26 March 2013

Mr. Gerald Comati, P.E.
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Subj: Comments on the Draft Environmental Impact Report (DEIR)

Ref: (a) Notice of Availability of a Draft Environmental Impact Report BEACON Single Use Carryout Bag Ordinance dated 12 February 2013
(b) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 4 March 2013
(c) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 15 March 2013
(d) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 25 March 2013

Encl: (1) "Detailed Comments on BEACON Draft EIR", by Anthony van Leeuwen, dated 26 March 2013

1. Detailed comments in references (b), (c), and (d) were previously submitted in accordance with reference (a) as public input regarding the content of the BEACON Draft EIR and the proposed project.

2. In reviewing the totality of comments I submitted as public input in references (b), (c), and (d) the following observations are submitted:

    a. The team putting the BEACON draft EIR together should be commended for modeling the environmental impacts of consumers washing/sanitizing their reusable bags.
    b. Based upon a thorough review of the BEACON Draft EIR including my comments as submitted, the BEACON Draft EIR is deemed to be **deficient** and will require a complete **rewrite** for the following reasons:
        - **Fails** to establish reasonable project objectives designed to achieve the best possible solution for the public and the environment and instead chose overly restrictive objectives leading to a preconceived solution.
        - **Fails** to use the status quo as the baseline condition and instead **uses** the proposed ordinance as the baseline condition to hide detrimental impacts to the environment from the public and decision makers.
        - **Fails** to establish a reasonable baseline condition for the status quo that reflects current plastic carryout bag, paper bag, and reusable bag usage by consumers.
        - **Fails** to inform the public and decision makers that trash in county water-ways is not a "significant issue".
        - **Fails** to inform the public and decision makers that the Watershed Protection District is taking aggressive action against what trash (including plastic bags) there is by installing trash excluders in storm drain catch basins.

- **Fails** to acknowledge that trash excluders will prevent trash including plastic carryout bags from flowing into rivers and creeks and the ocean thereby preventing harm to wildlife.
- **Fails** to identify that rubbish traps and catch basins are inspected and cleaned out on a regular maintenance schedule to prevent clogging and flooding.
- **Fails** to identify that discarded fishing gear, nets, and fishing line are responsible for entanglement of wildlife and not plastic carryout bags.
- **Fails** to acknowledge that increased water use for washing reusable bags might not be desirable in view that future water supplies are uncertain.
- **Fails** to disclose that plastic carryout bags make up less than 1% of roadside litter.
- **Fails** to disclose the danger reusable bags pose to the environment due to allowed amounts of lead, cadmium, and other heavy metals if discarded as litter.
- **Fails** to disclose that reusable bags affect the security posture of a retail store resulting in increased shoplifting with losses recouped by higher prices.
- **Creates** a perpetual financial and paperwork burden in reporting bag usage statistics to the controlling agency (county or municipality)
- **Creates** a perpetual expenditure of public funds for enforcing the proposed ordinance, analyzing retail store reports, and creating reports for the city council or board of supervisors.
- **Fails** to treat all members of the public equally by granting an exemption to the paper bag fee for those who are on public assistance and who will receive free paper bags each and every time they shop and who will have no reason to use reusable bags.
- **Fails** to provide an exemption to the paper bag fee to the elderly living on meager social security earnings while granting that exemption for those on certain public assistance programs.
- **Fails** to use reasonable quantities for plastic carryout bags used in California, on a per capita basis, and in the Study Area.
- **Fails** to use a reasonable quantity for reusable bags used in the study area.
- **Uses** the wrong methodology to determine quantity of reusable bags.
- **Fails** to account for double bagging of paper bags in quantities estimated.
- **Fails** to perform the environmental analysis using the type of reusable bags most commonly used by consumers.
- **Uses** an LDPE Reusable Bag that is very rare to do the environmental analysis.
- **Fails** to include LDPE plastic carryout bags in the environmental analysis.
- **Fails** to identify that the most reusable bags are not recyclable in the Study Area.
- **Fails** to identify that approximately 40% of plastic carryout bags were repurposed for use as trash bags.

- **Fails** to identify that consumers will have to purchase replacement plastic bags for the plastic carryout bags that would have been repurposed as trash bags.
- **Fails** to include those replacement plastic bags purchased by consumers in the environmental analysis.
- **Fails** to identify that paper bags come in many different sizes.
- **Fails** to identify that plastic carryout bags are made from both HDPE and LDPE plastic resins.
- **Fails** to acknowledge the increased use of non-regulated plastic bags to prevent contamination of reusable bags by meat and poultry products.
- **Fails** to acknowledge the increased use of non-regulated plastic bags to protect paper bags from moisture condensation from frozen foods.
- **Fails** to address impacts on landfills and recycling activities by disposal of plastic, paper, and reusable bags.
- **Fails** to estimate the weight and volume of reusable bags headed for the landfill or recycling facility.
- **Fails** to estimate the weight and volume of paper bags headed for the recycling facility or the landfill.
- **Fails** to identify that banning plastic carryout bags may result in a loss of recycling facilities at retail stores for plastic bags and wraps since retail stores would no longer be obligated by state law to maintain recycling bins.
- **Fails** to include an integral recycling component in the proposed ordinance.
- **Fails** to include education about recycling of carryout bags as a component of the proposed ordinance.
- **Fails** to compute waste generated by a reusable carryout bags correctly.

3. This memorandum is submitted in accordance with reference (a) and should become part of the official record, including links to documents available on the internet, regarding the Preparation of this EIR and development of model ordinances. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted]

Respectfully,

Anthony van Leeuwen

Detailed Comments on Draft EIR

BEACON Single Use Carryout Bag Ordinance

By Anthony van Leeuwen, 26 March 2013

1. Page 4.4-2, 1st Paragraph, Line 1. The following statement needs some additional clarification: "*Single use bags that enter the storm drain system as litter may affect storm water flow by clogging drains and redirecting flow. ... Single use plastic bags that become litter can enter storm drains and may clog catch basins or be transported to the local watershed, the Study Area's river systems, or the Pacific Ocean.*" First, installation of trash excluders in storm drain catch basins will prevent litter (including plastic bags and other plastic debris) from flowing into storm drains, rivers, and the ocean. The photo below shows a typical trash excluder installation in a storm drain catch basin in Ventura. It should be noted that each trash excluder is specifically designed for each application and that designs vary.

Figure 1. Photo of trash excluder. Photo Courtesy of the City of Ventura.

2. Page 6-1, Last Paragraph, line 13. The following statement fails to take into account that quantities of trash are decreasing in coastal areas: "*As discussed in Section 4.4, Hydrology and Water Quality, several programs are in place to reduce trash and pollution in Ventura County waterways. These existing programs would be in place in the No Project alternative and may reduce the plastic bag waste that enters and impairs waterways. However, these programs are not expected to reduce litter as much as the Proposed Ordinance and do not apply to the entire Study Area; therefore, this alternative would not result in the general benefits with respect to litter reduction, hydrology, and water quality that are expected to result from implementation of the Proposed Ordinance.*" In Figure 2, in a presentation[1], an official representing a municipality in Ventura County noted that the amount of trash collected during coastal cleanup events, despite an increase in the number of volunteers, are finding less litter and debris. Since most trash excluders have been or are being installed after 2010, it would be expected that litter in coastal areas would decrease significantly. In 2011 Coastal Cleanup[2] in Ventura County, 3,165 voluteers collected 12,810 lbs of trash; and in 2012, 3,346 volunteers collected 9,077 lbs of trash. Future collection events should see even less trash. In fact other public officials in

