoid losing grant funds if participation in a Mandatory Recycling Ordinance is not feasible for the City.

**RESPONSE D-2:** These comments address fiscal issues associated with the City’s recycling programs. While economic factors may be critical to a project, they are best addressed in a different venue if not related to an impact on the physical environment.

These comments do not raise issues related to the EIR or to the environmental impacts of the proposed project. No further response is required.

**COMMENT D-3:** 3. Adequate (even extra) processing capacity should be secured before materials (e.g. organics) are included in ordinance requirements. The current infrastructure may not be capable of handling plastic-contaminated commercial organics from Livermore if tonnages were to dramatically increase. Organics should not be included in the ordinance before capacity is secured by contract.

**RESPONSE D-3:** As discussed in the Draft EIR and summarized in Table 3.1-3 on page 64, there is more than adequate processing capacity available in the facilities currently utilized by franchising agencies in Alameda County. The specific timing will need to be resolved and considered by each jurisdiction affected, relative to franchise agreements, infrastructure, and other resources.

**COMMENT D-4:** 4. Any ordinance should focus on a defined goal (such as a diversion goal) and encourage flexibility to accommodate various collection and processing methodologies.  
5. Any ordinance should allow for a phased approach, perhaps beginning with proposed state requirements and adding more materials and generators over time. Adequate lead time – perhaps 12 months or more – to ramp up for compliance is necessary.  
6. Responsibility for enforcement should be at the jurisdiction’s sole discretion; a funding source for costs related to enforcement should be identified prior to finalizing any ordinance.

City of Livermore staff are hopeful that policy drafts will be available for review by the end of September 2011. For both policies under consideration, the City of Livermore suggests that StopWaste.Org staff allow adequate time (one month or more) for jurisdiction staff to review the language, collaborate with City officials, and offer thoughtful feedback.

**RESPONSE D-4:** These comments relate to specific aspects of policies and implementation of the proposed ordinance. None of the comments are inconsistent with the discussion of environmental effects in the Draft EIR. No other response is required.

**E. RESPONSES TO COMMENTS FROM THE CITY OF HAYWARD, DATED SEPTEMBER 16, 2011:**

**COMMENT E-1:** This letter responds to the Draft Environmental Impact Report (DEIR) prepared by StopWaste.Org regarding the proposed mandatory recycling and single-use bag reduction ordinances. The following comments address the proposed ordinances, as described in the DEIR, and other documents provided by agency staff.

It should be noted that, due to timing, our City Council has not met yet with regard to these programs, although the two ordinances will be discussed at the next City Council Sustainability Committee meeting on October 5.

**Single-Use Bag Reduction**

Hayward generally supports the development of a county-wide ordinance to reduce the number of single-use bags and has no specific comments on the DEIR regarding this ordinance.

**RESPONSE E-1:** These comments do not raise any questions or issues related to the EIR or the impacts of the proposed single-use bag reduction ordinance. No other response is required.

**Mandatory Recycling Ordinance**

**COMMENT E-2:** Space constraints, particularly for multi-family dwelling complexes, may preclude placement of outdoor containers and result in impacts on public and private roads due to the collection vehicles. These impacts are not adequately addressed in the DEIR.

**RESPONSE E-2:** Since the collection of garbage and recycling from multi-family complexes already occurs throughout Alameda County, it is assumed that the reference in this comment is primarily to organics collection, although non-organic recycling may also increase as a result of the ordinance.

Removing organics (and other recyclables) from the mixed waste stream will substantially reduce the quantity of garbage compared to the quantities currently collected from multi-family housing. Since the specifics for collecting organics (which would include landscaping or green waste, food waste, soiled paper, etc.) from multi-family housing in each jurisdiction has not yet been developed for most of the cities in Alameda County, it cannot be determined what types or sizes of containers are likely to be utilized. It is assumed based on the findings of the waste characterization work summarized in Table 2.2-1 (on page 31 of the Draft EIR) that separate collection of the two recycling categories will be capable of diverting most of the waste generated by multi-family housing complexes, and containers for organics and non-organic recyclables should be able to replace existing mixed garbage containers kept in garbage enclosures. Remaining mixed waste may be accommodated in carts or much smaller bins. Waste enclosures may need to be modified in many complexes, but minor modifications to existing waste enclosures are not anticipated to result in significant adverse environmental impacts. See also Response F-2 below.

Although there may be incremental increases in vehicle miles traveled (VMT) by collection vehicles, the only substantial increases identified would be in transporting organics to a distant processing facility and the VMT necessary to transport organics to existing facilities is reflected in the impacts identified in the Draft EIR. As discussed on pages 82-83 of the

Draft EIR, there will not be substantial increases in the numbers of collection vehicles on any single road. It is not envisioned that the program will require three vehicles (two new) stopping every day at every business, for example. Since almost all commercial waste in Alameda County goes through a transfer station/MRF, some of the loads that are almost entirely recyclables or organics will be hauled to the same location by the same truck, but the contents will be processed differently. Loads that currently contain minor quantities of organics can be picked up less frequently once the organics are separated (and the organics picked up at least once a week).

The same quantity of materials will continue to be hauled to the same or similar locations by the collection vehicles. Once the various collection systems have been resolved and stabilized, this analysis did not find that there will be substantial increases in VMT traveled on local streets, public or private.

**COMMENT E-3:** Mandatory recycling services will necessarily result in additional collection services, with attendant noise and air quality impacts. The DEIR does not fully identify or assess the impact of these conditions.

**RESPONSE E-3:** Since the collection of all recyclables and organics will occur at individual generator locations, it is not anticipated that these individual actions will result in a substantial increase in noise. Some additional annoyance may occur if different categories of materials are collected the same day, but all restrictions on collection hours currently imposed by relevant jurisdictions are assumed to apply to the different material streams collection.

Air quality impacts from measurable increases in VMT are addressed in the Draft EIR, on pages 88-90. Language is proposed in Section 4 of this Final EIR that clarifies that there is no significant increase in VMT anticipated from collection vehicles on local collection routes. (See also the response to Comment B-1.)

**COMMENT E-4:** The DEIR does not adequately address the economic impacts on both local jurisdictions and customers. Since Hayward has already implemented mandatory single-family residential recycling, the impacts of the proposed ordinance may fall heavily on other segments of our community, who may need to bear the costs of increased materials collection and transfer, outreach, enforcement, and physical modifications to buildings and trash enclosures. City staff will review the economic analysis being prepared by Stopwaste.Org and anticipates consideration of economic factors in the development of any mandatory recycling ordinance.

**RESPONSE E-4:** The Draft EIR does not address any economic impacts from either ordinance. While such factors are frequently important aspects of a project, they are generally and appropriately addressed in another context.

**COMMENT E-5:** Ordinance Development Process

We understand that the proposed ordinances will be available in October and ask that copies be provided as soon as possible to allow ample time to evaluate all aspects of both ordinances, as described in the Alameda County City Managers' Association's July 27 letter to you.

Hayward staff would expect to work collaboratively with Stopwaste.Org in crafting the provisions. To that end, we also request development of a workgroup framework, similar to that conducted by the Franchise Task Force, whose members would draft the mandatory commercial recycling and

single-use bag reduction ordinances, and a schedule for discussions of those ordinances with all members of the technical staff throughout the County. The workgroups will need to discuss several elements of the proposed mandatory recycling ordinance for multi-family dwellings and businesses, including materials required for collection, a performance standard, enforcement provisions, and a timeframe for implementation based on state legislation and other proposed state regulations.

Finally, we ask that the ordinance's provisions provide flexibility and customization as a workgroup is convened to revise the definition of adequate commercial recycling used to determine Measure D compliance.

**RESPONSE E-5:** These comments relate to specific aspects of policies and implementation of the proposed ordinance. None of the comments are inconsistent with the discussion of environmental effects in the Draft EIR. No other response is required.

**F. RESPONSES TO COMMENTS FROM THE CITY OF PLEASANTON, DATED SEPTEMBER 16, 2011:**

**COMMENT F-1:** Thank you for allowing the City of Pleasanton to comment on the proposed Draft Environmental Impact Report (DEIR) for the proposed Mandatory Recycling and Single Use Bag Reduction Ordinances. The City supports the concept of increasing diversion from landfills as well as the need to reduce the presence of single use plastic bags from our natural environment. The City also has some concerns about the DEIR which we wish to have addressed. The City's comments are as follows:

**Mandatory Recycling Ordinance**

Comments:

1. Table 3.1-2: please add a column listing the current capacity available at Composting Facilities 11 to 16. Please clarify the conflicting information in the DEIR relating to capacity and diversion of excess compostable material. Currently, the DEIR indicates that capacity will be exceeded; please discuss why adding capacity to address this issue is not being studied. Example: (pg. 60, 4th paragraph) discusses why adding capacity is not being studied; whereas, page 69, first bullet then discusses known limits will be exceeded for ColorScape II and the excess would be diverted to Recology Grover.

**RESPONSE F-1:** The text on pages 60 and 61 discusses where the information in Table 3.1-2 was obtained and what information was not available. Table 3.1-2 is entitled “Existing Facilities Handling Franchised Materials and Existing Capacities”. It does not include other facilities not receiving franchised material from jurisdictions in Alameda County.

This comment refers to text on page 60 and on page 69. The text on both pages is factually accurate, based on available public information, and the information is not conflicting. Copies of the solid waste facility permit for Colorscape II is available on the CalRecycle website, and a copy of the conditional use permit issued by Merced County was found through Merced County’s website. The permits’ limitations on the capacity of the El Nido Colorscape II facility is less than the combined quantity of organics that would be generated by the cities of Pleasanton and Dublin, and that difference is identified on page 69 of the DEIR.

The addition of capacity to Colorscape II to address the shortfall is not addressed in this EIR because there is no known proposal to expand the facility and StopWaste.Org has no jurisdiction to expand a facility in Merced County. As stated on page 68 of the Draft EIR, the “EIR does not evaluate the impacts that might result from expansion of any of the individual facilities”, particularly since sufficient capacity was identified overall for the material that is anticipated to be diverted as a result of the proposed mandatory recycling ordinance.

The EIR analysis assumed the excess material would go to Grover because (1) Grover has available capacity already permitted (see Tables 3.1-2 and 3.2-1); (2) Grover is already processing franchised material from Alameda County; and (3) Grover is sufficiently distant from Dublin and Pleasanton that “Impacts likely to result from transporting materials to [another] facility will likely be less than the assumed impacts...”, as stated at the bottom of Table 3.2-1 on page 82 of the Draft EIR. It is acknowledged that El Nido is farther away from the Pleasanton Transfer Station than Grover, but Grover was the most distant of the

permitted facilities currently utilized that has capacity. There is no limitation implied by the EIR analysis on where organics from Dublin and Pleasanton will be sent. As stated at the bottom of page 62 (and as modified by text added in *Section 4. Proposed Revisions to the Text of the Draft EIR*), there are other existing facilities in and near Alameda County that may be utilized to process some fraction of franchised waste in the future. The EIR does not speculate about which waste might be sent to locations other than those currently utilized, however.

**COMMENT F-2:** 2. Impact LU-1, pg. 70: mandatory recycling will likely require external modifications to existing buildings (beyond internal structures) and require additional covered trash enclosures (which drain to sewer system) to accommodate additional organics bins for multi-family residential and commercial.

Please discuss the impact of these external modifications.

**RESPONSE F-2:** Impacts of specific modifications to private property can only be evaluated when the modifications are known. CEQA does not require speculation when there is no factual information available. The extent of all of the information available on expansion of facilities where there are known capacity limitations is disclosed on page 69. The information provided by the operators of the material recovery facilities (MRFs) indicated that the additional capacity could be accommodated within the existing structures. The Newby Island Recyclery indicated that the material could be managed in cooperation with a neighboring facility that was approved by the City of San José, but is not yet built.

Based on the available information, there is no foundation for assuming that the additional capacity would result in significant land use impacts, as stated on page 70 (LU-1).

There is no specific information available that supports the statement in this comment that additional covered trash enclosures for multi-family residential and commercial generators would be necessary. As discussed in Response E-2 above, and on pages 82-83 of the Draft EIR, garbage hauled to landfill may “fit in a substantially smaller bin or cart that no longer needs to be collected multiple times a week”. Existing enclosures may require minor expansion or modifications (*e.g.*, to a gate or roll-out pad), or no modification at all. If existing or new trash enclosures are required to drain to storm drains, they will still be so required. If a property owner chooses to significantly expand an existing trash enclosure, or to add a separate trash enclosure for organics, that new or expanded structure would also be subject to local building, safety, and health codes. If some trash enclosures might need to be expanded, it is anticipated that they will be modified in conformance with existing codes and standards for the relevant jurisdiction, and consistency with those codes and standards will ensure that these modifications or new enclosures would create no significant adverse environmental impacts.

The current Municipal Permit issued by the Regional Board requires that waste enclosures in new development must be covered and must drain to a sanitary sewer. Local jurisdictions determine if modifications to waste enclosures must also meet those standards.

The proposed text amendments in Section 4 of this Final EIR include language clarifying and explaining the potential for impacts from changes to bin enclosures.

**COMMENT F-3:** 3.) 3.2.2.1 Transportation Impacts, pg. 82-83: this analysis lacks discussion of potential increases in multiple collection times per week for Multi-Family Dwellings (MFD) and commercial organics (due to odor and pest concerns). The analysis does not include Vehicle Miles Traveled (VMT) or discussion on odor concerns on a per jurisdiction basis. Please include an analysis of VMT and odor and pest concerns.

**RESPONSE F-3:** It is not clear from this comment why the commenter assumes there would be “increases in multiple collection times” for commercial organics. The proposed project would not increase the quantity of organics (or of any component of the waste stream), it would only require that the organics be separated from other wastes for recycling.

State health regulations already require that putrescibles must be collected at least weekly [Title 27; Article 5, Solid Waste Storage and Removal Standards, Sections 17301 – 17345]. Under no circumstances would the new regulations relax that standard. There is no basis for assuming that mixed waste from which all organics have been removed could or would result in pest or odor impacts. As discussed in detail in the Draft EIR on pages 82 and 83, the frequency of mixed waste collection is currently dictated by the presence of organics. If organics are separated from other recyclables and from waste materials, the frequency of collection (and sizes of containers) for these other materials can be adjusted to whatever is most efficient.

Responses to Comments B-1, E-2, and E-3 (above) also address the issue of VMT increases associated with collection of separated recyclables and organics.

**COMMENT F-4:** 4. 3.7.2 and 3.8.2: please include an analysis of the impact of multi-family households using the sink garbage disposal to avoid separating organic from garbage and analyze these impacts on water quality/wastewater treatment and the effects that this may have on sewage treatment of waste water.

**RESPONSE F-4:** Modern wastewater treatment facilities and sanitary sewers are designed with capacity for food scraps, since that is the current practice for managing food scraps. Standard design assumptions include the numbers of bedrooms, bathrooms, and kitchens planned for in a community at buildout of the general plan, as well as safety factors for hydraulic and organic loadings.

Some multi-family residents with garbage disposals use it at present to avoid putting organics in the garbage. A mandatory recycling ordinance is unlikely to increase or decrease multi-family tenants’ use of the garbage disposal for organics. To the degree that they use it now in order to avoid putting their organics in the garbage can, mandatory recycling would not provide any greater incentive for them to use the garbage disposal more frequently to avoid putting materials in a separate organics can.

**COMMENT F-5:** 5. Appendix B, pg. 11: location of additional bins in MFD and commercial sites

Please address the impact of bins needing to be covered and in enclosures with sewer drainage to meet storm water standards.

Please include a discussion on potential incentives for commercial sites/commercial businesses to enlarge enclosures.

Mandatory commercial recycling will require new types of bins that are watertight for organics to mitigate leaking of food waste bins. The DEIR lacks and should include a discussion on the

economic impact of acquiring new bins and the storm water effects with bins that may not be watertight.

**RESPONSE F-5:** The mandatory recycling ordinance will not have impacts associated with “bins needing to be covered and in enclosures with sewer drainage to meet storm water standards.” State and local laws already exist to prevent such impacts. Most of Alameda County is already covered by the requirements of the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit to minimize stormwater impacts:

([http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/stormwater/mrp.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/mrp.shtml))

State law presently requires that garbage bins be water tight and covered. If existing bins lack covers or are leaking, they are not in conformance with state regulations. Likewise, it is not legal to allow trash or leachate from waste containers to enter stormwater drains. New regulations implemented by the San Francisco Bay Regional Water Quality Control Board now require that most new development include waste enclosures that are covered and that the paved pads inside the enclosures drain to sanitary sewers. These requirements are separate from and independent of the proposed mandatory recycling ordinance. These requirements do not apply to pre-existing development, although some jurisdictions may be requiring compliance for building modifications or additions.

As discussed above, there is no basis for identifying a significant or substantial adverse environmental effect from a jurisdiction requiring that a trash enclosure be covered or drained to a sanitary sewer in order to avoid contamination of stormwater.

Language is proposed that addresses the potential for modifications to bin enclosures to create land use impacts as a result of the proposed mandatory recycling ordinance. Please see *Section 4. Proposed Revisions to the Text of the Draft EIR*.

There is no proposal at this time for incentives to be offered to businesses or commercial property owners to modify waste enclosures, although some cities have done so in the past – to encourage commercial recycling the City of San Jose had an up-to \$5,000 per business location grant program to rebuild enclosures to house recycling bins. . The presence or absence of such incentives does not affect the environmental effects of the proposed ordinance.

**COMMENT F-6:** 6. Appendix B, pg. 12: the DEIR should address the projected increase in frequency of pickup of organics/food waste and include an analysis of the following:

What is current frequency of garbage pick-up from commercial/restaurants?

Our analysis indicates that multiple pick-up times a week will be increased to address issues of odor/pests associated with commercial composting. Please provide additional analysis on this matter. Increased traffic/air impacts;

- We are concerned with the analysis on pages 14-16 that only new vehicle miles travelled are for post collection system transfer of organic materials to San Joaquin County;
  - If there is an increase in refuse, recyclables and organics pickups, the result will be an increase in VMT for collection per jurisdiction at jurisdiction level. The DEIR should address the VMT effects at the jurisdiction level.
- Appendix C: We request that the Air Quality Report be updated if the VMT effects indicate that more collection trips for commercial/restaurant organics bins will be necessary.

**RESPONSE F-6:** It is projected that for an increase in service frequency for one type of material there will likely be a reduction in service frequency for another type of material; so if organics are moved from a garbage bin to an organics bin, garbage could be collected less often and organics more often; and that this would not create a significant increase in VMT. (See also the response to Comments B-1, E-2, and E-3 above.)

**COMMENT F-7:** 7. Appendix B: frequency of generator "compliance plans." The DEIR is lacking, and should address the following:

- Specify who will be responsible for multi-tenant commercial buildings.
- Address how individual businesses that share a trash container would comply with the 4 cubic yard requirement.

**RESPONSE F-7:** These comments do not relate to the environmental impacts of the ordinance, but to policy issues regarding implementation of the ordinance that will be addressed separately from the EIR. No further response is required in this document.

### **Single Use Bag Reduction Ordinance**

**COMMENT F-8:** 8. Appendix D, Summary of Available Information on Reusable Shopping Bags. The DEIR should include a discussion on the following:

Bag capacity discussion does not take into account that while reusable bags have greater capacity than HDPE featured, persons buying groceries have weight carrying limit that the full reusable bag may exceed; and/or types of items may not allow for reusable bag to be filled to capacity (where heavier item could crush fragile item). It is possible that more reusable bags are likely to be bought and used than precise offset from HDPE bags.

**RESPONSE F-8:** While it is true that shoppers may have weight-carrying limits that can be exceeded with a full reusable bag, this is heavily dependent on the items placed in the bag. Heavy items such as canned goods may exceed the shopper's weight-carrying limit if a single use bag is filled to capacity with canned goods, for example. The problem of heavier items crushing fragile items occurs with all types of bags, and is not limited to reusable bags. In reality, shopping bags of any kind are rarely filled to capacity, and any attempt to predict the percentage of a bag's capacity that is typically utilized would be speculative. Because there is no quantitative evidence available on the differences in bag-filling behavior based on the type of shopping bag that is used, the EIR compared the relative capacities of different types of bags and assumed that bags would be filled in a similar manner regardless of their type.

**COMMENT F-9:** 9. Appendix E - Summary of Life Cycle Assessments (LCA)  
There appears to be a typographical or editing error in the Summary [of the 2002 Australia analysis] on pg. 3, second paragraph, line 1, "The streamlined LCA found that over the course of a year, single-use paper bags resulted in greater impacts than single-use paper bags in every category except persistence of litter over time."

We question the relevancy of the 2002 Australia analysis and would prefer more local analysis.

**RESPONSE F-9:** The typographical error has been noted. The corrected text can be found in *Section 4. Proposed Revisions to the Text of the Draft EIR*. The 2002 Australia

analysis was one of many LCAs that were consulted in the EIR, and pages 4 and 5 of Appendix E contain a discussion of the limitations of this specific LCA, including the fact that the report was completed in Australia. Despite its limitations, the LCA included the most robust analysis available of impacts associated with a range of reusable bags, and is therefore relevant to the analysis of the proposed ordinance. Care must be exercised in the use of all LCAs, as discussed on page 43 of the Draft EIR. LCAs completed in the United States also were consulted in the preparation of the EIR, and those LCAs have limitations of their own, which are also discussed in Appendix E.

**COMMENT F-10:** 10. Single Use Bag Prohibition

Please address the following policy concerns about mandates for retail merchandisers and local jurisdictions in the DEIR:

- Shoppers carrying their own bag will reduce browsing/sales as buyers will not have hands free to browse through racks of clothes or items.
- Customers do not always know if they are making a purchase, or if purchases will be large or small items, and it will be unclear as to the size of the bag or quantity of bags to bring (opposed to greater predictability at grocery stores).
- Bags carried into stores may become a cover for shoplifting.
- The DEIR evaluates the widest scope of options for the ban on plastic bags. It is critical that any ordinance developed be applied equally to similar retailers e.g.: grocery stores and those selling packaged foods.
- Lacking economic analysis relating to a buyer's choice to shop in a neighboring county where retail merchandisers do not have a ban on bags. Please conduct an economic analysis on the effects of a county by county ordinance as compared to a more comprehensive initiative.
- Enforcement, oversight and monitoring of program implementation and compliance: during a time when jurisdictions face workforce reductions and reduced revenues, the expectations and funding sources for jurisdictions must be carefully vetted prior to enacting any program. Currently, it is unclear how jurisdictions will be able to comply, monitor and implement these programs and to what degree, city staff or Stopwaste staff will be required to devote to such programs. Please conduct an analysis of the expected time and FTE's these programs will create for jurisdictions.

**RESPONSE F-10:** The comment refers to these issues as being “policy concerns”. It is beyond the scope of an EIR to address policies about issues related to law enforcement, economic constraints, and economic parity. These issues can be addressed in a separate venue.

**COMMENT F-11:** • It is unclear how the reusable bag campaign led by Stopwaste has influenced shoppers. An evaluation of an ongoing continued and/or more rigorous outreach and education effort should be conducted to determine if this would change the behavior of single use bag users.

**RESPONSE F-11:** Section 8.0 Alternatives to the Proposed Project discusses as a possible alternative a program that relies on enhanced education, recycling and litter control (starting on page 168 of the Draft EIR). The discussion also discusses the ongoing educational campaign to promote reusable bags, and states that after several years, the campaign has not effectively reduced the number of single-use bags used.

**COMMENT F-12:** 11. Mandatory Commercial Recycling

Please address the following policy concerns about mandates for commercial businesses and local jurisdictions in the DEIR:

- Summary, p. 6 and section 2.3.1.3, p. 37: "Local Jurisdictions will be required to implement commercial recycling program for eligible businesses with education, outreach, monitoring and notification of non-compliance."
- Enforcement, oversight and monitoring of program implementation and compliance: during a time when jurisdictions face workforce reductions and reduced revenues, the expectations and funding sources for jurisdictions must be carefully vetted prior to enacting any program. Stopwaste staff has indicated at times that monitoring and implementation will be conducted by Stopwaste staff or contracted firms. The DEIR provides information that is contradictory to the comments made by Stopwaste staff. It is important for jurisdictions to understand the expectations, parameters, and duties that will be required of city staff. The DEIR should carefully outline the impact to jurisdictions.
- The DEIR lacks economic analysis on the impact of possible increase in refuse, recycling and composting rates and the effect on haulers and rate payers. This economic analysis should be part of the DEIR.
- The DEIR should address the impact to weekly vendors such as Farmer's Markets and the impact of mandatory recycling and single use bag requirements for vendors participating at such events.

**RESPONSE F-12:** This comment refers to pages 6 and 37 of the Draft EIR. The quote ("Local jurisdictions will be required...") is on page 6 of the EIR Summary and refers to a requirement in the *state* regulations discussed in that paragraph.

Page 37 describes the mandatory recycling ordinance being considered by StopWaste.Org and says in *Section 2.3.1.2 Enforcement and Education* that StopWaste.Org will develop the outreach plan, implement the enforcement for a Countywide Ordinance, and will develop further enforcement and education details. The only role identified for a local jurisdiction is that they will "provide information on the ordinance to all residents and businesses via the usual outreach methods used...."

CEQA does not require an economic analysis in an EIR and none is provided in this EIR. If the ordinance or ordinances are written to apply to the vendors in temporary outdoor markets, then Farmers Markets vendors will be required to comply. No exception for outdoor markets was evaluated in this EIR.

**COMMENT F-13:** 12. Unclear about Cal Recycle's proposed regulation to ARB. In Summary (pg. 6, 3rd paragraph) states "... multi-family generators with five or more units ...."; Section 2.1.1 (pg. 16, 4th full paragraph) discusses, " ... multi-family generators with sixteen or more units ... "

- Please address the differences between comments made on pg. 6, 3rd paragraph and Section 2.1.1 (pg. 16, 4th full paragraph).

**RESPONSE F-13:** The state's criteria changed during preparation of the EIR. The reference to five or more units on page 6 is correct. The reference on page 16 is corrected in *Section 4. Proposed Revisions to the Text of the Draft EIR*.

**G. RESPONSES TO COMMENTS FROM SAVE THE BAY, DATED SEPTEMBER 15, 2011:**

**Single Use Bag Reduction Ordinance**

**COMMENT G-1:** As the oldest and largest organization working to protect and restore San Francisco Bay and representing thousands of members and supporters in Alameda County, Save The Bay submits this letter in support of the Environmentally Superior Alternative for a single-use bag ordinance as identified by the Draft Environmental Impact Report (State Clearinghouse # 2011042012).

A healthy and vibrant San Francisco Bay is central to the quality of life and economy in the Bay Area. Plastic bags are a significant contributing factor to the pollution of our creeks, rivers, and the Bay. Save The Bay estimates that more than one million plastic bags enter San Francisco Bay each year, threatening wildlife and choking wetlands.

The evidence is overwhelming that a ban on all single-use bags is the environmentally superior alternative. Save The Bay recognizes, however, the need to provide customers with a bag in the event that they do not bring their own. Therefore, the proposed ten cent charge on recycled-content paper bags is reasonable and provides the price signal that encourages customers to bring their own bags to avoid future charges.

The Bay has suffered from plastic bag pollution for far too long, and Alameda County and its cities can be leaders in the effort to protect our Bay and waterways. We strongly urge the Alameda County Waste Management Agency to adopt this EIR and introduce an ordinance that will ban the free distribution of single-use bags at all retailers within all Alameda County jurisdictions. Thank you for your consideration.

**RESPONSE G-1:** This comment is acknowledged. It does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is necessary.

## H. RESPONSES TO COMMENTS FROM SAVE THE PLASTIC BAG COALITION, DATED SEPTEMBER 15, 2011:

### Single Use Bag Reduction Ordinance

#### COMMENT H-1: INTRODUCTION

Pursuant to CEQA including but not limited to Pub. Res. Code §21177(b), Save the Plastic Bag Coalition (“STPB”) hereby objects to the approval and certification of the Alameda County (“County”) Draft EIR (“DEIR”) and the proposed Single Use Carryout Bag Reduction Ordinances based on the objections herein. STPB demands that a corrected draft EIR be completed and recirculated, in compliance with CEQA.

The CEQA objections herein are based entirely on environmental impacts. Economic and other impacts are not the bases for any of the objections herein.

STPB also objects on the ground that the proposed ordinance is preempted by AB 2449.

Exhibits are submitted herewith via e-mail for inclusion in the administrative record in support of these objections.

**RESPONSE H-1:** This comment is acknowledged. It does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No response is required.

#### COMMENT H-2: THE COALITION

STPB’s present membership includes manufacturers and distributors of plastic carryout bags that are distributed in and throughout Alameda County. Such plastic bags would be banned under the proposed ordinance. Therefore, some of STPB’s members would be directly impacted by the proposed ordinance.

STPB was formed in 2008 to respond to environmental myths, exaggerations, and misinformation about plastic bags and to draw attention to the negative environmental impacts of banning plastic bags. STPB is campaigning for all of the environmental impacts of banning plastic bags to be described and disclosed to city and county officials and the public. STPB believes that banning plastic bags (i) is not justified by the environmental facts; and (ii) would result in greater environmental harms including more paper bags.

For several years, plastic bags have been the subject of an intense national and international vilification campaign. STPB believes and contends that groups seeking to have plastic bags banned have disseminated environmental myths, misinformation and exaggerations to promote their goal. The *Times of London* has stated as follows in an editorial: [Exh. AL68.]

There is a danger that the green herd, in pursuit of a good cause, stumbles into misguided campaigns.

Analysis without facts is guesswork. Sloppy analysis of bad science is worse. Poor interpretation of good science wastes time and impedes the fight against obnoxious behavior. There is no place for bad science, or weak analysis, in the search for credible answers to difficult questions.... Many of those who have demonized plastic

bags have enlisted scientific study to their cause. By exaggerating a grain of truth into a larger falsehood they spread misinformation, and abuse the trust of their unwitting audiences.

A senior policy analyst with the U.S. Marine Mammal Commission has publicly stated as follows: [Exh. AL41.]

In their eagerness to make their case [against plastic bags], some of the environmental groups make up claims that are not really supportable.

The *San Jose Mercury News* has been disseminating such myths, including in an editorial on June 14, 2010 that stated as follows: [Exh. AL48.]

[Assembly Member Brownley, the author of pending bill AB 1998 that would ban plastic bags] calls plastic bags “urban tumbleweeds.” Californians use 19 billion bags a year, and the state spends more than \$25 million a year to try to keep them from blowing across cities and counties. That effort, for the most part, has been a failure.

Environmentalists have studies that show Californians recycle only 5 percent of the plastic bags they use. Worldwide, that number is closer to 1 percent. Yet they take 1,000 years to biodegrade. Huge numbers wind up as health hazards to marine mammals: Plastic bags kill an estimated 1 million seabirds and 100,000 other animals every year, whether from eating the things or getting tangled in them. Nearly 2 million barrels of oil a year is wasted to make the plastic bags used by Californians, enough to produce about 40 million gallons of gasoline.

Fifty years ago, sea captains rarely encountered plastic bags in their voyages across the Pacific. Today, about 1,000 miles off the coast of California, they find a swirling mass of plastic trash that spans an area estimated to be twice the size of Texas.

The *Mercury News* allegations are incorrect.

- Removing plastic bags would not save the state \$25 million in litter costs. The same streets, highways, parks, rivers and creeks, and other areas will have to be cleaned, even if there are no plastic bags in the litter stream. San Francisco has not saved any money in litter costs since it banned plastic bags.
- The plastic bag recycling rate of 5% was measured before AB 2449 took effect. AB 2449 required stores to install plastic bag recycling collection bins. Since that time, plastic bag recycling has increased significantly.
- If plastic bags take 1,000 years to biodegrade, that is a good thing. Paper bags do biodegrade in landfills. In the process of biodegrading, paper bags emit methane, which is a greenhouse gas (“GHG”) with 23 times the climate changing impact of CO<sub>2</sub>.
- The allegation that “plastic bags kill an estimated 1 million seabirds and 100,000 other animals every year, whether from eating the things or getting tangled in them” is untrue. The *Times of London* has exposed the allegation about 1 million seabirds and 100,000 sea animals being killed by plastic bags each year as a myth based on a typographical error! The survey on which the myth is based found that the deaths are caused by discarded fishing tackle including fishing nets,

not plastic bags. A marine biologist at Greenpeace told The Times: “It’s very unlikely that many animals are killed by plastic bags. The evidence shows just the opposite.” [Exh. AL34]

- The allegation that there is a swirling mass of plastic trash including plastic bags, “twice the size of Texas,” is untrue. The *Los Angeles Times* has made a similar allegation in an editorial on June 24, 2010 stating: “The Great Pacific Garbage Patch is an area of the ocean larger than Texas and thick with floating plastic debris: bottles, bottle caps, bits of packaging and uncountable plastic bags.” [Exh. AL33.]

In fact there is no such area of the ocean “larger than Texas and thick with floating plastic debris: bottles, bottle caps, bits of packaging and uncountable plastic bags.” If such an area existed, it would be clearly visible and there would be photographs of it. There are no such photographs, as anyone can see by searching Google images.

According to Dr. Marcus Erikson of the Algalita Research Foundation: “There is no island of plastic trash.” [Exh. AL60.] He claims that there is a confetti of waste spread over the entire ocean surface. However, he found very little such confetti when he went out to the Pacific Gyre himself and conducted a 24-hour trawl. See YouTube JUNK-n-Gyre video at [http://www.youtube.com/watch?v=3d3\\_fLsjC8U](http://www.youtube.com/watch?v=3d3_fLsjC8U). [Exh. AL67.] The video is hereby submitted into the administrative record in its entirety.

Oregon State University has issued a media release regard its research on the “Great Pacific Garbage Patch,” stating as follows:

The studies have shown is that if you look at the actual area of the plastic itself, rather than the entire North Pacific subtropical gyre, the hypothetically “cohesive” plastic patch is actually less than 1 percent of the geographic size of Texas.

“The amount of plastic out there isn’t trivial,” White said. “But using the highest concentrations ever reported by scientists produces a patch that is a small fraction of the state of Texas, not twice the size.”

Another way to look at it, White said, is to compare the amount of plastic found to the amount of water in which it was found. “If we were to filter the surface area of the ocean equivalent to a football field in waters having the highest concentration (of plastic) ever recorded,” she said, “the amount of plastic recovered would not even extend to the 1-inch line.”

[Exh. AL75.]

Miriam Goldstein, the chief scientist on the Scripps Seaplex expedition which went out to the Pacific to survey marine debris, states as follows regarding the “Great Pacific Garbage Patch”:

Misinformation on this issue is rampant.

Regarding whether there is an area of trash in the Pacific twice the size of Texas, she states:

There is no evidence for this. There certainly is a lot of trash, but there have been no measurements of either the trash’s total area or its growth rate.

[Exhs. AL76, AL77.] Goldstein also states: [Exh. AL78]

Ever since SEAPLEX was funded around two years ago, I have begun every one of my general audience talks (and even a few scientific ones) with a display of misleading and confusing headlines on the accumulation of trash in the North Pacific. According to these headlines, it's twice the size of America, 3.5 billion ...something...(they don't say what), stretching from Hawaii to Japan. Most of these claims cannot be supported by any scientific data of which I'm aware. As a scientist, it can be pretty frustrating to see these misconceptions repeated and repeated for years on end.

- The allegation that “nearly 2 million barrels of oil a year is wasted to make the plastic bags used by Californians, enough to produce about 40 million gallons of gasoline” is untrue. This is based on the myth that plastic bags are made of oil. In fact, 85% of plastic bags used in the United States are made in the United States. Those bags are made of ethane, which is a waste by-product of domestically produced natural gas. None of it could be used for gasoline.

The *Mercury News* editorial illustrates why STPB considers it so important that accurate and informative EIRs are prepared, so that decision-makers and the public in Alameda County do not evaluate the proposed ordinance based on myths, misinformation, and falsehoods.

Heal the Bay is one of the leaders of the anti-plastic bag campaign in California. Heal the Bay's President, Dr. Mark Gold, testified at the Manhattan Beach City Council meeting on July 1, 2008, which was considering banning plastic bags without preparing an EIR. He testified as follows:

Those [plastic bag] bans [in San Francisco and Oakland] did not include bioplastics, which is a *huge mistake*. And so by not doing the CEQA analysis specifically on what the environmental impacts were of not banning that, and moving towards bioplastics with the many problems that they cause, that was a major shortcoming.

Heal the Bay was right. It is essential to analyze and consider the environmental impacts of banning plastic bags.

**RESPONSE H-2:** This comment is acknowledged, but is not directed toward the Draft EIR. The information it is refuting was contained in a newspaper editorial and the rebuttal is based on information contained in various other publications. To the extent that some of these same statements directed at the editorial are reiterated in the letter's comments on the Draft EIR, which follows, they are responded to substantively in that context.

### **COMMENT H-3: CEQA OBJECTIONS**

The numbered title headings herein are part of the objections.

#### **1. STPB OBJECTS TO THE FINDING THAT A 10-CENT PAPER BAG FEE WOULD RESULT IN A SUFFICIENTLY EFFECTIVE DISINCENTIVE, AS THE COUNTY DOES NOT CITE SUBSTANTIAL EVIDENCE**

Reference is made to the following portions of the DEIR (footnotes omitted):

Page 41: This EIR analyzes the *maximum impact scenarios* that *could* occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations. In those situations where there is uncertainty about where materials might go for processing, for example, the farthest location is assumed. (Emphasis added.)

Pages 43-44: The most well known example is the country of Ireland, which imposed a fee on single use plastic carryout bags in 2002. As a result of the fee, the use of single use plastic bags was reduced by over 90 percent almost immediately. Additionally, surveys completed in 2003 indicated that approximately 90 percent of consumers were using reusable bags, so it does not appear that there was a dramatic shift to paper bag use.

Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.

A fee on single use carryout bags enacted in the District of Columbia, a \$0.05 charge for all single use bags, resulted in an immediate substantial reduction in their use during the first month. District staff estimates that the reduction was in the 50-80 percent range for both paper and plastic single use carryout bags.

Page 72: There is not a great deal of past experience to rely on in predicting exactly how and when behavior might change. The imposition of a fee on both plastic and paper single use carry bags by Denmark in 1994 resulted in a 66 percent reduction in use of both types of bags. In 2001, Ireland imposed a fee on single use plastic carryout bags, which resulted in a reduction of over 90 percent in the number of plastic bags used. Washington D.C. saw a 50 to 80 percent reduction in the use of single use plastic bags after the imposition of a five-cent fee in 2010.

The difference in effectiveness between the Irish and Danish programs likely was the result of differences in the two programs; the Danish tax was assessed on the bags sold to businesses, who presumably passed on the costs in various ways to their customers (including charging them for bags). The tax on single use bags was just one of a number of “green” taxes assessed by the Danish government during that time period so the Danish population would have been well aware of the purpose and need for the taxes. The Irish fee was assessed on the customer at the time of purchase and was specifically assessed to reduce plastic litter in a country dependent on tourist-generated revenues (a purpose that the Irish people themselves appeared to understand and agree with).