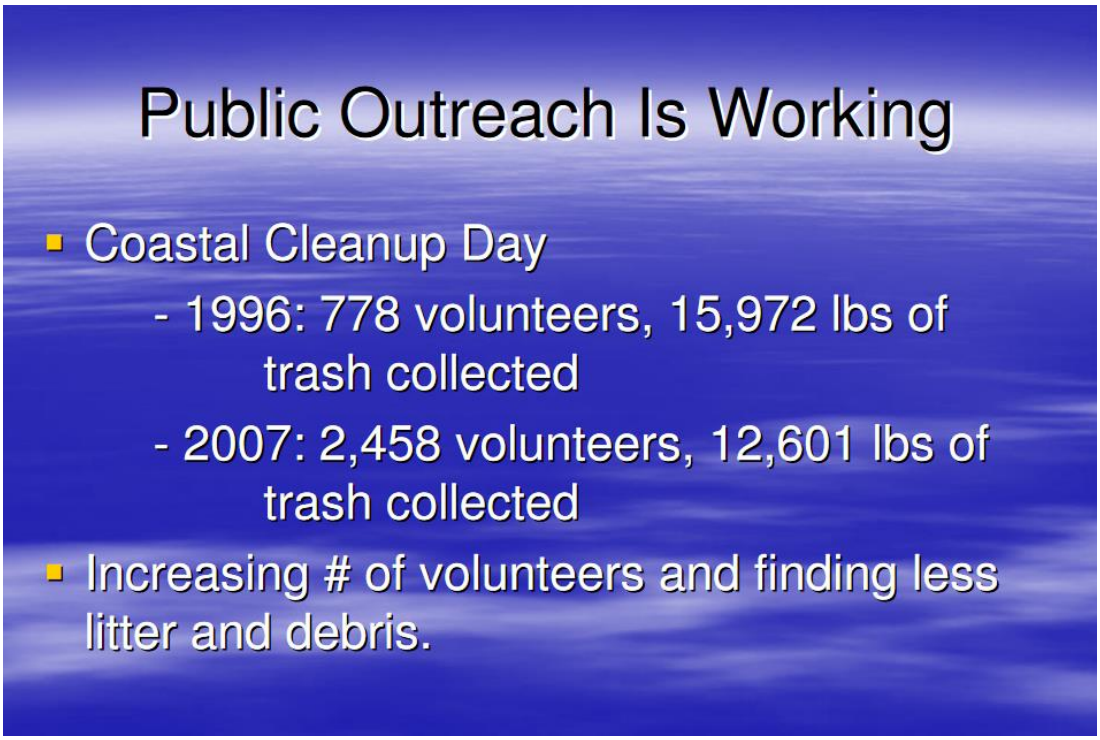

Figure 2. Less Litter and Debris

[1] Kroes, Shaun, City of Moorpark. "Trash Excluders" available at: http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/ventura_ms4/07_0920/presentation/Shaun_Kroes_City_of_Moorpark.pdf

[2] Ventura County Coastal Cleanup Website: http://www.vccoastcleanup.org/

Ventura County have stated that trash in Ventura County water-ways is **not a significant issue** as seen in the following slide.[3] Furthermore, officials indicate an aggressive approach to trash management that includes installation of Trash Excluders and Receptacles in high priority catch basins.

[3] Hubner, Gerhardt. 15 July 2009. "Update on Adopted Ventura County Municipal Stormwater Permit" Presentation to Calleguas Creek Watershed Steering Committee, Page 34. Available at: http://www.calleguascreek.org/ccwmp/meetings/Steering_Comm/071509/CC%20Steering%20Committee%20Final%20Permit%20SW%20Permit%20Overview%2007-14-.pdf

4 March 2013

Mr. Gerald Comati, P.E.
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206 East Victoria Street
Santa Barbara, CA 93101

Subj: Comments on the Draft Environmental Impact Report (DEIR)

Ref: (a) Notice of Availability of a Draft Environmental Impact Report BEACON Single Use Carryout Bag Ordinance dated 12 February 2013

Encl: (1) "A Discussion On Project Objectives and Goals", by Anthony van Leeuwen, dated 4 march 2013
(2) "Bag Quantity Assumptions", by Anthony van Leeuwen, dated 4 march 2013
(3) "Detailed Comments on BEACON Draft EIR", by Anthony van Leeuwen, dated 4 march 2013
(4) "Recommendations On The Proposed Model Ordinance", by Anthony van Leeuwen dated 4 march 2013

1. In accordance with reference (a) the following information is submitted as public input regarding the content of the Draft EIR and the proposed project.
    a. Enclosure (1) recommends wording and structural changes to the project objectives and goals for completeness and accuracy. These recommendations should be evaluated by BEACON as there may be a minor impact to the final EIR and the proposed project.
    b. Enclosure (2) recommends that the quantity of plastic carryout bags assumed to be used by Californians be reduced to a reasonable number that correspond more closely with actual observations. The current Draft EIR overstates the estimated quantity of plastic carryout bags and the resulting impact ripples throughout the EIR including inflated numbers for paper bags and reusable carryout bags. An alternative methodology is provided to determine a reasonable quantity for both plastic carryout bags, paper bags, and reusable carryout bags. The smaller quantity of bags will have a beneficial impact on environmental calculations in various sections of the EIR.
    c. Enclosure (3) provides a list of detailed comments on the Draft EIR.
    d. Enclosure (4) is submitted for consideration by BEACON and involve changes to the proposed project, the proposed model ordinance, and/or deal with issues that might be deemed outside the scope of the EIR. These issues will need to be addressed by BEACON or decision makers who implement the proposed ordinance or one of the recommended alternatives.

2. The Draft EIR fails to adequately discuss the impact of ongoing projects and their overlap and duplication with the proposed project and ordinance. The Trash Total Maximum Daily Loads (TMDL) program requires municipalities to install trash screens on storm drain outfalls that discharge into area rivers. The trash screens will prevent trash, including plastic carryout bags, from being discharged into the river and to the ocean. It is well documented that 80% of plastic bags and plastic debris in the ocean originate from land based sources and are conveyed to the ocean by storm drains and rivers. In other words, the TMDL program solves a major part of the

environmental problem that the proposed project attempts to solve. Hence, project overlap and duplication. In addition, it should be noted that the installation of trash screens on storm drain outfalls is a far more effective solution than banning a single product as the proposed ordinance intends to do. Furthermore, the descriptions of the environmental damage in the EIR that describe plastic bags flowing out of storm drains into the river and ocean are statements that were true in the past. These descriptions of environmental damage should be modified to reflect conditions following the installation of trash screens on storm drain outfalls and the completion of all ongoing projects in 2012 and 2013. An accurate and complete statement of the remaining environmental damage by plastic carryout bags should be included since the merit and justification of the project depends upon this statement. Since the TMDL program has eliminated the most serious of the environmental impacts of plastic carryout bags, the problem that remains is basically a roadside litter and aesthetics problem. That problem would be better addressed as a litter problem because plastic carryout bags comprise less than 1% of roadside litter. The public and their elected representatives deserve an accurate and clear understanding of the overlapping TMDL projects and the proposed project and ordinance and the specific environmental problems that each project solves or intends to solve.

3. This memorandum and enclosures are submitted in accordance with reference (a) and should become part of the official record regarding the preparation of this EIR and development of model ordinances. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted].

Respectfully,

Anthony van Leeuwen

A DISCUSSION ON PROJECT OBJECTIVES AND GOALS

BEACON Single Use Bag Ordinance

By

Anthony van Leeuwen

4 March 2013

The BEACON objectives identified in the Draft EIR for the Single Use Bag Ordinance are not only poorly worded and formulated but are overly restrictive so as to limit the full range of potential solutions to a single pre-conceived solution. Therefore, it is imperative that BEACON, in the public interest, re-examine the proposed objectives and consider adopting the new wording recommended in this paper. This new wording will not impact the substance of the proposed ordinance but may result in the consideration of one or more alternatives and the possibility of adding of new features. The purpose of this paper is to show how the project objectives should be structured and worded. The following are the objectives as stated in the Draft EIR except they are numbered in order to refer to them as objectives 1 through 5.