Because there were substantial reductions in the number of single use carryout bags resulting from all of these programs, it is reasonable to assume that there would be a substantial reduction in Alameda County of the number of single use carryout bags under the proposed ordinance.

Page 74: In the only program known to have been implemented in a large city in the United States, Washington D.C. recently enacted a fee on all single use bags, resulting in a reduction of between 50 and 80 percent.

Pages 75-76: Additionally, as described earlier in this EIR, the degree to which paper bag use may increase is very uncertain and will definitely be temporary. The citizens of nearby San Jose were surveyed and 81 percent indicated they would bring reusable bags rather than pay \$.10 for a paper bag. The estimate of an additional 59 to 102 million single use paper carryout bags being utilized in Alameda County was developed as an average based on dissimilar programs in various areas and represents a scenario where 65 percent of people switch to reusable bags.

Page 91: It is not known with any certainty what will happen to the number of paper bags used in the County. As discussed in §3.0 of this EIR, there is a possibility that use of single use paper carrier bags may increase.

The DEIR cites the following examples:

- Ireland
- Unidentified “individual stores in Australia and Canada” (DEIR at 43)
- The District of Columbia
- Denmark
- The San Jose and Herrera surveys

The DEIR fails to analyze of those examples and glosses over the details. DEIR objects to all those examples as they are not comparable situations.

**RESPONSE H-3:** This comment summarizes statements in the Draft EIR regarding the effects of various bag policies on consumer behavior and raises a general objection to the use of all of them, claiming they are not comparable situations. The Draft EIR acknowledges that there are limitations to the use of these examples to predict what will happen in Alameda County (Page 44: “The programmatic variations in combination with differences in physical conditions and cultures make it difficult to project the exact results of a program being implemented in Alameda County.”) However, these examples represent most of the available information on the effects of bag reduction policies on consumer behavior, and are therefore relevant to the analysis of the proposed ordinance. The intent of including these examples in the Draft EIR is to highlight that when customers must pay for carryout bags that were previously free, use of the bags drops dramatically.

Pages 44-45 of the Draft EIR contain a discussion of how the behavior assumptions used in the Draft EIR were formulated. The Draft EIR relies on a report prepared for the City of San Jose (Herrera report) which averaged the results of various price levels on carryout bags around the world with the results of surveys of residents of the Cities of Seattle and San Jose who were asked whether they would use reusable bags if they had to pay for single use bags. The report estimated that 65 percent of consumers would use reusable bags or no bags, and

35 percent of customers would use paper bags on which a 10 cent price is placed. This is a reasonable estimate based on available information.

To balance the evidence cited in this letter, NO real world examples are or have been provided that disprove the basic premise (that when a fee is placed on carryout bags that were previously free, use of the bags drops dramatically)

**COMMENT H-4: IRELAND PLASTAX**

- The Ireland PlasTax is now 22 Euro cents, which at today's exchange rate is U.S. 30 cents. See Heal the Bay letter to the City of Santa Monica [Exh. AL23] and Reuters article entitled "Ireland to raise "green" tax on plastic bags [Exh. AL29].
- When the Ireland PlasTax was lower, there was a major shift to replacement plastic bags. See Irish Examiner article entitled "Shoppers still bagging plastic bag sales" [Exh. AL30].
- *There is nothing in the record indicating that paper bags are offered in Ireland.* The choice in that country may be to bring or buy a reusable bag or use no bag at all.
- There is no indication of the cost of reusable bags in Ireland. They may be cheaper than 22 Euro cents or not much more expensive.
- The value of money in Ireland is different than Alameda County. They are different economies.
- Consumers in Ireland may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County. The City of San Jose states at page 28 of its draft EIR [Exh. AL101] which is part of its Final EIR [Exh. AL79] as follows:

The programmatic variations in combination with differences in physical conditions and cultures make it difficult to project the exact results of a program being implemented in San Jose. It is agreed that banning a type of bag will significantly reduce the use of that type of bag, but what will the public do instead? Behavior is influenced by a number of circumstances, including cost and convenience, but also by perceptions, values, and beliefs.

**RESPONSE H-4:** This comment discusses the effects of a bag reduction law in Ireland and then identifies various differences between Ireland and Alameda County. As discussed in Response H-3 and in the Draft EIR, the Draft EIR did not rely solely on the effects of the Irish policy when estimating what would likely occur in Alameda County, but instead considered it as part of the range of likely occurrences and weighed it along with the effects of several other bag reduction policies identified from around the world. It should be noted that the Draft EIR's estimate of 65 percent of consumers using reusable bags or no bag and 35 percent using paper bags with a 10 cent price (which would be an increase in use of paper bags compared to existing conditions, despite having to pay for them) is conservative when compared to the actual results of the bag fee in Ireland, which reduced by 90 percent the use of bags on which a price was placed.

## **COMMENT H-5: VICTORIA, AUSTRALIA VOLUNTARY LEVY**

- At page 43 of the DEIR, the County states: “Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.” STPB objects to the failure to identify the stores or the amounts of the fees or any other circumstances. Without waiving the objection, STPB therefore assumes that the reference to individual stores in Australia means the Victoria voluntary levy, a closed-down IKEA store in Moorabbin, and a supermarket in Byron.

**RESPONSE H-5:** The Draft EIR text excerpted in the comment was based on information in a 2002 report prepared for the Australia Department of Environment and Heritage to analyze the impacts that *might* result from a number of different policy *options* being explored to reduce plastic bag usage. This report was cited in the Draft EIR references (Nolan-ITU) and was summarized in Appendix E. The report stated that 10 cent price for bags at a Five Star supermarket in Byron Bay, Australia and an IKEA in Moorabbin, Australia resulted in 83 percent and 97 percent decreases in single use plastic bag use, respectively. The reference in the Draft EIR to stores in Canada was erroneous, and the corrected text can be found in *Section 4. Proposed Revisions to the Text of the Draft EIR*.

## **COMMENT H-6:**

- In the article entitled “Evaluating the sustainability impacts of packaging: the plastic carry bag dilemma,” Lewis, Verghese and Fitzpatrick, *Packaging Technology and Science* [Exh. AL20], the following statement is made at page 147 regarding the Victoria trial as follows:

In the state of Victoria, a voluntary 10 cent levy imposed on plastic carry bags by supermarkets in a 2-month trial in 2008 resulted in a 79% fall in the number of plastic bags issued by participating retailers, and 86% of customers said that they supported initiatives to reduce bag use.

Note: Australian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL3.]

- The Steering Committee which managed the Victoria trial issued an official report that made the following points. [Exh. AL65.]
  - The trial lasted only four weeks.
  - There was “an extensive media and advertising campaign managed by” the Victoria Government. (Report page 4.)
  - There were “free reusable bags for people with special needs, funded by the Victorian Government.” “Special needs” is not defined in the report. (Report page 4.)
  - The report states at page 6 as follows:

The Committee is unable to ascertain whether consumer behaviours would be sustained over a longer time period than the four week period of this trial. The qualitative results suggest this is achievable. However, qualitative data does not always translate into quantitative outcomes.

The four week trial had an immediate impact of reducing plastic bag use. However, the KPMG Report noted a slight drop off in the reduction in the final week of the trial. Whilst the KPMG Report suggests that this might be attributable to customers forgetting to bring their reusable bags and not wishing to purchase additional reusable bags, ongoing consumer behaviour patterns cannot be definitively understood absent longer term data and surveys.

- The report states at page 8 as follows:

The Committee noted that significant effort and resources were invested in establishing the trial to provide successful outcomes.

The media campaign and in-store signage were highly successful in creating a high level of awareness of both the trial and the amount of the charge, as evidenced by the qualitative results.

The Committee notes that some consumer behaviour change may have occurred in advance of the commencement of the trial as a result of media coverage dating back to April 2008, and particularly in the months of June and July when media confusion arose over the trial start date.

In addition, retailers implemented a number of promotional campaigns during the trial that could have impacted upon the outcomes, such as the offer of three reusable bags for \$2.00.

It is possible that the positive consumer response to this trial could influence community responses to alternatives, should they be considered in future.

Government provided support to people in need through free bags to around 8,000 people living in the trial areas. Local support agencies were responsible for determining appropriate distribution of these bags. The Committee believes that support mechanisms for people in need would be required in any further trials or if the charge was established on a permanent basis.

- The circumstances of the Victoria trial were very different from Alameda County's proposed ordinance. The Australian consumers were clearly influenced by a major publicity campaign, the provision of free reusable bags to 8,000 people in the trial areas, the three reusable bags for \$2.00 program, and probably an initial burst of enthusiasm for the environmental goals of the program. Moreover, the program only lasted 4 weeks. Consumers knew that they would be able to get free plastic bags again as soon as the program ended.

**RESPONSE H-6:** As with the other examples cited in the Draft EIR, the results of charging for single-use bags in Australia were used to highlight that when a price is placed on single-use carryout bags that were previously free, the usage of the bags drops dramatically. The Draft EIR acknowledged that the precise conditions of the examples cited differ from the proposed ordinance (see pages 44-45). The support efforts described for the Victoria trial are typical of implementation efforts made in the United States and in Alameda County for

new environmental programs, and many similar efforts (including education, outreach, signs, and media stories) will be utilized for the proposed Alameda County program.

**COMMENT H-7:** • As discussed below, a survey of consumers in the United States conducted by the University of Arizona showed that 97% do not wash reusable bags (which is a serious hygiene and health concern). [Exh. AL64 – fig. 7.] If a similar percentage of consumers in Australia also do not wash their reusable bags, those free and discounted bags provided in Victoria would have become too dirty to continue using for much longer than the four-week program. If the program had lasted a year and no more free and discounted reusable bags were offered after the first four weeks, the majority of consumers may have switched back to plastic bags even with a 10-cent fee.

**RESPONSE H-7:** The Victoria bag reduction effort resulted in a 79 percent reduction in plastic bags after customers had to pay 10 cents per bag. The example is noted, as is the fact that the rate of bag reduction was greater than the conservative estimate used in this EIR. No evidence is available showing that customers switched back to plastic bags after one year, as this comment hypothesizes.

The reference in this comment to bags becoming “too dirty to use” within four weeks is unsupported by any factual information provided by this comment or in this letter. The potential for reusable bags to create a “serious hygiene and health concern” as stated in this comment is addressed in the Draft EIR in Section 3.9.2.1 (starting on page 143) and was not identified as a significant impact.

**COMMENT H-8:** • The value of money in Victoria is different than Alameda County. They are different economies.

- Consumers in Victoria may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

**RESPONSE H-8:** This comment is directly contradicting a previous comment (Comment H-6 above) in this same letter that stated that “Note: Australian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL3.]”

The Draft EIR states that the precise conditions of bag reduction policies around the world differ from the proposed ordinance (see pages 44-45). See also Response H-3.

**COMMENT H-9:** A SUPERMARKET IN BYRON, AUSTRALIA

- The Nolan-ITU report states at page 50 as follows: [Exh. AL5.]

The Five Star supermarket in Byron Bay [Australia] introduced a 10 cents charge for plastic and biodegradable bags on the 12th of October 2002. Before this they averaged 1,200 plastic bags per day. They now sell an average 200 plastic bags per day, representing a decrease in bag use of 83%, and have had a positive response from customers.

Three plastic bag alternatives are provided: a biodegradable bag for which they also charge 10 cents, a paper bag provided free of charge and a reusable cotton/string bag sold for \$1.50.

There has been no decrease in sales since the 10 cents charge for plastic bags was introduced. Sales have actually increased slightly in that time, the owner believes that this is through the environmental and community activities that the business has put the 10 cents per bag revenue toward. The supermarket has not experienced any increase in pilfering of shopping baskets or trolleys or any grocery items. The store owner believes that as customers become used to this system there will be no additional checkout time added per transaction.

The supermarket has experienced an increase in costs due to the provision of free paper bags, which cost the supermarket 15 cents as compared to the 4 cents that they pay for plastic bags.

The experience of one supermarket location in Australia is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the store accomplished the reduction by use of rebates, promotional programs, *reusable bag giveaways*, or other means.

- The above extract from the Nolan-ITU report indicates that the store gives away *free paper bags*. According to the extract, paper bag usage *increased*.

**RESPONSE H-9:** The proposed ordinance would prohibit the free distribution of paper bags by requiring a 10 cent price on bags at the store. The worldwide experience has been that use of all types of bags decreases when there is a price placed on them. Nevertheless, to be conservative, the Draft EIR assumes an increase in the use of paper bags.

**COMMENT H-10:** • The value of money in Byron Bay is different than Alameda County. They are different economies.

- Consumers in Alameda may be more favorably predisposed and environmentally conscientious about using reusable bags.

**RESPONSE H-10:** A previous statement in this same letter says that the value of the Australian dollar is equivalent to the American dollar and provides a currency calculator to support the statement (see Comment H-6 above).

The Draft EIR states that the precise conditions of bag reduction policies around the world differ from the proposed ordinance (see pages 44-45). See also Response H-3.

**COMMENT H-11:** AN IKEA STORE IN MOORABBIN, AUSTRALIA

- Nolan-ITU report states at page 50 as follows: [Exh. AL5.]

Swedish-owned homewares retailer IKEA introduced its own 10c plastic bag levy in their Moorabbin, Victoria store in October 2002. Since its introduction, IKEA have reduced their plastic bag consumption from 8,000 per week to just 250 per week (a 97% reduction). The store offers for sale large reusable 'blue bags' for \$1.50 per bag,

however most customers choose to use no bag. Monitoring has found that one plastic bag is sold per 12 customers, and one blue bag per 24 customers.

The experience of one IKEA store in Australia is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the IKEA store accomplished the reduction by use of rebates, promotional programs, *reusable bag giveaways*, or other means.

**RESPONSE H-11:** The example of the IKEA store was used to demonstrate (again) that when a price is placed on carryout bags that were previously free, use of the bags drops dramatically. The Draft EIR did not rely solely on the IKEA example in its analysis (see Responses H-3, H-4, H-5, H-9, H-10, H-16, and H-21). The Draft EIR acknowledged that the precise conditions of bag reduction policies around the world differ from the proposed ordinance (see pages 44-45 of the DEIR).

While the circumstances differ, the outcomes are all similar – the use of single-use bags declines.

**COMMENT H-12:** • IKEA is a home furniture store. . It sells large items such as tables, chairs, sofas, and beds. If consumers were rejecting plastic bags in favor of no bags, rather than purchasing reusable bags, they must have been purchasing the kinds of items that did not require a bag. Consumers generally do not go to IKEA stores to buy large quantities of small things that need to be bagged.

**RESPONSE H-12:** In the IKEA example, consumers reduced their plastic bag consumption from 8,000 bags per week to just 250 per week. There is no evidence that this reduction in bag use resulted because the items purchased after imposition of the ten-cent price did not require a bag whereas the items purchased after the surcharge did require a bag.

Moreover, the example of the IKEA store was used to demonstrate (again) that when a price is placed on carryout bags that were previously free, use of the bags drops dramatically. The Draft EIR did not rely solely on the IKEA example in its analysis (see Responses H-3, H-4, H-5, H-9, H-10, H-16, and H-21). The Draft EIR acknowledged that the precise conditions of bag reduction policies around the world differ from the proposed ordinance (see pages 44-45 of the DEIR).

While the circumstances differ, the outcomes are all similar – the use of single-use bags declines.

**COMMENT H-13:** • There is no indication of whether the program was extended to other IKEA stores, and if it wasn't then the reasons why. This suggests that there may have been problems with the program. The IKEA Moorabbin store closed in 2005. [Exh. AL27.]

- The value of money in Moorabbin is different than Alameda County. They are different economies.
- Consumers in Moorabbin may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

**RESPONSE H-13:** The question of whether the program was extended to other IKEA stores is irrelevant to the EIR, as is the fact that this particular store closed in 2005.

This statement regarding the value of money contradicts an earlier statement in this same letter (see Comment H-6 above).

The DEIR states that conditions in Australia are different than conditions in Alameda County. See also Response H-3.

**COMMENT H-14: AUSTRALIAN GOVERNMENT NOLAN-ITU STUDY**

- The Nolan-ITU study states that a 25-cent fee would achieve the most significant reductions in environmental impact. [Exh. AL5.]
- The Nolan-ITU study does provide a bag distribution “scenario” based on 15-cent and 25-cent fees. (Table 6.2 at page 58 of Australian Nolan-ITU study.) However, it is only a scenario and speculation. It is not based on any empirical data or surveys. Scenario 1B in the Nolan-ITU report, which is a 25 cents fee, achieves the best environmental favorable results (assuming that a plastic bag ban is environmentally justified).
- Scenarios 1A and 1B in the Nolan-ITU study, which are a 15-cent fee and a 25-cent fee respectively, would also involve an “expanded Code of Practice” which is not part of the Alameda County proposal. This is critically important. The Nolan-ITU study states at page 55 as follows:

In these scenarios there would also be an expanded Code of Practice of retailers which would specify that reusable bags were made available as an alternative (to use and to purchase) in every retail store. *There would be a standard grocery reusable bag and once purchased the expanded Code of Practice would ensure that this bag be replaced free of charge when the customer returns the old reusable bag to the store.* Once returned to the retailer in exchange for a free replacement the old reusable bag would be recovered for recycling. In addition all large stores would have drop-off facilities for the recycling of single use plastic bags. Industry would make a commitment towards the use of recycled and Australian content in both single use plastic bags and in reusable bags. This would help ensure that the reduction in the use of plastic bags does not excessively harm the Australian industry.

(Emphasis added.)

- The free replacement of reusable bags in the Australian scenarios is a critical difference compared to Alameda County. Therefore, the Australian Nolan-ITU study scenarios are not valid for Alameda County, especially as there is no proposed similar Code of Practice.

**RESPONSE H-14:** Scenarios 1A and 1B in the Nolan-ITU report are not discussed in the Draft EIR, nor are any conclusions based on them, since they are not comparable or relevant to the proposed project. The fact that these scenarios contained an expanded Code of Practice while the proposed ordinance does not is irrelevant.

Appendix E of the Draft EIR contains a summary of the Nolan-ITU report, as well as a discussion under the heading “Limitations in Application of the LCA to Alameda County.” This discussion lists several reasons why the conclusions in the LCA cannot be applied directly to Alameda County; however, the LCA does provide a robust analysis of reusable

bags, as well as a useful information contrasting the impacts of single use bags against the impacts of a variety of reusable bags, and is thus at least partially relevant to the project.

**COMMENT H-15: THE METRO ONTARIO CHAIN IN TORONTO**

- At page 43 of the DEIR, the County states: “Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.” STPB objects to the failure to identify the stores or the amounts of the fee or any other circumstances. Without waiving the objection, STPB therefore assumes that the reference to Canada means the Metro Ontario chain.

Note: Canadian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL69.]

- The Metropolitan Washington Council of Governments’ Plastic Bag Report [Exh. AL35] at page 21 states as follows:

According to the preliminary reports on the just implemented (6/1/09) Toronto, Canada, five cent plastic bag fee, one (sic) the Metro Ontario grocery chain has observed a 70% reduction in the use of plastic bags and corresponding increase in the demand for reusable bags. Store officials believe that early results indicate that the city will be able to reach its goal of a 50% reduction in plastic bag use by the end of 2010.

Note: Canadian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL69.]

- The experience of one grocery chain in Toronto is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the Metro Ontario grocery chain store accomplished the reduction by use of rebates, promotional programs, reusable bags giveaways, or other means.
- The choice in Toronto (including at the Metro Ontario grocery chain referenced in the above extract) may be between plastic bags subject to a fee and reusable bags, or it may be between plastic bags subject to a fee, free biodegradable plastic bags, free compostable bags, free paper bags, and reusable bags. If free bags are offered, there is no indication regarding the percentage of consumers who have switched to such free bags.
- The value of money in Toronto is different than Alameda County. They are different economies.
- Consumers in Toronto may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

**RESPONSE H-15:** The text in the Draft EIR cited in the comment was not a reference to the above store in Toronto. As stated in Response H-5, the reference to stores in Canada was erroneous, and the corrected text can be found in *Section 4. Proposed Revisions to the Text of the Draft EIR*. The result identified in this comment of a 70 percent reduction in the use of plastic bags when a customer must pay five cents per bag is, however, consistent with the experiences of other bag reduction programs that are discussed in the Draft EIR (Ireland, Washington, D.C., stores in Australia, etc.).

## COMMENT H-16: THE DISTRICT OF COLUMBIA

- The DEIR states at pages 106-107: “It is not known with any certainty what will happen to the number of single use paper bags used in Alameda County. Based on the information currently available from the only program in a large city in the United States that charges for both paper and plastic bags (Washington D.C.), the number of single use paper bags used in Alameda County may go down substantially when people are asked to pay for them.”
- There is no finalized empirical data regarding Washington, D.C. The Metro Washington Plastic Bag Report [Exh. AL35] was prepared *before* the District of Columbia adopted an ordinance imposing a carryout bag fee.

**RESPONSE H-16:** There is updated evidence regarding the effectiveness of the five cent price for carryout bags in Washington, D.C. According to a February 2011 article in the Washington Post titled *District businesses not harmed by bag tax*, “City officials have said bag use decreased from about 270 million in 2009 to about 55 million last year - a reduction of 80 percent... In a survey of 600 randomly chosen D.C. residents commissioned by the Alice Ferguson Foundation, 75 percent said they are using fewer bags since the tax was enacted, while 21 percent said they have not changed their habits.” It can be reasonably said that a price on carryout bags in Washington D.C. substantially reduced the use of single use bags. The citation for the Washington Post article has been added to the text of the EIR, as shown in *Section 4. Proposed Revisions to the Text of the Draft EIR*.

**COMMENT H-17:** • The District of Columbia Government and retailers have been giving away reusable bags since the effective date of the fee on January 1, 2010. Four documents are provided herewith showing a huge number of free reusable bags given to District of Columbia shoppers as follows. [Exhs. AL9, AL10, AL11, AL12.]

- Giant Food stores gave away 250,000 reusable bags.
- CVS pharmacies in association with the DC Government gave away 112,000 reusable bags.
- Safeway stores gave away 10,000 reusable bags.
- Target gives a 5-cent discount for each reusable bag that customers provide.
- Section 6(b) of the DC law states that part of the fee collected by stores shall be remitted to the city and used for “[p]roviding reusable carryout bags to District residents, with priority distribution to seniors and low-income residents.” *Alameda County is not proposing a similar program.*
- DC regulations provide that stores may credit customers 5 cents for every reusable bag that a customer brings to the store to carry his or her goods. If they do give such credits, stores may keep two cents out of every five cents they charge for plastic or paper bags. [Exh. AL125.] *Alameda County is not proposing a similar program.*
- According to the latest U.S. Census, the number of households in the District of Columbia is 248,338. [Exh. AL61.] *That means that on average, every household in the District of Columbia received 1.5 free reusable bags in 2010.* That explains why there has been an upsurge in the

number of reusable bags, rather than the fee on plastic and paper bags. *Alameda County is not proposing similar programs.*

**RESPONSE H-17:** It is likely that the distribution of free and discounted reusable bags in Washington, D.C. played a role in the reduction in the use of single use bags. However, it is impossible to know what percentage of customers chose not to use a single use bags because of the price and what percentage chose not to use them because they were provided with a free reusable bag. In reality, both factors likely influenced customers' decisions. The Washington, D.C. bag reduction policy remains relevant to the proposed ordinance because it is an example of what occurred when a relatively small price (less than that proposed for Alameda County) was placed on single use bags in the United States. It should be noted that 1.5 bags per family is not an excessive number. Furthermore, in Alameda County many entities have already been giving away free reusable bags to that many consumers already have reusable bags they can use.

**COMMENT H-18:** • When the reusable bags given away in 2010 become dirty and worn, they will be discarded. At that point, the majority of consumers may prefer to pay the 5-cent fee rather than purchase more expensive reusable bags.

**RESPONSE H-18:** This comment speculates, with no supporting evidence or validation, that consumers will discard reusable bags when they become dirty and worn, and may then switch back to single use bags. As described in the Draft EIR, most reusable bags can be washed and can last years and even decades. There is no evidence to support the claim in this comment.

**COMMENT H-19:** • The value of money in the District of Columbia is different than Alameda County. They are different economies.

**RESPONSE H-19:** The value of money in the District of Columbia is the same as in Alameda County, since both use American dollars.

**COMMENT H-20:** • Consumers in the District of Columbia may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

**RESPONSE H-20:** While it is possible that consumers in the District of Columbia may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County, the opposite also is possible. The comment offers no evidence to support the claim.

Moreover, the example of Washington, D.C. was used to demonstrate that when a price is placed on carryout bags that were previously free, use of the bags drops dramatically. The Draft EIR did not rely solely on the IKEA example in its analysis (see Responses H-3, H-4, H-5, H-9, H-10, H-16, and H-21). The Draft EIR explains that the precise conditions of bag reduction policies around the world differ from the proposed ordinance (see pages 44-45 of the DEIR).

While the circumstances differ, the outcomes are all similar – the use of single-use bags declines.

**COMMENT H-21: DENMARK**

- The DIR states at page 45: “In Denmark, for example, bag fees are charged to retailers at the distribution level instead of customers at checkout, meaning customers never directly see the fee. Despite this, Denmark still achieved a 68 percent reduction in single use bags.”
- The Danish example is inapplicable. Decisions by retailers are not comparable to decisions by consumers. The proposed Alameda County fee would be payable by consumers.

**RESPONSE H-21:** The example of Denmark was discussed in the Draft EIR to demonstrate that even an indirect fee on carryout bags can reduce their use, especially when the community understands the purpose. The Draft EIR does not hide the differences in this example – the quote in this comment is from the EIR. The example underscores the principle that when a store charges more for an item, *even indirectly*, the use of that item generally decreases. For this reason, it is relevant to the proposed project.

**COMMENT H-22: SAN JOSE SURVEY**

- The DEIR states at page 44: “A survey of residents of the City of San Jose done in spring/summer 2010 did indeed verify that a charge on single use paper bags would increase customers’ use of reusable bags. Of those responding to the survey, 81 percent indicated they would bring reusable bags for shopping if plastic bags were banned and recycled content paper bags cost \$.10. Since there is no reason to think that the citizens of San Jose differ substantially in their beliefs and behavior from the citizens of Alameda County, this supports StopWaste.Org’s assumptions that the citizens of Alameda County will also reduce their use of plastic and paper single use bags.”
- According to the DEIR at page 44, the Herrera report commissioned by the City of San Jose “estimated” that 65 percent of retail customers will readily switch to reusable bags. Again, this was only an estimate and not based on real experience.

**RESPONSE H-22:** The estimate in the Herrera report was partly derived by averaging the actual results of bag charges in various locations around the world, and is thus based upon real experience. The results of surveys of US residents were also factored in to the estimate.

**COMMENT H-23:** • Responses to a survey reflect idealistic notions of what customers will do in practice. Of course, people will *say* that they will use reusable bags, but will they? What about those who find it inconvenient to carry reusable bags with them, or find that they don’t have enough space in a reusable bags, or forget them? They may have answered the survey in the affirmative.

**RESPONSE H-23:** This statement may be true but reflects only the commenter’s opinion and has no basis in fact and no verification is offered. It is even more unlikely that people opposed to placing a price on single-use bags would also say that they would use reusable bags.

It is relevant that the results of the surveys showed that 81 percent of San Jose residents said they would bring their own bag if a 10 cent price was placed on single use bags, and 70 percent of Seattle residents would be unwilling to pay for a single use bag with a 10 cent price. These percentages are quite close to the real-world bag reduction percentages resulting from programs cited previously in this comment letter: 90 percent in Ireland, 83 and 97

percent in Australia, 70 percent in Toronto, Canada, and 80 percent in Washington, D.C. The results of the surveys show that customers would be unwilling to pay for single use bags once a price is placed on them, and the results in the real-world of charging a price for bags show that this is carried out in practice. An occasional oversight or need for an extra bag does not cancel out an otherwise consistent pattern of behavior by thousands or millions of people.

**COMMENT H-24:** • In 2009, Thrifty Foods in Canada announced: “We think eliminating plastic grocery bags is the right thing to do and we are confident our customers will understand and accept this as a positive step in the right direction. In fact, we know from asking our Customer Panel that some 80 per cent of Thrifty Foods customers surveyed agree that plastic grocery bags should not be used,” said Milford Sorensen, President & CEO of Thrifty Foods.” (Exh. AL126.) However, in August 2011, the chain rolled out a pilot project that brings plastic back to three mainland stores, in Abbotsford, Coquitlam, and North Vancouver. After the project ends on Oct. 31, 2011, Thrifty will consider its next step. It will look at the customer impact, and then make a decision. The chain says the expectation was that by now, single-use bags, whether paper or plastic, would be a thing of the past, but many customers, citing ripping and leaking problems with paper bags, have expressed a preference for plastic bags. (Exhs. AL127.) *The Thrifty Foods example shows that customer surveys on this subject are extremely unreliable and produce idealistic wildly overoptimistic results.*

**RESPONSE H-24:** Neither the comment nor the source material provide evidence of what percentage of customers expressed a preference for plastic bags once the bags were removed from stores, only saying “many customers”. It is possible that 80 percent of customers still maintained the opinion that plastic bags should not be used.

This anecdotal story of what is going to happen does not constitute evidence that the surveys of San Jose and Seattle residents are unreliable.

**COMMENT H-25:** ALAMEDA COUNTY MUST EXPLAIN WHY IT IS ADOPTING A LOWER PAPER BAG FEE THAT SAN JOSE AND SANTA CLARA

- The paper bag fee in San Jose is 25 cents, after an initial two-year period at 10 cents. (Exh. AL57.)
- The paper bag fee in Santa Clara County is 15 cents. (Exh. AL128.)
- If other jurisdictions believe that the paper bag fee should be higher to prevent a significantly environmentally damaging increase in the number of paper bags, then Alameda County must explain why it is settling for a lower fee. The County has failed to provide such an explanation.

**RESPONSE H-25:** The City of San José has established a price of ten cents per bag for two years and it will be raised to 25 cents then, unless the City finds that the higher price is not necessary and changes the ordinance.

The role of an EIR is not to explain why a certain project was proposed. The role of an EIR is to analyze the environmental impacts of a proposed project. The EIR analyzed a proposed ordinance that includes a 10 cent price for single use paper bags, and found no significant impacts.

**COMMENT H-26 : STPB OBJECTS TO THE FINDING THAT BANNING PLASTIC BAGS WOULD HAVE BENEFICIAL ENVIRONMENTAL IMPACTS AND NO SIGNIFICANT NEGATIVE ENVIRONMENTAL IMPACTS**

After completing an EIR, Los Angeles County Board of Supervisors adopted an ordinance on November 16, 2010 banning plastic carryout bags and imposing a 10-cent fee on paper carryout bags. [Exh. AL73.]

The full Los Angeles County Final EIR is not provided herewith as it is too large to send via e-mail. However, STPB requests that it be made part of the administrative record. The full Final EIR and the Statement of Overriding Considerations are at:

[http://dpw.lacounty.gov/epd/aboutthebag/ordinance\\_govt.cfm](http://dpw.lacounty.gov/epd/aboutthebag/ordinance_govt.cfm).

The Los Angeles County Findings of Fact and Statement of Overriding Considerations are provided herewith. [Exh. AL31.]

The Los Angeles County EIR adopted the findings of the Ecobilan Report (and the Scottish Report). [The Scottish Report is Exh. AL55.] The Los Angeles County EIR states that the Ecobilan Report was used as the basis for the findings regarding paper bags and polyethylene reusable bags “because it is relatively recent; contains relatively sophisticated modeling and data processing techniques; considers a wide range of environmental indicators; considers paper, plastic, and reusable bags; was critically reviewed by the French Environment and Energy Management Agency; and contains detailed emission data for individual pollutants.” (Los Angeles County EIR at 3.1-15.) The Scottish Report is based entirely on the Ecobilan Report. (Los Angeles County EIR at 4-8, 4-47.) The Los Angeles County EIR determined that a 10-cent fee on paper bags and promoting and distributing reusable bags would *not* be sufficient to prevent significant negative environmental impacts caused by a shift from plastic to paper. The Los Angeles County EIR states:

Based on a conservative analysis, the County has determined that cumulative indirect [greenhouse gas] emissions resulting from implementation of the recommended ordinances will have the potential to result in significant unavoidable impacts even with implementation of [a paper bag fee and promotion and distribution of reusable bags], which will be expected to reduce significant adverse impacts to GHG emissions to the maximum extent feasible.

(Los Angeles County EIR at IV-1. Los Angeles County applied a method for determining applicable significance threshold that is similar to the Alameda County threshold. (Los Angeles County EIR at 3.3-14 to 15; Draft EIR at page 105.)

The Los Angeles County EIR determined that every polypropylene and cotton reusable bag distributed in the County must be used at least 104 times before delivering environmental benefits compared to plastic carryout bags. (Table at Los Angeles County EIR at 12-21 and repeated in text throughout Los Angeles County EIR.)

The Los Angeles County EIR determined that a reusable bag made from polyethylene must be used at least three times before delivering an environmental benefit compared to a plastic carryout bag. (Los Angeles County EIR at 4-49 to 50, 12-52 to 53.) This is far better than the 104 times that polypropylene or cotton reusable bags must be used to deliver environmental benefits.

As banning plastic bags, imposing a fee on paper bags, and promoting and distributing reusable bags would not avoid significant negative environmental impacts, the Los Angeles County Board of Supervisors adopted a “Statement of Overriding Considerations” finding that the alleged benefits of the ordinance outweighed the significant negative environmental impacts of the ordinance. (Los Angeles County EIR at IV-1.)

The principal alleged benefit identified by Los Angeles County in its Statement of Overriding Considerations is assisting in reducing litter cleanup costs by \$4 million throughout the County. (Los Angeles County EIR at IX-3.) Los Angeles County declined to explain how this figure was calculated, despite the fact that STPB pointed out that the same areas would still have to be cleared as plastic bags are only a fraction of total litter and that no money would be saved.

There are many deficiencies in the Los Angeles County EIR, including sweeping and inaccurate statements designed to justify a plastic bag ban. (STPB objected to those deficiencies.) Nevertheless, LA County was unable to avoid acknowledging that the ordinance will have significant negative environmental impacts.

**RESPONSE H-26:** This comment discusses the LA County EIR. No response is necessary.

**COMMENT H-27:** In contrast, the Alameda County DEIR finds that there would be no significant negative environmental impact from its proposed ordinance. The DEIR states at page 41:

This EIR analyzes the maximum impact scenarios that *could* occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations. (Emphasis added.)

Despite claiming that it is holding itself to the standard of what *could* occur, the DEIR in fact relies on multiple superficial, sweeping, overoptimistic, unsupported, and inaccurate statements and wishful thinking as the basis for *minimizing* the impacts, including the following:

- DEIR at page 72: “Because there were substantial reductions in the number of single use carryout bags resulting from all of these programs [Ireland, Australia, Denmark, San Jose survey, etc.] it is reasonable to assume that there would be a substantial reduction in Alameda County of the number of single use carryout bags under the proposed ordinance.”

**RESPONSE H-27:** Based on the reductions in the use of single use bags seen in all other programs where prices were placed on bags, it is reasonable to assume that the use of single use carryout bags in Alameda County would be reduced with the proposed ordinance. No evidence is known to exist that suggests otherwise. This letter does not provide fact-based information that would support a different conclusion.

**COMMENT H-28:** • DEIR at pages 75-76: “The estimate of an additional 59 to 102 million single use paper carryout bags being utilized in Alameda County was developed as an average based on dissimilar programs in various areas and represents a scenario where 65 percent of people switch to reusable bags.”

**OBJECTION:** As noted in Objection #1, the DEIR is based on flawed information and analysis about the impact of the proposed 10-cent paper bag fee. There is no substantial evidence that 65% of people will switch to reusable bags, or that 65% of bag usage will be reusable bags. Indeed, the DEIR states at page 91: “It is not known with any certainty what will happen to the number of paper bags used in the County.” It is overly optimistic and unrealistic to assume such a high figure. Moreover, the “maximum impact scenario” must assume a much lower figure that *could* happen.

**RESPONSE H-28:** As described in the DEIR and previous responses to comments, the estimate of 65 percent of customers using reusable bags or no bags is a conservative estimate based on all available information on the rate of single use bag reduction that occurs after a price is charged for bags. No evidence is provided in this comment supporting the claim that this estimate is “optimistic and unrealistic”. In fact, all evidence provided thus far in this comment letter supports the claim that when customers must pay for single use bags, their use decreases by more than 65 percent.

This comment also seems to misinterpret the meaning of “maximum impact scenario” for the purposes of the DEIR. As stated in Section 3.0 of the DEIR, starting on page 41, the maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations. The DEIR goes on to state that the maximum impact scenario is not the same thing as a “worst case”, which implies extreme conditions that may include illegal behavior and other unintended consequences. For the single use bag reduction ordinance, the maximum impact scenario is a scenario where all cities in the County adopt the ordinance, leading to the greatest increase in the use of paper bags (if in fact such an increase does occur). The assumed increase is based on reasonable but conservative assumptions, as is appropriate. Given that substantial evidence supports the assumptions made about use of paper bags, CEQA does not require that the EIR evaluate use of a “lower figure” for the number of paper bags that would be used if there is a price that must be paid for them.

**COMMENT H-29:** DEIR at page 76: “However, most of the trees are grown for paper and will be removed soon thereafter even if not used for single use paper bags sold in Alameda County.”  
**OBJECTION:** It erroneous and absurd to suggest that the same number of trees will be cut down even if paper bag usage substantially increases. More paper bags mean more trees cut down, which cannot reasonably be disputed.

**RESPONSE H-29:** This comment quotes the DEIR out of context and misinterprets the quote. The DEIR did not claim that the same number of trees will be cut down even if paper bag usage increases. The text quoted in the comment is on page 76 of the DEIR. Page 75 of the DEIR contains the statement, “A short term increase in demand for single use recycled content paper bags could result in increased timber harvesting and paper manufacturing.” An increase in paper bags used in Alameda County might mean that some trees harvested for pulp somewhere in the world might be cut down sooner than if there was no such increase in paper bags used in the County. The impacts of the potentially accelerated timber harvesting were analyzed in the DEIR (in Section 3.1.2.2 starting on page 75, and in Section 3.6.2.2 starting on page 122) and found to be less than significant.

**COMMENT H-30:** • DEIR at page 91: “In addition no LCA was found that looked at the emissions associated with manufacture of 40 percent or 100 percent recycled content paper bags.

- DEIR at page 164 “No LCA examined evaluated a single use paper bag with more than 30 percent recycled content.”

OBJECTION: The Boustead Report is an extremely thorough life cycle assessment of the environmental impacts of the types of plastic and paper carryout bags used in the U.S. It takes into account that a paper bag holds more than a plastic bag and applies an adjustment factor: 1 paper bag = 1.5 plastic bags. The Boustead Report summarizes its findings in the following table. Note that plastic bags are made of polyethylene.

Boustead Report  
Impact Summary of Various Bag Types  
(Carrying Capacity Equivalent to 1000 Paper Bags)

	Paper (30% Recycled Fiber)	Compostable Plastic	Polyethylene
Total Energy Used (MJ)	2622	2070	763
Fossil Fuel Use (kg)	23.2	41.5	14.9
Municipal Solid Waste (kg)	33.9	19.2	7.0
Greenhouse Gas Emissions (CO <sub>2</sub> Equiv. Tons)	0.08	0.18	0.04
Fresh Water Usage (Gal)	1004	1017	58

Ordinance requires that paper bags have 40% post-consumer recycled content. An additional 10% of recycled content would not result in a 10% improvement in environmental impacts. (Obviously, a paper bag with 100% post consumer recycled content would not have zero negative environmental impacts.) *But even if an extra 10% of recycled content decreased all environmental impacts of paper bags by 10%, paper bags are still far worse than plastic bags in every environmental category.* For example, instead of consuming 2622 megajoules of total energy, 1000 paper bags would consume 2360 megajoules. Plastic bags with the same carrying capacity consume only 763 megajoules.

The Boustead Report was commissioned by Progressive Bag Affiliates, a plastic bag industry organization. It was peer reviewed by an independent third party, a Professor of Chemical Engineering at North Carolina State University. He is an expert on life cycle analysis with extensive experience in the field. He stated that the Boustead Report “provides both a sound technical descriptions (sic) of the grocery bag products and the processes of life cycle use.... Whatever the goals of the policy makers, these need to be far more explicit that general environmental improvement, since the life cycle story is consistent in favor of recyclable plastic bags. “

The professor reviewed all of the figures in the report and disagreed with some of them. The Boustead report was amended to the extent that the Boustead author agreed with the professor’s comments. For example, the figure “103” for electricity in Table 9B was corrected to “154.”

**RESPONSE H-30:** It is unclear what this comment is objecting to. The DEIR cited the Boustead LCA and utilized its findings in the analysis. The DEIR does not anywhere claim that an additional 10 percent of recycled content would result in a 10 percent reduction in environmental impacts.

**COMMENT H-31:** • DEIR at pages 91-92: “Since paper bags will be required to have at least 40 percent recycled content under the proposed ordinance, any increase in emissions resulting from a change from a plastic to a paper bag may not be substantial because manufacture of paper bags using recycled content results in less pollutant emissions than manufacture using virgin material.”

**OBJECTION:** The DEIR cites no substantial evidence for this assertion. Recycling involves collection, transportation, sorting, cleaning, and reprocessing. This process creates pollutant emissions which may be greater than manufacturing using only virgin material.

**RESPONSE H-31:** Making paper from virgin materials also requires collection and transportation of virgin stock, in addition to pre-processing. Evidence exists that increasing the percentage of recycled content in paper results in environmental benefits, and this is addressed in the DEIR. As discussed in Section 8.5.4.1 of the DEIR, the Environmental Defense Fund Paper Calculator, which allows users to compare the environmental impacts associated with various types of paper, shows that increasing the recycled content of unbleached kraft paperboard, which is a thicker variation of kraft paper, reduces environmental impacts in every measurable category. This includes air pollutant emissions such as sulfur dioxide (SO<sub>2</sub>), greenhouse gases, nitrous oxides (NO<sub>x</sub>), hazardous air pollutants (HAP), volatile organic compounds (VOCs), and total reduced sulfur (TRS). As noted on its website, the Paper Calculator is based on research done by the Paper Task Force, a peer-reviewed study of the lifecycle environmental impacts of paper production and disposal, and the underlying data are updated regularly. The Paper Calculator was cited in *Section 10.0 References* of the DEIR.

See also the discussion in the research paper “Toxic Releases from Paper Made with Recovered Waste Paper Made Versus Virgin Wood Fiber: A Research Note” by Daniel Press, as listed in *Section 10.0 References* on page 159 of the DEIR.

**COMMENT H-32:** DEIR at page 92: “In addition, paper bags used in grocery stores are bigger than the HDPE plastic bags and would require fewer bags for more merchandise.”

**OBJECTION:** The Boustead Report factors in a paper to plastic bag ratio of 1:1.5. The LA County EIR, which is based on the Ecobilan report, also factors in the greater carrying capacity of paper bags. Once the greater capacity of paper bags is taken into account, paper bags still produce substantially more emissions and greater negative environmental impacts than plastic bags.

**RESPONSE H-32:** It is unclear what this comment is objecting to. The quoted text from the DEIR is an accurate statement. The Draft EIR acknowledged that on a bag-to-bag basis, paper bags are associated with greater negative environmental effects than plastic bags in some impact areas, including some air pollutant emissions.

**COMMENT H-33:** DEIR at page 92: “There is no evidence to suggest these emissions would occur in any one location in amounts that would conflict with or obstruct implementation of an applicable air quality plan, violate any air quality standard or contribute substantially to an existing

or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors.”

**OBJECTION:** Very few if any paper bags are manufactured in the project area. However, paper bag manufacturing produce emissions elsewhere and those impacts *must* be addressed. The DEIR fails to address them. In *Save The Plastic Bag Coalition v. City of Manhattan Beach* (2011), the Supreme Court stated (Slip Opinion at 21):

The other environmental impacts reflected in the record are those that might be felt beyond Manhattan Beach, as a result of processes associated with the manufacture, distribution, and recycling of paper bags in general. We have noted that the area defined by section 21060.5, that is, the area that will be affected by a proposed project, may be greater than the area encompassed by the project itself. “ [T]he project area does not define the relevant environment for purposes of CEQA when a project’s environmental effects will be felt outside the project area.’ [Citation.] Indeed, ‘the purpose of CEQA would be undermined if the appropriate governmental agencies went forward without an awareness of the effects a project will have on areas outside of the boundaries of the project area.”

**RESPONSE H-33:** The Draft EIR addressed emissions from paper bags manufactured outside of Alameda County, as evidenced by the Draft EIR text cited in this comment. The comment cites the California Supreme Court decision in *Save The Plastic Bag Coalition v. City of Manhattan Beach* (2011). However, the comment omits the text in the same Supreme Court decision that immediately follows the quoted excerpt:

This does not mean, however, that an agency is required to conduct an exhaustive analysis of all conceivable impacts a project may have in areas outside its geographical boundaries. “ ,[T]hat the effects will be felt outside of the project area . . . is one of the factors that determines the amount of detail required in any discussion. Less detail, for example, would be required where those effects are more indirect than effects felt within the project area, or where it [would] be difficult to predict them with any accuracy.” (*Muzzy Ranch Co. v. Solano County Airport Land Use Com., supra*, 41 Cal.4th at p. 388.) In *Muzzy Ranch*, we were concerned with the level of detail required to apply the commonsense exemption from CEQA review. However, our comments are equally pertinent to the analysis of impacts in an initial study leading to the issuance of a negative declaration. “Evidence appropriate to the CEQA stage in issue is all that is required.” (*Ibid.*)

The impacts of this project in areas outside Manhattan Beach itself are both indirect and difficult to predict. The actual increase in paper bag use as a result of the ordinance is necessarily uncertain, given that some percentage of local residents may be expected to turn to the city’s favored alternative, reusable bags. Moreover, the city could hardly be expected to trace the provenance of all paper bags that might be purchased by Manhattan Beach establishments, in order to evaluate the particular impacts resulting from their manufacture. Accordingly, under the approach we endorsed in *Muzzy Ranch Co. v. Solano County Airport Land Use Com., supra*, 41 Cal.4th at p. 388, the city could evaluate the broader environmental impacts of the ordinance at a reasonably high level of generality.

The Draft EIR analyzed impacts occurring outside Alameda County at a general level, which, based on the Supreme Court's opinion in *Save The Plastic Bag Coalition v. City of Manhattan Beach* (2011), is appropriate.

**COMMENT H-34:** DEIR at page 107: "Based on available information, it cannot be definitively determined what the net increases or decreases in greenhouse gas emissions might be."

**OBJECTION:** This is not correct. The LA County EIR determined the net increases in greenhouse gas emissions based on available information.

**RESPONSE H-34:** As described in the Comment H-26, the greenhouse gas (GHG) emissions analysis in the LA County EIR was based on the findings of the Ecobilan report, also referred to as the Carrefour LCA.

The StopWaste.Org Draft EIR did not rely on the Carrefour LCA for a variety of reasons, mainly because it is written entirely in French, with no English version available. This has led to confusion in the interpretation of the results contained in the report. The LA County EIR used a portion of the Carrefour LCA that stated GHG emissions associated with paper bags are 3.3 times greater than those associated with plastic bags. This led the LA County DEIR to identify a significant impact related to GHG emissions associated with an increase in paper bag use.

As described on pages 103-104 of the StopWaste.Org DEIR, the data used in most recent reports citing the Ecobilan report, including the LA County EIR, which shows paper bags being associated with 3.3 times the GHG emissions of single use plastic bags, comes from a table titled "Tableau 18: Performances relatives des sacs etudies (avec mise en decharge des sacs usages)" in the Carrefour LCA, which translates loosely to a comparison of the relative performances of bags in a scenario where all used bags are landfilled. This table, as well as all the other similar tables other than the one used in this EIR, are in a section of the Ecobilan report titled "24 Analyses de sensibilite et simulations", which roughly translates to sensitivity analysis and simulations. Other tables in this section compare bag-related impacts in several scenarios, such as partial reuse of plastic bags as garbage bags 65 percent of the time, partial reuse 32.5 percent of the time, and incineration of disposed bags for energy recovery. The tables in this section, including the one cited by the LA County EIR, represent simulations of very specific theoretical waste management scenarios, as opposed to the broad overview of the real-world situation in France. A scenario where all bags are landfilled would not be realistic in California, since it does not account for recycling. This results in inflated GHG emissions related to paper bags, since they break down in landfills, releasing GHG emissions, while plastic bags do not.

The StopWaste.Org DEIR cites a figure from the Carrefour LCA showing that emissions related to paper bags are 1.9 times greater than emissions related to single use plastic bags. The data in the StopWaste.Org EIR comes from a table titled "Tableau 14: Performances relatives des sacs etudies (contexte francais de traitement des dechets)" in the Carrefour LCA, which translates loosely to a comparison of the relative performance of bags in the context of the French waste management system, which includes a certain amount of recycling of bags. It is located in a section titled "23.10 Resume des performances relatives des sacs", which roughly means a summary of the relative performance of bags. This is the first of the several related tables presented in the Carrefour LCA, and was interpreted to

provide an overview of bag-related impacts in France, where the report was completed. This would seem to represent a more realistic GHG emissions scenario for any location where paper bags are recycled.

Some of the discrepancy in the use of figures from the Carrefour LCA may also stem from information contained in a report prepared for the Scottish government regarding impacts related to proposed bag regulation policies, which contains one of the only English summaries of the Carrefour LCA.<sup>2</sup> The Scottish report utilized a table from the Carrefour LCA showing paper bags being associated with 3.3 times the emissions of single use plastic bags. However, the specific scenario portrayed in the table was chosen because the preparers of the Scottish report felt it best represented the waste management system in Scotland. The appendices of the Scottish report provide the rationale used:

“For the base case considered here, we take the Carrefour sensitivity run where 100% of bags of all types go to landfill.

Over 88% of all waste went to landfill in Scotland in 2002/03, around 2% was incinerated and around 10% was recycled [SEPA]. Most recycled material consists of paper, glass and metal. We do not have evidence to indicate whether paper bags are more likely to be recycled than plastic ones. The assumption that 100% of bags go to landfill is slightly pessimistic. More recent figures show that recycling rates in Scotland increased in 2003/04 to an average of 12.3%. However, it is believed that plastic carrier bags will still be going to landfill or incineration, even though there will have been an increase in the recycling of newspapers, glass jars, tins, paper bags, etc. This reflects the fact that there are currently few facilities for, and little uptake of, plastic carrier bag recycling.

It is unlikely that this situation will persist in Scotland given new environmental legislation such as the Landfill Directive that requires a move away from landfill and other measures to promote recycling. However, it is possible to adapt the analysis to alternative assumptions on waste management using the results of some of the sensitivity analysis presented in the Carrefour study.”

This excerpt from the appendices to the Scottish report makes it clear that the figure showing paper bags being associated with 3.3 times the emissions of single use plastic bags represents a theoretical scenario of 100 percent landfilling that does not actually exist (even in Scotland), and does not accurately represent the situation in LA County or Alameda County.

The StopWaste.Org Draft EIR relied on the greenhouse gas emissions in the Boustead LCA, which the commenter has previously cited as “an extremely thorough life cycle assessment of the environmental impacts of the types of plastic and paper carryout bags used in the U.S.” (see Comment H-30). Using the figures from the Boustead LCA, the DEIR determined that the proposed ordinance would result in a net reduction in GHG emissions.

**COMMENT H-35:** DEIR at page 164: “Another way to avoid or reduce this impact is to recycle the paper bags; it is estimated that a substantial percentage, approximately 65 percent, of single use

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<sup>2</sup> Scottish Executive. Environment Group Research Report, Proposed Plastic Bag Levy – Extended Impact Assessment. August 2005.

paper carryout bags are already being recycled in Alameda County.... The assumption in the LCA that using more paper bags would create additional greenhouse gas emissions is therefore inapplicable.”

**OBJECTION:** The County cites no substantial evidence that approximately 65 percent of single use paper bags are currently being recycled in Alameda County.

**RESPONSE H-35:** The paper bag recycling rate of 65 percent was provided by StopWaste.Org and was based partly upon a 2008 Waste Characterization Study completed for Alameda County. A citation for the 2008 Waste Characterization Study has been added to the EIR, as shown in *Section 4. Proposed Revisions to the Text of the Draft EIR*. StopWaste.Org, as the Alameda County Waste Management Authority, is qualified to make estimates of recycling rates within its jurisdiction. Recent calculations have shown that the 65 percent figure used in the DEIR is a conservative estimate, with the actual paper bag recycling rate in Alameda County likely closer to 82.4 percent.

**COMMENT H-36:** 3. ALAMEDA COUNTY MUST MAKE THE SAME FINDING AS LOS ANGELES COUNTY, THAT THE ORDINANCE WILL OR COULD HAVE A SIGNIFICANT NEGATIVE IMPACT ON THE ENVIRONMENT, AND ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS IF IT WISHES TO ADOPT THE ORDINANCE (SUBJECT TO THE PREEMPTION OBJECTION)

**RESPONSE H-36:** This comment is factually incorrect. The CEQA Guidelines specify that findings must be based on substantial evidence in the record, which includes the DEIR prepared for this agency. The StopWaste.Org DEIR undertook an analysis of the effects of the proposed ordinance in Alameda County, and utilized information and resources that were determined to be most relevant to the County and that best informed the analysis. The conclusions of the DEIR, the methodology for arriving at those conclusions, and the sources utilized to inform the analysis are all presented in the text and appendices of the DEIR. As such, the DEIR represents a good faith effort at full disclosure of the environmental impacts of the project.

As shown in RESPONSE H-34, the LA County EIR sometimes used a different methodology and cited different source materials to arrive at its conclusions than did the StopWaste.Org DEIR. It is possible that all paper bags are currently landfilled in Los Angeles County, although this is unlikely anywhere in California based on studies completed for the State (see the *Statewide Waste Characterization Study* completed for the California Integrated Waste Management Board in December 2004, as cited in *Section 10. References* of the DEIR); it is not true in Alameda County. Therefore, some of the methodology used and information cited in the LA County EIR is not considered appropriate for or relevant to the analysis in the StopWaste.Org DEIR. As a result, the two EIRs sometimes arrived at different conclusions. This does not mean that either EIR is inadequate. CEQA does not require that all EIRs for similar projects arrive at the same conclusions.

**COMMENT H-37:** The DEIR states:

Page 41: This EIR analyzes the maximum impact scenarios that could occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts,

including full implementation by all jurisdictions and compliance by all of the affected populations. In those situations where there is uncertainty about where materials might go for processing, for example, the farthest location is assumed.

Page 155: *Negative environmental effects, however, could conceivably occur if the cumulative effect of these various programs leads to a large increase in paper bag use compared to existing conditions, especially if the increased use of paper bags is permanent.* However, it is more likely that the cumulative effect of more jurisdictions banning and/or regulating single use carryout plastic and paper bags will be that more people will use reusable bags more consistently. A frequently heard reason for not using reusable bags is that people forget to take them into the store. As more people use them, more people will see other shoppers carrying the reusable bags from car to store and will remember to take them into the stores. This phenomenon was noticeable during the start-up period for curbside recycling programs – people who saw neighbors putting out recycling, remembered to put out their own. (Emphasis added.)

Page 163: The discussion in this EIR of each area of impact describes the premises of the EIR analysis and its conclusions. An increase in the manufacture of 40 percent recycled content single use paper bags may occur after the ordinance is passed. There are currently no fact-based studies of what people will do when free single use plastic carryout bags are no longer available but a single use carryout paper bag or reusable bag can be purchased. The conclusions of this EIR are therefore based on the limited experience of others.

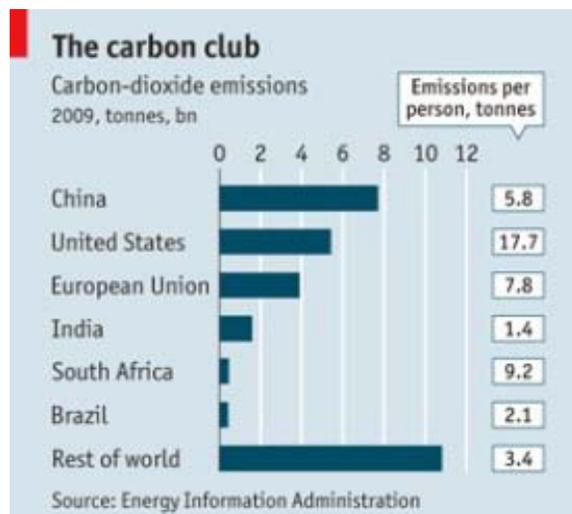
*The assertion that “more people will use reusable bags more consistently” is pure impermissible argumentation, opinion, speculation, and wishful thinking. It is not a basis for a finding that there would be no significant environmental impact.*

Guidelines §15064(f) states:

Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

**RESPONSE H-37:** As stated in the DEIR and previous responses to comments, the estimated rate of reusable bag use resulting from the proposed ordinance is based on available information on the effects of bag reduction programs around the world, as well as surveys of residents in San Jose and Seattle. No quantified conclusions in the DEIR were based on the idea that as more people use reusable bags, more people will see other shoppers carrying the reusable bags from car to store and will remember to take them into the stores. As stated in the DEIR, increased participation resulting from witnessing the participation of others is a common phenomenon seen in many environmental programs. It is not unreasonable to assume that more people will start using reusable bags because of the ordinance, nor is it unreasonable to assume that as shoppers see more people carrying reusable bags, they will be more likely to remember to bring their reusable bag into the store. This is the expert opinion of the StopWaste.Org professional staff responsible for implementing and managing the Agency’s environmental programs.

**COMMENT H-38:** Greenhouse gas emissions are important and should not be dismissed by means of wishful thinking and slick writing. The United States is the highest per capita producer of CO<sub>2</sub> emissions in the world (5.8 tonnes per person in 2009) and it has a special responsibility to address this problem.



**RESPONSE H-38:** Greenhouse gas emissions of the proposed project are analyzed on pages 95-108 of the DEIR, in *Section 3.4 Greenhouse Gas Emissions*.

**COMMENT H-39:** The DEIR accepts that there could be significant negative environmental impacts based on a maximum impact scenario. Therefore, Alameda County must make this a finding of fact. Subject to STPB's AB 2449 preemption objection, the County may adopt the proposed ordinance, but only if it also adopts a Statement of Overriding Considerations as the Los Angeles County Board of Supervisors did. [Exh. AL 31.]

**RESPONSE H-39:** The DEIR did not identify significant impacts related to the single use bag reduction ordinance. No evidence is provided in this comment or this letter to support this statement.

**COMMENT H-40:** 4. STPB OBJECTS TO THE STATEMENT ABOUT THE TOXIC CONTENTS OF HARD PLASTICS AND POLYSTYRENE AS PLASTIC BAGS ARE MADE FROM SOFT PLASTICS WITH NO TOXIC CONTENTS

The DEIR states at page 118-119 as follows:

Most of the concerns and issues with plastic in the environment revolve around the fact that plastic does not break down quickly and the items that enter the natural environment (bags, cups, plastic pellets, etc.) retain some aspect of their form for some time. Much of the ocean plastic has broken into smaller and smaller pieces, but is still recognizably pieces of plastic. Recent research has found that some plastics do degrade in the ocean environment. Specifically, certain hard plastics leach chemicals (including bisphenol A or BPA) into the water and polystyrene breaks down into three styrene oligomers that are not found in nature. BPA disrupts the hormone systems of animals, and the styrene oligomers are believed to be human carcinogens.

The subject of the DEIR is plastic and paper carryout bags, not hard plastics or polystyrene. Plastic bags are not made of hard plastic or polystyrene. STPB objects to this statement in the DEIR because it conveys the impression that plastic bags leach such chemicals, which is untrue. Plastic bags do not contain such chemicals.

The statement is clearly calculated to mislead decision-makers and the public into believing that plastic bags contain these chemicals because they are made of plastic. The statement should not appear in the Final EIR. The County should include a statement in the Final EIR that there is no suggestion that any of the mentioned chemicals are in plastic bags.

**RESPONSE H-40:** The DEIR specifically states on page 129, in reference to BPA and styrene oligomers, “While these chemical pollutants have been found in increasing concentrations in ocean water, none of them are believed to be associated with plastic bags.”

The information that is provided about such chemicals in other plastics is specifically attributed to other plastics and the DEIR states that the circumstances do not appear to apply to plastic bags. The information in the DEIR is correct and not misleading. There is no basis for retraction.

The information is relevant and is included in the DEIR because of statements made widely by representatives of the plastic industry and others that plastics do not break down in water, including seawater. That is now known to not be true of all plastics and this is relevant information for the public and decision makers. It is also relevant that the leaching of these specific toxic substances (styrene oligomers and BPA) into ocean water does not apply to plastic bags.

**COMMENT H-41: OBJECTION BASED ON PREEMPTION**

STPB also objects to the proposed ordinance on the ground that it is preempted by AB 2449 until January 1, 2013.

In 2006, the Legislature passed AB 2449. (Pub. Res. Code §§42250-57.) The Legislature declared its legislative intent therein as follows:

It is the intent of the Legislature, in enacting Chapter 5.1 (commencing with section 42250) Part 3 of Division 30 of the Public Resources Code, to encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use bags.

The Governor’s signing statement includes the following language:

I am signing Assembly Bill 2449 that implements a statewide plastic bag recycling program

While this bill may not go as far as some local environmental groups and cities may have hoped, this program will make progress to reduce plastics in our environment. This measure requires every retail establishment that provides its customers plastic bags to have an in store plastic bag recycling program, a public awareness program promoting bag recycling, post recycling requirements, record keeping and penalties.

Because this is a statewide program the bill precludes locals from implementing more stringent local requirements. The bill sunsets in six years and this will allow locals time to develop additional programs or the legislature to consider a more far reaching solution. (Emphasis added.)

[Exh. AL1, <http://www.scribd.com/doc/1814000/5/SIGNING-MESSAGES>, formerly at [http://gov.ca.gov/pdf/press/ab\\_2449\\_sign.pdf](http://gov.ca.gov/pdf/press/ab_2449_sign.pdf).]

AB 2449 sunsets and expires on January 1, 2013 (Pub. Res. Code §42257).

If plastic bags are banned locally, stores in those localities will not be subject to AB 2449 and the statewide scheme will be defeated. We can see this from two examples.

First example: Under AB 2449, stores that provide plastic bags to customers must install plastic bag collection bins for the purpose of recycling plastic bags. (Pub. Res. Code §42252(b).) Any member of the public may use those bins to deposit any discarded plastic bags. If stores in the County are prohibited from handing out plastic bags, then all such stores would be permitted to remove their plastic bag recycling bins. Such bins are used to collect and recycle all types of plastic bags, including bags that are not prohibited under the proposed ordinance, including but not limited to retail bags, produce bags, newspaper bags, and dry cleaning bags. There would be no way to recycle such bags as they are not accepted in curbside recycling programs in the County. The statewide statutory scheme of AB 2449 would be defeated.

Second example: AB 2449 states that “[t]he operator of the store shall make reusable bags available to customers within the store, which may be purchased and used in lieu of using a plastic carryout bag or paper bag.” (Pub. Res. Code §42252(e).) If plastic bags are banned by local ordinances, such stores will not be required to make reusable bags available to customers in lieu of paper bags. That is because only stores that provide plastic bags are required by AB 2449 to also provide reusable bags. (Pub. Res. Code §42250(e).) Therefore, the declared legislative intent of AB 2449 “to encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use bags,” including paper bags, would be defeated. Although an ordinance banning plastic bags may require such stores to make reusable bags available in lieu of paper bags, there is no guarantee that a city or county will include such a requirement in an ordinance.

“Whenever the Legislature has seen fit to adopt a general scheme for the regulation of a particular subject, the entire control over whatever phases of the subject are covered by state legislation ceases as far as local legislation is concerned.” (*American Financial Services Assn. v. City of Oakland* (2005) 34 Cal.4th 1239, 1253.) No express preemption language is necessary for preemption to occur. (*Id.* at 1252.)

Based on the foregoing, the Alameda County ordinance would conflict with the comprehensive and integrated statewide plastics recycling and reusable bag scheme of AB 2449.

**RESPONSE H-41:** This comment objects to the proposed ordinance, but does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No response is necessary.

**COMMENT H-42: NOTICE OF INTENT TO LITIGATE**

STPB hereby notifies Alameda County that STPB *will* file a petition for writ of mandate and request other appropriate relief in the Alameda County Superior Court in the public interest, based on the points and objections herein, if the proposed ordinance or a similar ordinance is adopted.

**RESPONSE H-42:** This comment is acknowledged. No response is necessary.

**COMMENT H-43: ADMINISTRATIVE RECORD**

STPB is submitting herewith, by e-mail, copies of documents cited herein or which otherwise support the objections herein. STPB requests that all such documents be made part of the administrative record.

STPB requests that the documents submitted by STPB be numbered and indexed in the administrative record in accordance with STPB's numbering system: AL1, AL2, etc.

**RESPONSE H-43:** This comment is acknowledged. The aforementioned documents are part of the administrative record.

**COMMENT H-44: REQUEST FOR NOTICES**

I request that you send me by e-mail and regular mail any future public notices regarding the proposed ordinance and any public hearings, including but not limited to any and all CEQA notices and documents.

**CONTACT PERSON**

I am the designated contact person for the Save The Plastic Bag Coalition.

**RESPONSE H-44:** This comment is acknowledged. No response is necessary.

**COMMENT H-45: RESERVATION OF RIGHTS**

All rights are reserved.

The fact that particular parts of the DEIR are not mentioned or objected to herein does not mean that STPB accepts their accuracy or validity.

No rights or duties are waived by any statement or omission herein. Strict compliance with all the applicable provisions of CEQA is hereby demanded.

According to the DEIR at page 38, the definition of a reusable bag may be subject to further definition. STPB reserves the right to comment on and object to any such further definition.

**RESPONSE H-45:** This comment does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is necessary.

**I. RESPONSES TO COMMENTS FROM CALIFORNIA REFUSE AND RECYCLING COUNCIL, DATED SEPTEMBER 16, 2011:**

**Mandatory Recycling Ordinance**

**COMMENT I-1:** The California Refuse Recycling Council (CRRC) Northern District is a trade association of haulers, processors, recyclers, and composters with members throughout the Bay Area and the Central Valley. Our members have been providing commercial recycling for years, and have strongly supported the further development of mandated commercial recycling programs. CRRC has a statewide perspective on mandatory commercial recycling over the last three years with active involvement on the AB 32 Scoping Plan, legislative efforts cumulating in AB 341 (Chesbro) this year, and the current regulations being considered by the California Air Resources Board (CARB) on October 20, 2011. CRRC has been in collaboration with the Institute of Local Government and the League of Cities on the development of their sample mandated commercial recycling ordinance. We appreciate the opportunity to comment on your Draft Environmental Impact Report on Mandated Recycling and Single Use Bag Reduction Ordinance. Our comments will focus on the mandatory recycling ordinance and our participation in two recent workshops held by the Alameda County Waste Management Authority (ACWMA).

In Alameda County, there are five franchise haulers and four permitted facilities that are members of CRRC. We have been providing commercial recycling services under the terms of our respective franchises, while our facilities are gearing up to accept more commercial recyclables. On behalf of CRRC members, I participated in the August 11, 2011 ACWMA Policy Workshop and the September 8, 2011 Joint Meeting of the ACWMA and Recycling Board's Workshop on Mandated Recycling Ordinances. CRRC presented the verbal comments summarized later in this letter to support our comments on the Draft EIR.

**RESPONSE I-1:** This comment is acknowledged. No other response is required.

**COMMENT I-2:** Draft EIR Comment No. 1 – Proposed Sample Ordinance as an Alternative: StopWaste.Org is proposing a Mandatory Recycling Ordinance to cover all 17 jurisdictions within the ACWMA, which will help meet the States' AB 32 Scoping Plan measure to increase recycling.

Under Section 8.0 Alternatives to the Proposed Project – 8.2.4 Alternatives Considered but Rejected, variations to the Mandatory Recycling Ordinance was discussed which would allow a jurisdiction to adopt their own ordinance, which could result in lower impacts based on the analysis in the EIR. A jurisdiction should be able to adopt their own ordinance which would still meet AB 32 Scoping Plan goals, the pending CARB regulations and pending AB 341 legislation, as further discussed herein. ACWMA could adopt a sample or model ordinance with minimum standards based upon a “menu approach” and could still meet the objectives of the Mandatory Recycling Ordinance. The Draft EIR should allow each jurisdiction to adopt their own ordinance as an Alternative.

CRRC proposes that Section 8.0 Alternatives to the Proposed Project include the development of a Sample or Model Mandatory Recycling Ordinance that can be customized by each jurisdiction. Instead of adopting a “one-size-fits-all” mandatory commercial ordinance for all jurisdictions, this alternative should be presented that allows each jurisdiction to adopt their own ordinance, following a model or sample ordinance outlined by StopWaste.Org. The objectives for the Mandatory Recycling Ordinance analyzed in the Draft EIR can still be achieved but would be implemented on a jurisdictional basis instead of a regional basis. CRRC comments are supported by speakers at the two workshops that we participated in, the previous work by the Institute of Local Government, and the

precedent-setting Model C&D Ordinance process adopted by StopWaste.Org in 1999, as presented below:

August 11, 2011 Policy Workshop:

The Policy Workshop focused on the “stand-alone” option and the “menu” option, where the “stand-alone” options would establish a minimum standard that is separate and apart from direct collection activity, and the “menu” options would allow jurisdictions to select one or more standards to the provisions of their particular collection franchise and municipal code. CRRC supported the “menu” approach as it allows local flexibility to address local circumstances. Some jurisdictions may have mature programs with infrastructure in place and a recent franchise, whereas other jurisdictions may still need to build the infrastructure and amend the franchise. Such as with current regulatory efforts at CalRecycle and CARB, legislation with AB 341 (Chesbro), and the work with the Institute of Local Government, there has been general consensus to build upon the existing infrastructure and work with the current franchise or contract to implement mandated commercial recycling, and then resort to an ordinance. The “menu” approach allows the jurisdiction and their contracted hauler to implement programs most suitable to their community. The “stand alone” approach or “one-size-fits-all” may create an overarching regulatory framework that may not be viable for all jurisdictions.

September 8, 2011 Joint Meeting of the ACWMA and Recycling Board’s Workshop:

The Workshop consisted of five presenters from jurisdictions that have mandated commercial recycling: Seattle, San Diego, San Carlos, Sacramento, and San Francisco. There was a common theme that the mandated commercial recycling ordinance was specific to a jurisdiction, and that a multi-jurisdictional ordinance may be problematic. The County of Kings has a different program than the City of Seattle. San Diego and San Francisco have their own programs that were not regional. Sacramento did include both the City and the County, and the other participating cities had their own ordinances that mimicked much of the larger policy issues for regional consistency, but had separate implementation and enforcement measures. The presenter from San Carlos, being part of www.Rethink.Org, discussed their ordinance, and cautioned about the “Tale of Two Cities” when trying to get the City of San Mateo to participate. The presenter was also the Chairman of www.Rethink.Org, and warned against creating a broader ordinance that may be much more difficult to implement.

Under public comment, I noted the above observation, and recommended that ACWMA pursue jurisdictional-based ordinances that would provide the local flexibility to work with the current franchisees and infrastructure.

Construction and Demolition Debris Model Ordinance adopted by StopWaste.Org in 1999  
In November 1999, the Alameda County Waste Management Authority Board endorsed a Model Construction & Demolition Ordinance requiring contractors to divert at least 50% of their construction waste materials from landfill. Each jurisdiction then went forth and adopted their community-based ordinance customized to their local circumstances. StopWaste.Org should follow the same Model Ordinance utilized for C&D, or the Sample Ordinance process endorsed by the Institute of Local Government.

Institute of Local Government – Sample Ordinance

CRRC has been in collaboration with the Institute of Local Government and the League of Cities on the development of their sample mandated commercial recycling ordinance that also echoed working with the current contracts in place to design and implement mandated commercial recycling programs. A 17-jurisdictional ordinance may not be necessary for program design, as current franchises and contracts supplemented by a specific jurisdictional ordinance may easily suffice.

CRRC understands the jurisdictional ordinance approach may be needed to address generator responsibility and generator enforcement measures.

The Institute of Local Government prepared a sample ordinance that recognized that one-size-does-not-fit-all, and offered the explanation below that an ordinance needs to be designed to reflect unique circumstance at the local level. Plus, the Institute suggested that a mandatory commercial recycling ordinance should be considered in the context of the agency's existing solid waste and recycling regulatory system. This includes existing exclusive or non-exclusive franchises, local solid waste ordinances, policies and regulations, and hauling permits or contract conditions.

*“The sample commercial recycling ordinance was prepared in 2009 by the Institute for Local Government’s Climate Change Program under a contract with the California Integrated Waste Management Board (now CalRecycle).*

*Adoption and implementation of the sample ordinance by local agencies is voluntary.*

*The sample ordinance emphasizes policy choices at the local level and is designed to be modified by individual agencies to reflect the unique circumstances in the community. It offers a menu of options to suit local needs and service situations. In addition, it includes extensive commentary that explains the options and provides background explanations for many provisions.”*

*“A. Review Existing Franchises, Permits and Contracts*

*A mandatory commercial recycling ordinance should be considered in the context of the agency’s existing solid waste and recycling regulatory system. This includes existing exclusive or non-exclusive franchises, local solid waste ordinances, policies and regulations, and hauling permit or contract conditions. For example, if an agency has an exclusive franchise with one solid waste hauler to serve the commercial sector, review what types of commercial recycling, reporting or enforcement requirements already are included in the franchise or ordinance.*

*Agencies with an “open competition” system for the commercial sector also may have contract or permit conditions related to offering recycling services by haulers or recyclers.”*

CRRC has been active with legislative efforts, culminating in AB 341 (Chesbro) this year, and the current regulations being considered by the CARB which both recognize the franchise system as highlighted in the notes below:

AB 341 (Chesbro) – Enrolled to the Governor:

AB 341 recognizes current commercial recycling programs in place and the franchises in place:

*42649.3. (b) If a jurisdiction already has a commercial solid waste recycling program as one of its diversion elements that meets the requirements of this section, it shall not be required to implement a new or expanded commercial solid waste recycling program*  
*42649.5. (b) This chapter does not modify, limit, or abrogate in any manner any of the following:*

*(1) A franchise granted or extended by a city, county, or other local government agency.*

*(2) A contract, license, or permit to collect solid waste previously granted or extended by a city, county, or other local government agency.*

Proposed Draft Regulation to Reduce Greenhouse Gas Emissions by Requiring Commercial Businesses to Recycle:

The Draft regulation recognizes current commercial recycling programs in place and the franchises in place, and will be considered by CARB on October 20, 2011:

*This Section does not modify or abrogate in any manner any of the following:*

*(1) A franchise granted or extended by a city, county, or other local government agency;*

*(2) A permit to collect solid waste granted or extended by a city, county, or other local government agency as of the effective date of this regulation; or*

**RESPONSE I-2:** This letter states that a model ordinance was developed to be consistent with the state's previously identified goals and objectives. As stated in the text quoted above, "A mandatory commercial recycling ordinance should be considered in the context of the agency's existing solid waste and recycling regulatory system." The member agencies of StopWaste.Org have adopted a Countywide Integrated Waste Management Plan (CoIWMP) that reflects substantially broader goals and much more specific and focused objectives than the statewide regulations (see Section 2.3.1.2 Objectives for the Mandatory Recycling Ordinance, starting on page 37 of the DEIR). The proposed elements of the mandatory recycling ordinance evaluated in this EIR reflect the objectives in the adopted CoIWMP. To retrofit a generic model ordinance so that it reflects the local plan and objectives would not appear to serve any useful purpose in this particular situation.

The text of the comment also does not identify what, if any, environmental effects might be reduced or avoided by using this model ordinance. The purpose of including alternatives in an EIR is stated in the CEQA Guidelines as:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if those alternatives would impede to some degree the attainment of the project objectives, or would be more costly. [§15126.6(b)]

The statement appears near the beginning of this comment that the Draft EIR identifies an alternative that would "allow a jurisdiction to adopt their own ordinance, which could result in lower impacts based on the analysis in the EIR". This is not a correct reading of the text in the EIR. The EIR states that "any ordinance adopted by an individual jurisdiction is unlikely to have a significant impact by itself, although it might also contribute to the cumulative impact" (page 167, Section 8.2.4.1). That is because the significant impact identified in this DEIR results from the combined actions anticipated to occur because of multiple jurisdictions complying with the mandatory recycling ordinance. Any single jurisdiction that sends organics to the Central Valley would contribute to the cumulatively significant impacts on air

quality and to pretend otherwise (i.e., to do individual review of separate cities in order to avoid having to acknowledge the combined impact) would be piecemealing.

**COMMENT I-3:** Draft EIR Comment No. 2 – Anaerobic Digestion as an Alternative:

Implementation of a countywide mandatory ordinance could result in a significant air quality impact by hauling organics to the San Joaquin Valley air basin. The Draft EIR assumes the hauling of organics to the compost facilities in the Central Valley. The Draft EIR recognizes that the most effective way to reduce impacts to less than significant would be to establish a composting facility in Alameda County, under Section 8.4 Alternatives to the Mandatory Recycling Ordinance – 8.4.1 Establish a Composting Facility In Alameda County. With the commercialization of anaerobic digestion (AD) technologies (as evidenced by one of the first domestic facilities being placed in San Jose) AD facilities should also be mentioned as an alternative. AD facilities could be right-sized to meet the community organic waste stream and be placed in-town and in-vessel in enclosed buildings. AD is a form of composting, and the Draft EIR should be amended to address AD facilities, and decrease VMTs and emissions in the Central Valley, as noted on page 173 regarding composting facilities.