1. Reducing the environmental impacts related to single use plastic carryout bags, such as impacts to biological resources (including marine environments), water quality and utilities (solid waste equipment and facilities)
2. Deterring the use of paper bags by retail customers
3. Promoting a shift toward the use of reusable carryout bags by retail customers
4. Reducing the amount of single-use bags in trash loads to reduce landfill volumes
5. Reducing litter and the associated adverse impacts to storm water systems, aesthetics and marine and terrestrial environments

Objective 1 is overly broad with the reference to "utilities (solid waste equipment and facilities)" and this wording should be removed. The environmental elements of objective 5 should then be incorporated as follows: "*Reduce or eliminate the environmental impacts related to single use plastic carryout bags as litter including impacts to biological resources and marine and terrestrial environments, water quality, storm water systems, and aesthetics.*" As restated the objective is concrete, specific, and measurable. In addition, the restated objective is valid because it is supported by past environmental impacts from single-use plastic carryout bags. As restated the objective provides a better focus to the scope of the intended project which is to protect the environment.

Objective 2 is not a valid objective because there is no negative documented environmental impact associated with use of paper carryout bags that has any significance that would mandate elimination or a reduction in use. The use of paper carryout bags is one of the alternatives specified, although not the

recommended solution, to the elimination or reduction of plastic carryout bags. The use of paper carryout bags is increased in the proposed ordinance from the status quo, and either stays the same or increases or decreases in the five recommended alternatives. Hence, objective 2 is really an optional goal. Desired but not required.

Objective 3 is also not a valid objective. Objective 3 states that it "promotes a shift" from one product to another. This objective has already been achieved since some people have shifted from plastic carryout bags to reusable carryout bags. This should be rephrased to *encourage* the use of reusable bags or no bag at all. In the proposed ordinance the consumer has three choices: a recyclable paper bag, a reusable bag, or no bag. If consumers all choose either recyclable paper bags or no bags ,or a combination of the two, the objective would fail. Again the use of reusable carryout bags would increase in the proposed ordinance, but not necessarily in all of the five recommended alternatives. Hence, objective 3 is really an optional goal. Desired but not absolutely required.

Objective 4 is valid because California State Law establishes a goal of 50% for the reduction in the amount of material going to the landfill. Some municipalities in the study area have set much higher goals for waste reduction. This is accomplished through combination of diversion through recycling and reuse, or by reduction and prevention. Objective 4 focuses on reduction of waste by prevention. Again, the volume of material going to the landfill increases with the proposed ordinance and either stays the same or increases or decreases with the five alternatives. Hence objective 4 is also an *optional* goal. Desired but not absolutely required.

Furthermore, Objective 4 is incomplete in that it does not consider diversion of material to recycling activities or to potential reuse as a method to achieve reduction of material headed to the landfill. Hence a related goal should be to encourage the recycling of plastic, paper, and reusable bags vice disposal in the landfill. This addition is needed for completeness.

Objective 5 is valid but the items mentioned here were included in the restatement of Objective 1.

At this point the original objectives are reformulated as a primary objective and optional secondary goals and summarized as follows:

Objectives:

a. Reduce or eliminate the environmental impacts related to single use plastic carryout bags as litter including impacts to biological resources and marine and terrestrial environments, water quality, storm water systems, and aesthetics.

Goals:

a. (*Optional*) Discourage the use of paper bags by retail customers.
b. (*Optional*) Encourage the use of reusable carryout bags or no bags by retail customers.
c. (*Optional*) Reduce the amount of material in trash loads to reduce landfill volumes.
d. (Optional) Increase the diversion of material to recycling activities to reduce landfill volumes.

The question you might be asking is why change the original BEACON objectives to a single objective and several optional goals? First, the objective should be narrow, precise, tangible, concrete and one whose achievement can be validated. The optional goals reflect desired outcomes but their achievement will vary depending upon whether decision makers choose the proposed ordinance or one of the alternatives specified in the EIR. Second, by reformulating the original objectives into a single objective with four optional goals we increase the universe of alternative solutions that can achieve the objective and potentially provide a better project outcome. In addition, we have the option of adding a recycling component to the proposed project and ordinance.

For example, the public will ask the question "If plastic carryout bags are bad for the environment, why not just ban plastic carryout bags and leave it at that?" This alternative to ban plastic bags and not charge for paper bags is listed as "No Charge for Paper Bags" in the section **Alternatives Considered but Rejected** because it did not meet the original project objectives. This alternative will meet the reformulated objectives and goals and therefore could be evaluated, after all it is a return to conditions prior to the introduction of plastic carryout bags. The public interest will then be well served, if this alternative is evaluated and decision makers can intelligently discuss with the public the environmental pros and cons in comparison with the proposed ordinance or the alternatives that have already been considered.

Another example, is the proposed ordinance to ban plastic carryout bags will also see an increase in the use of single-use plastic produce bags to package produce, meat, and frozen foods to prevent contamination of reusable bags or to preserve the integrity of paper bags. These single-use bags are also lightweight and could become windblown litter if not properly disposed of. Hence, a recycling component needs to be added to the proposed ordinance.

BAG QUANTITY ASSUMPTIONS

BEACON Single Use Carryout Bag Ordinance

By

Anthony van Leeuwen

4 March 2013

Plastic Carryout Bags

The BEACON Single Use Carryout Bag Ordinance Draft Environmental Impact Report (EIR) assumes that Californians use 20 billion plastic carryout bags per year or 531 bags per capita (Draft EIR, paragraph 2.3.1.a and 2.3.1.b) . While this number is widely accepted it is important to determine if this number is reasonable and in the ball park. The quantity of plastic carryout bags used in the EIR will affect a number of assumptions and environmental calculations throughout the document. If the quantity is understated or overstated and outside the ballpark the quantitative results in the EIR will be skewed and the document will be of little value since the numbers would be bogus. Decision makers will then make decisions based on bogus data that could potentially result in further harming of the environment. My contention is that this number is unreasonable and overstated and needs to be changed to a lower number.

Is 20 Billion Plastic Carryout Bags A Reasonable Number?

First, let's do a quick sanity check. The draft EIR assumes that Californians use 20 billion plastic carryout bags per year or 531 plastic carryout bags for every man, women, and child. A family of four would use 4 x 531 or 2,124 bags per year or about 41 plastic carryout bags per week. This number is simply too large. A more appropriate number might be in the range of 15 to 20 bags per week. Especially, if the family does most of their shopping at the big box stores, like Costco and Sam's Club. So, the 20 billion number does NOT pass the quick sanity check.

Where Does The 20 Billion Plastic Carryout Bag Number Come From?

Many people will be surprised to learn that the 20 billion plastic carryout bag number comes straight from the landfill. The California Integrated Waste Management Board (CIWMB), a now defunct agency, published a report titled "California 2008 Statewide Waste Characterization Study" wherein they identified the composition of material dumped in California's landfills by different material classes. The material class we are interested in is called "Plastic Grocery and Other Merchandise Bags." The weight of material in each class was determined by sampling and extrapolating the results to the weight of all material dumped in the landfill during the reporting period. The report contains tables for overall, residential, commercial, and various miscellaneous categories such as self-haul, etc.

How Are the Quantity Of Plastic Carryout Bags Determined?