**RESPONSE I-4:** The EIR discussion of an alternative that would locate a composting facility in Alameda County (starting on page 173 of the Draft EIR) does not limit the type of composting operation to any particular type of facility. An anaerobic facility of sufficient capacity that is sited and designed to avoid significant impacts to criteria pollutants and to reuse all of the methane could conceivably achieve the same reduction in landfilled waste as a turned windrow facility and can be assumed to be part of the alternative.

The location of the facility relative to the jurisdictions that send material to the facility for processing might determine how much material would need to be processed there in order to avoid the significant impact. This is true regardless of whether the composting is done in open windrows, aerated static piles, in-vessel, or anaerobically. As stated in the DEIR, the current proposal to operate a composting facility at Altamont landfill would be relevant to the CEQA analysis because much of the waste is being landfilled there under existing conditions.

The statement in this comment is that an anaerobic facility could be located “in-town”. The alternative in the DEIR only assumes that there is a suitable site for a composting facility in Alameda County.

**COMMENT I-5:** Draft EIR Comment No. 3 – Materials Flow Modeling:

Figure 5 – Materials Flow by Jurisdiction, Recyclable Materials graphically shows that recyclables generated by Pleasanton Transfer Station flow to Alameda County Industries Transfer Station in San Leandro; no materials from the Pleasanton facility are delivered to ACI. It is our understanding that materials collected in the City of Pleasanton are processed at the Pleasanton Transfer Station and materials collected in the City of Dublin are transferred to the BLT Facility in Fremont.

**RESPONSE I-5:** The errors are corrected in *Section 4. Proposed Revisions to the Text of the Draft EIR.*

**COMMENT I-6:** Draft EIR Comment No. 4 – Compost Facility Operational Emissions:

The Draft EIR identifies that the implementation of a countywide mandatory ordinance could result in a significant air quality impact from the hauling of organics, and subsequent hauling of finished compost products, to the San Joaquin Valley air basin. The Draft EIR, however, only recognizes the hauling of organics to the compost facilities in the Central Valley as a significant contributor to emissions and fails to discuss the increased operational emissions that would result from the

increased throughput at the facilities. Increases in NOx, PM, and other criteria pollutants should be expected due to the corresponding increased use of materials handling equipment (i.e. front end loaders, excavators, etc.) as well as the incremental emissions (mainly volatile organic compounds) associated with the composting of additional organic feedstocks from Alameda County. Any required expansion of currently-permitted throughput at composting facilities in the San Joaquin air basin will require New Source Review by the local air district staff, which will result in the implementation of Best Available Control Technology and the potential purchase of emissions offsets, resulting in significant cost to the operators.

**RESPONSE I-6:** The information in this comment about the need for additional analysis and requirements that would be placed on any expansion of the facility is not relevant to this project, since the quantity of material generated, which includes organics from Dublin and Pleasanton, would be within the existing permitted capacity of the facility (2,000 TPD). The analysis in the Draft EIR assumes that the organic materials transported to the San Joaquin Valley for processing will be composted at existing permitted facilities using the best management practices identified in the CEQA process implemented for their existing permits from their local land use authority and the San Joaquin Valley Air Quality Management District. None of the issues referred to in this comment associated with permit revisions or “New Source Review” would be triggered by organics that may be hauled to Recology Grover.

Additional analysis for pending new Rule 4566<sup>3</sup> indicates further measures that may be implemented if Rule 4566 is adopted.

[<http://www.valleyair.org/rules/currentrules/rule4566cleanrule.pdf>] and evaluated in the most recent staff report dated September 26, 2011:

[<http://www.valleyair.org/workshops/postings/2010/9-22-10-rule4566/2%20r4566%20draft%20staff%20report.pdf>].

This is also consistent with the assumptions in the Initial Statement of Reasons (ISOR) prepared by CalRecycle and the Air Resources Board for the statewide regulation.

The Draft EIR quantifies the impacts from transporting the maximum credible quantity of material to Recology Grover and the air quality impacts from marketing the finished compost because it is assumed that those specific pollutants may not have been known and were not part of the impact analysis done for the permitting of the Recology Grover composting facility in 2008. The Draft EIR also evaluates the climate change impacts of transporting the material to Grover, marketing the finished product, and composting the material at Grover because climate change impacts were not typically included in CEQA analyses in 2008, when the last permit was issued for Grover.

The proposed project could generate up to 304,000 tons per year of additional material to be composted at Grover; that is less than half of its permitted capacity of 2,000 TPD, assuming the facility does not receive material on Sundays. StopWaste.Org staff believes that the current throughput is less than half of the permitted capacity, based on information obtained through direct negotiations with the principals of the Grover facility for capacity for the existing Alameda County food scrap program, interviews, and site visits (where capacity was the specific focus of discussion). It is, therefore, assumed that the 304,000 tons per year of

---

<sup>3</sup> The new Rule 4566 as it would be applied to Recology Grover would require the use of both water and a finished compost blanket over the windrows to manage air quality impacts. These are not unusual techniques for processing organics in aerated static piles (ASP).

material (which is less than 1,000 TPD based on deliveries six days a week) can be accommodated under the existing cap and was included in the CEQA analysis done for the existing permit.

**J. RESPONSES TO COMMENTS FROM NAOMI SCHER, DATED SEPTEMBER 8, 2011:**

**COMMENT J-1:** I think it's a great idea! Let's stop wasting so much Alameda County!!!

**RESPONSE J-1:** This comment is acknowledged. It does not raise any issue regarding the environmental effects of the project or the contents of the EIR. No other response is required.

**SECTION 4. PROPOSED REVISIONS TO THE TEXT OF THE DRAFT ENVIRONMENTAL IMPACT REPORT**

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Page 16 Section 2.0 Project Description; 2.1.1 Background to Mandatory Recycling Ordinance; Regulatory Setting: **REVISE** the third sentence in the fourth paragraph of this section as shown:

...to ARB in July 2011. If adopted, commercial generators producing at least four cubic yards of solid waste per week and multi-family generators with ~~sixteen~~ **five** or more units will be required to segregate recyclable and organic materials for recycling. Local jurisdictions....

Page 35 Section 2.3 Description of the Proposed Project; 2.3.1 Mandatory Recycling Ordinance; Collection and Processing; Figure 5: Materials Flow by Jurisdiction, Recyclable Materials: **REPLACE** this figure with:

Figure 5 Revised  
(Note: a copy of this figure is provided after page 71 of this Final EIR)

Page 43 Section 3.0 Environmental Setting, Impacts, and Mitigation: **REVISE** the following text in the last paragraph of the page as shown:

Individual stores in Australia ~~and Canada~~ that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.

Page 45 Section 3.0 Environmental Setting, Impacts, and Mitigation; **REVISE** the following text in the first paragraph on the page as shown:

In Washington D.C., where ~~an~~ **50** ~~80~~ percent reduction in single use bags was achieved, the fee is only five cents, instead of the 10 cent store charge proposed by the project.

Page 59 Section 3.1 Land Use; Section 3.1.1 Existing Setting; Section 3.1.1.1 Existing Setting Related to Mandatory Recycling Ordinance: **REVISE** the seventh row of this table as shown:

Dublin	N/A	Altamont	<del>Pleasanton</del> TS/Fremont	Port of Oakland	Pleasanton TS	Colorscape II
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Page 62 Last paragraph on the page; **REVISE** as follows:

There are also other facilities in and near Alameda County that process some of the same types of materials and that may currently be handling self-haul loads, construction and demolition debris, and other waste materials not specifically addressed in this EIR. Those facilities (Smurfit-Stone, Recyclery at Newby Island, Zanker Materials Processing Facility, Keller Canyon Landfill, Jepson Prairie, Forward Landfill composting facility, Z-Best

composting facility, City of Modesto composting facility, and others) may be utilized for some fraction of franchised waste in the future. This EIR is unable to evaluate the impacts of using other locations, since that would be too speculative.

Page 70

Section 3.1 Land Use; 3.1.2 Land Use Impacts; 3.1.2.1 Impacts from the Mandatory Recycling Ordinance: **INSERT** the following text just following Impact LU-1:

*Impacts from Bin Enclosures*

During the period of adjustment to the new ordinance, as generators learn to separate organics from waste materials, provision will need to be made for storing different containers for waste, recyclable organics, and other recyclables on-site. It is anticipated that full implementation of the proposed mandatory recycling ordinance will result in substantially decreased quantities of mixed waste destined for landfill being placed out for collection. For multi-family housing projects, garbage volumes may decrease substantially if food waste, soiled paper, and green waste are collected in organics bins. The garbage hauled to landfill will fit in a substantially smaller bin or cart that no longer needs to be collected multiple times a week, once the putrescibles are removed and if/when non-organic recyclables are successfully diverted from the waste category.

For commercial accounts, some businesses will shift their discards from garbage and recyclables bins or carts to recyclables and organics bins and carts. Some will shift from large garbage bins serviced frequently to garbage and recyclables bins serviced less frequently. Some locations may, for example, substitute twice weekly garbage service of a large bin to weekly garbage service of a small garbage bin and a large recyclables bin. Others may find it works better to have weekly service of a large organics bin, and every other week collection of a small bin of recyclables or mixed waste.

It is possible that some inconveniences will result, especially in multi-family residential complexes where multiple households, site managers, and service providers will be learning how to accommodate the new requirements. There may be temporary land use impacts and sources of annoyance, including overfull containers, mistakes in container use, misplaced containers that interfere with other land uses (like parking), and similar issues.

Ultimately, some bin or cart enclosures may need to be modified (such as changes in the gate size or roll-out pad) or expanded to accommodate whatever combination of bin and cart sizes and numbers are found to be appropriate. A property owner may elect to add a new enclosure, particularly in a multi-tenant development that has a kitchen or cafeteria. A number of existing regulations will ensure that these changes will not result in significant environmental impacts. All modifications and new enclosures will be subject to the applicable building, fire, and health codes and relevant site and architectural standards and processes of the local jurisdiction. During this same timeframe, recently enacted requirements from the Regional Board

related to conformance with the federal Clean Water Act and the state's Porter Cologne Act will require that garbage enclosures for new development be covered to minimize stormwater intrusion into waste containers, and that the enclosures be drained to a sanitary sewer (not to storm drains). These requirements are separate and independent of the proposed mandatory recycling ordinance, although they will minimize potential stormwater contamination from future spills or trash dropped from containers.

The inconveniences and annoyances of the adjustment period can be minimized by advance notice and education about the purpose and goals of the new programs. Cooperation between StopWaste.Org, local jurisdictions, service providers and stakeholder groups (such as apartment owners, management associations, business groups, etc.) and sharing information that identifies methods for minimizing disruptions will also help to reduce problems and shorten the transition timeframe.

**Impact LU-1(b):** While there is a potential for temporary land use conflicts to occur associated with changing the ways in which residents and businesses manage their waste on-site, it is unlikely that these conditions would constitute any greater impact than temporary inconveniences. The modifications to existing bin/cart enclosures, or the addition of a new enclosure on-site which adheres to all appropriate local codes, standards, and regulations would not result in significant land use impacts. (Less Than Significant Impact)

Page 72

In Section 3.1 Land Use; Section 3.1.2 Land Use Impacts; Section 3.1.2.2 Impacts from the Single Use Bag Reduction Ordinance: **REVISE** the following text in the last sentence of the second paragraph on the page as shown:

Washington D.C. saw an 50 to 80 percent reduction in the use of single use plastic bags after the imposition of a five-cent fee in 2010.

Page 74

In Section 3.1 Land Use; Section 3.1.2 Land Use Impacts; Section 3.1.2.2 Impacts from the Single Use Bag Reduction Ordinance: **REVISE** the following text in the last sentence of the second to last paragraph on the page as shown:

In the only program known to have been implemented in a large city in the United States, Washington D.C. recently enacted a fee on all single use bags, resulting in a reduction of ~~between 50 and 80~~ percent.

Page 84

In Section 3.2 Transportation; Section 3.2.2 Transportation Impacts; Section 3.2.2.1 Transportation Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the third paragraph on the page as shown:

The calculations resulted in an estimated net overall increase in VMT of ~~729,580~~ 729,460, which includes a decrease in VMT of ~~253,563~~ 215,806 traveled in the Bay Area and an increase in VMT of ~~983,143~~ 945,267 traveled in the San Joaquin Valley.

In Section 3.2 Transportation; Section 3.2.2 Transportation Impacts; Section 3.2.2.1 Transportation Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the last sentence on the page as shown:

Overall, however, the miles traveled in Alameda County will be *reduced* an average of ~~410,692~~ 1,683 VMT per day (excluding Sundays) for the entire county, which is a relatively small quantity over a large area.

In Section 3.2 Transportation; Section 3.2.2 Transportation Impacts; Section 3.2.2.1 Transportation Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the first paragraph on the page as shown:

Increased mileage in the San Joaquin Valley is the result of more transfer vehicles hauling organics to Grover in the morning (an average increase of ~~4,358~~ 1,683 VMT per day), trucks hauling finished compost to farms and landscapers in the Valley and wood chips to the waste to energy facility in Modesto (an overall average increase of ~~1,545~~ 1,107 VMT per day), and trucks hauling processed glass to Gallo in Modesto (an average increase of 239 VMT per day).

In Section 3.3 Air Quality; Section 3.3.2 Air Quality Impacts; Section 3.3.2.1 Air Quality Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the first paragraph on the page and the table that follows as shown:

The project as a whole could result in an increase of ~~729,580~~ 729,460 vehicle miles traveled (VMT) spread between both the Bay Area Air Basin and the San Joaquin Valley Air Basin. There will actually be a decrease of ~~253,563~~ 215,806 VMT, and the resulting emissions, in the Bay Area Air Basin. However, there will be an increase of ~~983,143~~ 945,267 VMT in the San Joaquin Valley Air Basin due to the increased diversion of organic materials, and the fact that a major organics facility, Grover, is located in the San Joaquin Valley. Additionally, the amount of finished compost from Grover will increase, and will be delivered to market in the San Joaquin Valley, requiring additional truck trips.<sup>4</sup> As shown in Table 3.3-1, this increase of VMT in the San Joaquin Valley Air Basin would result in an increase in NO<sub>x</sub> emissions, at a rate of ~~12.3~~ 11.45 tons per year. This is over the 10 tons per year threshold established by the SJVAPCD, and would constitute a significant impact.

<sup>4</sup> For the purposes of this EIR, it is assumed that finished compost from organics facilities will be delivered an average of 25 miles to market.

<b>Table 3.3-1: NOx Emissions in the San Joaquin Valley Air Basin</b>		
<b>Category</b>	<b>Annual VMT</b>	<b>NOx Emissions (tons/year)</b>
Organics to Facility	<del>424,905</del> <u>525,089</u>	<del>4.82</del> <u>5.82</u>
Compost to Market	<del>483,500</del> <u>345,453</u>	<del>6.48</del> <u>4.63</u>
Recycled Glass to Market	<del>74,737</del> <u>74,724</u>	1.00
<i>Total</i>	<del>983,143*</del> <u>945,267*</u>	<del>12.30</del> <u>11.45</u>
* Note: Because of rounding, totals may not sum precisely according to the integers shown.		

Page 90

In Section 3.3 Air Quality; Section 3.3.2 Air Quality Impacts; Section 3.3.2.1 Air Quality Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the impact statement near the top of the page as shown:

**Impact AQ-1:** The proposed ordinance could result in an increase of ~~12.3~~ 11.45 tons of NOx emissions per year in the San Joaquin Valley Air Basin. (**Significant Impact**)

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In Section 3.3 Air Quality; Section 3.3.2 Air Quality Impacts; Section 3.3.2.1 Air Quality Impacts from the Mandatory Recycling Ordinance: **REVISE** the following text in the fourth paragraph near the middle of the page as shown:

Should enough of these jurisdictions decline to adopt the ordinance so that it results in a ~~24~~ 14 percent reduction (~~63,839~~ 42,560 tons) in the amount of organics transported to Grover compared to full countywide implementation, the significant NOx impact identified above would be reduced to a less than significant level.

Page 93

In Section 3.3 Air Quality; Section 3.3.3 Mitigation and Avoidance Measures for Air Quality Impacts; Section 3.3.3.1 Mitigation Measures Not Proposed by the Project: **REVISE** the following text in the third paragraph on the page as shown:

Due to the increased transport of recycled glass and organic materials to facilities and markets in the San Joaquin Valley Air Basin, the project could add ~~12.3~~ 11.45 tons per year of NOx emissions in the Air Basin, which is a significant impact. As shown in Table 3.3-1, ~~11.3~~ 10.45 tons per year of the NOx emissions are associated with the increased transport of organics, and one ton per year is associated with the increased transport of recycled glass. An overall reduction in NOx emissions of at least ~~2.3~~ 1.45 tons, or ~~18.7~~ 13 percent, is needed to reduce the project's NOx emissions to a level below the 10 tons per year threshold established by SJVAPCD. This reduction must come from reducing the anticipated increase in VMT (or the air quality impacts associated with emissions resulting from this VMT, per MM AIR-1.2 below) associated with transporting organics to the compost facility, since neither the transport of recycled glass nor the transport of compost going to market can be regulated by the ACWMA. However, since the amount of compost going to market is directly related to the amount of organics sent to the compost facility, a reduction in the quantity of organics sent to the facility

would result in a similar reduction in the quantity of compost subsequently sent to market, and in any associated VMT. The needed ~~2.3~~ 1.45 ton reduction in NOx emissions would represent a ~~20.4~~ 14 percent reduction in the ~~41.3~~ 10.45 tons of emissions resulting from the transport of organics.

Page 93

In Section 3.3 Air Quality; Section 3.3.3 Mitigation and Avoidance Measures for Air Quality Impacts; Section 3.3.3.1 Mitigation Measures Not Proposed by the Project: **REVISE** the following text in the mitigation measures at the bottom of the page as shown:

**MM AIR-1.1:** Of the estimated 304,000 tons of increased organic materials transported from Alameda County to the Grover composting facility in the San Joaquin Valley Air Basin as a result of implementing a countywide ordinance, at least ~~21~~ 14 percent, or approximately ~~65,000~~ 42,560 tons, shall be transferred to composting facilities outside the San Joaquin Valley air basin. No more than ~~240,160~~ 261,440 additional tons of organics shall be transported to the Grover facility compared to existing conditions.

Page 121

Section 3.6 Biological Resources; Section 3.6.2 Biological Resources Impacts; Section 3.6.2.2 Biological Resources Impacts from the Single Use Bag Reduction Ordinance: **REVISE** the following text in the last sentence of the first paragraph of the section as shown:

Individual stores in Australia ~~and Canada~~ that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.

Page 173

Section 8.4 Alternatives to the Mandatory Recycling Ordinance; Section 8.4.1 Establish a Composting Facility in Alameda County: **REVISE** the following text in the third sentence of the third paragraph of the page as shown:

An overall reduction in NOx emissions of at least ~~2.3~~ 1.45 tons is needed to reduce the project's NOx emissions to a level below the 10 tons per year threshold established by SJVAPCD.

Page 173

Section 8.4 Alternatives to the Mandatory Recycling Ordinance; Section 8.4.1 Establish a Composting Facility in Alameda County: **REVISE** the following text at the end of the third paragraph of the page as shown:

The needed ~~2.3~~ 1.45 ton reduction in NOx emissions would represent a ~~20.4~~ 14 percent reduction in the ~~41.3~~ 10.45 tons of emissions resulting from the transport of organics. It is therefore assumed that reducing the total VMT associated with the transport of organics to the San Joaquin Valley by approximately ~~21~~ 14 percent would result in less than significant air quality impacts. A reduction of ~~65,000~~ 42,560 tons of organic materials transported to the San Joaquin Valley from Alameda County would result in a ~~21~~ 14 percent reduction in VMT.

Page 173 Section 8.4 Alternatives to the Mandatory Recycling Ordinance; Section 8.4.1 Establish a Composting Facility in Alameda County; 8.4.1.1 Comparison of Environmental Impacts: **REVISE** the following text in the first paragraph of the section as shown:

A compost facility in Alameda County with a capacity of at least ~~65,000~~ 42,560 tons per year (TPY) would be able to process ~~24~~ 14 percent of the increased quantity of organics assumed to be transported to Grover as a result of the mandatory recycling ordinance. Assuming conservatively that the new compost facility were to be closed on weekends, this would equate to approximately ~~300~~ 165 tons per day.

Page 174 Section 8.4 Alternatives to the Mandatory Recycling Ordinance; Section 8.4.1 Establish a Composting Facility in Alameda County; 8.4.1.1 Comparison of Environmental Impacts: **REVISE** the following text in the first paragraph of the page as shown:

If ~~65,000~~ 42,560 TPY of organics are composted at Altamont instead of Grover, the significant NOx impacts from hauling the organics into the San Joaquin Valley would be avoided. There would be less of a reduction in VMT in the Bay area than would occur under the proposed project, but much of the organic waste is being hauled to Altamont under existing conditions, so those trips do not create a new impact. The finished compost would weigh approximately ~~32,500~~ 21,280 tons. If the finished compost is marketed within 50 miles of the processing site, the activity would create ~~150,000~~ roughly 97,000 additional VMT.

Page 192 Section 10.0 References; **ADD** the following reference before the first complete entry on this page:

California Department of Resources Recycling and Recovery Air Resources Board; *Initial Statement of Reasons for the Proposed Rulemaking to Reduce Greenhouse Gas Emissions to Recycle*, August 31, 2011.

Page 195 Section 10.0 References; **ADD** the following reference near the middle of this page:

Kumar, A, Alaimo, C.P., Horowitz, R., Mitloehner, F.M., Kleeman, M.J., Green, P.G. "Volatile Organic Compound Emissions from Green Waste Composting Characterization and Ozone Formation". Accepted Manuscript, January 7, 2011. *Atmospheric Environment*.

Page 196 Section 10.0 References; **ADD** the following reference near the middle of this page:

R.W. Beck, *2008 Alameda County Waste Characterization Study Final Report*, June 2009. <http://stopwaste.org/docs/acwcs-2008r.pdf>.

Appendix B A revised Appendix B is attached to this Final EIR

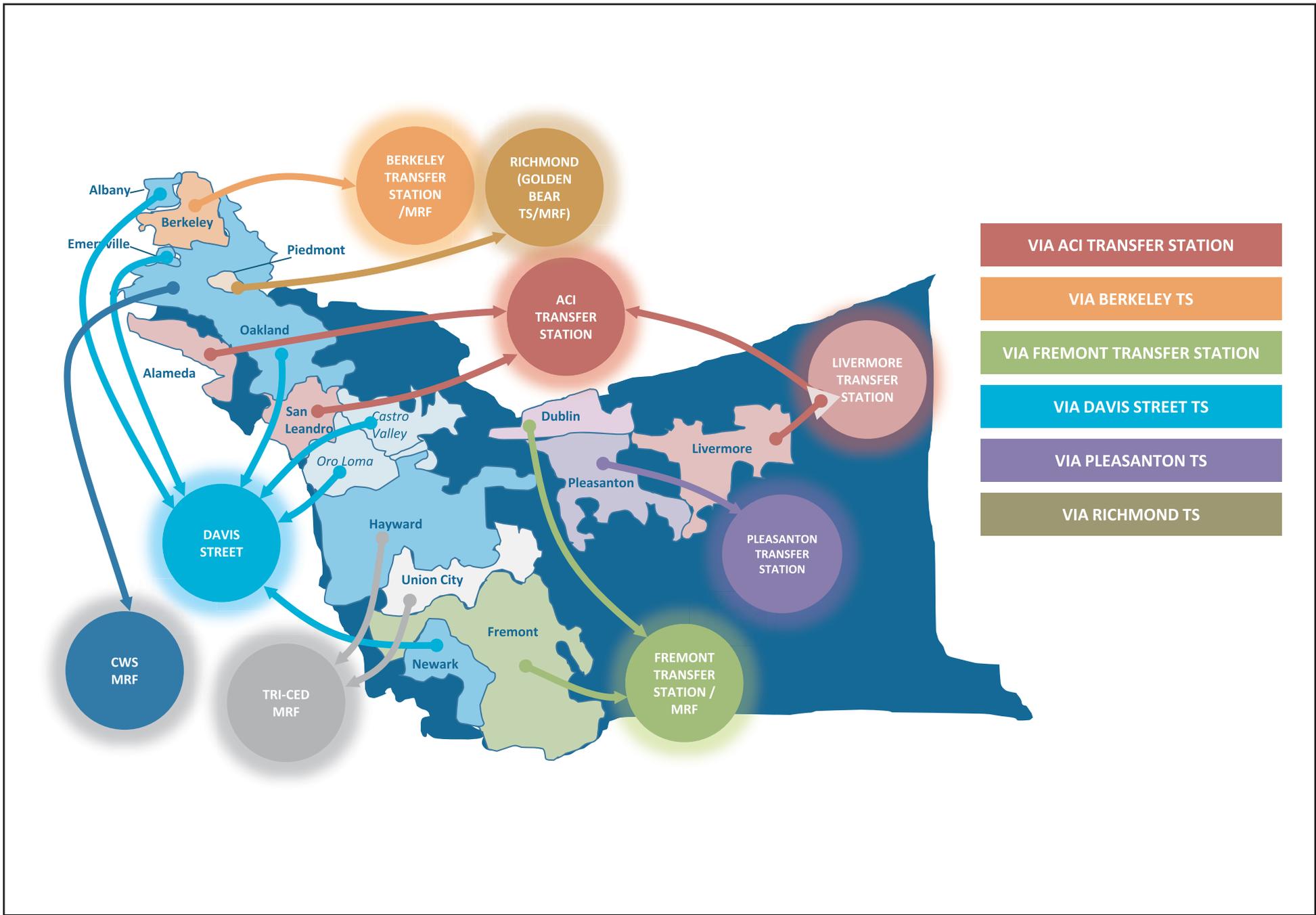
Appendix C

A revised Appendix C is attached to this Final EIR

Appendix E, Page 3

“A Summary of Life Cycle Assessments”: **REVISE** the following text in the last paragraph near the bottom of the page as shown:

The streamlined LCA found that over the course of a year, single-use paper bags resulted in greater impacts than single-use ~~paper~~ plastic bags in every category except persistence of litter over time. The LCA also found that every type of reusable bag resulted in less impacts than ~~both~~ either single-use paper ~~and~~ or plastic bags over the course of a year. Table E-2 contains a summary of the results ~~as~~ shown in the LCA.



MATERIALS FLOW BY JURISDICTION, RECYCLABLE MATERIALS

FIGURE 5 (REVISED)

**REVISED**

**Appendix B**

**Analysis of Proposed Mandatory  
Recycling System**

# Mandatory Recycling Analysis for



By



July 28, 2011

Revised October 4, 2011

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## 1. PROJECT DESCRIPTION

### 1.1 BACKGROUND: STOPWASTE.ORG

StopWaste.Org is the Alameda County Waste Management Authority (ACWMA) and the Source Reduction and Recycling Board operating as one public agency. The ACWMA is an independent agency, established in 1976 to provide waste management planning and programs in Alameda County. In 1990, the Source Reduction and Recycling Board was established by an act of the voters, and integrated into the existing Authority. There are two separate boards, the Waste Management Authority Board and the Recycling Board, sharing the same staff and with member overlap on the boards.

The ACWMA's 17-member board of elected officials includes representatives from each of the 14 city councils, the County Board of Supervisors, and two sanitary district boards that mainly serve unincorporated areas. The ACWMA operates under a "Joint Exercise of Powers Agreement [JPA] for Waste Management" adopted by the member agencies. This Agreement provides, in part, that the ACWMA is responsible for policy-making, budgeting, planning, implementation, and enforcement of the Alameda County Integrated Waste Management Plan.

In 1990, Alameda County voters approved a County Charter initiative amendment known as Measure D. Measure D created the Alameda County Recycling Board, which has been established as a subsidiary body within the Authority. The 11-member Board is jointly appointed by the Authority [5 members] and the Board of Supervisors [6 members] and operates pursuant to a Memorandum of Understanding [MOU] with the Authority. The Authority provides staffing.

The Recycling Board's main responsibilities are to prepare a County Recycling Plan and provide support for waste reduction. The Recycling Board also manages programs or oversees requirements mandated by Measure D.

The ACWMA has the authority to enact countywide ordinances pursuant to the JPA. The JPA grants the ACWMA the power, duty, and responsibility to prepare, adopt, revise, amend, administer, enforce and implement the Countywide Integrated Waste Management Plan (CoIWMP), and the power to adopt ordinances necessary to carry out the purposes of the JPA. The ACWMA has exercised this authority in the past by adopting ordinances such as a ban on plant debris disposal in landfills, which allows for enforcement at the generator level. For purposes of this EIR, [StopWaste.Org](http://StopWaste.Org) is the Alameda County Waste Management Authority. After completion of the EIR process, the ACWMA, as the lead agency, will be the entity responsible for considering approval of the two ordinances.

The CoIWMP is a state-mandated plan prepared by the ACWMA, as required by the California Integrated Waste Management Act of 1989 (AB 939). The CoIWMP identifies solid waste facilities and wastesheds within Alameda County. Waste reduction and disposal facilities in the county that require Solid Waste Facility Permits must conform to policies and siting criteria contained in the CoIWMP. The CoIWMP includes, by reference, source reduction and recycling elements, household hazardous waste elements, and non-disposal facility elements for each city and the unincorporated county area, as well as a plan that describes countywide diversion programs and landfill disposal needs. The CoIWMP was first adopted in 1997 and most recently amended in January 2011.

The CoIWMP includes goals, objectives, and policies that are the blueprint for developing specific programs to meet the County's needs. Goal 2 of the CoIWMP calls on the ACWMA and its member agencies to “achieve maximum feasible waste reduction” and to “reduce the amount of waste disposed at landfills through improved management and conservation of resources.” Policy 2.1.1 of the CoIWMP adopts a waste management hierarchy that ranks management of waste as follows: 1) source reduction, 2) waste diversion, 3) transformation, and 4) sanitary landfill. The CoIWMP describes source reduction as “producing less waste in the first place.” Examples of source reduction given include “reusing canvas shopping bags” and “buying durable as opposed to disposable goods.” Waste diversion is defined in the CoIWMP as “recycling or composting that recovers waste for use in new products.” Examples of waste diversion given include “drop-off, buy-back, and curbside collection programs; large scale material recovery facilities (MRFs) and composting.” In an effort to achieve greater waste diversion in Alameda County, the CoIWMP was amended in January 2011 to include a new discard objective that readily recoverable (recyclable and compostable) materials comprise not more than 10 percent of material deposited in landfill (Objective 2.4).

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## 1.2 BACKGROUND: MANDATORY RECYCLING ORDINANCE

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The goal of the mandatory recycling system is to maximize recovery of recyclable and organic materials and reduce the disposal of recoverable materials.

### REGULATORY SETTING

In 1989, the State adopted AB 939, which requires cities and counties to achieve a 25 percent diversion goal by 1995 and a 50 percent diversion goal by 2000.

In 1990, StopWaste.Org adopted a 75 percent countywide diversion goal to be achieved by 2010.

In 2009, the ACWMA adopted a ban stating that plant debris could no longer be disposed in landfills in the County.

In 2010, StopWaste.Org adopted a strategic plan to guide organizational activities through 2020. The plan includes a goal of no more than 10 percent of readily recoverable materials in the disposed wastestream by 2020. This goal goes beyond the 75 percent diversion goal adopted in 1990. To achieve this new goal, StopWaste.Org will need to increase participation in recycling and composting programs from all waste producing sectors.

In 2006, the State of California approved landmark legislation establishing the first economy-wide climate change regulation in the United States. The California Global Warming Solutions Act of 2006, commonly referred to as AB 32, established a goal to reduce greenhouse gas emissions in California to 1990 levels by 2020.

AB 32 establishes the Air Resources Board (ARB) as the lead regulatory agency for developing a plan to achieve target reductions and adopting necessary regulations. In 2008, the ARB adopted a scoping plan, which includes a mandatory commercial recycling measure designed to achieve a reduction of 5 million metric tons of carbon dioxide equivalents (CO<sub>2</sub>eq). To achieve this reduction, commercial generators statewide will need to recycle an additional two to three million tons of materials annually.

The California Department of Resources Recycling and Recovery (CalRecycle) is leading a rulemaking process for a statewide mandatory commercial recycling regulation. CalRecycle is scheduled to present the proposed regulation to ARB in July 2011. If adopted, the regulation requires commercial generators producing at least four cubic yards of solid waste per week and multi-family generators producing more than four units [or, alternately, five or more units] to separate recyclable and organic materials for recycling. The regulation also requires local jurisdictions to implement a commercial recycling program for eligible businesses with education, outreach, monitoring, and notification of non-compliance.

StopWaste.Org is proposing a Mandatory Recycling Ordinance which will help meet the State's scoping plan measure to increase commercial recycling and thereby reduce 5 million metric tons of CO<sub>2</sub>eq statewide. Also important to Alameda County, this ordinance is necessary to achieve the Agency's goal of 90 percent diversion of readily recyclable materials by 2020, in accordance with Objective 2.4 of the CoIWMP. The proposed ordinance will also help the jurisdictions within Alameda County who have adopted a Climate Action Plan achieve the waste diversion goals contained within those plans.

## 2. DESCRIPTION OF THE PROPOSED PROJECT

To achieve the goals and objectives in the Alameda County Integrated Waste Management Plan (CoIWMP), StopWaste.Org is proposing to adopt two ordinances: a Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance. The Mandatory Recycling Ordinance is described in further detail in section 2.1.

The analysis in section 2.1 evaluates the impacts of recovering at least 90 percent of “readily recyclable materials” still being disposed in landfills. Data for this analysis draws from the StopWaste.Org 2008 Waste Characterization Study.

This analysis projects that the Mandatory Recycling Ordinance will recover **607,925** tons per year of readily recyclable materials from landfills. Table 1 lists the materials and tonnages the ordinance is projected to recover.

This analysis presents a maximum impact scenario. If desired, the cities of Alameda County and StopWaste.Org have the flexibility to adopt an ordinance that affects a smaller universe, which would have less significant impacts on recyclable materials recovery.

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### 2.1 MANDATORY RECYCLING ORDINANCE

#### DESCRIPTION OF THE ORDINANCE

The proposed Mandatory Recycling Ordinance would require all Alameda County single-family, multifamily, and commercial generators to separate recyclable and compostable organic materials from garbage for recovery. In this maximum impact scenario, the ACWMA has identified the list of readily recyclable materials that could be included in this recovery program. Collection systems and markets are already in place in the greater San Francisco Bay Area for these materials. Table 1 details the quantities of readily recyclable materials with target diversion levels of greater than 90 percent capture rate.

**Table 1. Readily<sup>1</sup> Recyclable Materials, Estimated Annual Tons Diverted<sup>2</sup>**

GROUP	MATERIAL	2008 QUANTITY	ADJUSTED TOTAL	TARGET DIVERSION
<b>Paper</b>		<b>233,171</b>	<b>261,990</b>	<b>241,545</b>
	Uncoated Corrugated Cardboard	36,409	40,909	37,717
	High Grade Paper	14,575	16,376	15,098
	Newspaper	9,247	10,390	9,579
	Mixed Recyclable Paper	53,049	59,606	54,954
	Compostable Paper	119,891	134,709	124,197
<b>Plastics</b>		<b>14,887</b>	<b>16,727</b>	<b>15,422</b>
	HDPE Bottles (#2)	4,092	4,598	4,239
	PETE Bottles (#1)	4,664	5,240	4,831
	Other plastic containers	6,131	6,889	6,352
<b>Glass</b>		<b>20,329</b>	<b>22,842</b>	<b>21,059</b>
	Recyclable Glass Bottles/Containers	23,329	22,842	21,059
<b>Metals</b>		<b>9,137</b>	<b>10,266</b>	<b>9,465</b>
	Aluminum Cans	1,831	2,057	1,897
	Steel Food and Beverage Cans	6,062	6,811	6,280
	White Goods	1,244	1,398	1,289
<b>Yard Waste</b>		<b>68,072</b>	<b>76,485</b>	<b>70,517</b>
	Leaves/Grass/Chips	39,210	44,056	40,618
	Branches/Stumps/Prunings/Trimming	28,862	32,429	29,899

<sup>1</sup> Readily recyclable materials are those for which there are widely available collection infrastructure and mature markets.

<sup>2</sup> 2008 Alameda County Waste Characterization Study Final Report, R.W. Beck: <http://stopwaste.org/docs/acwcs-2008r.pdf>.

<b>Organics</b>		<b>222,457</b>	<b>249,952</b>	<b>230,446</b>
	Food Waste	222,457	249,952	230,446
<b>Misc.</b>		<b>1,628</b>	<b>1,829</b>	<b>1,686</b>
	Covered E-Waste	1,628	1,829	1,686
	Carpet	17,168	19,290	17,785
<b>TOTAL</b>	<b>READILY RECYCLABLE MATERIALS</b>	<b>586,849</b>	<b>659,291</b>	<b>607,925</b>

**Note:** The Waste Characterization Study sampled 89 percent of the total waste stream. Target quantities were calculated by applying material proportions from the 2008 Waste Characterization Study to the entire waste stream (1.33 million tons), and then calculating the target based on the goal of no more than 10% of readily recyclable and compostables in the landfill.

## COLLECTION AND PROCESSING

The proposed mandatory recycling ordinance would place the following requirements on waste generators:

- Single-family residents would be required to place recyclables, compostable organics, and waste into separate containers for separate collection. This service is already available to residents of single-family homes on a voluntary basis; under the proposed ordinance it would simply become mandatory.
- Multifamily building owners would be required to obtain recycling services from their collection service provider for residents, employees, contractors, visitors, and other persons on site. Multifamily residents would be required to separate their material discards into recyclables, compostable organics, and waste and place them into the separate containers provided by the building owners, for separate collection.
- Almost all businesses in Alameda County currently have garbage service. Commercial recycling collection services are widely available, but not regularly utilized. Commercial Organics collection services are also generally available, but not widely utilized. The proposed mandatory recycling ordinance would require commercial businesses to obtain and use recycling and composting collection services. Staff, customers, and visitors would be required to separate material discards by type for separate collection.
- Individuals and businesses that haul their own materials (self-haul) would be required to separate their recyclable and compostable organic materials from other wastes delivered to transfer stations, landfills, or recycling and composting facilities.
- Franchised haulers would be required to collect the materials separated by the generator and deliver these materials to appropriate processing facilities.