Table 1, below, shows the quantity of plastic carryout bags calculated for both California and United States as a whole. The California data was obtained from CIWMD and the United States data was obtained from a report published by the United States Environmental Protection Agency (EPA). The quantity of bags is calculated by dividing the estimated weight in landfills by the weight per bag. The weight per bag used is the average weight of an HDPE plastic carryout bag. As you can see, for California in the Overall Category a quantity of 20,347,073,372 plastic carryout bags are calculated for a per capita quantity of 535 bags. These number are very close to the quantities assumed in the Draft EIR.

Table 1. Plastic Carryout Bags Calculated From Landfill Contents

Jurisdiction	Category or Sector	Estimated Weight (tons)	Weight Per Bag	Quantity	Population (2012)	Bags Per Capita
California[i]	Overall	123,405	0.01213 lbs.	20,347,073,372	38,041,430	535
	Residential	77,736	0.01213 lbs.	12,817,147,568	38,041,430	337
	Commercial	45,669	0.01213 lbs.	7,529,925,804		
	Grocery Store	54,298	0.01213 lbs.	8,952,679,307	38,041,430	235
USA[ii]	Overall	770,000	0.01213 lbs.	126,958,000,000	313,914,040	404

Similarly, for the United States a quantity of 126,958,000,000 plastic carryout bags are calculated for a per capita quantity of 404 bags.

Are The Quantities Calculated From Estimated Landfill Weights Accurate?

In Table 1, the estimated weight for the California "Overall" category is derived from the "Plastic Grocery and Other Merchandise Bags" material class in the California 2008 Statewide Waste Characterization Study. This material class is defined in the Waste Characterization Study as follows:

> *Plastic Grocery and Other Merchandise Bags means plastic shopping bags used to contain merchandise to transport from the place of purchase, given out by the store with the purchase.* ***This type includes dry cleaning bags intended for one-time use****. Does not include produce bags.*

In other words, the estimated weight of 123,405 tons for the "plastic grocery and other merchandise bags" material class is corrupted by the inclusion of the weight of dry cleaning bags! Since the proportion of dry cleaning bags cannot be determined, there is no way to adjust the estimated weight to remove the effect of the dry cleaning bags. Since dry cleaning bags are not regulated in the proposed ordinance or alternatives, and since dry cleaning bags weigh more than HDPE plastic carryout bags, the result of any calculation will result in an inflated and skewed number of plastic carryout bags.

Other Factors That Undermine Calculating Bag Quantities From Landfill Weights

First, the estimated weight for the "plastic grocery and other merchandise bags" material class represents less than 0.3% of the total weight of all material deposited in the landfill in 2008. Therefore,

the number's accuracy should be questioned even though the CIWMB report claims a 90% confidence factor.

Second, the "plastic grocery and other merchandise bags" material class contains not only grocery store bags but also other plastic merchandise bags from other retailers. These bags are made not only from different plastic resins but also have different weights. For example, Target's LDPE bag weighs 9.3 grams and HDPE bags from a variety of grocery stores and retailers can weigh between 4.0 and 6.5 grams each. The average weight of an HDPE bag is 5.5 grams. The average weight of plastic carryout bags in the landfill is unknown. Therefore calculating the quantity of bags from landfill weights using the average weight of an HDPE bag will provide an inflated and incorrect quantity.

Third, from Table 1, we see that California has 12% of the nation's population and yet uses 16% of the nation's plastic carryout bags. Again this is an indication that this methodology does not provide a reasonable quantity.

Fourth, if you compare the quantities calculated for the residential sector to the commercial sector you will find that for every 5 plastic carryout bags used by the residential sector, the commercial sector uses 3 bags. This does not make sense. Again, this is an indication that the data from the California Integrated Waste Management Board (CIWMB) is not a reliable source of information to use in determining a reasonable quantity for the total number of carryout bags used by Californians.

How To Determine A Reasonable Number Of Plastic Carryout Bags

In 2006, the California legislature passed AB 2449. AB 2449 among other things, required grocery and retail stores subject to AB 2449, to report the total weight of plastic carryout bags purchased and the total weight of plastic carryout bags that were recycled on annual basis. CalRecycle then compiled the data submitted and published it. Table 2 contains the weight of bags purchased and the number of bags was calculated in a manner similar to what was done above. Note the quantities are much more reasonable.

Table 2. Quantity of Bags Purchased

Year	Bags Purchased (tons)	Weight Per Bag	Bags Purchase
2007 (1 Jul to 31 Dec)	24,600	0.01213 lbs.	4,056,059,357
2008	54,000	0.01213 lbs.	8,903,544,930
2009	53,000	0.01213 lbs.	8,738,664,468
2010	39,570	0.01213 lbs.	6,524,319,868
2011	31,258	0.01213 lbs.	5,153,833,471

It should be noted that in Table 2 the quantity of plastic carryout bags purchased in 2008 is very similar the quantity of plastic carryout bags in the Table 1 Grocery Store category. It should be noted that the

Table 1 grocery store category was derived from a comment in the California 2008 Statewide Waste Characterization Study denoting the fractional part that denoted grocery store bags.

If we use the 8.9 billion bag figure from Table 1 with 235 bags per capita, a family of four would use 940 bags per year or 18 bags per week. This number is more reasonable and corresponds closely with reality.

Even if the number was bumped up to 10 billion plastic carryout bags per year, in order to ensure that all bags were accounted for by retailers not subject to AB 2449, the per capita quantity would compute to 263 bags. For a family of four this would mean 1052 bags per year or 20 bags per week. This number is more reasonable than the 20 billion bags estimated from landfill quantities.

Are These Quantities Any More Accurate?

The quantity of plastic carryout bags calculated from the total weight of plastic carryout bags purchased also has a number of issues. Retailers purchased both HDPE and LDPE bags. The average weight of bags purchased is unknown. Hence, dividing the weight by the average weight of an HDPE bag also will result in an inflated number. So the question becomes – since both methods to calculate the number of bags from landfill weights or purchased weights are inflated – which numbers appear to provide a more reasonable per capita and per week quantity for an average family that correlates with actual observations.

Plastic Bag Quantity Recommendation

It is recommended that BEACON revise the assumption for the quantity of plastic carryout bags used by Californians. A number such as **9** or **10 billion** would be more in the ball park than 20 billion.

Paper Bags

The study area has a population of 1,239,626 who use 658,241,406 plastic carryout bags per year based upon 531 bags per capita (Draft EIR page 2-7). The Draft EIR assumes that 30% of these bags would be replaced on a one for one basis by paper bags or a total of 197,472,422 paper bags.

By revising the total number of plastic carryout bags for California, as discussed above, to a reasonable and lower number, the number of paper bags estimated in the EIR will also be decreased to around 97,806,492. This would be beneficial to the environment.

Reusable Bags

The study area has a population of 1,239,626 who use 658,241,406 plastic carryout bags per year based upon 531 bags per capita (Draft EIR page 2-7). The proposed ordinance assumes that 65% of the plastic carryout bags in the study area would be replaced by reusable bags. The number of reusable bags is calculated by multiplying the number of plastic carryout bags in the study area by 65% and then dividing by 52 yielding a quantity of 8,228,018 reusable bags in the study area.

Is The Number Of Reusable Bags Correct?

Let's do a quick sanity check on this number. If 100% of the plastic carryout bags are used by 100% of the study area population, then it follows that 65% of the plastic carryout bags would be used by 65% of the study area population or 805,757 people. This means that the 8,228,018 reusable bags would be used by 805,757 people or 10.2 reusable bags per capita. For a family of four this would equate to 41 reusable bags. Again, the number is unreasonable since a family of four would have 8-15 reusable bags. Hence the number cited in the Draft EIR is **unreasonable**.

Assumptions From The Initial Study

In the Initial Study for the Single Use Carryout Bag Ordinance located in Appendix A of the Draft EIR, the number of reusable bags is calculated by dividing 65% of the estimated plastic carryout bags used in the study area by 52 resulting in 8,228,018 bags. The Initial Study then assumes that the 8,228,018 reusable bags are used by the study area population of 1,239,626 people for approximately 6.6 or 7 bags per capita. In addition, the assumption is made each person in the study area would purchase 7 reusable bags per year. So that begs the question "If everyone in the study area is using reusable bags, then who is using the 197, 472,422 paper bags?" Overlooking that conceptual error, the question is the total quantity of reusable carryout bags and the number of bags per capita reasonable? Again for a quick sanity check, a family of four would use 4 x 7 or 28 reusable bags per year. Again, the number is unreasonable since a family of four would have 8-15 reusable bags. Hence the number and assumptions cited in the Initial Study are **unreasonable** as well.

How To Determine A Reasonable Number Of Reusable Bags

The proper way to determine the number of reusable bags is to tie the quantity to the number of households in the study area. For the proposed ordinance it was assumed that 65% of the study area population or 805,757 people would use reusable bags. The average household size in California is 3 people (2.91 persons rounded up). We then calculate the number of households by dividing 805,757 by 3 and then multiplying by the average number of reusable carryout bags per household. The average number per household is between 8 and 15 reusable bags. If you assume that the average number is 12 then you would obtain a quantity of 3,223,028 reusable bags. If we convert that household of 3 people to bags-per-capita we would obtain 4 bags per capita and then that means are family of four would have 16 reusable bags. This number is more reasonable and because it is a lower number it will have a beneficial impact on environmental calculations in the EIR.

Summary

Using the number of 20 billion plastic carryout bags used by Californians is **unreasonable**. As stated, the origin of the number as calculated from the estimated weight of plastic bags in the landfill is fraught with error of one type or another. Only the weight of plastic carryout bags purchased by California grocery and retail stores under AB 2449 provides a reasonable ball park estimate for the total number of plastic carryout bags purchased and distributed by retailers in California.

Once the EIR reduces the number of plastic carryout bags assumed to be used by Californians the number of paper bags in the study area will also be reduced.

The methodology used to determine the number of reusable bags in the study area must be modified as noted above to produce a more reasonable number.

Using smaller bag quantities will be beneficial to the environmental calculations in the EIR. The smaller quantities will ripple throughout the EIR including the proposed ordinance and the recommended alternatives.

[i] California Integrated Waste Management Board, August 2009. "California 2008 Statewide Waste Characterization Study". Produced by: Cascadia Consulting Group. Available at: http://www.calrecycle.ca.gov/Publications/Documents/General%5C2009023.pdf

[ii] United States Environmental Protection Agency, December 2011. "Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2010". Available at: http://www.epa.gov/osw/nonhaz/municipal/pubs/2010_MSW_Tables_and_Figures_508.pdf

Detailed Comments On Draft EIR

BEACON Single Use Carryout Bag Ordinance

By

Anthony van Leeuwen

4 March 2013

The following comments are submitted on the Draft Environmental Impact Report Draft EIR dated 12 February 2013:

1. Page ES-2, 1st Paragraph, Line 7. The phrase "and (6) displaces" should be "and (6) places" or "and (6) display".
2. Page ES-2, 2nd Paragraph. This paragraph states: "Retail establishments would be required to keep complete and accurate records and report annually to the governing jurisdiction." This requirement adds an expense to the cost of doing business on the part of both the retail establishment and the governing jurisdiction. It is recommended that this requirement be removed and/or to add a sunset provision in order to avoid indefinite long term taxpayer costs. See Enclosure (4) titled "Recommendations On The Proposed Model Ordinance" for additional information.
3. Page ES-2, Project Objectives. The statements "Deterring the use of paper bags by retail customers" and "Promoting a shift toward the use of reusable carryout bags by retail customers " are not valid project objectives and are really optional goals. A valid project objective must be tied to the detrimental impact of plastic carryout bags to the environment and as litter and to reduce the volume of material that ends up in the landfill. Reusable bags and paper bags as well as no bags are all valid alternatives to using plastic carryout bags in the proposed ordinance and the environmental impact of using these should be analyzed. Revise the project objectives as recommended in Enclosure (1) titled "A Discussion of Project Objectives and Goals" for additional information.
4. Page ES-4, Impact BIO-1. This ordinance will have minimal impact on reducing the amount of litter entering the coastal and bay habitats. The installation of trash excluders on storm drains that empty in waterways will have a greater impact on reducing litter in these sensitive areas. It is said that 80% of the litter in the ocean comes from land based sources and conveyed to coastal and bay habitats via the storm drain. The remaining 20% comes largely from marine sources and by visitors at area beaches when litter is improperly disposed of. The quantity of plastic carryout bags that are windblown into these sensitive habitats are a small fraction compared to the quantity of plastic bags and litter originating from storm drains in the past. Request that you amend this impact statement to reflect environmental conditions post installation of the trash excluders on area storm drains.
5. Page ES-5, Impact U-1. At the present time there are sufficient water supplies to account for the increased demand expected to be created by consumers washing their reusable bags for hygienic reasons. However, future water supplies cannot be guaranteed due to cyclical drought and extended drought conditions in Southern California. Paragraph 4.3-4 which states: "Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, **including a pattern of recurring and extended droughts**. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California." The impact statement should be amended

to reflect the uncertainty of future water supplies. In addition, the impact should be reevaluated in terms of uncertain future supplies.

6. Page 1-1, 1st Paragraph, Line 6. The statement "*The intent of the Proposed Ordinance is to reduce waste by decreasing the use of single use carryout bags*" appears meant to reduce both plastic carryout bags and paper carryout bags. The Environmental Impact Report (EIR) documents damage to environment by plastic carryout bags, but not by paper carryout bags that is of any significance. While the impact of paper bags to the environment from manufacture to disposal is analyzed, this is no different than any other product manufactured for human use. Absent a direct detrimental impact or significant effect to the environment means that paper carryout bags should not be targeted for reduction or elimination on the basis of environmental damage. This poses the classic "bait and switch" situation. The reduction of paper bags is warranted by the goal to reduce the volume of material dumped in the landfill. In addition, the proposed ordinance assumes there would be an increase in paper carryout bag usage. Therefore the proposed ordinance contains a fee designed to discourage paper carryout bag use and motivate (coerce) people to use reusable bags. Except, the proposed ordinance also contains an exemption to the fee by those who are on specific public assistance programs. The problem with this approach is that the class of people who are exempt will not be motivated to use reusable bags, since the retail store will always supply a paper bag without charge. Thereby creating a permanent class of people who will use paper bags. See Enclosure (1) titled "A Discussion of Project Objectives and Goals" and Enclosure (4) titled "Recommendations On The Proposed Model Ordinance" for additional information.
7. Page 1-1, Last Paragraph, Line 1. The word "realted" should be "related".
8. Page 1-3, Topic No. 9. **The impact of trash excluders on trash discharges into area rivers is not discussed in the Initial Study located in Appendix A. Although there is some discussion in the section 4.4 of the Draft EIR but fails to discuss the impact of the Trash TMDL programs in relationship to this project.** The installation of trash excluders or trash screens on storm drains outfalls that empty into rivers was to eliminate litter including plastic bags and other plastic debris harmful to marine wildlife and marine habitats. These trash excluders are being installed in both Santa Barbara and Ventura Counties in order to meet the objectives of the Trash Total Maximum Daily Loads (TMDL) program required under the federal Clean Water Act. The EIR describes harm by plastic bags and other litter to rivers and sensitive habitat areas prior to the installation of the trash excluders and not afterwards. It is said that 80% of the litter in the ocean comes from land based sources and conveyed to coastal and bay habitats and rivers via storm drains. The remaining 20% comes largely from marine sources and by visitors to area beaches when litter is improperly disposed of. In other words, the TMDL program has already eliminated the primary source of plastic carryout bags in the marine environment meaning that the objectives of the proposed ordinance overlaps the Trash TMDL and hence is a duplication of effort. Furthermore, statements of harm to the physical environment are therefore descriptions of harm that occurred in the past and not in the present or future. Since the Trash TMDL program has already eliminated harm to rivers, the ocean, and critical habitat areas is really reduced to an anti-litter ordinance and can no longer be grounded upon environmental damage. Therefore, the public and their elected representatives need to have a clear understanding of the effectiveness of the TMDL program in order to determine if the proposed ordinance or one of the alternatives has sufficient merit and should be adopted, or modified to narrowly target remaining litter issues.
9. Page 1-4, Topic No. 12. The proposed ordinance requires the retail store to offer to customers a reusable bag for sale that has a specific volume and when filled could weigh as much as 22 lbs. This is simply too heavy for the elderly and young children and people with back problems. Therefore, decision makers should consider recommending to retail stores that they also offer a smaller bag