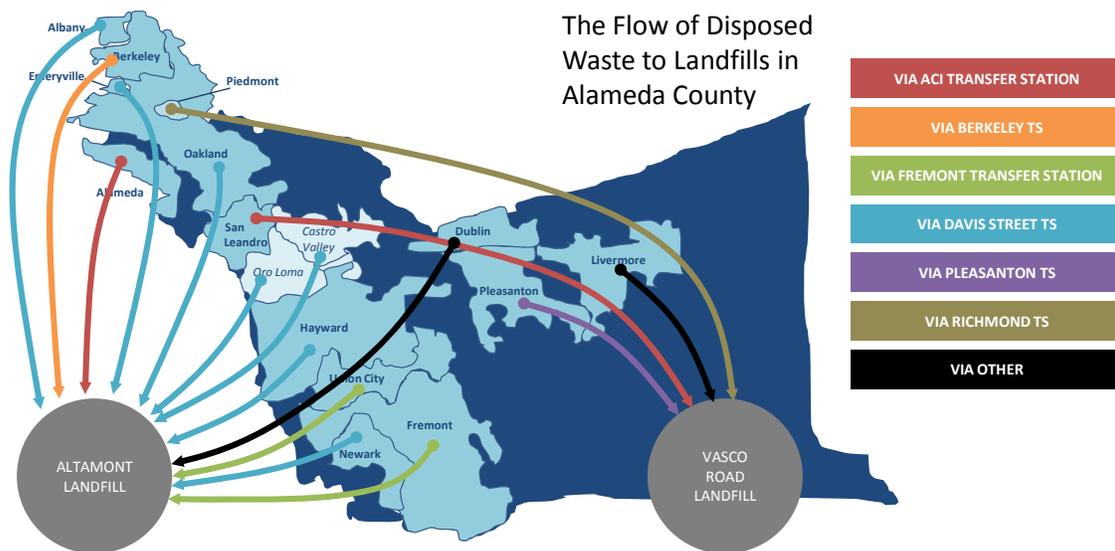
- Transfer stations and landfills would be required to develop programs to require their customers to separate recyclables and compostables from garbage, and submit compliance plans describing their efforts promoting generator compliance with the mandates.

The flow of materials from collection to transfer to recyclable and organics processing to landfill will vary by city, based on contractual arrangements between cities, haulers, and processing facilities.

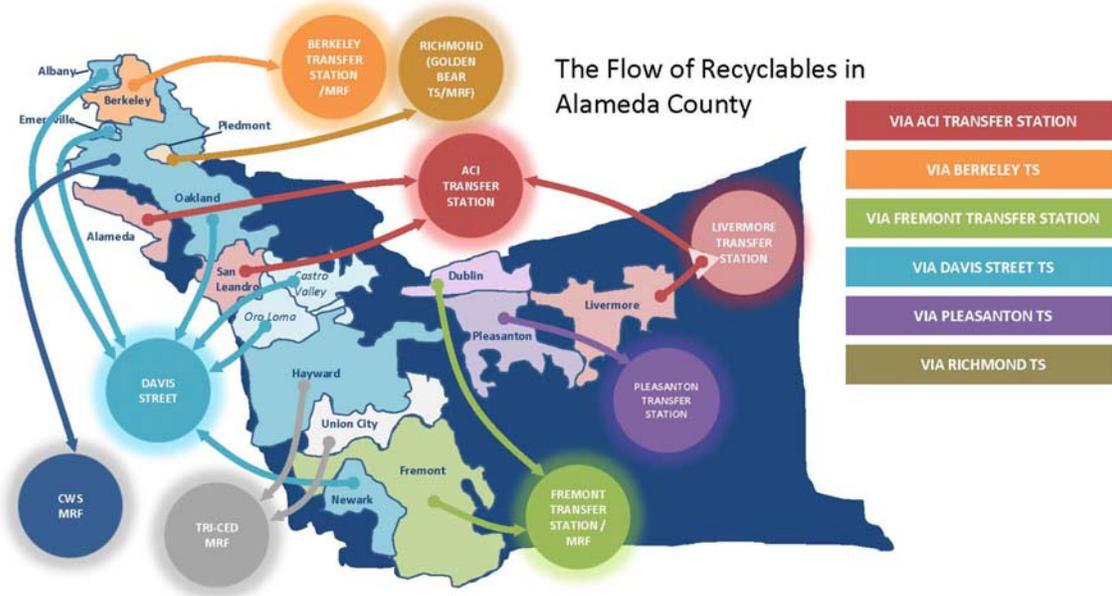
Figures 1, 2, and 3 illustrate the current material flows within Alameda County. The total system of processing facilities currently used for the recovered materials, both in-county and out-of-county, has sufficient additional capacity to handle the proposed increase in recyclables and organic materials under the maximum impact scenario, assuming that the same haulers continue to transport materials to the same facilities as they are currently.

While there is sufficient capacity in the total system, some of the existing materials recovery facilities and transfer stations may require internal modifications to handle all of the materials, and some of the existing facilities may require modifications to their permits.

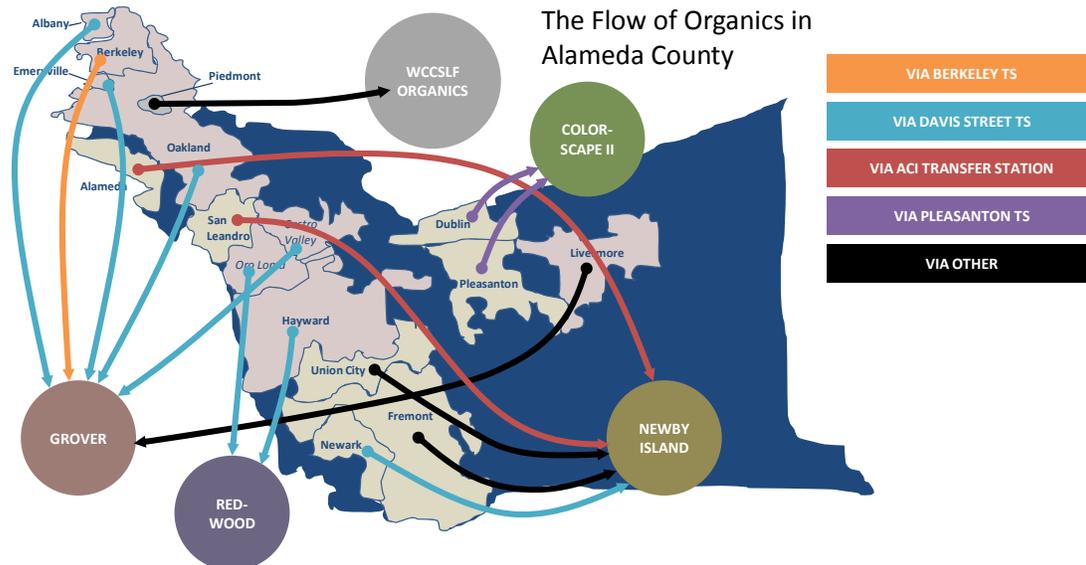
**Figure 1. Materials Flow by Jurisdiction, Disposed Waste**



**Figure 2. Materials Flow by Jurisdiction, Recyclable Materials**



**Figure 3. Materials Flow by Jurisdiction, Organic Materials**



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## 2.2 COLLECTION SYSTEM IMPACTS

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### SINGLE-FAMILY SERVICE

Virtually all single-family households currently have three containers, one each for garbage, recyclables, and organics. Every household will continue to have three containers, at least one each for garbage, recyclables, and organics. It is likely that some households will have more than one organics container.

Moving some materials from one collection container to another (from garbage to recyclables) does not change the total volume or tonnage of materials requiring collection. The difference will be that the garbage containers will not be as large or as full, and the recyclables and organics containers will be more completely filled, more often.

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#### *Change in Garbage Collection*

In most communities, residential garbage collection vehicles collect two loads a day – which is generally one full load and one partial (about 1/3 – 1/2) load. Reducing the amount of garbage by between 25 percent and 50 percent would mean that the garbage collection vehicles would service their existing routes in a single load rather than in two loads. Collection vehicles would still drive by all households, but the number of trips to and from the route area to the landfill or transfer station would be fewer. Eliminating this extra garbage load thus reduces the number of miles each truck drives each day.

Also, since the trucks will have more time on route (less time off-route) each day, each collection vehicle may be able to provide service to more households, thus further reducing the number of collection vehicles on the road. Alternately, in a community with a growing population, additional houses could be added to the route without increasing the number of collection vehicles.

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#### *Change in Recyclables Collection*

Residential recyclables collection vehicles also generally make two loads a day in most communities and in most the second load is not full. Single-family residents could increase the volume of recyclables collected by as much as 50 percent if the carts currently being serviced were more full when set out for collection – as long as the additional volume did not exceed the capacity of a second load in the collection vehicle. In some high participation areas, an additional collection vehicle might be required since it is not likely that there would be sufficient time in the day to add a third load to an existing route.

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#### *Change in Organics Collection*

Single-family residential organics collection is projected to be most affected of all three streams. Automated organics collection vehicles picking up materials with higher-than-average densities will reach weight limitations sooner. Therefore, more trucks will make more trips to collect organics. This increased traffic due to increased organics program participation will likely offset the savings in number of trips and trucks required to collect the reduced amount of garbage.

The bottom line is that there are no new tons to collect. The existing tons will just be moved from one system to another, incrementally increasing the efficiencies of one and possibly decreasing the efficiencies of another.

## MULTIFAMILY SERVICE

Multifamily collection services may be provided with either small wheeled carts (gallon increments) or large bins (yard increments). Carts are more maneuverable and can be 'squeezed' into smaller spaces, but have a larger total footprint than the equivalent capacity in bins.

It also takes much longer to collect wastes or recyclables from multiple carts than from a single large bin, so the collection vehicle is less efficient with carts.

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### *Carts*

In apartments that currently use carts for small volumes of materials, the carts may provide flexibility in adding new services to small spaces.

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### *Bins*

Most existing apartments do not have room for additional large containers. Complexes with multiple bin locations may be able to replace some of their garbage bins with recycling bins. However, in many cases, there would not be sufficient room in the enclosures for additional bins, so the recycling and garbage bins would not be paired (they would be in separate locations) making compliance more difficult. In this case (at least in the beginning), the recycling bins would be heavily contaminated by residents accustomed to using those enclosures for their garbage only.

An incentive program could encourage apartment owners to enlarge the enclosures to provide space for three container types, and improve enclosure design to reduce litter associated with trash collection, in response to the new National Pollutant Discharge Elimination System (NPDES) guidelines.

Larger enclosures that provide space for multiple bins might allow for more service with no increase in vehicle traffic. For example, if a garbage bin is currently serviced multiple times a week, and the same size bin is kept even though there is less waste disposed under the proposed ordinance, the bin could be serviced fewer days a week. Thus the total number of truck trips to collect garbage, recyclables, and organics would not need to increase.

At many apartments, almost half of the garbage disposed by residents is thrown away on the weekend. Therefore, maintaining larger bin capacity (with less frequent service) would mean that there is less likely to be an overflow problem during high volume periods.

## COMMERCIAL BIN SERVICE

Almost all businesses currently have garbage service. Commercial garbage collection is generally provided as bin service. Very small businesses and home offices may have cart service, but the carts are generally collected with the residential cart service, rather than with commercial wastes. New lift adapters allow a front loading packing truck to collect carts, so that the front loading trucks can collect commercial carts as part of a commercial bin route.

The Mandatory Recycling Program designed in this proposed ordinance would significantly reduce the amount of garbage collected by adding or expanding collection of recyclables and compostable organics. A

business that currently uses only one garbage bin may need additional bins for collection of these other materials. Relatively few commercial accounts in Alameda County currently have three separate bins for garbage, recyclables, and organics.

Therefore, there may be a significant increase in the number of bins on commercial collection routes, even though there is no increase in the number of cubic yards or tons of material requiring collection.

In many cases, it will be possible to increase the efficiency of the collection system to avoid an increase in the number of trucks or frequency of service to an individual customer. While many existing recycling bins would need to be emptied more often under the proposed ordinance, if a significant portion of the garbage is transferred into the recyclables or organics collection system, the garbage containers will not need to be served as often. Also, in most communities, collection system services have not been maximized recently. Since service levels change as business activity increases or decreases, many downsized businesses are paying for extra services. Eliminating these unnecessary services would increase collection efficiency.

Another tactic to improve collection efficiency is to reevaluate collection needs of businesses that currently have every day or almost every day collection. Current municipal collection rate structures do not commonly provide an incentive for businesses to subscribe to a larger bin and less frequent service. Therefore, most collection systems have not been optimized for efficiency. Some restaurants subscribe to 6 days a week service, but generate most of their trash over the weekend when collection service is not provided: from Saturday morning to Monday morning. It is critical that they have capacity to make it through the peak generation period. Providing additional bins or replacing small bins with larger bins can drop collection service to three or four days a week.

As a specific example of optimizing collection efficiency, if a business had a 4 cubic yard garbage bin collected three times a week (total 12 cubic yards/week), and began recycling half of their discarded materials, they could use a 6 cubic yard bin for garbage and a 6 cubic yard bin for recyclables. After increasing their container collection size, the business could reduce collection service from three days a week to two days a week.

In an attempt to optimize collection of multiple streams, the collection industry is developing divided containers that can be collected in a single lift by a split body collection vehicle. The two compartments of the collection vehicle can be unloaded separately.

Collection route sequencing will play a role in providing clean sorted loads that can be processed at a local facility. In some communities, haulers use the same vehicle to collect recyclables in one load, and then garbage in a second load over the same geographic area.

The proposed ordinance suggests that separate compostable organics collection containers will be provided to businesses with food services available in the building. This would include restaurants, bars, deli, cafeterias, markets, and other similar businesses. At this time it is not possible to speculate how many businesses in the County, or within each city, have food service facilities. Many office buildings do not generate sufficient volumes of compostable organics to warrant a separate bin for these materials.

## SELF-HAUL

The proposed ordinance would not likely change load composition for loads of unwanted materials that individuals can haul to landfills and transfer stations. These individuals would pre-sort their materials and load them in different parts of the vehicle so that they could be unloaded appropriately at the receiving facility, or staff at the unloading facility would ask individuals to sort the material at the facility to comply with the ordinance.

For large quantity generators who self-haul as a normal business practice, it is likely that once they are informed of the requirements of the ordinance, that they would pre-sort their unwanted materials to comply with the requirements of the receiving facility.

## CONCLUSION

With the implementation of a mandatory recycling program, there would be significant changes to the collection system. Moving over 90% of the readily recyclable materials from the garbage collection system to the recycling or organics collection system will greatly reduce the amount of material to be collected as garbage, and increase the amount of materials collected for recycling and composting by an equal amount. The changes in the collection system, however, do not necessarily mean that vehicle miles traveled will increase substantially.

Savings in collection of reduced quantities of garbage will likely offset the increases in vehicles and fuel required to collect larger quantities of recyclables and compostables. These savings to the garbage collection system include fewer trucks, fewer drivers, less fuel, and less methane to landfill.

## 2.3 END MARKETS FOR RECYCLABLES

Recyclables will be shipped from the processing facilities to end markets, such as paper mills and aluminum smelting plants. Consistent with current market conditions, many recyclables are expected to continue to be exported to Asian or other markets through the Port of Oakland. More specifically:

- Nearly all recovered paper and plastic is expected to be shipped out of County, with the majority exported to Asia.
- Most aluminum is shipped out-of-state to U.S. smelters, or exported to Asia.
- Much of the glass is either shipped to Strategic Materials in Hayward, or used for “beneficial” purposes at the landfills in the County. The landfill’s beneficial purposes for the glass pieces may include glass inclusion in the leachate and methane collection systems, and roadway construction. Strategic Materials ships furnace-ready cullet to regional in-state manufacturing facilities, primarily to the Gallo Glass Company in Modesto for bottles, the O-I glass plant in Tracy, the Owens-Corning Fiberglas insulation manufacturing facility in Santa Clara.
- Most of the recovered wood is either used locally as mulch or shipped to out-of-County, in-state biomass facilities. Some wood is shipped to out-of-county facilities and made into mulch.
- Almost all organic materials currently leave Alameda County for processing, with the exception of a small quantity of material that is diverted to the East Bay Municipal Utility District (MUD)

wastewater treatment facility for digestion. The East Bay MUD digestion facility cannot process anything other than pre-processed food waste slurry. They cannot accept plant debris, waxed cardboard, or mixed paper. Most organic material will likely continue to leave the County, unless a competitively-priced in-County composting facility is built or an anaerobic digester that accepts a wider range of materials becomes available. The Authority continues to evaluate the feasibility of an in-County composting facility.

### 3. VEHICLE MILES TRAVELED (VMT) - REVISED

#### 3.1 CHANGES IN VMT FROM CHANGES IN THE COLLECTION SYSTEM

No significant changes are anticipated in vehicle miles traveled based on the projected changes in the collection system. If more materials are picked up during each vehicle stop without increasing the time per stop, there will be no loss of efficiency. It is projected that there will be a reduction in miles traveled to collect **607,925** fewer tons of garbage. However, an increase in miles traveled to collect an equivalent amount of recyclable and compostable material will balance that reduction.

In most communities, the collection systems are not maximized for collection efficiency. Therefore, it may be possible to maximize the efficiency of the future, expanded collection program to reduce the impacts of the increased collection of recyclables and compostables. However, the collectors are not prepared to speculate on the changes a hypothetical mandatory recycling ordinance might make to their system. As a result of these uncertainties, it is not possible to calculate the precise change to collection systems at this time.

Table 2 provides details of the distance assumptions used in Vehicle Miles Traveled Estimates. The mileage for MSW, recyclables, and organics from each jurisdiction is calculated from the corporation yard to the centroid of the city, from the centroid to the transfer station or processing facility, and from the transfer station or processing facility to the landfill, port, or other terminus of the material tracking.

Table 3 provides Post-Processing Vehicle Miles Traveled Estimates for each jurisdiction, and a total for the County. Calculations include the tons of each material type (MSW, recyclables, glass, and organics) to be recovered each year. Each of these tonnage numbers is then divided by 22 tons per load to provide the number of loads to be hauled. The number of loads is then multiplied by the round trip distance traveled to move all of the collected materials to their market. The total distances for the four material types are added to get the total vehicle miles traveled.

#### 3.2 CHANGES IN VMT FROM CHANGES IN THE POST-COLLECTION SYSTEM

There will be significant changes to the post-collection system. However, many of the increases will be balanced by reductions. One of the main increases in VMT will come from organics service. Organics that are currently landfilled at Altamont or Vasco will be hauled to processing facilities that are further away than the landfill (unless composting is initiated at the current landfills).

Overall we have calculated a net project increase in VMT of **729,460**. This represents the increase in VMT associated with materials being transported to different facilities (246,080, as shown in Table 3 below, which includes the transport of recycled glass to the Gallo Glass facility in Modesto), plus the increase in VMT

associated with transporting finished compost from processing facilities to market in the San Joaquin Valley and the Bay Area (345,453 and 137,927, respectively, as shown in Tables 4 and 5).

## RECYCLABLES

Most of the recyclable materials that are currently landfilled at Altamont or Vasco will be collected and delivered to processing facilities before being hauled to the Port of Oakland for shipment to international markets. The processing facilities are closer to the Port of Oakland than they are to the Altamont Landfill, so for every ton diverted, there will be a reduction in VMT associated with the post-collection handling of recyclable materials.

Specifically, the Davis Street Transfer Station is 32.6 miles from Altamont, but only 8.8 miles from the Port of Oakland, thus reducing the round trip distance by 47.6 miles per load. For recyclables from the City of Alameda, the ACI processing facility in San Leandro is 31.1 miles from Altamont, but only 10.0 miles from the Port of Oakland, thus reducing the round trip distance by 42.2 miles per load. For recyclables from the City of San Leandro, the ACI processing facility in San Leandro is 23.1 miles from Newby Island, but only 10.0 miles from the Port of Oakland, thus reducing the round trip distance by 26.2 miles per load. The Fremont Transfer Station is 35.3 miles from Altamont, but only 26.8 miles from the Port of Oakland, thus reducing the round trip distance by 17 miles per load. The Berkeley Transfer Station is 32.6 miles from Altamont, but only 8.5 miles from the Port of Oakland, thus reducing the round trip distance by 48.2 miles per load.

Based primarily on the proximity of the recyclables processing facilities to the Port of Oakland, there is a projected decrease of **215,806** VMT within Alameda County under the proposed ordinance. This number was derived by subtracting the post-processing VMT that occurs in the San Joaquin Valley (525,089 for organics and 74,724 for glass, as shown in Table 4) from the overall post-processing total (246,080, as shown in Table 3), and then adding the compost-to-market VMT occurring in the Bay Area (137,927, as shown in Table 5).

The glass recovered at the processing facilities will be likely be hauled to Strategic Materials in Hayward, and then on to a manufacturing facility. Most of the glass that Strategic Materials processes and sells is sold to Gallo Glass. If all of the glass was hauled to the Gallo glass plant in Modesto, there would be a net increase of 172,488 VMT associated with recycled glass; of which approximately 97,764 miles are in Alameda County and 74,724 miles are in San Joaquin County. These totals are accounted for in the above calculation of the decrease in VMT occurring in Alameda County.

The reality is that some of the glass will be shipped a shorter distance either to the Owens-Illinois glass plant in Tracy, or the Owens-Corning Fiberglas plant in Santa Clara. However, no estimate of the percent of materials moving shorter distances was available to the authors of this report, so the maximum impact scenario – all glass to Gallo Glass – is identified above.

## ORGANICS

The primary processing facilities for organics from Alameda County jurisdictions are in the San Joaquin Valley. These facilities are further from the transfer stations in the County than are the Altamont or Vasco landfills. Thus, as additional organic materials are recovered for processing, there will be a net increase in VMT for hauling organic materials.

There will be an increase in VMT within Alameda County, by the distance from Altamont to the County Line (just west of Tracy), for each load hauled to a compost facility in the Central Valley. There is projected to be an increase of **945,267** miles in VMT in the San Joaquin Valley. This increase is related to hauling additional organics to the current processing facilities, including VMT associated with transporting organics from the County line to the compost facilities (projected to be 525,089 miles, as shown in Table 4). The increase in VMT is also associated with transporting finished compost and glass from processing facilities to market (projected to be 345,453 and 74,724 miles, respectively, as shown in Table 4) in the San Joaquin Valley.

Organics collected in the cities of Fremont and Union City are currently processed at the Fremont Transfer Station and then composted at Newby Island, which is closer to the population of Fremont and the Fremont transfer station than is Altamont, so the more tons of organics diverted from landfill, the more their VMT will decrease.

As discussed above, VMT for hauling associated with the processing and marketing of organics and glass in the San Joaquin Valley will increase by a total of **945,267** miles under the new ordinance.

**Table 2. Distance Assumptions Used in Vehicle Miles Traveled Estimates**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL	
<b>MSW</b>																			
Yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City Center	4.90	1.80	2.10	4.20	8.90	17.70	17.50	9.50	6.90	6.40	10.00	8.30	17.30	1.90	14.30	0.90	17.30	<b>15.20</b>	
Transfer Station	-	1.80	2.10	3.80	8.30	17.70	17.50	9.50	6.90	6.40	10.00	8.30	17.30	-	14.30	2.60	17.30	<b>14.82</b>	
Collection and Transferring Subtotal	4.90	3.60	4.20	8.00	17.20	35.40	35.00	19.00	13.80	12.80	20.00	16.60	34.60	1.90	28.60	3.50	34.60	<b>30.02</b>	
Terminus (Landfill)	6.00	28.40	14.00	35.30	35.30	27.70	32.60	32.60	32.60	32.60	32.60	31.10	32.60	17.70	32.60	43.40	32.60	<b>29.19</b>	
<b>Total</b>	<b>10.90</b>	<b>32.00</b>	<b>18.20</b>	<b>43.30</b>	<b>52.50</b>	<b>63.10</b>	<b>67.60</b>	<b>51.60</b>	<b>46.40</b>	<b>45.40</b>	<b>52.60</b>	<b>47.70</b>	<b>67.20</b>	<b>19.60</b>	<b>61.20</b>	<b>46.90</b>	<b>67.20</b>	<b>59.21</b>	
<b>Recycling</b>																			
Yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
City Center	4.90	1.80	2.10	4.20	2.30	17.70	17.50	9.50	6.90	6.40	7.40	8.30	17.30	1.90	14.30	0.90	17.30	<b>14.63</b>	
Transfer Station	4.90	-	2.10	3.80	-	17.70	17.50	9.50	6.90	6.40	-	8.30	17.30	6.90	14.30	2.60	17.30	<b>14.30</b>	
Collection and Transferring Subtotal	9.80	1.80	4.20	8.00	2.30	35.40	35.00	19.00	13.80	12.80	7.40	16.60	34.60	8.80	28.60	3.50	34.60	<b>28.93</b>	
Terminus (Port of Oakland)	28.00	1.80	21.20	27.30	2.30	0.90	7.30	7.30	7.30	7.30	7.30	10.30	7.30	18.00	7.30	7.60	7.30	<b>10.54</b>	
<b>Total</b>	<b>37.80</b>	<b>3.60</b>	<b>25.40</b>	<b>35.30</b>	<b>4.60</b>	<b>36.30</b>	<b>42.30</b>	<b>26.30</b>	<b>21.10</b>	<b>20.10</b>	<b>14.80</b>	<b>26.90</b>	<b>41.90</b>	<b>26.80</b>	<b>35.90</b>	<b>11.10</b>	<b>41.90</b>	<b>39.46</b>	

**Table 2. Distance Assumptions Used in Vehicle Miles Traveled Estimates**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL
<b>Organics</b>																		
<b>Yard</b>	-	-	-	-	-	-	-	-	-	-	-		-	-	-		-	-
<b>City Center</b>	4.90	1.80	2.10	4.20	8.90	17.70	17.50	9.50	6.90	6.40	10.00	8.30	17.30	1.90	14.30	0.90	17.30	<b>15.20</b>
<b>Transfer Station</b>	4.90	1.80	2.10	3.80	8.30	17.70	17.50	9.50	6.90	6.40	10.00	8.30	17.30	6.90	14.30	2.60	17.30	<b>15.56</b>
<b>Collection and Transferring Subtotal</b>	9.80	3.60	4.20	8.00	17.20	35.40	35.00	19.00	13.80	12.80	20.00	16.60	34.60	8.80	28.60	3.50	34.60	<b>30.76</b>
<b>Terminus (San Joaquin Valley)</b>	30.70	23.10	39.70	6.10	6.10	0.90	49.30	49.30	49.30	49.30	49.30	54.90	49.30	39.70	49.30	69.90	49.30	<b>42.91</b>
<b>Total</b>	40.50	26.70	43.90	14.10	23.30	36.30	84.30	68.30	63.10	62.10	69.30	71.50	83.90	48.50	77.90	73.40	83.90	<b>73.67</b>

**Table 3. Post-Processing Vehicle Miles Traveled Estimates**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL
<b>MSW</b>																		
Tons MSW	(53,638)	(43,528)	(45,825)	(80,283)	(24,164)	(2,282)	(3,598)	(145,781)	(16,787)	(19,933)	(60,926)	(23,217)	(21,316)	(18,608)	(7,912)	(37,192)	(3,942)	(608,931)
Loads MSW	(2,438)	(1,979)	(2,083)	(3,649)	(1,098)	(104)	(164)	(6,626)	(763)	(906)	(2,769)	(1,055)	(969)	(846)	(360)	(1,691)	(179)	(27,679)
Miles to Terminus	(29,257)	(112,382)	(58,322)	(257,636)	(77,545)	(5,747)	(10,662)	(432,042)	(49,749)	(59,073)	(180,562)	(65,640)	(63,172)	(29,942)	(23,449)	(146,740)	(11,681)	(1,613,602)
<b>Recycling</b>																		
Tons Recyclables	11,622	13,229	17,575	24,784	5,619	410	618	33,773	3,584	3,243	17,101	5,516	4,576	5,439	2,602	10,788	1,890	162,371
Loads Recyclables	528	601	799	1,127	255	19	28	1,535	163	147	777	251	208	247	118	490	86	7,380
Miles to Terminus	40,150	12,027	33,872	61,510	10,727	604	410	22,413	2,379	2,152	11,349	5,165	3,037	13,252	1,727	7,453	1,254	229,482
<b>Glass</b>																		
Tons Glass	2,360	976	1,661	1,827	655	45	103	5,883	843	679	1,836	864	712	1,163	276	1,079	118	21,080
Loads Glass	107	44	75	83	30	2	5	267	38	31	83	39	32	53	13	49	5	958
Miles to Terminus	18,748	7,758	15,429	14,350	5,145	446	834	47,440	6,795	5,472	14,804	6,865	5,744	9,377	2,229	10,100	951	172,488
<b>Organics</b>																		
Tons Organics	39,656	29,322	26,589	53,672	17,890	1,827	2,876	106,125	12,360	16,011	41,989	16,837	16,027	12,006	5,034	25,326	1,934	425,480
Loads Organics	1,803	1,333	1,209	2,440	813	83	131	4,824	562	728	1,909	765	728	546	229	1,151	88	19,340

**Table 3. Post-Processing Vehicle Miles Traveled Estimates**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL
Miles to Terminus	110,677	61,577	95,961	29,764	9,921	149	12,892	475,632	55,393	71,759	188,186	84,032	71,830	43,399	22,560	160,934	8,667	1,553,718
<b>Total Miles</b>	140,318	(31,020)	86,940	(152,012)	(51,751)	(4,547)	3,473	113,443	14,818	20,311	33,777	30,422	17,439	43,329	3,067	31,748	(809)	246,080
										(22,776)	(22,776)							
										(2,465)*	11,001*							

\* Roughly equal amounts of organics from Oro Loma Sanitary District and City of Hayward (approximately 50 TPD, or 4 truck loads, from each) are now hauled from the Davis Street Transfer Station to the Redwood Landfill in Novato, rather than to Grover Landscape Services in Modesto (where all other jurisdictions listed haul their materials). The Redwood Landfill in Novato is closer than Grover, these separate calculations are to reduce the total miles to reflect that change.

Note: Because of rounding, totals may not sum precisely according to the integers shown.

**Table 4. Post-Processing Vehicle Miles Traveled Estimates – San Joaquin Valley Only**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL
<b>Organics to Facility</b>																		
Tons Organics	39,656	-	26,589	-	-	-	2,876	106,125	12,360	16,011	41,989	-	16,027	12,006	5,034	25,326	-	303,999
Loads Organics	1,803	-	1,209	-	-	-	131	4,824	562	728	1,909	-	729	546	229	1,151	-	13,818
VMT Occurring in SJV <sup>1</sup>	68,497	-	45,926	-	-	-	4,968	183,307	21,349	27,655	72,526	-	27,683	20,738	8,695	43,745	-	525,089
<b>Compost to Market</b>																		
Tons Compost	19,828	-	13,295	-	-	-	1,438	53,063	6,180	8,006	20,995	-	8,014	6,003	2,517	12,663	-	152,000
Loads Compost	901	-	604	-	-	-	65	2,412	281	364	954	-	364	273	114	576	-	6,909
VMT in San Joaquin Valley <sup>1</sup>	45,064	-	30,215	-	-	-	3,268	120,597	14,045	18,194	47,715	-	18,213	13,643	5,720	28,780	-	345,453
<b>Glass to Market</b>																		
Tons Glass	2,360	976	1,661	1,827	655	45	103	5,883	843	679	1,836	864	712	1,163	276	1,079	118	21,080
Loads Glass	107	44	75	83	30	2	5	267	38	31	83	39	32	53	13	49	5	958
VMT in San Joaquin Valley <sup>2</sup>	8,346	3,432	5,850	6,474	2,340	156	390	20,826	2,964	2,418	6,474	3,042	2,496	4,134	1,014	3,822	390	74,724
<b>Total VMT in SJV</b>	121,906	3,432	81,991	6,474	2,340	156	8,626	324,729	38,359	48,268	126,715	3,042	48,392	38,515	15,430	76,346	390	945,267

<sup>1</sup> A distance of 19 miles from the County line to the Recology Grover facility is assumed.

<sup>2</sup> A distance of 39 miles from the County line to the Gallo Glass facility is assumed.

**Table 5. Finished Compost-to-Market Vehicle Miles Traveled Estimates – Bay Area Only**

	Livermore	San Leandro	Pleasanton	Fremont	Union City	Piedmont	Albany	Oakland	CVSD	OLSD	Hayward	Alameda	Newark	Dublin	Emeryville	Berkeley	Uninc.	TOTAL
<b>Compost to Market</b>																		
Tons Compost	-	14,661	-	26,836	8,945	1,827	-	-	-	-	-	8,419	-	-	-	-	-	60,688
Loads Compost	-	666	-	1220	407	83	-	-	-	-	-	383	-	-	-	-	-	2,759
VMT in Bay Area	-	33,320	-	60,991	20,330	4,152	-	-	-	-	-	19,134	-	-	-	-	-	137,927

## 4. ENFORCEMENT AND EDUCATION

Enforcement and education will be necessary elements in achieving full compliance with the requirements of the mandatory recycling ordinance. StopWaste.org would likely implement the following enforcement and education strategies:

- Develop an outreach plan to notify all generators about the new ordinance and how it impacts each of them. Each jurisdiction would also provide information on the ordinance to all of their residents and businesses via their usual outreach methods, like bill inserts and city newsletters.
- Implement an enforcement plan if a Countywide Ordinance is adopted. It is likely that this enforcement activity will be similar to actions used in enforcement of the existing plant debris ban. This enforcement consists of random inspections conducted by StopWaste.Org representatives of self hauled loads of solid waste at transfer stations and landfills and random inspections of all solid waste at the point of collection.

## 5. DEFINITIONS AND POLICY OBJECTIVES

For the purposes of this project, **mandatory recycling** means regulations of state or local government requiring residents and/or businesses within their jurisdiction to segregate material discards for recycling. These requirements are intended to accomplish the following:

- Assist jurisdictions in complying with AB 32, which will require that commercial and multi-family generators statewide participate in recycling programs.
- Augment voluntary recycling efforts to further regional recycling and landfill diversion goals.
- Reduce greenhouse gas emissions associated with the extraction of virgin materials from mining operations, the manufacturing of products, and from the disposal of solid waste.
- Further protect the natural environment and human health, and enhance the economy through increased recycling and organics processing activities.

The prohibition of certain recyclable and compostable materials from disposal at Alameda County landfills is reasonable and necessary to carry out the purposes of the Authority and implement the CoIWMP, including the following goals and policies:

- Goal 2 of the CoIWMP calls on the Authority and its member agencies to “achieve maximum feasible waste reduction” and to “reduce the amount of waste disposed at landfills through improved management and conservation of resources.”
- Objective 2.1 is to “achieve countywide waste reduction of 75 percent by 2010.”
- Policy 2.1.1 adopts a waste management hierarchy that ranks management of waste through source reduction and then recycling and composting above landfill disposal.

- Policy 4.1.1 of the CoIWMP is to “promote conservation of landfill capacity.”
- Policy 4.4.1 states that “the Authority shall encourage feasible waste reduction operations at landfills and transfer stations.” Objective 2.4 is to reduce the amount of readily recyclable and compostable materials deposited in landfills to no more than 10% of total materials landfilled by 2020.
- In order to implement the CoIWMP and meet the objective to reduce the amount of readily recyclable and compostable materials deposited in landfills to no more than 10% of total materials landfilled by 2020, disposal must be significantly reduced from current levels.
- Composting plant debris and food and recycling the covered materials will further the Authority’s efforts to reduce waste and implement the CoIWMP, AB 939, and Measure D.

The State of California through its Integrated Waste Management Act of 1989, Assembly Bill 939 (AB 939), requires that each local jurisdiction significantly increase its diversion of discarded materials from landfills to 50% by December 31, 2000, and thereafter maintain or exceed that diversion rate.

The Waste Reduction and Recycling Act of 1990 (Measure D), a ballot initiative passed by the voters of Alameda County, established the Alameda County Source Reduction and Recycling Board and the policy goal of reducing the total tonnage landfilled of materials generated in Alameda County by 75%.

Cal Recycle is developing mandatory commercial and multifamily recycling regulations to aid in implementing AB 32 and reduce greenhouse gases (GHG). A mandatory recycling ordinance in Alameda County that goes into effect at the same time that the Cal Recycle regulations go into effect, will assist local jurisdictions and businesses in complying with these state regulations.

While the quantity of plant debris, food waste, and recyclables being composted and recycled has increased over the last five years, significant quantities of food waste and recyclables continue to be landfilled. Significant potential exists for the prevention, recovery, and composting of this material. This will aid the cities in Alameda County in achieving the GHG reduction goals contained within their Climate Action Plans.

## 6. COMPARATIVE RESEARCH

### 6.1 MANDATORY RECYCLING IN OTHER COMMUNITIES

Several U.S. communities, many located in California, have already implemented mandatory recycling ordinances. The following table provides a summary of mandatory recycling programs from a cross section of U.S. cities, counties, and states.

CHULA VISTA (CA)<sup>i</sup>  
 PLEASANT HILL (CA)<sup>iv</sup>  
 SAN DIEGO COUNTY (CA)<sup>vi</sup>  
 FRESNO (CA)<sup>viii</sup>

CONTACT	GENERATORS	MATERIALS	QUANTITIES GENERATED	ENFORCEMENT	EDUCATION	OUTCOMES AND LESSONS LEARNED
Lynn France <a href="mailto:lfrance@ci.chula-vista.ca.us">lfrance@ci.chula-vista.ca.us</a> (619) 397-6221	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables* <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban  <i>*includes C&amp;D</i>	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other  "...warning, notice of violation, or other means."	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>The City's franchised hauler aids outreach efforts, and identifies problem businesses for the City.<sup>ii</sup></li> <li>The City uses rate structures to incent increased diversion:                             <ul style="list-style-type: none"> <li>Businesses that divert all recyclables are eligible for a residential cart for waste.</li> <li>Recycling service is less expensive than waste service.<sup>iii</sup></li> </ul> </li> </ul>
Martin Nelis Public Information Officer <a href="mailto:mnelis@ci.pleasant-hill.ca.us">mnelis@ci.pleasant-hill.ca.us</a> 925-671-5229	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input type="checkbox"/> Fines <input checked="" type="checkbox"/> No pick-up <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Limited*  *Available upon customer request. <sup>v</sup>	Contact did not return request for interview.
Michael Wonsidler 858-694-2465 <a href="mailto:Michael.Wonsidler@sdcountry.ca.gov">Michael.Wonsidler@sdcountry.ca.gov</a>	<input type="checkbox"/> Single-family <input type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial*  <i>* all buildings of 20,000 sq ft or more, including institutions                      *all hospitality facilities</i>	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input type="checkbox"/> All <input checked="" type="checkbox"/> Other* * Initially only covered: MF with 100 units or more, eventually all; Commercial 20,000 sq. ft. or more, eventually all	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Limited*  *Technical assistance limited to hospitality businesses	<ul style="list-style-type: none"> <li>Current residential diversion rate is 40%; current commercial diversion rate is less than 10%.</li> <li>Since 2002, the County has provided technical assistance to about 120 multi-family sites and 100 commercial sites.</li> <li>Non-exclusive hauling agreement: can't hold haulers to the quality of material they collect.</li> <li>Having the ordinance gets businesses to pay attention.</li> <li>No County staff dedicated to enforcement, difficult to make successful.<sup>vii</sup></li> </ul>
Garbage, Green Waste, or Recycling Collection Services 559-621-1452	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Before commercial ordinance: 32% diversion for residential and commercial customers. After commercial ordinance: 62% diversion for both.</li> <li>City attributes tiered rate structure (recycling service less expensive than garbage service) to incentivizing commercial participation.<sup>ix</sup></li> </ul>

<sup>i</sup> <http://www.calrecycle.ca.gov/climate/Recycling/Workshops/2009/ChulaVista.pdf>

<sup>ii</sup> <http://www.ca-ilg.org/node/1623>

<sup>iii</sup> Phone interview with Lynn France.