that when filled would weigh only about 10-12 lbs. See also Enclosure (4) "Recommendations On The Proposed Model Ordinance" for more information.

10. Page 1-4, Topic No. 17. Contrary to the statement in the right column, information in the "No Project" alternative does not contain the beneficial impact of trash excluders on **improving** the river, coastal habitat areas, and the ocean and preventing harm to marine wildlife by trapping plastic carryout bags and other plastic debris. See comment 8 above for more information.
11. Page 2-5, Paragraph 2.3.1.a, Plastic Bags. The Draft EIR states that 20 billion plastic carryout bags are used in California every year. This number is overstated and exaggerated. See Enclosure (2) titled "Bag Quantity Assumptions" for more information.
    i. The 20 billion number is calculated from the estimated weight of plastic merchandise bags in California landfills by the estimated weight of a single HDPE plastic carryout bag. The estimated weight of merchandise bags in landfills is determined by sampling of trash dumped in all California landfills. A similar calculation for the entire United States yields 126 billion bags. That means California uses 16% of the nation's plastic carryout bags while only having 12% of the nation's population. Obviously, this demonstrates that the methodology used to calculate the number of bags is faulty.
    ii. Based upon the overstated quantity of 20 billion plastic carryout bags and California's population, the Draft EIR correctly computes the bags per capita as 531 bags. This means that a family of four (Father, Mother, and two children) would use 41 plastic carryout bags per week. Since most families do the bulk of their grocery shopping at the big box stores such as Costco or Sam's Club, 20 plastic carryout bags per week is more than enough to account for all retail and grocery store shopping. In other words, the 20 billion number of plastic carryout bags is unreasonable and should be cut in half.
    iii. AB 2449 requires retail stores that issue plastic carryout bags at checkout to report to the State of California the quantity (weight) of plastic carryout bags purchased and to report the weight of plastic carryout bags and the weight of other plastic recycled through the in-store recycling bins. According to the State of California, stores subject to AB 2449 reported purchasing in 2008 a total of 54,000 tons of plastic carryout bags or a total of 8.9 billion bags. In 2009, 53,000 tons or 8.7 billion bags. In 2010, 39,570 tons or 6.5 billion bags. In 2011, 31,258 tons or 5.1 billion bags. The decreasing quantity of bags purchased reflect the slowdown in the economy and the fact that many municipalities have banned or sharply curtailed the use of plastic carryout bags. Even if you round up the 2008 figure of 8.9 billion bags to 10 billion bags, to cover retail establishments not subject to the requirements of AB 2449, the number would be more than adequate and more closely reflect the national average based upon population.
    iv. Based upon the information presented in the above paragraphs, it is recommended that the quantity of bags used in California be reduced by 50% to 10 billion per year.
    v. By overstating the number of plastic bags in use, the results of analysis will provide false and misleading data from calculations and present false and misleading data to decision makers. See also comments 34 and 35 below.
12. Page 2-5, Paragraph 2.3.1.a, Plastic Bags. This paragraph serves to provide background information to the reader and the decision maker regarding plastic carryout bags. Recommend that this paragraph be expanded to cover both the low density polyethylene (LDPE) bags and the high density polyethylene (HDPE) bags as a matter of completeness. The intent of the proposed ordinance is to ban plastic carryout bags made from both LDPE and HDPE plastic resins!
13. Page 2-5, Paragraph 2.3.1.a, Paper Bags. The Draft EIR does not take into account an increase in plastic bag use when a shift to paper bag use occurs. For example, in coastal areas such as Santa Barbara and Ventura Counties, the humidity is much higher than in desert areas such as Palm

Springs. When a consumer purchases a frozen food item, such as Ice Cream, the package will sweat (condensed water vapor) making the paper bag wet, and when lifted will tear and spill the contents. Therefore, items like ice cream will have to be placed in plastic bags and then placed in the paper bag to preserve the integrity of the paper bag. These plastic bags are also single use and very lightweight, and will end up in the landfill unless recycled. These plastic bags can also become windblown litter even though they do not have the familiar "handles". **This is why the proposed ordinance should have an integral recycling component**; otherwise, we will be back to where we started from. See also Enclosure (4) titled "Recommendations On The Proposed Model Ordinance" for additional information.

14. Page 2-5, Paragraph 2.3.1.a, Paper Bags. Prior to the introduction of plastic carryout bags, when only paper carryout bags were available, paper bags came in different sizes. If the proposed ordinance or alternative is adopted, and a shift to paper bags is allowed, one can expect that bags will be provided in different sizes. Is there any intent to account for the different size bags by different fees?
15. Page 2-5, Paragraph 2.3.1.a, Paper Bags. The description of the manufacture of the paper bags, indicate the use of paper made from virgin material. The description should be updated to show paper manufactured from a combination of virgin raw material and recycled content.
16. Page 2-5, Paragraph 2.3.1.a, Biodegradable Bags. An advantage of using a biodegradable bag is that if swallowed or eaten by a marine mammal, the bag would disintegrate in the digestive system and be eliminated, whereas the HDPE plastic carryout bag would not. In addition, biodegradable bags do degrade and break apart in the environment more in line with the paper bag. I do not believe a commercial composting facility is an absolute requirement. If so, the paragraph should address this.
17. Page 2-6, Paragraph 2.3.1.b. Same comment as comment 11 above. Reduce the quantity of bags used in California to a more reasonable number. 531 bags for every man, woman, and child is an unreasonable number!
18. Page 2-7, Table 2-1. The table should be updated and the **Total Bags Used Annually** recalculated using a more reasonable per capita number for plastic carryout bags. See comment 11 above.
19. Page 2-9, 2nd To Last Paragraph. Same comment as Comment 2 above.
20. Page 2-10, 1st Paragraph. The shift to paper bag use should include a corresponding increase in small single-use plastic bags used to wrap frozen food items. In addition, the shift to reusable bags would also see an increase in single-use produce bags or other single-use plastic bags to prevent contamination of the reusable bags. See comment 13 above.
21. Page 2-10, 1st Paragraph. The quantity of plastic carryout bags, paper bags, and reusable bags should be modified to more reasonable numbers. See comment 11 above.
22. Page 2-10, 1st Paragraph. Paper bags come in different sizes. The assumption about bag volume holds true only for the primary bag that will replace the plastic carryout bag. For example, grocery stores will more than likely have at least two different paper bag sizes, this was the situation prior to the introduction of plastic carryout bags. Also other retail stores that utilize a variety of plastic bag sizes for different products may switch over to multiple sizes of paper bags if the proposed ordinance is applied to retail stores that do not sell groceries. It is obvious, from the discussion in this paragraph, that the Draft EIR analysis is focused solely on "grocery" stores and not on other retail establishments and naively assumes only one size of paper bag. In the event the ordinance is applied to all retail stores, then the analysis should include the different sizes of carryout bags from those establishment. For example, an exemption for very large plastic carryout bags such as those that can hold bedding, pillows, clothes, etc. should be included in the final ordinance because these bags do not present the same kind of problems that HDPE plastic carryout bags present.
23. Page 2-10, 1st Paragraph and Table 2-2. The EIR assumes that 5% of plastic carryout bags remain, 30% are replaced by paper carry bags, and 65% is replaced by reusable carryout bags. The impact of

the proposed ordinance will also increase the consumption of single-use plastic garbage bags that will replace the up to 40% of plastic carryout bags previously used as wastebasket liners and trash bags. Because the increased consumption of plastic trash bags is a direct consequence of the proposed ordinance, the environmental impact of manufacturing and disposal of those bags should be accounted for in the environmental calculations throughout this EIR.

24. Page 2-10, Table 2-2. The quantity of bags used Post-Ordinance should be reviewed in concert with comment 13 above. In addition, the statement is made that the reusable bag is used once per week for 52 weeks. In a number of other places in this EIR the lifetime of this reusable bag is conservatively assumed to be one year. Should that projected lifetime not be mentioned here?
25. Page 2-11, Paragraph 2.6. Same comment as comment 3 above. These objectives should be reformulated and reworded as recommended in Enclosure (1) titled "A Discussion of Project Objectives and Goals" for additional information.
26. Page 3-2, Paragraph 3.1.2, 4th Sub-Paragraph. The paragraph mentions Ventura County's transportation system to include "pedestrian rail service" and four airports. What is not mentioned is freight rail service or Ventura County's three harbors: Port Hueneme deep seawater port, Oxnard harbor, and Ventura harbor. The Oxnard Harbor District, Port of Hueneme, is the commercial deep water seaport located within Ventura County supporting regional freight transportation mobility to all of California, the Pacific Northwest, the western region of the United States and the western Providences of Canada. Please update the description of Ventura County's transportation system.
27. Page 3-2, Paragraph 3.1.2, 4th Sub-Paragraph. "Pedestrian" rail service could be better stated as "passenger" rail service. "Scout Coast Area Transit" should be "South Coast Area Transit".
28. Page 3-2, Paragraph 3.2. The cumulative impact of the Trash TMDLs in both Santa Barbara and Ventura Counties should be discussed with respect to the proposed ordinance. Both the proposed ordinance and the Trash TMDLs for county waterways impact the amount of trash conveyed by storm drains to waterways, to the ocean, and other critical habitat areas. Both the proposed ordinance and the Trash TMDLs overlap in the problems they intend to solve. Harm to marine wildlife and habitats by plastic bags and plastic debris that originate from land based sources and conveyed to rivers and the ocean via the storm drain is well documented. However, those statements and that documentation point a largely past condition, prior to the installation of trash excluders on storm drains via the Total Maximum Daily Loads Program. Those trash excluders were installed in 2012 and continuing in 2013. Decision makers need to know how effective the trash excluders are in preventing plastic bags and other plastic debris from entering county waterways and subsequently the ocean and coastal bays and habitats. Information from other areas in California should be available that document the environmental conditions before and after installation of trash excluders on storm drains. That information could be used to project the future state of county rivers and the degree of environmental damage that is avoided by installation of trash excluder on storm drain outfalls. Decision makers need to fully informed when making the decision to adopt the proposed ordinance or one of the alternatives.
29. Page 3-5, Table 3-1, City of San Francisco. The minimum ten cent charge applies to checkout bags: compostable, recycled paper bags, or reusable bags.
30. Page 4.1-4, 6th Paragraph, Truck Trips. The number of truck trips should be adjusted to be more closely aligned with reality. The number of bags should also be adjusted. See also comment 11 above.
31. Page 4.1-5, 2nd Paragraph, Line 11, 12, and 13. Is the reference to a "single use plastic bag" a reference to an HDPE plastic carryout bag? It appears that the Draft EIR addresses only HDPE plastic carryout bags and not LDPE plastic carryout bags. How does the LDPE single use plastic carryout bag compare to the LDPE plastic reusable bag? You may want to update this paragraph to include carryout bags of both resin types. As is, it is a little confusing. Nowhere does it say that single use

plastic bag refers to both HDPE and LDPE bags. The EIR must address both types of single use carryout bags, those made from HDPE and LDPE plastic. This comment applies in other places as well. Are there plastic bags made from other resin types as well? See also comment 12 above.

32. Page 4.1-6, Table 4.1-3. The table for current emissions assume that 100% of the population of Santa Barbara and Ventura Counties are using plastic carryout bags. While this baseline condition may have been true prior to the impact of California State Law AB 2449, the impact of this law was voluntarily shift people from plastic carryout bags to reusable bags. Today, there is significant percentage of environmentally conscientious people who use reusable bags. In addition, there is a small percentage of people who insist on paper bags. The remainder continue to use plastic carryout bags. The baseline condition should be updated to reflect current conditions in accordance with CEQA guidelines. Are there any statistics of the percentage of the population that uses paper and/or reusable bags in Ventura and Santa Barbara counties so that the baseline condition can be stated to reflect actual conditions. The public and their elected representatives deserve to know the baseline conditions assumed for this project. Assuming that 100% of the people use plastic carryout bags when that is obviously not the case is unrealistic assumption.
33. Page 4.1-9, Middle of Page. Similar to comment 31. Is the "single use plastic bag" an HDPE or LDPE bag? Are the emissions for both the same with respect to the paper bag?
34. Page 4.1-10, 3rd Paragraph. The reduction in kilograms per year of ground level ozone and atmospheric acidification is overstated and misleading because the values computed are dependent on the estimated quantity of plastic carryout bags, paper bags, and reusable bags used in the study area. See comment 11 above.
35. Page 4.1-11, Table 4.1-4. The quantity of reusable bags is calculated by taking 65% of the plastic bags used in the study area and dividing by 52. This calculation yields a number of 8,228,018 as shown in the table. If you divide this number by 65% of the people in the study area you get 10.2 reusable bags per capita. Or 41 reusable bags for a family of four. Obviously the number is incorrect. Double check your assumption on the number of plastic carryout bags used in the study area. See Enclosure (2) for more information.
    i. Recommendation: The number of reusable bags should be calculated from the number of **households** in the study area vice from the number of plastic bags used in the study area.
    ii. The number of people per household in the State of California averages 2.91 which can be rounded up to 3.0 for purposes of this Program EIR. The population of the study area is 1,239,626 people or 413,209 households.
    iii. The average number of reusable bags per household can be estimated to be 12.
    iv. Multiply 65% of the households in the study area by 12 reusable bags per household. This calculation yields 3,223,028 reusable bags.
36. Page 4.2-2, Paragraph 4.2.1.c. The statement that "carryout bags can affect biological resources as a result of litter that enters the storm drain system and ultimately coastal and marine environments" is a statement of a past condition. The installation of trash excluders on storm drains in 2012 and 2013 through the Total Maximum Daily Loads (TMDL) Program will prevent plastic bags and plastic debris from entering the riverbed and the ocean. In other words, this paragraph needs to be updated to identify damage to the environment post trash excluder installation. Decision makers need to know how effective the Total Maximum Daily Loads Program is in solving the environmental problems identified in the Draft EIR before making a decision to adopt the proposed ordinance or one of the alternatives. See also comment 28 above.
37. Page 4.2-2, Last Paragraph. The paragraph should clarify that wildlife is entangled by discarded fishing lines and fishing nets and NOT by plastic bags. The United Nations has published reports that show that discarded fishing gear is responsible for entangling wildlife which often results in death. Entanglement by plastic carryout bags if it occurs, occurs as seldom as branches from a bush or tree

entangle a small or large animal. The subject of entanglement needs to remain focused on discarded fishing gear and not plastic bags.