<sup>iv</sup> <http://www.ca-ilg.org/sites/ilgbackup.org/files/resources/Pleasant%20Hill.pdf>

<sup>v</sup> [http://www.alliedwasteservicesofcontracostacounty.com/commercial\\_recycling.cfm](http://www.alliedwasteservicesofcontracostacounty.com/commercial_recycling.cfm)

<sup>vi</sup> <http://docs.sandiego.gov/municode/MuniCodeChapter06/Ch06Art06Division07.pdf>

<sup>vii</sup> Phone interview with Michael Wonsidler.

<sup>viii</sup> <http://www.ca-ilg.org/node/1407>

<sup>ix</sup> <http://www.ca-ilg.org/node/1624>

SACRAMENTO COUNTY (CA)<sup>x</sup>

SAN CARLOS (CA)<sup>xii</sup>

SAN FRANCISCO (CA)<sup>xiii</sup>

CONTACT	GENERATORS	MATERIALS	QUANTITIES GENERATED	ENFORCEMENT	EDUCATION	OUTCOMES AND LESSONS LEARNED
Paul Philleo <a href="mailto:philleop@saccounty.net">philleop@saccounty.net</a>  Sharon Zimmerman <a href="mailto:zimmermans@saccounty.net">zimmermans@saccounty.net</a> 916-875-1730	<input type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + events with service greater than 2 cubic yards per week	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input checked="" type="checkbox"/> 4 cy and 5MF units <input type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input type="checkbox"/> Fines <input checked="" type="checkbox"/> No pick-up <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Since passing both ordinances, SWA revenue decreased from 4.25 million in 2007 to 3.25 million in 2010 (based on garbage disposal fees), while recycling tonnage disposed remains the same.</li> <li>City staff have performed inspections of 6,057 of the <b>largest</b> commercial generators, and have found them to be 97.5% in compliance.</li> <li>City staff have inspected 379 of the <b>largest</b> multi-family generators, found 54% compliance.</li> <li>The County made a mistake in starting enforcement in multi-family accounts before fully educating.<sup>xi</sup></li> </ul>
Miriam Reiter RecycleWorks Outreach Specialist 650-599-1405 <a href="mailto:Miriam@RecycleWorks.org">Miriam@RecycleWorks.org</a>	<input type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial*	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input checked="" type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Courtesy warnings prior to punitive measures</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	Contact did not return request for interview.
Hilary Near, Commercial Zero Waste Associate, SF Environment <a href="mailto:hilary.near@sfgov.org">hilary.near@sfgov.org</a> ; 415- 355-3745	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + events	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines* <input checked="" type="checkbox"/> No pick-up <input type="checkbox"/> Other  <i>* extreme cases</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Huge impact on organics collection: 420 tons per month collected before mandatory, 600 tons per month consistently collected since.</li> <li>Recycling tonnage collection has decreased, in connection with economic fluctuations.</li> <li>Compliance: 6,000 of 8,500 multi-family accounts have organics collection service. 6,800 of over 16,000 commercial accounts have organics collection service.<sup>xiv</sup></li> </ul>

<sup>x</sup> <http://www.ca-ilg.org/node/1636>

<sup>xi</sup> Phone interviews with Paul Philleo and Sharon Zimmerman.

<sup>xii</sup> [http://www.ca-ilg.org/sites/ilgbackup.org/files/resources/San\\_Carlos\\_Commercial\\_Recycling\\_ordinance\\_-\\_Adopted.pdf](http://www.ca-ilg.org/sites/ilgbackup.org/files/resources/San_Carlos_Commercial_Recycling_ordinance_-_Adopted.pdf)

<sup>xiii</sup> [http://www.sfenvironment.org/downloads/library/sf\\_mandatory\\_recycling\\_composting\\_ordinance.pdf](http://www.sfenvironment.org/downloads/library/sf_mandatory_recycling_composting_ordinance.pdf)

<sup>xiv</sup> E-mail correspondence with Hilary Near.

SAN LUIS OBISPO CO. (CA)<sup>xv</sup>

SEATTLE (WA)<sup>xvii</sup>

HONOLULU (HI)<sup>xviii</sup>

CONTACT	GENERATORS	MATERIALS	QUANTITIES GENERATED	ENFORCEMENT	EDUCATION	OUTCOMES AND LESSONS LEARNED
Integrated Waste Management Authority (IWMA) (805) 782-8530 or 1-800-400-0811 <a href="mailto:iwma@iwma.com">iwma@iwma.com</a>	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + events	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Local jurisdictions determine enforcement of single-family homes</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>The County got DOC grants to introduce recycling to 200 bars and restaurants; less than 5% declined to participate.</li> <li>The mandatory recycling program was basically to get this 5% on board.</li> <li>Recycling rate: 64% to 70% since adopting the ordinance.</li> <li>Incentive: businesses get 2 days of recycling pick-up free.</li> <li>The County has never had to issue citations. They have also yet to do quality assessments; SLO will perform these in the next year.<sup>xvi</sup></li> </ul>
Stephanie Terrell Cascadia Consulting Group 206-343-9759 <a href="mailto:Stephanie@cascadiaconsulting.com">Stephanie@cascadiaconsulting.com</a>	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics <input checked="" type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines* <input checked="" type="checkbox"/> No pick-up** <input checked="" type="checkbox"/> Other***  <i>*commercial            **residential            ***1-year grace period</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	Contact did not return request for interview.
Suzanne Jones, Recycling Branch Chief, City & County of Honolulu, 768-3420, <a href="mailto:sjones@honolulu.gov">sjones@honolulu.gov</a>	<input type="checkbox"/> Single-family <input type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + government agencies	<input checked="" type="checkbox"/> Recyclables* <input checked="" type="checkbox"/> Organics* <input type="checkbox"/> Waste ban  <i>*generator-specific</i>	<input type="checkbox"/> 4 cy and 5MF units <input type="checkbox"/> All <input checked="" type="checkbox"/> Other*  <i>*Different types of commercial businesses must meet different size requirements to be covered by the ordinance. Office buildings must be 20,000 sq. ft. or larger.</i>	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Education and technical assistance provided prior to fine</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Regulated businesses self-report compliance.</li> <li>In July 2010, 70% of businesses reported recycling food waste and glass, and 85% of businesses reported recycling glass. Random inspections by City staff revealed the majority in compliance as reported.</li> <li>The City sent a notice to businesses who did not self-report, informing them of an upcoming inspection notice. The majority of these businesses contacted the City for help setting up a program before the inspection.</li> <li>Waivers available for exemption from all program aspects: no petitions for waivers received from businesses required to recycle glass or office paper, a few businesses located in outlying areas requested waivers for organics, because of limited collection options.<sup>xix</sup></li> </ul>

<sup>xv</sup> [http://www.iwma.com/admin/ordinances/Ordinance%202008-3\\_Mandatory\\_Recycling.pdf](http://www.iwma.com/admin/ordinances/Ordinance%202008-3_Mandatory_Recycling.pdf)

<sup>xvi</sup> Phone interview with William Worrell.

<sup>xvii</sup> [http://www.seattle.gov/util/groups/public/@spu/@csb/documents/webcontent/cos\\_003964.pdf](http://www.seattle.gov/util/groups/public/@spu/@csb/documents/webcontent/cos_003964.pdf)

<sup>xviii</sup> [http://www.opala.org/solid\\_waste/archive/Mandatory\\_Recycling\\_Laws.html](http://www.opala.org/solid_waste/archive/Mandatory_Recycling_Laws.html)

<sup>xix</sup> E-mail correspondence with Suzanne Jones.

PITTSBURGH (PA)<sup>xxi</sup>

PHILADELPHIA (PA)<sup>xxii</sup>

GAINESVILLE (FL)<sup>xxiii</sup>

CONTACT	GENERATORS	MATERIALS	QUANTITIES GENERATED	ENFORCEMENT	EDUCATION	OUTCOMES AND LESSONS LEARNED
Recycling Division 412-255-2631 or 2773	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + institutions	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Hauler assists monitoring; Public violation report hotline</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	Contact did not return request for interview.
Streets Department Recycling 215-685-7329 <a href="mailto:csstreets@phila.gov">csstreets@phila.gov</a> For commercial properties: <a href="mailto:commercial.recycling@phila.gov">commercial.recycling@phila.gov</a>	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables* <input checked="" type="checkbox"/> Organics* <input type="checkbox"/> Waste ban  <i>*includes C&amp;D</i>	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Mirrored by residential rewards program</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	Contact did not return request for interview.
Steve Joplin, Gainesville Solid Waste Manager, (352) 393-7991	<input type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily* <input checked="" type="checkbox"/> Commercial  <i>*5 units or more</i>	<input checked="" type="checkbox"/> Recyclables <input type="checkbox"/> Organics <input type="checkbox"/> Waste ban	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All* <input type="checkbox"/> Other  <i>*If designated recyclables comprise 15% or more of the volume of a business' waste stream, these materials must be recycled.</i>	<input checked="" type="checkbox"/> None <input type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>▪ Ordinance written without fines, compliance is okay without fines, but will have a new ordinance out in 60 days that instates a fine.</li> <li>▪ A total of 4 enforcement staff have conducted 600 commercial inspections over the past few months; expect to have at least 1600 completed by end of the fiscal year.</li> <li>▪ Biggest barriers: open market for haulers, so cannot achieve necessary diversion; cannot capture diversion from chain stores that backhaul; many businesses are recycling non-traditional materials in alternative ways, outside of sending to a MRF.<sup>xxiv</sup></li> </ul>

<sup>xx</sup> <http://www.city.pittsburgh.pa.us/pw/html/recycling.html>

<sup>xxi</sup> <http://www.phila.gov/streets/index.html>

<sup>xxii</sup> <http://www.phillyrecyclingpays.com/>

<sup>xxiii</sup> <http://www.cityofgainesville.org/GOVERNMENT/CityDepartmentsNZ/Recycling/MandatoryCommercialRecycling/tabid/488/Default.aspx>

<sup>xxiv</sup> Phone interview with Steve Joplin.

PORTLAND (OR)<sup>xxv</sup>

STATE OF CONNECTICUT<sup>xxvii</sup>

STATE OF NEW JERSEY<sup>xxviii</sup>

CONTACT	GENERATORS	MATERIALS	QUANTITIES GENERATED	ENFORCEMENT	EDUCATION	OUTCOMES AND LESSONS LEARNED
Paul deBlock, Manager, Portland Bureau of Planning and Sustainability, <a href="mailto:Paul.deBlock@portlandoregon.gov">Paul.deBlock@portlandoregon.gov</a> , 503-823-2037	<input type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Recyclables* <input checked="" type="checkbox"/> Organics* <input checked="" type="checkbox"/> Waste ban**  <i>*includes C&amp;D</i> <i>**C&amp;D projects at or above \$50,000</i>	<input type="checkbox"/> 4 cy and 5MF units <input checked="" type="checkbox"/> All <input type="checkbox"/> Other	<input checked="" type="checkbox"/> None <input type="checkbox"/> Fines <input type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Enforcement considered a last resort</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Open competitive market among businesses makes it difficult to track compliance.</li> <li>An effort to track compliance: City called largest ~800 generators to remind them about the ordinance, 90+ percent reported that they participate in recycling service.</li> <li>Need more coordination with haulers to track how well customers are recycling, not just that they have recycling service.<sup>xxvi</sup></li> </ul>
Judy Belaval, CT DEP Office of Source Reduction and Recycling, 860- 424-3237, <a href="mailto:Judy.Belaval@ct.gov">Judy.Belaval@ct.gov</a>	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + all cities required to adopt a recycling ordinance	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics* <input type="checkbox"/> Waste ban  <i>*food scraps not specified</i>	<input type="checkbox"/> 4 cy and 5MF units <input type="checkbox"/> All <input checked="" type="checkbox"/> Other* <i>*Requirements differ from jurisdiction to jurisdiction within the state.</i>	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines <input checked="" type="checkbox"/> No pick-up <input checked="" type="checkbox"/> Other*  <i>*Specified by individual municipalities</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Limited	<ul style="list-style-type: none"> <li>Recycling rate before 1991 (year ordinance passed): 5% to 10%.</li> <li>Recycling rate for 2009: 24.5%, actual rate is probably close to 30% (including unreported recycling).</li> <li>Increased recycling rate due to an array of strategies in addition to recycling being mandatory: extensive outreach, education, technical assistance, municipal grants, etc.</li> <li>Recycling stream has changed: fewer glass containers, light weighting of some types of packaging, smaller amounts of newspaper due to media changes, etc.<sup>xxviii</sup></li> </ul>
Bureau of Recycling and Planning 609-984-3438 Guy Watson <a href="mailto:Guy.Watson@dep.state.nj.us">Guy.Watson@dep.state.nj.us</a> Local Recycling Coordinators <a href="http://www.nj.gov/dep/dshw/recycling/recvcoor.htm">www.nj.gov/dep/dshw/recycling/recvcoor.htm</a>	<input checked="" type="checkbox"/> Single-family <input checked="" type="checkbox"/> Multifamily <input checked="" type="checkbox"/> Commercial  + institutions	<input checked="" type="checkbox"/> Recyclables <input checked="" type="checkbox"/> Organics* <input type="checkbox"/> Waste ban  <i>*yard waste</i>	<input type="checkbox"/> 4 cy and 5MF units <input type="checkbox"/> All <input checked="" type="checkbox"/> Other* <i>*Requirements differ from jurisdiction to jurisdiction within the state.</i>	<input type="checkbox"/> None <input checked="" type="checkbox"/> Fines* <input type="checkbox"/> No pick-up <input type="checkbox"/> Other  <i>*Warnings first</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Limited	Contact did not return request for interview.

<sup>xxv</sup> <http://www.portlandonline.com/bps/index.cfm?c=41461>

<sup>xxvi</sup> Phone interview with Paul deBlock.

<sup>xxvii</sup> <http://www.ct.gov/dep/cwp/view.asp?A=2714&Q=324894>

<sup>xxviii</sup> Phone interview with Judy Belaval.

<sup>xxviii</sup> <http://www.state.nj.us/dep/dshw/recycling/>

**REVISED**

**Appendix C**

**Air Quality Report**

# Memo

**To:** Michael Lisenbee, *David J. Powers and Associates, Inc.*

**Date:** June 9, 2011, *Revised October 27, 2011*

**From:** James A. Reyff

**Subject:** Truck Emissions for ACWMA Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance

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Illingworth & Rodkin, Inc. computed heavy-duty truck emissions associated with projected truck travel in the San Joaquin Valley air basin. We understand that the Alameda County Waste Management Authority (ACWMA) and the Source Reduction and Recycling Board, operating as one public agency, is proposing a Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance. Projections of collection and refuse hauling traffic changes as a result of this proposed action have been conducted. These projections show that there would be an increase in truck refuse hauling, including areas outside of the Bay Area (occurring in the San Joaquin Valley Air Basin). This increase would be partially offset by the reduction in truck travel in the Bay Area; however, the additional truck travel in the San Joaquin Valley would cause new emissions to that air basin.

## Emission Rates

Emission rates in grams per mile of air pollutants and GHG were developed and applied to the haul truck travel data. Air pollutants for this assessment include ozone precursors (reactive organic gases [ROG] and nitrogen oxides [NOx]) and respirable particulate matter (PM<sub>10</sub>). The proposed project would involve the use of two different types of trucks: diesel-fueled and compressed-natural-gas (CNG) fueled. Emission factors were developed for 2012 and applied to the projected increase in vehicle miles travelled caused by the proposed project in the San Joaquin Valley.

The EMFAC2007 model developed and used by the California Air Resources Board (CARB) to compute on-road vehicle emission rates was used. Diesel truck air pollutant emission rates were computed for heavy-duty trucks, assuming a default fleet for 2012. Emission factors were representative of the largest size truck that can be selected in the model (i.e., heavy, heavy-duty diesel truck). EMFAC2007 provides emission rates of PM<sub>10</sub> that account

for exhaust, tire wear and brake wear. The additional emissions associated with entrained roadway dust were computed using U.S. EPA AP-42 methods and California Air Resources Board inputs for emissions inventories<sup>1</sup>.

The EMFAC2007 model does not compute emission factors for compressed natural gas (CNG). CNG emissions were based on EMFAC2007, but using the newer stringent 2011 standard that new waste collection trucks will have to meet. So the predicted CNG emission rates used in this analysis represented the highest CNG rates, rather than the actual rates.

Although not necessary, emission calculations for greenhouse gases (GHG) are also provided. The EMFAC2007 model provides gram per mile emission rates of carbon dioxide (CO<sub>2</sub>) for diesel-fueled vehicles. In order to compute the emissions of the other two common greenhouse gases from truck emissions (nitrous oxides and methane), the California Climate Action Registry (CCAR) protocol method was used. CCAR provides emission rates, based on fuel consumption. Therefore, the average truck fuel efficiency provided by EMFAC2007 was used to compute fuel consumptions and the CCAR factors for nitrous oxide and methane emissions were applied. GHG emissions for CNG were computed based on CNG usage and factors from CCAR. For CNG use, the CARB average CNG fuel use value of 26.86 MJ/mile, based on a county-wide average travel speed. The fuel use was then calculated in miles per therm since the CCAR CNG CO<sub>2</sub> emission factor is in kilograms per therm. CCAR N<sub>2</sub>O and CH<sub>4</sub> emission factors are in grams per mile.

Emission rate computations are provided in Attachment 1.

## Computed Emissions

### Bay Area Air Basin Air Pollutant and GHG Emissions

Because VMT in the Bay Area would be lower with the proposed project, emissions of air pollutants and GHG within the air basin would not increase. Therefore, a significant impact within the basin (under jurisdiction of the Bay Area Air Quality Management District or BAAQMD) would not occur.

### San Joaquin Valley Air Pollutant and GHG Emissions

Estimated vehicle travel was combined with the emission factors to compute annual emissions of air pollutants and GHGs. Travel fractions by fuel type (CNG or diesel) were applied. Table 1 provides a summary of the emission computations.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has developed the Guide for Assessing and Mitigating Air Quality Impacts, also known as the GAMAQI. The following threshold of significance, obtained from the SJVAPCD's GAMAQI, is used to determine whether a proposed project would result in a significant air quality impact:

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<sup>1</sup> U.S. Environmental Protection Agency. Compilation of Air Pollutant Emission Factors, AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, Section 13.2.1 Paved Roads, December 2003. <http://www.epa.gov/ttn/chief/ap42/ch13/index.html> for CARB methodology in San Joaquin Valley, see [www.arb.ca.gov/ei/areasrc/PMSJVPavedRoadMethod2003.pdf](http://www.arb.ca.gov/ei/areasrc/PMSJVPavedRoadMethod2003.pdf)

*Emissions of Ozone Precursors (ROG and NOx). Direct and indirect emissions associated with the proposed project would be considered significant in the San Joaquin Valley Air Basin if the project generates emissions of ROG or NO<sub>x</sub> that exceed 10 tons per year. SJVAPCD has not published thresholds for long-term emissions of Particulate Matter (PM). However, a PM<sub>10</sub> emission level of 15 tons per year was used for this assessment,<sup>2</sup> since this is the level at which SJVAPCD requires “offsets” for new stationary sources. Since PM<sub>2.5</sub> ambient air quality standards are about 30% below the PM<sub>10</sub> standard, a threshold of 10 tons per year for PM<sub>2.5</sub> was used to judge the significance of the project direct and indirect emissions.<sup>3</sup>*

As shown in Table 1, the emission from the projected truck travel in the San Joaquin Valley Air Basin would be below the significance SJVAPCD thresholds for ROG and PM<sub>10</sub>. Although PM<sub>2.5</sub> emissions were not computed, they would be less than PM<sub>10</sub> emissions and well below 10 tons annually. However, emissions of NO<sub>x</sub> would exceed the 10-ton per year threshold. These would represent a potentially significant impact.

#### Overall Air Pollutant and GHG Emissions

Overall VMT would increase as a result of the proposed project. This would lead to an overall increase in air pollutant emissions and GHG. Emissions associated with the net increase in truck traffic VMT was computed and reported in Table 2. This is basically the result of summing VMT computations for both the Bay Area and San Joaquin Valley air basins.

GHG emissions are computed on an annual basis in terms of metric tons of equivalent CO<sub>2</sub> based on CO<sub>2</sub>, nitrous oxide, and methane. Equivalent CO<sub>2</sub> is expressed as CO<sub>2</sub>e. Overall, CO<sub>2</sub>e emissions could increase by up to 1,500 metric tons per year.

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<sup>2</sup> While San Joaquin Valley Air Pollution Control District CEQA guidance recognizes that particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) is a major air quality issue in the basin, it has to date not established numerical thresholds for significance for these pollutants. For the purposes of this analysis, a PM<sub>10</sub> emission threshold of 15 tons per year was used as a measure of significance.

<sup>3</sup>The Federal 24-hour standard for PM<sub>2.5</sub> (35 µg/m<sup>3</sup>) is approximately 30 percent lower than the State 24-hour standard for PM<sub>10</sub> (35 µg/m<sup>3</sup>).

**Table 1 Proposed Project Emissions in San Joaquin Valley Air Basin**

<b>ACWMA Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance</b>										
<b>Computations of Heavy Duty Truck Travel Emissions in San Joaquin Valley Air Basin</b>										
<b>Emissions due to net VMT change</b>										
Category	Annual VMT	Emissions (in tons/year)								
		ROG	NOx	PM <sub>10</sub>	Exhaust	Tire Wear	Brake Wear	Dust	CO <sub>2</sub>	
<b>Organics To Facility</b>										
<i>Emission Rate</i>	<i>gram/mile:</i>	0.62	12.16	4.12	0.43	0.04	0.03	3.62	2057	
Diesel	421,234	0.28	5.65	1.91	metric tons:				866	
<i>Emission Rate</i>	<i>gram/mile:</i>	0.14	1.48	3.75	0.07	0.04	0.03	3.62	1591	
CNG	103,855	0.02	0.17	0.43	metric tons:				182	
	525,089					metric tons:				165
<b>Compost To Market</b>										
<i>Diesel Emission Rate</i>	<i>gram/mile:</i>	0.62	12.16	0.50	0.43	0.04	0.03	0.00	2057	
	345,453	0.24	4.63	0.19	metric tons:				783	
<b>Glass To Market</b>										
<i>Diesel Emission Rate</i>	<i>gram/mile:</i>	0.62	12.16	0.50	0.43	0.04	0.03	0.00	2057	
	74,724	0.05	1.00	0.04	metric tons:				169	
<b>Total Emissions (tons)</b>		<b>0.59</b>	<b>11.45</b>	<b>2.57</b>	metric tons:				<b>2089</b>	
						metric tons:				<b>1895</b>

Notes:

- <sup>1</sup> Diesel emission factors based on EMFAC2007 emission factors for heavy-duty trucks (heavy, heavy-duty diesel) in San Joaquin Valley Air Basin for annual conditions with temperature of 60deg, relative humidity of 50%, average speed of 50mph, and calendar year 2012.
- <sup>2</sup> CNG emission factors based on EMFAC2007 emission factors as described above, but assumed CNG rates meet CARB 2010 standards, so only model year 2010 fleet assumed in EMFAC2007 model.

Mitigation for Potentially Significant NOx Emissions in San Joaquin Valley

Emissions from increased truck travel in the San Joaquin Valley are considered potentially significant, rather than significant, because they do not take into account the latest emissions requirements for truck fleets that were imposed by the California Air Resources Board. In December 2008 CARB approved a new regulation to reduce emissions of nitrogen oxides and fine particulate matter from existing on-road heavy-duty diesel fueled vehicles<sup>4</sup>. Amendments were made in 2010. The regulation requires affected vehicles to meet specific performance requirements between 2012 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by January 1, 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle. Older, more polluting trucks, are replaced early in the program.

<sup>4</sup> <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>

**Table 2 Proposed Project Overall Emissions**

<b>ACWMA Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance</b>									
<b>Computations of Heavy Duty Truck Travel Emissions from Project</b>									
<b>Emissions due to net VMT change</b>									
Category	Annual VMT	Emissions (in tons/year)							
		ROG	NOx	PM <sub>10</sub>	Exhaust	Tire Wear	Brake Wear	Dust	CO <sub>2</sub>
<i>Emission Rate</i>	<i>grm/mile:</i>	0.62	12.16	4.12	0.43	0.04	0.03	3.62	2057
<i>Diesel</i>	729,460	0.49	9.78	3.31					1654
									metric tons: 1500
<b>Total Emissions (tons)</b>		<b>0.49</b>	<b>9.78</b>	<b>3.31</b>					<b>1654</b>
									metric tons: 1500
VMT- overall increase =	729,460								
Notes:									
<sup>1</sup> Diesel emission factors based on EMFAC2007 emission factors for heavy-duty trucks (heavy, heavy-duty diesel) in San Joaquin Valley Air Basin for annual conditions with temperature of 60deg, relative humidity of 50%, average speed of 50mph, and calender year 2012									

For this project, emissions were computed using the EMFAC2007 model with a statewide fleet age for the year 2012. The model does not incorporate effects of this regulation when computing default fleet emission rates. Depending on the age and retrofit/replacement schedule for trucks associated with hauling recyclables, emissions may be much lower. However, this assessment assumes that diesel truck emissions for the project are equivalent to the average statewide fleet for 2012 without any effects of the regulation. The following mitigation measure should be implemented to ensure that the project does not cause NOx emissions to increase above 10 tons per year:

When the project is implemented such that VMT caused by the project reaches 80 percent of the predicted VMT for San Joaquin Valley truck travel, then the following mitigation measures could be implemented that would reduce NOx emissions in the San Joaquin Valley air basin to less than significant:

The project shall ensure that fleet-wide emissions from Organics to Facility truck trips are reduced by at least 49-percent below emissions computed based on a statewide composite rate for the year 2012. Table 3 shows that retrofitting or replacing up to 65-percent of the haul trucks to meet Model Year 2010 NOx emissions rates would reduce project emissions in the San Joaquin Valley to less than 10 tons per year. Converting trucks from older diesel to CNG or replacing with trucks that meet 2010 heavy-duty diesel engine standards would achieve these reductions. The applicant shall prepare a plan and include computations demonstrating how these emission reductions will be achieved.

**Table 3. Mitigated Project Emissions**

<b>ACWMA Mandatory Recycling Ordinance and a Single Use Bag Reduction Ordinance</b>										
<b>Computations of Heavy Duty Truck Travel Emissions in San Joaquin Valley Air Basin</b>										
<b>Emissions due to net VMT change with Mitigation</b>										
Category	Annual VMT	Emissions (in tons/year)								
		ROG	NOx	PM <sub>10</sub>	Exhaust	Tire Wear	Brake Wear	Dust	CO <sub>2</sub>	
Emissions to mitigate			1.45							
VMT that Mitigation can apply	525,089		5.82							
<b>Organics To Facility</b>										
<i>Emission Rate</i>	<i>grm/mile:</i>	0.62	12.16	0.50	0.43	0.04	0.03	0.00	2057	
35% Diesel	183,781	2.46								
metric tons:										
<i>Emission Rate</i>	<i>grm/mile:</i>	0.14	1.48	0.14	0.07	0.04	0.03	0.00	1591	
2010 Diesel or CNG	341,308	0.56								
	525,089	3.02								
metric tons:										
<b>Computed Reduction</b>			<b>2.80</b>							
Notes:										
<ol style="list-style-type: none"> <li><sup>1</sup> Diesel emission factors based on EMFAC2007 emission factors for heavy-duty trucks (heavy, heavy-duty diesel) in San Joaquin Valley Air Basin for annual conditions with temperature of 60deg, relative humidity of 50%, average speed of 50mph, and calendar year 2012.</li> <li><sup>2</sup> CNG emission factors based on EMFAC2007 emission factors as described above, but assumed CNG rates meet CARB 2010 standards, so only model year 2010 fleet assumed in EMFAC2007 model.</li> </ol>										

JR

11-097

# **Appendix F**

## **Comment Letters**

# **Comment Letter A**

CITY OF PIEDMONT  
CALIFORNIA



September 7, 2011

StopWaste.Org  
1537 Webster Street  
Oakland, CA 94612  
Attn: Debra Kaufman

Re: Draft EIR for proposed Mandatory Recycling and Single Use Bag Reduction Ordinances

Dear Ms. Kaufman:

At its regularly scheduled hearing on September 6, 2011, the Piedmont City Council directed City Staff to provide the following comments on the draft Environmental Impact Report (DEIR) prepared for the proposed Mandatory Recycling Ordinance and Single Use Bag Reduction Ordinance:

**Process**

We understand: 1) that the DEIR was developed to look at the maximum impact of these two ordinances; 2) that Alameda County residents, businesses and jurisdictions have the opportunity to comment on and influence the decision making process to certify the EIR and then adopt the proposed ordinances or variations thereof; and 3) any ordinance(s) adopted may very well have less restrictive requirements. Therefore, we encourage you to be thorough in your notification of future hearings on the DEIR and consideration of the ordinances and the release of any associated documents so that local governments and the public are fully vested in the decision-making process.

**Jurisdictional Scope of the Ordinances**

As is practicable for each ordinance, the adoption and implementation of the proposed ordinance should be considered at the local jurisdiction level in order to ensure that local control is maintained and solutions relevant to the local jurisdiction are implemented.

**Project Description Content**

Re: DEIR Section 2.1.1.1, paragraph 3: The City of Piedmont includes plastic bags as an accepted material in its recycling program. Plastic bags that are bundled or bagged and tied can be placed in the blue "Recyclables" carts for collection and processing for marketing as a recyclable material. As with all other designated materials, whether or not there is a viable market for this recyclable material is beyond the City's control.

Re: DEIR Section 2.3.1, paragraph 5: Both, the collection of recyclables (bottles, cans, paper, etc.) and the collection of source-separated organics (yard trimmings, food scraps and food-soiled paper) from multi-family residences is readily available and provided in the City of Piedmont.

The agency's efforts to develop this document to assist local jurisdictions' compliance with state regulations and to meet the waste reduction goals of the county and its jurisdictions are greatly appreciated and the City looks forward to participating in future ACWMA hearings on the EIR and proposed ordinances.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Jackson". The signature is fluid and cursive, with a large initial "K" and "J".

Kevin Jackson, AICP  
Assistant Planner

# **Comment Letter B**



## CITY OF DUBLIN

100 Civic Plaza, Dublin, California 94568

Website: <http://www.ci.dublin.ca.us>

September 15, 2011

Debra Kaufman  
StopWaste.Org  
1537 Webster St.  
Oakland, CA 94612

Submitted via Email

**Re: Draft Mandatory Recycling and Single-Use Bag Reduction Ordinances Environmental Impact Report**

Dear Ms. Kaufman:

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report (EIR) for the Mandatory Recycling and Single Use Bag Reduction Ordinances. The City understands that the Draft EIR is designed to analyze the maximum impacts of a Countywide program, and that the final ordinances considered will not be as comprehensive as this analysis. While the City's response contained herein is focused on the Draft EIR, it will only touch lightly the implementation concerns, which are of primary interest to the City. With that being said, the City's comments on the Draft EIR are outlined below.

### **Mandatory Recycling:**

The Draft EIR does not appear to fully detail the impacts of increased services that will result from the additional collection of materials. For example, within the City of Dublin, there is a three bin system consisting of garbage collection, recycling collection, and organics collection. Each of these services has their own routes, trucks, and drivers. If recycling and organics participation were to be mandated, there would be a significant increase in the vehicle miles traveled from the added truck routes to compensate for the additional collection of recycling and organics. Simply, the City does not currently have every business participating in all three services. This impact should be fully analyzed within the report.

While it may be beyond the scope of the EIR, the real concern for cities is what economic impacts will result from mandated recycling within the County. The cost to the ratepayer could be severe as well as the cost and time impacts to the local jurisdictions. Up to this point, it does not appear that such analysis has been completely explored. In particular, there are an abundance of impacts that should be looked at including enforcement, outreach, increased collection, franchise amendments, enclosure concerns, processing capacity, etc. Exploration and presentation of these topics will be crucial to help the Waste Management Authority Board make informed decisions on the future proposed ordinances.

Area Code (925) • City Manager 833-6650 • City Council 833-6650 • Personnel 833-6605 • Economic Development 833-6650  
Finance 833-6640 • Public Works/Engineering 833-6630 • Parks & Community Services 833-6645 • Police 833-6670  
Planning/Code Enforcement 833-6610 • Building Inspection 833-6620 • Fire Prevention Bureau 833-6606

*Printed on Recycled Paper*

**Single-use Bag Reduction:**

The City of Dublin's major concern in this area is that we share a border with Contra Costa County and the City of San Ramon. This ordinance could have an impact on stores within the community resulting from the new fee for the bags and a perceived inconvenience in needing to bring bags to the store for the shopper. As there are shopping alternatives in surrounding jurisdictions that will not be affected by such an ordinance, which are within a reasonable driving distance, the City and its business sector could be negatively impacted by this ordinance.

Please feel free to contact me with any questions or comments at (925) 833-6650.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Bradley', with a stylized flourish at the end.

Roger Bradley  
Assistant to the City Manager

cc: Joni L. Pattillo, City Manager  
Chris Foss, Assistant City Manager

# **Comment Letter C**



*Community Services Department*  
P.O. Box 5006, Fremont, CA 94537-5006  
www.fremont.gov

September 15, 2011

VIA EMAIL

Debra Kaufman  
Stopwaste.Org  
1537 Webster Street  
Oakland, CA 94612

Dear Ms. Kaufman:

The City of Fremont has reviewed the Draft Environmental Impact Report for Mandatory Recycling and Single Use Bag Reduction Ordinances and provides the comments below.

The City generally supports the development of a countywide ordinance to restrict the distribution of single use bags, specifically single use plastic bags. Fremont staff looks forward to supporting the development of a specific ordinance, and providing input as policies around this issue evolve.

In regards to the proposed project for countywide mandatory recycling, the following comments are submitted:

- Staff is concerned the DEIR does not fully identify the impacts of the mandatory recycling project on the service infrastructure, such as loss of collection efficiency and the likely need for added truck routes. An incomplete assessment of environmental impacts of service changes in the DEIR may place the burden of further environmental analysis on local jurisdictions when implementing mandated recycling programs.
- We believe it is essential that a future mandatory recycling ordinance provide flexibility that allows local jurisdictions to leverage existing processing infrastructure and service contracts to the greatest extent possible.
- The economic impacts on local jurisdictions and the customer base associated with implementing the mandatory recycling project have not been adequately detailed. Such impacts may fall heavily on segments of our community who will no doubt bear the costs of increased materials collection, transfer, and processing expenses, outreach and enforcement costs, and the expense of physical



alterations to buildings and trash enclosures to fulfill the ambitions of the stated project. City staff awaits the economic analysis being conducted by Stopwaste.Org and desires to see economic impacts legitimately considered in the development of any mandatory recycling ordinance.

Thank you for the opportunity to comment on the Draft Environmental Impact Report.

Sincerely



Kathy Cote  
Environmental Services Manager

C: Anu Natatrajan  
Fred Diaz  
Ken Pianin

# **Comment Letter D**



September 15, 2011

Debra Kaufman  
StopWaste.Org  
1537 Webster St.  
Oakland, CA 94612

Subject: Draft Mandatory Recycling and Single-Use Bag Reduction Ordinances Environmental Impact Report

Dear Ms. Kaufman,

The purpose of this letter is to provide comments related to the Mandatory Recycling and Single-Use Bag Reduction Ordinances Draft Environmental Impact Report (DEIR) released by StopWaste.Org in August 2011. The DEIR examines two potential policies that would, once developed, be evaluated and considered independently of the other. The DEIR analyses the "maximum impact" scenarios that could occur with the adoption of these two ordinances, meaning that the set of assumptions about the scope and design of each of the two policies would likely result in the greatest environmental impact.

It should be noted that the Livermore City Council is scheduled to discuss these policies at the October 24, 2011 Council meeting, so the City Council has not yet adopted a formal position. However, given the timeline and absent any specific policies to evaluate, Livermore staff has taken this opportunity to prepare feedback assuming both potential policies intend to capture a "maximum impact" scenario as presented in the DEIR.

**Proposed Single-Use Bag Reduction Ordinance**

Staff has reviewed the information pertaining to a Single-Use Bag Reduction Ordinance; observations are listed below.

1. An ordinance that would apply county-wide would reduce the need for retailers to comply with slightly different rules in each City, and allay concerns about the economic impacts resulting from consumers shopping at neighboring out-of-county jurisdictions to avoid paying for single-use bags.
2. This ordinance could help Livermore comply with Regional Water Quality Control Board requirements to abate litter.

3. A phased-in, all inclusive policy could ensure that no retailer is unnecessarily disadvantaged by the ordinance. Phased applicability beginning with larger vendors may be desirable; any ordinance should be as inclusive as possible to include all large grocery and large retail, or all retail.
4. Adequate lead time should be incorporated to allow vendors to exhaust current supplies of plastic bags and prepare to comply.
5. Responsibility for enforcement should be at the jurisdiction's sole discretion; a funding source for costs related to enforcement should be identified prior to finalizing any ordinance.

### **Proposed Mandatory Recycling Ordinance**

The City of Livermore staff have a number of concerns related to a Mandatory Recycling Ordinance, particularly if a "maximum impact" scenario is approved. These concerns, along with suggestions for consideration, are listed below.

1. Recycling and organics collection is heavily subsidized by garbage rates in Livermore. Therefore, shifting materials away from the garbage stream may result in hauler revenue shortfalls and additional rate increases for generators. An in-depth economic analysis should be completed to better understand the impacts of the proposed ordinance to rate payers.
2. If an opt-out provision is included, ordinance requirements could potentially be tied to Measure D funding via a proposed definition of "adequate commercial recycling", in effect forcing jurisdictions to adopt the ordinance or face becoming ineligible for Measure D funding. Measure D monies are an important source of funding for City recycling programs. Livermore would like to avoid losing grant funds if participation in a Mandatory Recycling Ordinance is not feasible for the City.
3. Adequate (even extra) processing capacity should be secured before materials (e.g. organics) are included in ordinance requirements. The current infrastructure may not be capable of handling plastic-contaminated commercial organics from Livermore if tonnages were to dramatically increase. Organics should not be included in the ordinance before capacity is secured by contract.
4. Any ordinance should focus on a defined goal (such as a diversion goal) and encourage flexibility to accommodate various collection and processing methodologies.
5. Any ordinance should allow for a phased approach, perhaps beginning with proposed state requirements and adding more materials and generators over time. Adequate lead time – perhaps 12 months or more – to ramp up for compliance is necessary.

Ms. Debra Kaufman  
September 15, 2011  
Page 3 of 3

6. Responsibility for enforcement should be at the jurisdiction's sole discretion; a funding source for costs related to enforcement should be identified prior to finalizing any ordinance.

City of Livermore staff are hopeful that policy drafts will be available for review by the end of September 2011. For both policies under consideration, the City of Livermore suggests that StopWaste.Org staff allow adequate time (one month or more) for jurisdiction staff to review the language, collaborate with City officials, and offer thoughtful feedback.

Thank you for considering these preliminary comments; if you have any questions, please feel free to contact me at 925-960-8002.

Sincerely,

A handwritten signature in cursive script that reads "Judy Erlandson". The signature is written in black ink and is positioned above the typed name.

Judy Erlandson  
Public Works Manager

# **Comment Letter E**



CITY OF  
**HAYWARD**  
HEART OF THE BAY

September 16, 2011

Gary Wolff  
Executive Director  
StopWaste.Org  
1537 Webster Street  
Oakland, CA 94612

Re: Response to Draft EIR for Mandatory Recycling and Single-Use Bag Reduction Ordinances

Dear Mr. Wolff:

This letter responds to the Draft Environmental Impact Report (DEIR) prepared by StopWaste.Org regarding the proposed mandatory recycling and single-use bag reduction ordinances. The following comments address the proposed ordinances, as described in the DEIR, and other documents provided by agency staff. It should be noted that, due to timing, our City Council has not met yet with regard to these programs, although the two ordinances will be discussed at the next City Council Sustainability Committee meeting on October 5.

Single-Use Bag Reduction

Hayward generally supports the development of a county-wide ordinance to reduce the number of single-use bags and has no specific comments on the DEIR regarding this ordinance.

Mandatory Recycling

- Space constraints, particularly for multi-family dwelling complexes, may preclude placement of outdoor containers and result in impacts on public and private roads due to the collection vehicles. These impacts are not adequately addressed in the DEIR
- Mandatory recycling services will necessarily result in additional collection services, with attendant noise and air quality impacts. The DEIR does not fully identify or assess the impact of these conditions.
- The DEIR does not adequately address the economic impacts on both local jurisdictions and customers. Since Hayward has already implemented mandatory single-family residential recycling, the impacts of the proposed ordinance may fall heavily on other segments of our community, who may need to bear the costs of increased materials collection and transfer, outreach, enforcement, and physical modifications to buildings and trash enclosures. City staff will review the economic analysis being prepared by Stopwaste.Org and anticipates consideration of economic factors in the development of any mandatory recycling ordinance.

DEPARTMENT OF PUBLIC WORKS  
ADMINISTRATION

777 B Street • Hayward • CA • 94541-5007

Tel: 510-583-4700 • Fax: 510-583-3610 • Website: [www.hayward-ca.gov](http://www.hayward-ca.gov)

Ordinance Development Process

We understand that the proposed ordinances will be available in October and ask that copies be provided as soon as possible to allow ample time to evaluate all aspects of both ordinances, as described in the Alameda County City Managers' Association's July 27 letter to you.

Hayward staff would expect to work collaboratively with Stopwaste.Org in crafting the provisions. To that end, we also request development of a workgroup framework, similar to that conducted by the Franchise Task Force, whose members would draft the mandatory commercial recycling and single-use bag reduction ordinances, and a schedule for discussions of those ordinances with all members of the technical staff throughout the County. The workgroups will need to discuss several elements of the proposed mandatory recycling ordinance for multi-family dwellings and businesses, including materials required for collection, a performance standard, enforcement provisions, and a timeframe for implementation based on state legislation and other proposed state regulations.

Finally, we ask that the ordinance's provisions provide flexibility and customization as a workgroup is convened to revise the definition of adequate commercial recycling used to determine Measure D compliance.

Thank you for your attention to and consideration of these comments.

Sincerely,



Robert A. Bauman  
Public Works Director

cc: Fran David, City Manager  
David Rizk, Development Services Director

# **Comment Letter F**



September 16, 2011

Stopwaste  
Gary Wolff  
Executive Director  
1537 Webster Street  
Oakland, CA 94612

Subject: Comments on the Draft Environmental Impact Report regarding Mandatory Recycling and Single Use Bag Reduction Ordinances

Dear Mr. Wolff:

Thank you for allowing the City of Pleasanton to comment on the proposed Draft Environmental Impact Report (DEIR) for the proposed Mandatory Recycling and Single Use Bag Reduction Ordinances. The City supports the concept of increasing diversion from landfills as well as the need to reduce the presence of single use plastic bags from our natural environment. The City also has some concerns about the DEIR which we wish to have addressed. The City's comments are as follows:

Comments:

1. Table 3.1-2: please add a column listing the current capacity available at Composting Facilities 11 to 16. Please clarify the conflicting information in the DEIR relating to capacity and diversion of excess compostable material. Currently, the DEIR indicates that capacity will be exceeded; please discuss why adding capacity to address this issue is not being studied. Example: (pg. 60, 4<sup>th</sup> paragraph) discusses why adding capacity is not being studied; whereas, page 69, first bullet then discusses known limits will be exceeded for ColorScape II and the excess would be diverted to Recology Grover.
2. Impact LU-1, pg. 70: mandatory recycling will likely require external modifications to existing buildings (beyond internal structures) and require additional covered trash enclosures (which drain to sewer system) to accommodate additional organics bins for multi-family residential and commercial. Please discuss the impact of these external modifications.
3. 3.2.2.1 *Transportation Impacts*, pg. 82-83: this analysis lacks discussion of potential increases in multiple collection times per week for Multi-Family Dwellings (MFD) and commercial organics (due to odor and pest concerns). The analysis does not include Vehicle Miles Traveled (VMT) or discussion on odor concerns on a per jurisdiction basis. Please include an analysis of VMT and odor and pest concerns.

4. 3.7.2 and 3.8.2: please include an analysis of the impact of multi-family households using the sink garbage disposal to avoid separating organic from garbage and analyze these impacts on water quality/wastewater treatment and the effects that this may have on sewage treatment of waste water.
5. Appendix B, pg. 11: location of additional bins in MFD and commercial sites
  - Please address the impact of bins needing to be covered and in enclosures with sewer drainage to meet storm water standards.
  - Please include a discussion on potential incentives for commercial sites/commercial businesses to enlarge enclosures.
  - Mandatory commercial recycling will require new types of bins that are watertight for organics to mitigate leaking of food waste bins. The DEIR lacks and should include a discussion on the economic impact of acquiring new bins and the storm water effects with bins that may not be watertight.
6. Appendix B, pg. 12: the DEIR should address the projected increase in frequency of pickup of organics/food waste and include an analysis of the following:
  - What is current frequency of garbage pick-up from commercial/restaurants?
  - Our analysis indicates that multiple pick-up times a week will be increased to address issues of odor/pests associated with commercial composting. Please provide additional analysis on this matter.
  - Increased traffic/air impacts;
    - We are concerned with the analysis on pages 14-16 that only new vehicle miles travelled are for post collection system transfer of organic materials to San Joaquin County;
      - If there is an increase in refuse, recyclables and organics pickups, the result will be an increase in VMT for collection per jurisdiction at jurisdiction level. The DEIR should address the VMT effects at the jurisdiction level.
    - Appendix C: We request that the Air Quality Report be updated if the VMT effects indicate that more collection trips for commercial/restaurant organics bins will be necessary.
7. Appendix B: frequency of generator “compliance plans.” The DEIR is lacking, and should address the following:
  - Specify who will be responsible for multi-tenant commercial buildings.
  - Address how individual businesses that share a trash container would comply with the 4 cubic yard requirement.
8. Appendix D, Summary of Available Information on Reusable Shopping Bags. The DEIR should include a discussion on the following:

Bag capacity discussion does not take into account that while reusable bags have greater capacity than HDPE featured, persons buying groceries have weight carrying limit that the full reusable bag may exceed; and/or types of items may not allow for reusable bag to be filled to capacity (where heavier item could crush fragile item). It is possible that more reusable bags are likely to be bought and used than precise offset from HDPE bags.

9. Appendix E – Summary of Life Cycle Assessments (LCA)

There appears to be a typographical or editing error in the Summary [of the 2002 Australia analysis] on pg. 3, second paragraph, line 1, “The streamlined LCA found that over the course of a year, single-use paper bags resulted in greater impacts than single-use paper bags in every category except persistence of litter over time.”

We question the relevancy of the 2002 Australia analysis and would prefer more local analysis.

10. Single Use Bag Prohibition

Please address the following policy concerns about mandates for retail merchandisers and local jurisdictions in the DEIR:

- Shoppers carrying their own bag will reduce browsing/sales as buyers will not have hands free to browse through racks of clothes or items.
- Customers do not always know if they are making a purchase, or if purchases will be large or small items, and it will be unclear as to the size of the bag or quantity of bags to bring (opposed to greater predictability at grocery stores).
- Bags carried into stores may become a cover for shoplifting.
- The DEIR evaluates the widest scope of options for the ban on plastic bags. It is critical that any ordinance developed be applied equally to similar retailers e.g.: grocery stores and those selling packaged foods.
- Lacking economic analysis relating to a buyer’s choice to shop in a neighboring county where retail merchandisers do not have a ban on bags. Please conduct an economic analysis on the effects of a county by county ordinance as compared to a more comprehensive initiative.
- Enforcement, oversight and monitoring of program implementation and compliance: during a time when jurisdictions face workforce reductions and reduced revenues, the expectations and funding sources for jurisdictions must be carefully vetted prior to enacting any program. Currently, it is unclear how jurisdictions will be able to comply, monitor and implement these program and to what degree, city staff or Stopwaste staff will be required to devote to such programs. Please conduct an analysis of the expected time and FTE’s these programs will create for jurisdictions.
- It is unclear how the reusable bag campaign led by Stopwaste has influenced shoppers. An evaluation of an ongoing continued and/or more rigorous outreach and education effort should be conducted to determine if this would change the behavior of single use bag users.

11. Mandatory Commercial Recycling

Please address the following policy concerns about mandates for commercial businesses and local jurisdictions in the DEIR:

- Summary, p. 6 and section 2.3.1.3, p. 37: “Local Jurisdictions will be required to implement commercial recycling program for eligible businesses with education, outreach, monitoring and notification of non-compliance.”
- Enforcement, oversight and monitoring of program implementation and compliance: during a time when jurisdictions face workforce reductions and reduced revenues, the expectations and funding sources for jurisdictions must be carefully vetted prior to enacting any program. Stopwaste staff has indicated at times that monitoring and implementation will be conducted by Stopwaste staff or contracted firms. The DEIR provides information that is contradictory to the comments made by Stopwaste staff. It is important for jurisdictions to understand the expectations, parameters, and duties that will be required of city staff. The DEIR should carefully outline the impact to jurisdictions.
- The DEIR lacks economic analysis on the impact of possible increase in refuse, recycling and composting rates and the effect on haulers and rate payers. This economic analysis should be part of the DEIR.
- The DEIR should address the impact to weekly vendors such as Farmer’s Markets and the impact of mandatory recycling and single use bag requirements for vendors participating at such events.

12. Unclear about Cal Recycle’s proposed regulation to ARB. In Summary (pg. 6, 3<sup>rd</sup> paragraph) states “...multi-family generators with five or more units ....”; Section 2.1.1 (pg. 16, 4<sup>th</sup> full paragraph) discusses, “... multi-family generators with sixteen or more units...”

- Please address the differences between comments made on pg. 6, 3<sup>rd</sup> paragraph and Section 2.1.1 (pg. 16, 4<sup>th</sup> full paragraph).

Thank you for considering our comments.

Sincerely,



Nelson Fialho  
City Manager

c: Maria Lara, Assistant to the City Manager  
Daniel Smith, Director of Operations Services  
Steven Bocian, Assistant City Manager

# **Comment Letter G**



September 15, 2011

StopWaste.Org  
1537 Webster Street  
Oakland, CA 94612  
Attn: Debra Kaufman

RE: Single-use bag DEIR comments

Dear Ms. Kaufman:

As the oldest and largest organization working to protect and restore San Francisco Bay and representing thousands of members and supporters in Alameda County, Save The Bay submits this letter in support of the Environmentally Superior Alternative for a single-use bag ordinance as identified by the Draft Environmental Impact Report (State Clearinghouse # 2011042012).

A healthy and vibrant San Francisco Bay is central to the quality of life and economy in the Bay Area. Plastic bags are a significant contributing factor to the pollution of our creeks, rivers, and the Bay. Save The Bay estimates that more than one million plastic bags enter San Francisco Bay each year, threatening wildlife and choking wetlands.

The evidence is overwhelming that a ban on all single-use bags is the environmentally superior alternative. Save The Bay recognizes, however, the need to provide customers with a bag in the event that they do not bring their own. Therefore, the proposed ten cent charge on recycled-content paper bags is reasonable and provides the price signal that encourages customers to bring their own bags to avoid future charges.

The Bay has suffered from plastic bag pollution for far too long, and Alameda County and its cities can be leaders in the effort to protect our Bay and waterways. We strongly urge the Alameda County Waste Management Agency to adopt this EIR and introduce an ordinance that will ban the free distribution of single-use bags at all retailers within all Alameda County jurisdictions. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "David Lewis".

David Lewis  
Executive Director

# **Comment Letter H**

## **SAVE THE PLASTIC BAG COALITION**

350 Bay Street, Suite 100-328

San Francisco, CA 94133

Phone: (415) 577-6660

Fax: (415) 869-5380

E-mail: [savetheplasticbag@earthlink.net](mailto:savetheplasticbag@earthlink.net)

Website: [www.savetheplasticbag.com](http://www.savetheplasticbag.com)

September 15, 2011

StopWaste.Org  
1537 Webster Street  
Oakland, CA 94612

Via e-mail to: [drafteir@stopwaste.org](mailto:drafteir@stopwaste.org)

RE: Comments and objections to Alameda County Draft EIR on Single Use Bag Reduction Ordinances

### **INTRODUCTION**

Pursuant to CEQA including but not limited to Pub. Res. Code §21177(b), Save the Plastic Bag Coalition (“STPB”) hereby objects to the approval and certification of the Alameda County (“County”) Draft EIR (“DEIR”) and the proposed Single Use Carryout Bag Reduction Ordinances based on the objections herein. STPB demands that a corrected draft EIR be completed and recirculated, in compliance with CEQA.

The CEQA objections herein are based entirely on environmental impacts. Economic and other impacts are not the bases for any of the objections herein.

STPB also objects on the ground that the proposed ordinance is preempted by AB 2449.

Exhibits are submitted herewith via e-mail for inclusion in the administrative record in support of these objections.

### **THE COALITION**

STPB’s present membership includes manufacturers and distributors of plastic carryout bags that are distributed in and throughout Alameda County. Such plastic bags would be banned under the proposed ordinance. Therefore, some of STPB’s members would be directly impacted by the proposed ordinance.

STPB was formed in 2008 to respond to environmental myths, exaggerations, and misinformation about plastic bags and to draw attention to the negative environmental impacts of banning plastic bags. STPB is campaigning for all of the environmental impacts of banning plastic bags to be described and disclosed to city and county officials and the public. STPB believes that banning plastic bags (i) is not justified by the environmental facts; and (ii) would result in greater environmental harms including more paper bags.

For several years, plastic bags have been the subject of an intense national and international vilification campaign. STPB believes and contends that groups seeking to have

plastic bags banned have disseminated environmental myths, misinformation and exaggerations to promote their goal. The *Times of London* has stated as follows in an editorial: [Exh. AL68.]

There is a danger that the green herd, in pursuit of a good cause, stumbles into misguided campaigns.

Analysis without facts is guesswork. Sloppy analysis of bad science is worse. Poor interpretation of good science wastes time and impedes the fight against obnoxious behavior. There is no place for bad science, or weak analysis, in the search for credible answers to difficult questions.... Many of those who have demonized plastic bags have enlisted scientific study to their cause. By exaggerating a grain of truth into a larger falsehood they spread misinformation, and abuse the trust of their unwitting audiences.

A senior policy analyst with the U.S. Marine Mammal Commission has publicly stated as follows: [Exh. AL41.]

In their eagerness to make their case [against plastic bags], some of the environmental groups make up claims that are not really supportable.

The *San Jose Mercury News* has been disseminating such myths, including in an editorial on June 14, 2010 that stated as follows: [Exh. AL48.]

[Assembly Member Brownley, the author of pending bill AB 1998 that would ban plastic bags] calls plastic bags “urban tumbleweeds.” Californians use 19 billion bags a year, and the state spends more than \$25 million a year to try to keep them from blowing across cities and counties. That effort, for the most part, has been a failure.

Environmentalists have studies that show Californians recycle only 5 percent of the plastic bags they use. Worldwide, that number is closer to 1 percent. Yet they take 1,000 years to biodegrade. Huge numbers wind up as health hazards to marine mammals: Plastic bags kill an estimated 1 million seabirds and 100,000 other animals every year, whether from eating the things or getting tangled in them. Nearly 2 million barrels of oil a year is wasted to make the plastic bags used by Californians, enough to produce about 40 million gallons of gasoline.

Fifty years ago, sea captains rarely encountered plastic bags in their voyages across the Pacific. Today, about 1,000 miles off the coast of California, they find a swirling mass of plastic trash that spans an area estimated to be twice the size of Texas.

The *Mercury News* allegations are incorrect.

- Removing plastic bags would not save the state \$25 million in litter costs. The same streets, highways, parks, rivers and creeks, and other areas will have to be cleaned, even if there are no plastic bags in the litter stream. San Francisco has not saved any money in litter costs since it banned plastic bags.
- The plastic bag recycling rate of 5% was measured before AB 2449 took effect. AB 2449 required stores to install plastic bag recycling collection bins. Since that time, plastic bag recycling has increased significantly.
- If plastic bags take 1,000 years to biodegrade, that is a good thing. Paper bags do biodegrade in landfills. In the process of biodegrading, paper bags emit methane, which is a greenhouse gas (“GHG”) with 23 times the climate changing impact of CO<sub>2</sub>.
- The allegation that “plastic bags kill an estimated 1 million seabirds and 100,000 other animals every year, whether from eating the things or getting tangled in them” is untrue. The *Times of London* has exposed the allegation about 1 million seabirds and 100,000 sea animals being killed by plastic bags each year as a myth based on a typographical error! The survey on which the myth is based found that the deaths are caused by discarded fishing tackle including fishing nets, not plastic bags. A marine biologist at Greenpeace told The Times: “It’s very unlikely that many animals are killed by plastic bags. The evidence shows just the opposite.” [Exh. AL34]
- The allegation that there is a swirling mass of plastic trash including plastic bags, “twice the size of Texas,” is untrue. The *Los Angeles Times* has made a similar allegation in an editorial on June 24, 2010 stating: “The Great Pacific Garbage Patch is an area of the ocean larger than Texas and thick with floating plastic debris: bottles, bottle caps, bits of packaging and uncountable plastic bags.” [Exh. AL33.]

In fact there is no such area of the ocean “larger than Texas and thick with floating plastic debris: bottles, bottle caps, bits of packaging and uncountable plastic bags.” If such an area existed, it would be clearly visible and there would be photographs of it. There are no such photographs, as anyone can see by searching Google images.

According to Dr. Marcus Erikson of the Algalita Research Foundation: “There is no island of plastic trash.” [Exh. AL60.] He claims that there is a confetti of waste spread over the entire ocean surface. However, he found very little such confetti went he went out to the Pacific Gyre himself and conducted a 24-hour trawl. See YouTube JUNK-n-Gyre video at [http://www.youtube.com/watch?v=3d3\\_fLsjC8U](http://www.youtube.com/watch?v=3d3_fLsjC8U). [Exh. AL67.] The video is hereby submitted into the administrative record in its entirety.

Oregon State University has issued a media release regard its research on the “Great Pacific Garbage Patch,” stating as follows:

The studies have shown is that if you look at the actual area of the plastic itself, rather than the entire North Pacific subtropical gyre, the hypothetically “cohesive” plastic patch is actually less than 1 percent of the geographic size of Texas.

“The amount of plastic out there isn’t trivial,” White said. “But using the highest concentrations ever reported by scientists produces a patch that is a small fraction of the state of Texas, not twice the size.”

Another way to look at it, White said, is to compare the amount of plastic found to the amount of water in which it was found. “If we were to filter the surface area of the ocean equivalent to a football field in waters having the highest concentration (of plastic) ever recorded,” she said, “the amount of plastic recovered would not even extend to the 1-inch line.”

[Exh. AL75.]

Miriam Goldstein, the chief scientist on the Scripps Seaplex expedition which went out to the Pacific to survey marine debris, states as follows regarding the “Great Pacific Garbage Patch”:

Misinformation on this issue is rampant.

Regarding whether there is an area of trash in the Pacific twice the size of Texas, she states:

There is no evidence for this. There certainly is a lot of trash, but there have been no measurements of either the trash’s total area or its growth rate.

[Exhs. AL76, AL77.] Goldstein also states: [Exh. AL78]

Ever since SEAPLEX was funded around two years ago, I have begun every one of my general audience talks (and even a few scientific ones) with a display of misleading and confusing headlines on the accumulation of trash in the North Pacific. According to these headlines, it’s twice the size of America, 3.5 billion ...something...(they don’t say what), stretching from Hawaii to Japan. Most of these claims cannot be supported by any scientific data of which I’m aware. As a scientist, it can be pretty frustrating to see these misconceptions repeated and repeated for years on end.

- The allegation that “nearly 2 million barrels of oil a year is wasted to make the plastic bags used by Californians, enough to produce about 40 million gallons of gasoline” is

untrue. This is based on the myth that plastic bags are made of oil. In fact, 85% of plastic bags used in the United States are made in the United States. Those bags are made of ethane, which is a waste by-product of domestically produced natural gas. None of it could be used for gasoline.

The *Mercury News* editorial illustrates why STPB considers it so important that accurate and informative EIRs are prepared, so that decision-makers and the public in Alameda County do not evaluate the proposed ordinance based on myths, misinformation, and falsehoods.

Heal the Bay is one of the leaders of the anti-plastic bag campaign in California. Heal the Bay's President, Dr. Mark Gold, testified at the Manhattan Beach City Council meeting on July 1, 2008, which was considering banning plastic bags without preparing an EIR. He testified as follows:

Those [plastic bag] bans [in San Francisco and Oakland] did not include bioplastics, which is a *huge mistake*. And so by not doing the CEQA analysis specifically on what the environmental impacts were of not banning that, and moving towards bioplastics with the many problems that they cause, that was a major shortcoming.

Heal the Bay was right. It is essential to analyze and consider the environmental impacts of banning plastic bags.

### **CEQA OBJECTIONS**

The numbered title headings herein are part of the objections.

#### **1. STPB OBJECTS TO THE FINDING THAT A 10-CENT PAPER BAG FEE WOULD RESULT IN A SUFFICIENTLY EFFECTIVE DISINCENTIVE, AS THE COUNTY DOES NOT CITE SUBSTANTIAL EVIDENCE**

Reference is made to the following portions of the DEIR (footnotes omitted):

Page 41: This EIR analyzes the *maximum impact scenarios* that ***could*** occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations. In those situations where there is uncertainty about where materials might go for processing, for example, the farthest location is assumed. (Emphasis added.)

Pages 43-44: The most well known example is the country of Ireland, which imposed a fee on single use plastic carryout bags in

2002. As a result of the fee, the use of single use plastic bags was reduced by over 90 percent almost immediately. Additionally, surveys completed in 2003 indicated that approximately 90 percent of consumers were using reusable bags, so it does not appear that there was a dramatic shift to paper bag use.

Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.

A fee on single use carryout bags enacted in the District of Columbia, a \$0.05 charge for all single use bags, resulted in an immediate substantial reduction in their use during the first month. District staff estimates that the reduction was in the 50-80 percent range for both paper and plastic single use carryout bags.

Page 72: There is not a great deal of past experience to rely on in predicting exactly how and when behavior might change. The imposition of a fee on both plastic and paper single use carry bags by Denmark in 1994 resulted in a 66 percent reduction in use of both types of bags. In 2001, Ireland imposed a fee on single use plastic carryout bags, which resulted in a reduction of over 90 percent in the number of plastic bags used. Washington D.C. saw a 50 to 80 percent reduction in the use of single use plastic bags after the imposition of a five-cent fee in 2010.

The difference in effectiveness between the Irish and Danish programs likely was the result of differences in the two programs; the Danish tax was assessed on the bags sold to businesses, who presumably passed on the costs in various ways to their customers (including charging them for bags). The tax on single use bags was just one of a number of “green” taxes assessed by the Danish government during that time period so the Danish population would have been well aware of the purpose and need for the taxes. The Irish fee was assessed on the customer at the time of purchase and was specifically assessed to reduce plastic litter in a country dependent on tourist-generated revenues (a purpose that the Irish people themselves appeared to understand and agree with).

Because there were substantial reductions in the number of single use carryout bags resulting from all of these programs, it is reasonable to assume that there would be a substantial reduction in Alameda County of the number of single use carryout bags under the proposed ordinance.

Page 74: In the only program known to have been implemented in

a large city in the United States, Washington D.C. recently enacted a fee on all single use bags, resulting in a reduction of between 50 and 80 percent.

Pages 75-76: Additionally, as described earlier in this EIR, the degree to which paper bag use may increase is very uncertain and will definitely be temporary. The citizens of nearby San Jose were surveyed and 81 percent indicated they would bring reusable bags rather than pay \$.10 for a paper bag. The estimate of an additional 59 to 102 million single use paper carryout bags being utilized in Alameda County was developed as an average based on dissimilar programs in various areas and represents a scenario where 65 percent of people switch to reusable bags.

Page 91: It is not known with any certainty what will happen to the number of paper bags used in the County. As discussed in §3.0 of this EIR, there is a possibility that use of single use paper carrier bags may increase.

The DEIR cites the following examples:

- Ireland
- Unidentified “individual stores in Australia and Canada” (DEIR at 43)
- The District of Columbia
- Denmark
- The San Jose and Herrera surveys

The DEIR fails to analyze of those examples and glosses over the details. DEIR objects to all those examples as they are not comparable situations.

#### **IRELAND PLASTAX**

- The Ireland PlasTax is now 22 Euro cents, which at today’s exchange rate is U.S. 30 cents. See Heal the Bay letter to the City of Santa Monica [Exh. AL23] and Reuters article entitled “Ireland to raise “green” tax on plastic bags [Exh. AL29].
- When the Ireland PlasTax was lower, there was a major shift to replacement plastic bags. See Irish Examiner article entitled “Shoppers still bagging plastic bag sales” [Exh. AL30].
- ***There is nothing in the record indicating that paper bags are offered in Ireland.*** The choice in that country may be to bring or buy a reusable bag or use no bag at all.

- There is no indication of the cost of reusable bags in Ireland. They may be cheaper than 22 Euro cents or not much more expensive.
- The value of money in Ireland is different than Alameda County. They are different economies.
- Consumers in Ireland may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County. The City of San Jose states at page 28 of its draft EIR [Exh. AL101] which is part of its Final EIR [Exh. AL79] as follows:

The programmatic variations in combination with differences in physical conditions and cultures make it difficult to project the exact results of a program being implemented in San Jose. It is agreed that banning a type of bag will significantly reduce the use of that type of bag, but what will the public do instead? Behavior is influenced by a number of circumstances, including cost and convenience, but also by perceptions, values, and beliefs.

#### **VICTORIA, AUSTRALIA VOLUNTARY LEVY**

- At page 43 of the DEIR, the County states: “Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.” STPB objects to the failure to identify the stores or the amounts of the fees or any other circumstances. Without waiving the objection, STPB therefore assumes that the reference to individual stores in Australia means the Victoria voluntary levy, a closed-down IKEA store in Moorabbin, and a supermarket in Byron.
- In the article entitled “Evaluating the sustainability impacts of packaging: the plastic carry bag dilemma, ”Lewis, Verghese and Fitzpatrick, *Packaging Technology and Science* [Exh. AL20], the following statement is made at page 147 regarding the Victoria trial as follows:

In the state of Victoria, a voluntary 10 cent levy imposed on plastic carry bags by supermarkets in a 2-month trial in 2008 resulted in a 79% fall in the number of plastic bags issued by participating retailers, and 86% of customers said that they supported initiatives to reduce bag use.

Note: Australian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL3.]

- The Steering Committee which managed the Victoria trial issued an official report that made the following points. [Exh. AL65.]
  - The trial lasted only four weeks. (Report page 4.)

- There was “an extensive media and advertising campaign managed by” the Victoria Government. (Report page 4.)
- There were “free reusable bags for people with special needs, funded by the Victorian Government.” “Special needs” is not defined in the report. (Report page 4.)
- The report states at page 6 as follows:

The Committee is unable to ascertain whether consumer behaviours would be sustained over a longer time period than the four week period of this trial. The qualitative results suggest this is achievable. However, qualitative data does not always translate into quantitative outcomes.

The four week trial had an immediate impact of reducing plastic bag use. However, the KPMG Report noted a slight drop off in the reduction in the final week of the trial. Whilst the KPMG Report suggests that this might be attributable to customers forgetting to bring their reusable bags and not wishing to purchase additional reusable bags, ongoing consumer behaviour patterns cannot be definitively understood absent longer term data and surveys.

- The report states at page 8 as follows:

The Committee noted that significant effort and resources were invested in establishing the trial to provide successful outcomes.

The media campaign and in-store signage were highly successful in creating a high level of awareness of both the trial and the amount of the charge, as evidenced by the qualitative results.

The Committee notes that some consumer behaviour change may have occurred in advance of the commencement of the trial as a result of media coverage dating back to April 2008, and particularly in the months of June and July when media confusion arose over the trial start date.

In addition, retailers implemented a number of promotional campaigns during the trial that could have impacted upon the outcomes, such as the offer of three reusable bags for

\$2.00.

It is possible that the positive consumer response to this trial could influence community responses to alternatives, should they be considered in future.

Government provided support to people in need through free bags to around 8,000 people living in the trial areas. Local support agencies were responsible for determining appropriate distribution of these bags. The Committee believes that support mechanisms for people in need would be required in any further trials or if the charge was established on a permanent basis.

- The circumstances of the Victoria trial were very different from Alameda County's proposed ordinance. The Australian consumers were clearly influenced by a major publicity campaign, the provision of free reusable bags to 8,000 people in the trial areas, the three reusable bags for \$2.00 program, and probably an initial burst of enthusiasm for the environmental goals of the program. Moreover, the program only lasted 4 weeks. Consumers knew that they would be able to get free plastic bags again as soon as the program ended.
- As discussed below, a survey of consumers in the United States conducted by the University of Arizona showed that 97% do not wash reusable bags (which is a serious hygiene and health concern). [Exh. AL64 – fig. 7.] If a similar percentage of consumers in Australia also do not wash their reusable bags, those free and discounted bags provided in Victoria would have become too dirty to continue using for much longer than the four-week program. If the program had lasted a year and no more free and discounted reusable bags were offered after the first four weeks, the majority of consumers may have switched back to plastic bags even with a 10-cent fee.
- The value of money in Victoria is different than Alameda County. They are different economies.
- Consumers in Victoria may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

#### **A SUPERMARKET IN BYRON, AUSTRALIA**

- The Nolan-ITU report states at page 50 as follows: [Exh. AL5.]

The Five Star supermarket in Byron Bay [Australia] introduced a 10 cents charge for plastic and biodegradable bags on the 12th of October 2002. Before this they averaged 1,200 plastic bags per day. They now sell an average 200 plastic bags per day, representing a decrease in bag use of 83%, and have had a positive

response from customers.

Three plastic bag alternatives are provided: a biodegradable bag for which they also charge 10 cents, a paper bag provided free of charge and a reusable cotton/string bag sold for \$1.50.

There has been no decrease in sales since the 10 cents charge for plastic bags was introduced. Sales have actually increased slightly in that time, the owner believes that this is through the environmental and community activities that the business has put the 10 cents per bag revenue toward. The supermarket has not experienced any increase in pilfering of shopping baskets or trolleys or any grocery items. The store owner believes that as customers become used to this system there will be no additional checkout time added per transaction.

The supermarket has experienced an increase in costs due to the provision of free paper bags, which cost the supermarket 15 cents as compared to the 4 cents that they pay for plastic bags.

The experience of one supermarket location in Australia is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the store accomplished the reduction by use of rebates, promotional programs, *reusable bag giveaways*, or other means.

- The above extract from the Nolan-ITU report indicates that the store gives away *free paper bags*. According to the extract, paper bag usage *increased*.
- The value of money in Byron Bay is different than Alameda County. They are different economies.
- Consumers in Alameda may be more favorably predisposed and environmentally conscientious about using reusable bags.

#### **AN IKEA STORE IN MOORABBIN, AUSTRALIA**

- Nolan-ITU report states at page 50 as follows: [Exh. AL5.]

Swedish-owned homewares retailer IKEA introduced its own 10c plastic bag levy in their Moorabbin, Victoria store in October 2002. Since its introduction, IKEA have reduced their plastic bag consumption from 8,000 per week to just 250 per week (a 97% reduction). The store offers for sale large reusable 'blue bags' for \$1.50 per bag, however most customers choose to use no bag. Monitoring has found that one plastic bag is sold per 12 customers, and one blue bag per 24 customers.

The experience of one IKEA store in Australia is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the IKEA store accomplished the reduction by use of rebates, promotional programs, *reusable bag giveaways*, or other means.

- IKEA is a home furniture store. It sells large items such as tables, chairs, sofas, and beds. If consumers were rejecting plastic bags in favor of no bags, rather than purchasing reusable bags, they must have been purchasing the kinds of items that did not require a bag. Consumers generally do not go to IKEA stores to buy large quantities of small things that need to be bagged.
- There is no indication of whether the program was extended to other IKEA stores, and if it wasn't then the reasons why. This suggests that there may have been problems with the program. The IKEA Moorabbin store closed in 2005. [Exh. AL27.]
- The value of money in Moorabbin is different than Alameda County. They are different economies.
- Consumers in Moorabbin may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

#### **AUSTRALIAN GOVERNMENT NOLAN-ITU STUDY**

- The Nolan-ITU study states that a 25-cent fee would achieve the most significant reductions in environmental impact. [Exh. AL5.]
- The Nolan-ITU study does provide a bag distribution “scenario” based on 15-cent and 25-cent fees. (Table 6.2 at page 58 of Australian Nolan-ITU study.) However, it is only a scenario and speculation. It is not based on any empirical data or surveys. Scenario 1B in the Nolan-ITU report, which is a 25 cents fee, achieves the best environmental favorable results (assuming that a plastic bag ban is environmentally justified).
- Scenarios 1A and 1B in the Nolan-ITU study, which are a 15-cent fee and a 25-cent fee respectively, would also involve an “expanded Code of Practice” which is not part of the Alameda County proposal. This is critically important. The Nolan-ITU study states at page 55 as follows:

In these scenarios there would also be an expanded Code of Practice of retailers which would specify that reusable bags were made available as an alternative (to use and to purchase) in every retail store. *There would be a standard grocery reusable bag and once purchased the expanded Code of Practice would ensure that this bag be replaced free of charge when the customer returns the old reusable bag to the store. Once returned to the retailer in exchange for a free replacement the old reusable bag would be recovered for recycling. In addition all large stores would have*

drop-off facilities for the recycling of single use plastic bags. Industry would make a commitment towards the use of recycled and Australian content in both single use plastic bags and in reusable bags. This would help ensure that the reduction in the use of plastic bags does not excessively harm the Australian industry.

(Emphasis added.)

- The free replacement of reusable bags in the Australian scenarios is a critical difference compared to Alameda County. Therefore, the Australian Nolan-ITU study scenarios are not valid for Alameda County, especially as there is no proposed similar Code of Practice.

### **THE METRO ONTARIO CHAIN IN TORONTO**

- At page 43 of the DEIR, the County states: “Individual stores in Australia and Canada that charge for single use plastic bags have experienced reductions in their use of 83 and 97 percent, respectively.” STPB objects to the failure to identify the stores or the amounts of the fee or any other circumstances. Without waiving the objection, STPB therefore assumes that the reference to Canada means the Metro Ontario chain.

Note: Canadian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL69.]

- The Metropolitan Washington Council of Governments’ Plastic Bag Report [Exh. AL35] at page 21 states as follows:

According to the preliminary reports on the just implemented (6/1/09) Toronto, Canada, five cent plastic bag fee, one (sic) the Metro Ontario grocery chain has observed a 70% reduction in the use of plastic bags and corresponding increase in the demand for reusable bags. Store officials believe that early results indicate that the city will be able to reach its goal of a 50% reduction in plastic bag use by the end of 2010.

Note: Canadian \$1 is roughly equivalent to U.S. \$1 at today’s exchange rates. See currency conversion document provided herewith. [Exh. AL69.]

- The experience of one grocery chain in Toronto is not substantial evidence regarding what would happen in Alameda County. There is no indication of whether the Metro Ontario grocery chain store accomplished the reduction by use of rebates, promotional programs, reusable bags giveaways, or other means.
- The choice in Toronto (including at the Metro Ontario grocery chain referenced in the above extract) may be between plastic bags subject to a fee and reusable bags, or it may be between plastic bags subject to a fee, free biodegradable plastic bags, free

compostable bags, free paper bags, and reusable bags. If free bags are offered, there is no indication regarding the percentage of consumers who have switched to such free bags.

- The value of money in Toronto is different than Alameda County. They are different economies.
- Consumers in Toronto may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

### **THE DISTRICT OF COLUMBIA**

- The DEIR states at pages 106-107: “It is not known with any certainty what will happen to the number of single use paper bags used in Alameda County. Based on the information currently available from the only program in a large city in the United States that charges for both paper and plastic bags (Washington D.C.), the number of single use paper bags used in Alameda County may go down substantially when people are asked to pay for them.”
- There is no finalized empirical data regarding Washington, D.C. The Metro Washington Plastic Bag Report [Exh. AL35] was prepared *before* the District of Columbia adopted an ordinance imposing a carryout bag fee.
- The District of Columbia Government and retailers have been giving away reusable bags since the effective date of the fee on January 1, 2010. Four documents are provided herewith showing a huge number of free reusable bags given to District of Columbia shoppers as follows. [Exhs. AL9, AL10, AL11, AL12.]
  - Giant Food stores gave away 250,000 reusable bags.
  - CVS pharmacies in association with the DC Government gave away 112,000 reusable bags.
  - Safeway stores gave away 10,000 reusable bags.
  - Target gives a 5-cent discount for each reusable bag that customers provide.
  - Section 6(b) of the DC law states that part of the fee collected by stores shall be remitted to the city and used for “[p]roviding reusable carryout bags to District residents, with priority distribution to seniors and low-income residents.” **Alameda County is not proposing a similar program.**
  - DC regulations provide that stores may credit customers 5 cents for every reusable bag that a customer brings to the store to carry his or her goods. If they do give such credits, stores may keep two cents out of every five cents they charge for plastic or paper bags. [Exh. AL125.] **Alameda County is not proposing a similar program.**

- According to the latest U.S. Census, the number of households in the District of Columbia is 248,338. [Exh. AL61.] *That means that on average, every household in the District of Columbia received 1.5 free reusable bags in 2010.* That explains why there has been an upsurge in the number of reusable bags, rather than the fee on plastic and paper bags. *Alameda County is not proposing similar programs.*
- When the reusable bags given away in 2010 become dirty and worn, they will be discarded. At that point, the majority of consumers may prefer to pay the 5-cent fee rather than purchase more expensive reusable bags.
- The value of money in the District of Columbia is different than Alameda County. They are different economies.
- Consumers in the District of Columbia may be more favorably predisposed and environmentally conscientious about using reusable bags than consumers in Alameda County.

### **DENMARK**

- The DIR states at page 45: “In Denmark, for example, bag fees are charged to retailers at the distribution level instead of customers at checkout, meaning customers never directly see the fee. Despite this, Denmark still achieved a 68 percent reduction in single use bags.”
- The Danish example is inapplicable. Decisions by retailers are not comparable to decisions by consumers. The proposed Alameda County fee would be payable by consumers.

### **SAN JOSE SURVEY**

- The DEIR states at page 44: “A survey of residents of the City of San Jose done in spring/summer 2010 did indeed verify that a charge on single use paper bags would increase customers’ use of reusable bags. Of those responding to the survey, 81 percent indicated they would bring reusable bags for shopping if plastic bags were banned and recycled content paper bags cost \$.10. Since there is no reason to think that the citizens of San Jose differ substantially in their beliefs and behavior from the citizens of Alameda County, this supports StopWaste.Org’s assumptions that the citizens of Alameda County will also reduce their use of plastic and paper single use bags.”
- According to the DEIR at page 44, the Herrera report commissioned by the City of San Jose “estimated” that 65 percent of retail customers will readily switch to reusable bags. Again, this was only an estimate and not based on real experience.
- Responses to a survey reflect idealistic notions of what customers will do in practice. Of course, people will say that they will use reusable bags, but will they? What about those who find it inconvenient to carry reusable bags with them, or find that they don’t have

enough space in a reusable bags, or forget them? They may have answered the survey in the affirmative.

- In 2009, Thrifty Foods in Canada announced: “We think eliminating plastic grocery bags is the right thing to do and we are confident our customers will understand and accept this as a positive step in the right direction. In fact, we know from asking our Customer Panel that some 80 per cent of Thrifty Foods customers surveyed agree that plastic grocery bags should not be used,” said Milford Sorensen, President & CEO of Thrifty Foods.” (Exh. AL126.) However, in August 2011, the chain rolled out a pilot project that brings plastic back to three mainland stores, in Abbotsford, Coquitlam, and North Vancouver. After the project ends on Oct. 31, 2011, Thrifty will consider its next step. It will look at the customer impact, and then make a decision. The chain says the expectation was that by now, single-use bags, whether paper or plastic, would be a thing of the past, but many customers, citing ripping and leaking problems with paper bags, have expressed a preference for plastic bags. (Exhs. AL127.) ***The Thrifty Foods example shows that customer surveys on this subject are extremely unreliable and produce idealistic wildly overoptimistic results.***

### **ALAMEDA COUNTY MUST EXPLAIN WHY IT IS ADOPTING A LOWER PAPER BAG FEE THAT SAN JOSE AND SANTA CLARA**

- The paper bag fee in San Jose is 25 cents, after an initial two-year period at 10 cents. (Exh. AL57.)
- The paper bag fee in Santa Clara County is 15 cents. (Exh. AL128.)
- If other jurisdictions believe that the paper bag fee should be higher to prevent a significantly environmentally damaging increase in the number of paper bags, then Alameda County must explain why it is settling for a lower fee. The County has failed to provide such an explanation.

### **2. STPB OBJECTS TO THE FINDING THAT BANNING PLASTIC BAGS WOULD HAVE BENEFICIAL ENVIRONMENTAL IMPACTS AND NO SIGNIFICANT NEGATIVE ENVIRONMENTAL IMPACTS**

After completing an EIR, Los Angeles County Board of Supervisors adopted an ordinance on November 16, 2010 banning plastic carryout bags and imposing a 10-cent fee on paper carryout bags. [Exh. AL73.]

The full Los Angeles County Final EIR is not provided herewith as it is too large to send via e-mail. However, STPB requests that it be made part of the administrative record. The full Final EIR and the Statement of Overriding Considerations are at:

[http://dpw.lacounty.gov/epd/aboutthebag/ordinance\\_govt.cfm](http://dpw.lacounty.gov/epd/aboutthebag/ordinance_govt.cfm).

The Los Angeles County Findings of Fact and Statement of Overriding Considerations are provided herewith. [Exh. AL31.]

The Los Angeles County EIR adopted the findings of the Ecobilan Report (and the Scottish Report). [The Scottish Report is Exh. AL55.] The Los Angeles County EIR states that the Ecobilan Report was used as the basis for the findings regarding paper bags and polyethylene reusable bags “because it is relatively recent; contains relatively sophisticated modeling and data processing techniques; considers a wide range of environmental indicators; considers paper, plastic, and reusable bags; was critically reviewed by the French Environment and Energy Management Agency; and contains detailed emission data for individual pollutants.” (Los Angeles County EIR at 3.1-15.) The Scottish Report is based entirely on the Ecobilan Report. (Los Angeles County EIR at 4-8, 4-47.)

The Los Angeles County EIR determined that a 10-cent fee on paper bags and promoting and distributing reusable bags would *not* be sufficient to prevent significant negative environmental impacts caused by a shift from plastic to paper. The Los Angeles County EIR states:

**Based on a conservative analysis, the County has determined that cumulative indirect [greenhouse gas] emissions resulting from implementation of the recommended ordinances will have the potential to result in significant unavoidable impacts even with implementation of [a paper bag fee and promotion and distribution of reusable bags], which will be expected to reduce significant adverse impacts to GHG emissions to the maximum extent feasible.**

(Los Angeles County EIR at IV-1. Los Angeles County applied a method for determining applicable significance threshold that is similar to the Alameda County threshold. (Los Angeles County EIR at 3.3-14 to 15; Draft EIR at page 105.)

The Los Angeles County EIR determined that every polypropylene and cotton reusable bag distributed in the County must be used at least 104 times before delivering environmental benefits compared to plastic carryout bags. (Table at Los Angeles County EIR at 12-21 and repeated in text throughout Los Angeles County EIR.)

The Los Angeles County EIR determined that a reusable bag made from polyethylene must be used at least three times before delivering an environmental benefit compared to a plastic carryout bag. (Los Angeles County EIR at 4-49 to 50, 12-52 to 53.) This is far better than the 104 times that polypropylene or cotton reusable bags must be used to deliver environmental benefits.

As banning plastic bags, imposing a fee on paper bags, and promoting and distributing reusable bags would not avoid significant negative environmental impacts, the Los Angeles County Board of Supervisors adopted a “Statement of Overriding Considerations” finding that the alleged benefits of the ordinance outweighed the significant negative environmental impacts

of the ordinance. (Los Angeles County EIR at IV-1.)

The principal alleged benefit identified by Los Angeles County in its Statement of Overriding Considerations is assisting in reducing litter cleanup costs by \$4 million throughout the County. (Los Angeles County EIR at IX-3.) Los Angeles County declined to explain how this figure was calculated, despite the fact that STPB pointed out that the same areas would still have to be cleared as plastic bags are only a fraction of total litter and that no money would be saved.

There are many deficiencies in the Los Angeles County EIR, including sweeping and inaccurate statements designed to justify a plastic bag ban. (STPB objected to those deficiencies.) Nevertheless, LA County was unable to avoid acknowledging that the ordinance will have significant negative environmental impacts.

In contrast, the Alameda County DEIR finds that there would be no significant negative environmental impact from its proposed ordinance. The DEIR states at page 41:

This EIR analyzes the maximum impact scenarios that *could* occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations. (Emphasis added.)

**Despite claiming that it is holding itself to the standard of what *could* occur, the DEIR in fact relies on multiple superficial, sweeping, overoptimistic, unsupported, and inaccurate statements and wishful thinking as the basis for *minimizing* the impacts, including the following:**

- DEIR at page 72: “Because there were substantial reductions in the number of single use carryout bags resulting from all of these programs [Ireland, Australia, Denmark, San Jose survey, etc.] it is reasonable to assume that there would be a substantial reduction in Alameda County of the number of single use carryout bags under the proposed ordinance.”
- DEIR at pages 75-76: “The estimate of an additional 59 to 102 million single use paper carryout bags being utilized in Alameda County was developed as an average based on dissimilar programs in various areas and represents a scenario where 65 percent of people switch to reusable bags.”

**OBJECTION:** As noted in Objection #1, the DEIR is based on flawed information and analysis about the impact of the proposed 10-cent paper bag fee. There is no substantial evidence that 65% of people will switch to reusable bags, or that 65% of bag usage will be reusable bags. Indeed, the DEIR states at page 91: “It is not known with any certainty what will happen to the number of paper bags used in the County.” It is overly optimistic

and unrealistic to assume such a high figure. Moreover, the “maximum impact scenario” must assume a much lower figure that *could* happen. DEIR at page 76: “However, most of the trees are grown for paper and will be removed soon thereafter even if not used for single use paper bags sold in Alameda County.”

**OBJECTION:** It erroneous and absurd to suggest that the same number of trees will be cut down even if paper bag usage substantially increases. More paper bags mean more trees cut down, which cannot reasonably be disputed.

- DEIR at page 91: “In addition no LCA was found that looked at the emissions associated with manufacture of 40 percent or 100 percent recycled content paper bags.
- DEIR at page 164 “No LCA examined evaluated a single use paper bag with more than 30 percent recycled content.”

**OBJECTION:** The Boustead Report is an extremely thorough life cycle assessment of the environmental impacts of the types of plastic and paper carryout bags used in the U.S. It takes into account that a paper bag holds more than a plastic bag and applies an adjustment factor: 1 paper bag = 1.5 plastic bags. The Boustead Report summarizes its findings in the following table. Note that plastic bags are made of polyethylene.

**Boustead Report  
Impact Summary of Various Bag Types  
(Carrying Capacity Equivalent to 1000 Paper Bags)**

	<b>Paper (30% Recycled Fiber)</b>	<b>Compostable Plastic</b>	<b>Polyethylene</b>
Total Energy Used (MJ)	2622	2070	763
Fossil Fuel Use (kg)	23.2	41.5	14.9
Municipal Solid Waste (kg)	33.9	19.2	7.0
Greenhouse Gas Emissions (CO <sub>2</sub> Equiv. Tons)	0.08	0.18	0.04
Fresh Water Usage (Gal)	1004	1017	58

The Boustead Report analyzes paper bags with 30% post consumer recycled content. The Ordinance requires that paper bags have 40% post-consumer recycled content. An additional 10% of recycled content would not result in a 10% improvement in environmental impacts. (Obviously, a paper bag with 100% post consumer recycled content would not have zero negative environmental impacts.) **But even if an extra 10% of recycled content decreased all environmental impacts of paper bags by 10%, paper bags are still far worse than plastic bags in every environmental category.** For example, instead of consuming 2622 megajoules of total energy, 1000 paper bags would consume 2360 megajoules. Plastic bags with the same carrying capacity consume only 763 megajoules.

The Boustead Report was commissioned by Progressive Bag Affiliates, a plastic bag industry organization. It was peer reviewed by an independent third party, a Professor of Chemical Engineering at North Carolina State University. He is an expert on life cycle analysis with extensive experience in the field. He stated that the Boustead Report “provides both a sound technical descriptions (sic) of the grocery bag products and the processes of life cycle use.... Whatever the goals of the policy makers, these need to be far more explicit that general environmental improvement, since the life cycle story is consistent in favor of recyclable plastic bags. “

The professor reviewed all of the figures in the report and disagreed with some of them. The Boustead report was amended to the extent that the Boustead author agreed with the professor’s comments. For example, the figure “103” for electricity in Table 9B was corrected to “154.”

- DEIR at pages 91-92: “Since paper bags will be required to have at least 40 percent recycled content under the proposed ordinance, any increase in emissions resulting from a change from a plastic to a paper bag may not be substantial because manufacture of paper bags using recycled content results in less pollutant emissions than manufacture using virgin material.”

**OBJECTION:** The DEIR cites no substantial evidence for this assertion. Recycling involves collection, transportation, sorting, cleaning, and reprocessing. This process creates pollutant emissions which may be greater than manufacturing using only virgin material.

- DEIR at page 92: “In addition, paper bags used in grocery stores are bigger than the HDPE plastic bags and would require fewer bags for more merchandise.”

**OBJECTION:** The Boustead Report factors in a paper to plastic bag ratio of 1:1.5. The LA County EIR, which is based on the Ecobilan report, also factors in the greater carrying capacity of paper bags. Once the greater capacity of paper bags is taken into account, paper bags still produce substantially more emissions and greater negative environmental impacts than plastic bags.

- DEIR at page 92: “There is no evidence to suggest these emissions would occur in any one location in amounts that would conflict with or obstruct implementation of an applicable air quality plan, violate any air quality standard or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors.”

OBJECTION: Very few if any paper bags are manufactured in the project area. However, paper bag manufacturing produce emissions elsewhere and those impacts *must* be addressed. The DEIR fails to address them. In *Save The Plastic Bag Coalition v. City of Manhattan Beach* (2011), the Supreme Court stated (Slip Opinion at 21):

The other environmental impacts reflected in the record are those that might be felt beyond Manhattan Beach, as a result of processes associated with the manufacture, distribution, and recycling of paper bags in general. We have noted that the area defined by section 21060.5, that is, the area that will be affected by a proposed project, may be greater than the area encompassed by the project itself. “ [T]he project area does not define the relevant environment for purposes of CEQA when a project’s environmental effects will be felt outside the project area.’ [Citation.] Indeed, ‘the purpose of CEQA would be undermined if the appropriate governmental agencies went forward without an awareness of the effects a project will have on areas outside of the boundaries of the project area.’”

- DEIR at page 107: “Based on available information, it cannot be definitively determined what the net increases or decreases in greenhouse gas emissions might be.”

OBJECTION: This is not correct. The LA County EIR determined the net increases in greenhouse gas emissions based on available information.

- DEIR at page 164: “Another way to avoid or reduce this impact is to recycle the paper bags; it is estimated that a substantial percentage, approximately 65 percent, of single use paper carryout bags are already being recycled in Alameda County.... The assumption in the LCA that using more paper bags would create additional greenhouse gas emissions is therefore inapplicable.”

OBJECTION: The County cites no substantial evidence that approximately 65 percent of single use paper bags are currently being recycled in Alameda County.

3. **ALAMEDA COUNTY MUST MAKE THE SAME FINDING AS LOS ANGELES COUNTY, THAT THE ORDINANCE WILL OR COULD HAVE A SIGNIFICANT NEGATIVE IMPACT ON THE ENVIRONMENT, AND ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS IF IT WISHES TO ADOPT THE ORDINANCE (SUBJECT TO THE PREEMPTION OBJECTION)**

The DEIR states:

Page 41: This EIR analyzes the maximum impact scenarios that could occur with the adoption of single use bag reduction and mandatory recycling ordinances. The maximum impact scenario is a set of assumptions about the scope and design of the two ordinances that would likely result in the greatest environmental impacts, including full implementation by all jurisdictions and compliance by all of the affected populations.<sup>13</sup> In those situations where there is uncertainty about where materials might go for processing, for example, the farthest location is assumed.

Page 155: ***Negative environmental effects, however, could conceivably occur if the cumulative effect of these various programs leads to a large increase in paper bag use compared to existing conditions, especially if the increased use of paper bags is permanent.*** However, it is more likely that the cumulative effect of more jurisdictions banning and/or regulating single use carryout plastic and paper bags will be that more people will use reusable bags more consistently. A frequently heard reason for not using reusable bags is that people forget to take them into the store. As more people use them, more people will see other shoppers carrying the reusable bags from car to store and will remember to take them into the stores. This phenomenon was noticeable during the start-up period for curbside recycling programs – people who saw neighbors putting out recycling, remembered to put out their own. (Emphasis added.)

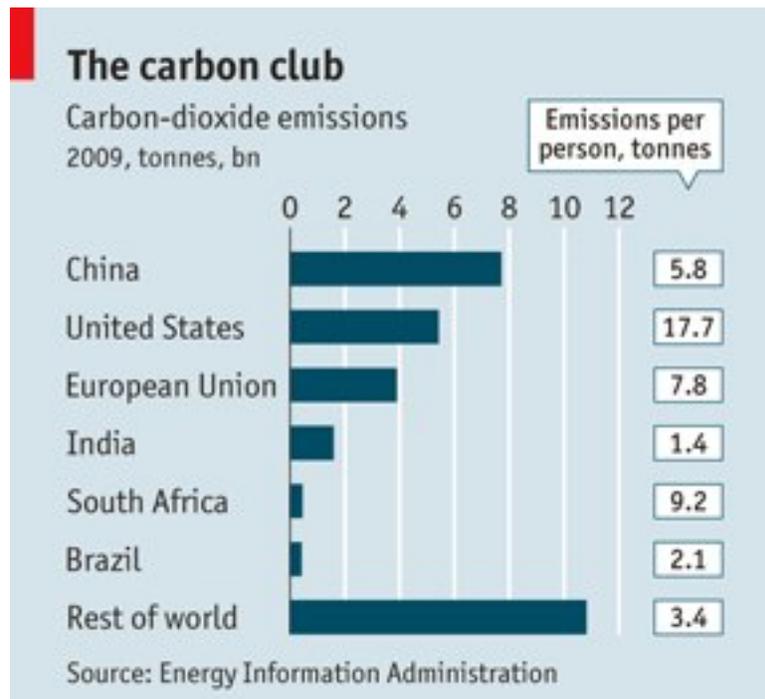
Page 163: The discussion in this EIR of each area of impact describes the premises of the EIR analysis and its conclusions. An increase in the manufacture of 40 percent recycled content single use paper bags may occur after the ordinance is passed. There are currently no fact-based studies of what people will do when free single use plastic carryout bags are no longer available but a single use carryout paper bag or reusable bag can be purchased. The conclusions of this EIR are therefore based on the limited experience of others.

**The assertion that “more people will use reusable bags more consistently” is pure impermissible argumentation, opinion, speculation, and wishful thinking. It is not a basis for a finding that there would be no significant environmental impact.**

Guidelines §15064(f) states:

Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

**Greenhouse gas emissions are important and should not be dismissed by means of wishful thinking and slick writing. The United States is the highest per capita producer of CO<sub>2</sub> emissions in the world (5.8 tonnes per person in 2009) and it has a special responsibility to address this problem.**



**The DEIR accepts that there could be significant negative environmental impacts based on a maximum impact scenario. Therefore, Alameda County must make this a finding of fact. Subject to STPB’s AB 2449 preemption objection, the County may adopt the proposed ordinance, but only if it also adopts a Statement of Overriding Considerations as the Los Angeles County Board of Supervisors did. [Exh. AL 31.]**

**4. STPB OBJECTS TO THE STATEMENT ABOUT THE TOXIC CONTENTS OF HARD PLASTICS AND POLYSTYRENE AS PLASTIC BAGS ARE MADE FROM SOFT PLASTICS WITH NO TOXIC CONTENTS**

The DEIR states at page 118-119 as follows:

Most of the concerns and issues with plastic in the environment revolve around the fact that plastic does not break down quickly and the items that enter the natural environment (bags, cups, plastic pellets, etc.) retain some aspect of their form for some time. Much of the ocean plastic has broken into smaller and smaller pieces, but is still recognizably pieces of plastic. Recent research has found that some plastics do degrade in the ocean environment. Specifically, certain hard plastics leach chemicals (including bisphenol A or BPA) into the water and polystyrene breaks down into three styrene oligomers that are not found in nature. BPA disrupts the hormone systems of animals, and the styrene oligomers are believed to be human carcinogens.

The subject of the DEIR is plastic and paper carryout bags, not hard plastics or polystyrene. Plastic bags are not made of hard plastic or polystyrene. STPB objects to this statement in the DEIR because it conveys the impression that plastic bags leach such chemicals, which is untrue. Plastic bags do not contain such chemicals.

The statement is clearly calculated to mislead decision-makers and the public into believing that plastic bags contain these chemicals because they are made of plastic. The statement should not appear in the Final EIR. The County should include a statement in the Final EIR that there is no suggestion that any of the mentioned chemicals are in plastic bags.

**OBJECTION BASED ON PREEMPTION**

STPB also objects to the proposed ordinance on the ground that it is preempted by AB 2449 until January 1, 2013.

In 2006, the Legislature passed AB 2449. (Pub. Res. Code §§42250-57.) The Legislature declared its legislative intent therein as follows:

It is the intent of the Legislature, in enacting Chapter 5.1 (commencing with section 42250) Part 3 of Division 30 of the Public Resources Code, to encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use bags.

The Governor's signing statement includes the following language:

I am signing Assembly Bill 2449 that implements a statewide plastic bag recycling program.

While this bill may not go as far as some local environmental groups and cities may have hoped, this program will make progress to reduce plastics in our environment. This measure requires every retail establishment that provides its customers plastic bags to have an in store plastic bag recycling program, a public awareness program promoting bag recycling, post recycling requirements, record keeping and penalties.

Because this is a statewide program the bill precludes locals from implementing more stringent local requirements. The bill sunsets in six years and this will allow locals time to develop additional programs or the legislature to consider a more far reaching solution. (Emphasis added.)

[Exh. AL1, <http://www.scribd.com/doc/1814000/5/SIGNING-MESSAGES>, formerly at [http://gov.ca.gov/pdf/press/ab\\_2449\\_sign.pdf](http://gov.ca.gov/pdf/press/ab_2449_sign.pdf).]

AB 2449 sunsets and expires on January 1, 2013 (Pub. Res. Code §42257).

If plastic bags are banned locally, stores in those localities will not be subject to AB 2449 and the statewide scheme will be defeated. We can see this from two examples.

First example: Under AB 2449, stores that provide plastic bags to customers must install plastic bag collection bins for the purpose of recycling plastic bags. (Pub. Res. Code §42252(b).) Any member of the public may use those bins to deposit any discarded plastic bags. If stores in the County are prohibited from handing out plastic bags, then all such stores would be permitted to remove their plastic bag recycling bins. Such bins are used to collect and recycle all types of plastic bags, including bags that are not prohibited under the proposed ordinance, including but not limited to retail bags, produce bags, newspaper bags, and dry cleaning bags. There would be no way to recycle such bags as they are not accepted in curbside recycling programs in the County. The statewide statutory scheme of AB 2449 would be defeated.

Second example: AB 2449 states that “[t]he operator of the store shall make reusable bags available to customers within the store, which may be purchased and used in lieu of using a plastic carryout bag or paper bag.” (Pub. Res. Code §42252(e).) If plastic bags are banned by local ordinances, such stores will not be required to make reusable bags available to customers in lieu of paper bags. That is because only stores that provide plastic bags are required by AB 2449 to also provide reusable bags. (Pub. Res. Code §42250(e).) Therefore, the declared legislative intent of AB 2449 “to encourage the use of reusable bags by consumers and retailers and to reduce the consumption of single-use bags,” including paper bags, would be defeated. Although an ordinance banning plastic bags may require such stores to make reusable bags available in lieu of paper bags, there is no guarantee that a city or county will include such a requirement in an ordinance.

“Whenever the Legislature has seen fit to adopt a general scheme for the regulation of a particular subject, the entire control over whatever phases of the subject are covered by state

legislation ceases as far as local legislation is concerned.” (*American Financial Services Assn. v. City of Oakland* (2005) 34 Cal.4th 1239, 1253.) No express preemption language is necessary for preemption to occur. (*Id.* at 1252.)

Based on the foregoing, the Alameda County ordinance would conflict with the comprehensive and integrated statewide plastics recycling and reusable bag scheme of AB 2449.

### **NOTICE OF INTENT TO LITIGATE**

STPB hereby notifies Alameda County that STPB will file a petition for writ of mandate and request other appropriate relief in the Alameda County Superior Court on the public interest, based on the points and objections herein, if the proposed ordinance or a similar ordinance is adopted.

### **ADMINISTRATIVE RECORD**

STPB is submitting herewith, by e-mail, copies of documents cited herein or which otherwise support the objections herein. STPB requests that all such documents be made part of the administrative record.

STPB requests that the documents submitted by STPB be numbered and indexed in the administrative record in accordance with STPB’s numbering system: AL1, AL2, etc.

### **REQUEST FOR NOTICES**

I request that you send me by e-mail and regular mail any future public notices regarding the proposed ordinance and any public hearings, including but not limited to any and all CEQA notices and documents.

### **CONTACT PERSON**

I am the designated contact person for the Save The Plastic Bag Coalition.

### **RESERVATION OF RIGHTS**

All rights are reserved.

The fact that particular parts of the DEIR are not mentioned or objected to herein does not mean that STPB accepts their accuracy or validity.

No rights or duties are waived by any statement or omission herein. Strict compliance with all the applicable provisions of CEQA is hereby demanded.

According to the DEIR at page 38, the definition of a reusable bag may be subject to further definition. STPB reserves the right to comment on and object to any such further definition.

Dated: September 15, 2011

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

---

STEPHEN L. JOSEPH  
Counsel, Save The Plastic Bag Coalition

# **Comment Letter I**



NORTHERN DISTRICT

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Rinaldo M. Rossi, 82-83  
Leonard Stefanelli, 80-81  
Wm. A. Bacigalupi, 78-79  
Anthony J. Petri, 76-77  
Paul W. Madsen, 74-75  
Lawrence A. Zunino, 72-73  
John P. Moscone, 70-71  
"Rudy" Vaccarezza, 68-69  
A.J. Annigoni, 66-67  
Dewey Vittori, 64-65

Directors Emeritus  
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Fiore Garbarino

Executive Director  
Trish Roath

September 16, 2011

StopWaste.Org  
1537 Webster Street  
Oakland, CA 94612  
Attn: Debra Kaufmann

**RE: Comment on the Draft EIR –  
Mandatory Recycling and Single Use Bag Reduction Ordinance**

Dear Ms. Kaufmann:

The California Refuse Recycling Council (CRRC) Northern District is a trade association of haulers, processors, recyclers, and composters with members throughout the Bay Area and the Central Valley. Our members have been providing commercial recycling for years, and have strongly supported the further development of mandated commercial recycling programs. CRRC has a statewide perspective on mandatory commercial recycling over the last three years with active involvement on the AB 32 Scoping Plan, legislative efforts cumulating in AB 341 (Chesbro) this year, and the current regulations being considered by the California Air Resources Board (CARB) on October 20, 2011. CRRC has been in collaboration with the Institute of Local Government and the League of Cities on the development of their sample mandated commercial recycling ordinance. We appreciate the opportunity to comment on your Draft Environmental Impact Report on Mandated Recycling and Single Use Bag Reduction Ordinance. Our comments will focus on the mandatory recycling ordinance and our participation in two recent workshops held by the Alameda County Waste Management Authority (ACWMA).

In Alameda County, there are five franchise haulers and four permitted facilities that are members of CRRC. We have been providing commercial recycling services under the terms of our respective franchises, while our facilities are gearing up to accept more commercial recyclables. On behalf of CRRC members, I participated in the August 11, 2011 ACWMA Policy Workshop and the September 8, 2011 Joint Meeting of the ACWMA and Recycling Board's Workshop on Mandated Recycling Ordinances. CRRC presented the verbal comments summarized later in this letter to support our comments on the Draft EIR.

**Draft EIR Comment No. 1 – Proposed Sample Ordinance as an Alternative:**

StopWaste.Org is proposing a Mandatory Recycling Ordinance to cover all 17 jurisdictions within the ACWMA, which will help meet the States' AB 32 Scoping Plan measure to increase recycling.

1121 L Street, Suite 505 | Sacramento, California 95814

Phone: 916-444-CRRC (2772) Fax: 916-442-0623 www.crrcnorth.org  
Affiliate of West Coast Refuse & Recycling Coalition (WCRRC)

PRINTED ON RECYCLED PAPERS

Under **Section 8.0 Alternatives to the Proposed Project – 8.2.4 Alternatives Considered but Rejected**, variations to the Mandatory Recycling Ordinance was discussed which would allow a jurisdiction to adopt their own ordinance, which could result in lower impacts based on the analysis in the EIR. A jurisdiction should be able to adopt their own ordinance which would still meet AB 32 Scoping Plan goals, the pending CARB regulations and pending AB 341 legislation, as further discussed herein. ACWMA could adopt a sample or model ordinance with minimum standards based upon a “menu approach” and could still meet the objectives of the Mandatory Recycling Ordinance. The Draft EIR should allow each jurisdiction to adopt their own ordinance as an Alternative.

CRRC proposes that **Section 8.0 Alternatives to the Proposed Project** include the development of a *Sample or Model Mandatory Recycling Ordinance* that can be customized by each jurisdiction. Instead of adopting a “one-size-fits-all” mandatory commercial ordinance for all jurisdictions, this alternative should be presented that allows each jurisdiction to adopt their own ordinance, following a model or sample ordinance outlined by StopWaste.Org. The objectives for the Mandatory Recycling Ordinance analyzed in the Draft EIR can still be achieved but would be implemented on a jurisdictional basis instead of a regional basis. CRRC comments are supported by speakers at the two workshops that we participated in, the previous work by the Institute of Local Government, and the precedent-setting Model C&D Ordinance process adopted by StopWaste.Org in 1999, as presented below:

**August 11, 2011 Policy Workshop:**

The Policy Workshop focused on the “stand-alone” option and the “menu” option, where the “stand-alone” options would establish a minimum standard that is separate and apart from direct collection activity, and the “menu” options would allow jurisdictions to select one or more standards to the provisions of their particular collection franchise and municipal code. CRRC supported the “menu” approach as it allows local flexibility to address local circumstances. Some jurisdictions may have mature programs with infrastructure in place and a recent franchise, whereas other jurisdictions may still need to build the infrastructure and amend the franchise. Such as with current regulatory efforts at CalRecycle and CARB, legislation with AB 341 (Chesbro), and the work with the Institute of Local Government, there has been general consensus to build upon the existing infrastructure and work with the current franchise or contract to implement mandated commercial recycling, and then resort to an ordinance. The “menu” approach allows the jurisdiction and their contracted hauler to implement programs most suitable to their community. The “stand alone” approach or “one-size-fits-all” may create an overarching regulatory framework that may not be viable for all jurisdictions.

**September 8, 2011 Joint Meeting of the ACWMA and Recycling Board’s Workshop:**

The Workshop consisted of five presenters from jurisdictions that have mandated commercial recycling: Seattle, San Diego, San Carlos, Sacramento, and San Francisco. There was a common theme that the mandated commercial recycling ordinance was specific to a jurisdiction, and that a multi-jurisdictional ordinance may be problematic. The County of Kings has a different program than the City of Seattle. San Diego and San Francisco have their own programs that were not regional. Sacramento did include both the City and the County, and the other participating cities had their own ordinances that mimicked much of the larger policy issues for regional consistency, but had separate implementation and enforcement measures. The presenter from San Carlos, being part of www.Rethink.Org, discussed their ordinance, and cautioned about the “Tale of Two Cities” when trying to get the City of San Mateo to participate. The

presenter was also the Chairman of www.Rethink.Org, and warned against creating a broader ordinance that may be much more difficult to implement.

Under public comment, I noted the above observation, and recommended that ACWMA pursue jurisdictional-based ordinances that would provide the local flexibility to work with the current franchisees and infrastructure.

### **Construction and Demolition Debris Model Ordinance adopted by StopWaste.Org in 1999**

In November 1999, the Alameda County Waste Management Authority Board endorsed a Model Construction & Demolition Ordinance requiring contractors to divert at least 50% of their construction waste materials from landfill. Each jurisdiction then went forth and adopted their community-based ordinance customized to their local circumstances. StopWaste.Org should follow the same Model Ordinance utilized for C&D, or the Sample Ordinance process endorsed by the Institute of Local Government.

### **Institute of Local Government – Sample Ordinance**

CRRC has been in collaboration with the Institute of Local Government and the League of Cities on the development of their sample mandated commercial recycling ordinance that also echoed working with the current contracts in place to design and implement mandated commercial recycling programs. A 17-jurisdictional ordinance may not be necessary for program design, as current franchises and contracts supplemented by a specific jurisdictional ordinance may easily suffice. CRRC understands the jurisdictional ordinance approach may be needed to address generator responsibility and generator enforcement measures.

The Institute of Local Government prepared a sample ordinance that recognized that one-size-does-not-fit-all, and offered the explanation below that an ordinance needs to be designed to reflect unique circumstance at the local level. Plus, the Institute suggested that a mandatory commercial recycling ordinance should be considered in the context of the agency's existing solid waste and recycling regulatory system. This includes existing exclusive or non-exclusive franchises, local solid waste ordinances, policies and regulations, and hauling permits or contract conditions.

*“The sample commercial recycling ordinance was prepared in 2009 by the Institute for Local Government’s Climate Change Program under a contract with the California Integrated Waste Management Board (now CalRecycle).*

*Adoption and implementation of the sample ordinance by local agencies is voluntary.*

*The sample ordinance emphasizes policy choices at the local level and is designed to be modified by individual agencies to reflect the unique circumstances in the community. It offers a menu of options to suit local needs and service situations. In addition, it includes extensive commentary that explains the options and provides background explanations for many provisions.”*

#### *“A. Review Existing Franchises, Permits and Contracts*

*A mandatory commercial recycling ordinance should be considered in the context of the agency’s existing solid waste and recycling regulatory system. This includes existing exclusive or non-exclusive franchises, local solid waste*

*ordinances, policies and regulations, and hauling permit or contract conditions. For example, if an agency has an exclusive franchise with one solid waste hauler to serve the commercial sector, review what types of commercial recycling, reporting or enforcement requirements already are included in the franchise or ordinance.*

*Agencies with an “open competition” system for the commercial sector also may have contract or permit conditions related to offering recycling services by haulers or recyclers.”*

CRRC has been active with legislative efforts, culminating in AB 341 (Chesbro) this year, and the current regulations being considered by the CARB which both recognize the franchise system as highlighted in the notes below:

**AB 341 (Chesbro) – Enrolled to the Governor:**

AB 341 recognizes current commercial recycling programs in place and the franchises in place:

*42649.3. (b) If a jurisdiction already has a commercial solid waste recycling program as one of its diversion elements that meets the requirements of this section, it shall not be required to implement a new or expanded commercial solid waste recycling program*

*42649.5. (b) This chapter does not modify, limit, or abrogate in any manner any of the following:*

- (1) A franchise granted or extended by a city, county, or other local government agency.*
- (2) A contract, license, or permit to collect solid waste previously granted or extended by a city, county, or other local government agency.*

**Proposed Draft Regulation to Reduce Greenhouse Gas Emissions by Requiring Commercial Businesses to Recycle:**

The Draft regulation recognizes current commercial recycling programs in place and the franchises in place, and will be considered by CARB on October 20, 2011:

*This Section does not modify or abrogate in any manner any of the following:*

- (1) A franchise granted or extended by a city, county, or other local government agency;*
- (2) A permit to collect solid waste granted or extended by a city, county, or other local government agency as of the effective date of this regulation; or*

**Draft EIR Comment No. 2 – Anaerobic Digestion as an Alternative:**

Implementation of a countywide mandatory ordinance could result in a significant air quality impact by hauling organics to the San Joaquin Valley air basin. The Draft EIR assumes the hauling of organics to the compost facilities in the Central Valley. The Draft EIR recognizes that the most effective way to reduce impacts to less than significant would be to establish a composting facility in Alameda County, under **Section 8.4 Alternatives to the Mandatory**

**Recycling Ordinance – 8.4.1 Establish a Composting Facility In Alameda County.** With the commercialization of anaerobic digestion (AD) technologies (as evidenced by one of the first domestic facilities being placed in San Jose) AD facilities should also be mentioned as an alternative. AD facilities could be right-sized to meet the community organic waste stream and be placed in-town and in-vessel in enclosed buildings. AD is a form of composting, and the Draft EIR should be amended to address AD facilities, and decrease VMTs and emissions in the Central Valley, as noted on page 173 regarding composting facilities.

**Draft EIR Comment No. 3 – Materials Flow Modeling:**

Figure 5 – Materials Flow by Jurisdiction, Recyclable Materials graphically shows that recyclables generated by Pleasanton Transfer Station flow to Alameda County Industries Transfer Station in San Leandro; no materials from the Pleasanton facility are delivered to ACI. It is our understanding that materials collected in the City of Pleasanton are processed at the Pleasanton Transfer Station and materials collected in the City of Dublin are transferred to the BLT Facility in Fremont.

**Draft EIR Comment No. 4 – Compost Facility Operational Emissions:**

The Draft EIR identifies that the implementation of a countywide mandatory ordinance could result in a significant air quality impact from the hauling of organics, and subsequent hauling of finished compost products, to the San Joaquin Valley air basin. The Draft EIR, however, only recognizes the hauling of organics to the compost facilities in the Central Valley as a significant contributor to emissions and fails to discuss the increased operational emissions that would result from the increased throughput at the facilities. Increases in NOx, PM, and other criteria pollutants should be expected due to the corresponding increased use of materials handling equipment (i.e. front end loaders, excavators, etc.) as well as the incremental emissions (mainly volatile organic compounds) associated with the composting of additional organic feedstocks from Alameda County. Any required expansion of currently-permitted throughput at composting facilities in the San Joaquin air basin will require New Source Review by the local air district staff, which will result in the implementation of Best Available Control Technology and the potential purchase of emissions offsets, resulting in significant cost to the operators.

We appreciate the opportunity to comment on this Draft EIR and look forward to working with you through the completion of this rulemaking process.

Should you have any questions, please contact me at (916) 739-1200.

Sincerely,



Evan W.R. Edgar  
Principal Civil Engineer

# **Comment Letter J**

**From:** [Mike Cohen](#)  
**To:** [Michael Lisenbee](#);  
**Subject:** FW: comment on draft eir  
**Date:** Friday, September 16, 2011 6:05:40 PM

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**From:** homie.naomi@gmail.com [mailto:homie.naomi@gmail.com] **On Behalf Of**  
Naomi Scher  
**Sent:** Thursday, September 08, 2011 11:20 PM  
**To:** drafteir  
**Subject:** comment on draft eir

I think it's a great idea! Let's stop wasting so much Alameda County!!!

Naomi Scher  
Oakland Resident  
1531 7th Ave.