38. Page 4.2-2, Last Paragraph, Line 7. The phrase "have been reported to ingest or become entangled in plastic debris" suggest that a ban on a single product will not prevent the harm to marine wildlife. Plastic bags and Plastic debris can be stopped by trash excluders installed on storm drains through the Total Maximum Daily Loads (TMDL) Program. It should be noted that banning plastic bags will not prevent harm to marine wildlife by plastic debris. Only the Trash TMDL and the installation of trash excluders present a comprehensive solution to preventing harm to marine wildlife. Please update the paragraph to reflect that plastic bags do not cause entanglement, but fishing gear does.
39. Page 4.2-7, 1st Paragraph. The statement that because paper bags are less resistant to breakdown than plastic bags and therefore are less likely to cause entanglement is a phony issue. Even people can become entangled by the sheets on their bed when they get up in the morning. The type of material the bag is made of, the design of the bag with handles, or even the length of time that it takes for a bag to degrade has nothing to do with entanglement. Bags do not cause entanglement any more often that branches of a tree or bush entangles animals. Entanglement by discarded fishing lines and nets has been well documented and has been shown to harm marine wildlife. Please update the paragraph.
40. Page 4.2-10, Last Paragraph. The statement " These bags can become litter that enters the storm drain system and ultimately enters into creeks/rivers and eventually coastal and marine environments" is a statement that reflects a past condition prior to the installation of Trash Excluders on storm drains through the Total Maximum Daily Loads Program. Please update the paragraph to reflect harm done to the environment post trash excluder installation, if any. See also comment 28.
41. Page 4.2-11, 2nd Paragraph. The paragraph should be expanded to include better definitions of recycling and to clarify several issues:
    i. Curbside Recycling bins – Some allow and some reject plastic bags, plastic wrap, etc.
    ii. Retail In-Store Recycling bins – This is the only recycling facility currently available for recycling plastic carryout bags and a lot of other plastic bags and wraps. This facility could be lost in the event of a plastic carryout bag ban! Which would result in more plastic going to the landfill.
    iii. Plastic Carryout Bags – Can enter the landfill, as a trash bag filled with trash or as a discarded carryout bag. In the case where a plastic carryout bag is filled with trash it serves a useful purpose and would be replaced by a paper or other plastic bag in the event plastic carryout bags are banned. The discarded carryout bag is a problem because it can become windblown litter due to their light weight and these bags should have been recycled.
    iv. Plastic Carryout Bags – that become litter can enter storm drains but then get caught in the trash excluder and is then removed and properly disposed of by agency personnel on a regular maintenance schedule.
42. Page 4.2-11, 3rd Paragraph. Same comment as 36 and 40. This paragraph reflects harm to the environment prior to the installation of trash excluders on storm drains and hence represents a past condition.
43. Page 4.2-12, 2nd Paragraph, line 6 and 7. The proposed ordinance would not reduce the amount of litter that enters the marine environment since installation of trash excluders under the Trash TMDL project will prevent all trash from entering the marine environment. The proposed ordinance might prevent a few windblown plastic carryout bags from the marine environment but not else. Please update the paragraph.
44. Page 4.2-12, Last Paragraph. The beneficial impact of trash excluders installed on area storm drains is that they interrupt the flow of trash to creeks/rivers and to the ocean and have a beneficial

impact that overlaps and duplicates the benefits of the proposed ordinance. The proposed ordinance will not have any beneficial impact on the marine environment. See comment 42.

45. Page 4.3-1, Paragraph 4.3.1.a. The statement "The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe" does not appear to jive with facts about the past climate. In the 1960's climatologists were saying we are headed towards another ice age then in the 1990's it was global warming then when that stopped they changed the term to climate change since there has been no warming in the last 16 years. Even the United Nations has admitted that Global Warming is not occurring and that climate models overstated expected impacts. Please reword the sentence or remove it.
46. Page 4.3-5, Paragraph 2. It should be noted that as the ocean water temperatures and terrestrial temperatures rise, the amount of water that evaporates will increase resulting in more rapid cloud formation which in turn will result in cooling and increased rainfall. Please include this information in the text of the paragraph.
47. Page 4.3-6, 2nd Paragraph, Line 1. The paragraph talks about "carryout bags" but only describes the truck trips required for Plastic Carryout Bags. The carryout bags used in the study area include paper and reusable bags, why are truck trips for these not included? Should this not be included in the baseline condition? Also, the number of plastic carryout bags need to be adjusted. See comment 11 above.
48. Page 4.3-6, 3rd Paragraph. Not all bags are headed to the landfill. Why is recycling not covered in this paragraph? For example, the EIR mentions that 40% of paper bags are projected to be recycled. Reusable bags can also be recycled. For completeness we need to know the percentages of bags of each type that are expected to be recycled compared to the amount expected to be disposed in the landfill.
49. Page 4.3-6, 3rd Paragraph. There are several problems in this paragraph. First, does "carryout bags" refer to all three types, plastic, paper, and reusable? Second, we know that landfills generate methane, CH_4 , as a result of the decomposition of organic materials. In the article[1] titled "Why Not To Ban Plastic Carryout Bags" it is stated that plastic and paper do not necessarily decompose in modern landfills due to a lack of air, water, and sunlight. Rather than decompose the materials are mummified. Therefore the assertion that carryout bags in the landfill generate methane is questionable. Please verify this issue and correct the paragraph if needed.
50. Page 4.3-6, 4th Paragraph. Are GHG emissions for HDPE and LDPE plastic carryout bags the same? Or different?
51. Page 4.3-6, Last Paragraph. This paragraph is confusing. The first sentence should say that the reusable LDPE bag if used 20 times, the reusable LDPE bag has 10% of the GHG emissions of a single use HDPE plastic bag on a "per use basis". Is this correct? If so, please modify the statement.
52. Page 4.3-6, Last Paragraph and Page 4.3-7, 1st Paragraph. The statement "There is no known available Life Cycle Assessment that evaluates all types of reusable bags (canvas, cotton, calico, etc.) with respect to potential GHG emissions" is partially true. The analysis in the Draft EIR includes an analysis of an LDPE reusable bag. At the very minimum, the cotton reusable bag should be evaluated as more than likely that this is the type of bag that is machine washable and dryable. The following documents can provide Life Cycle Analysis data for both the polypropylene reusable bag and cotton bags. These documents can be found on the internet by searching for the document titles:
    i. UK Environment Agency, "Life cycle assessment of supermarket carrier bags: a review of bags available in 2006".

[1] Van Leeuwen, Anthony. 12 December 2012. "Why Not To Ban Plastic Carryout Bags" in "BEACON Single Use Carryout Bag Ordinance, Draft Environmental Impact Report", February 2013, Page 223 and 224.

ii. Green, Joseph., California State University Chico Research Foundation, January 2011, "Life Cycle Assessment of Reusable and Single-use Plastic Bags in California".
iii. Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hong Kong, China. "An Exploratory Comparative Life Cycle Assessment Study of Grocery Bags – Plastic, Paper, Non-Woven and Woven Shopping Bags."

53. Page 4.3-7, 1st Paragraph, Last Line. Is "LDPE bag" a LDPE reusable bag or an LDPE single use bag?
54. Page 4.3-7, 2nd Paragraph and Table 4.3-1. Same comment as 11 above. The overstatement of the number of plastic carryout bags will provide incorrect results in GHG calculations. The number of metric tons of CO_2e and CO_2e per Person are overstated.
55. Page 4.3-10; 2nd Paragraph, line 3; 3rd Paragraph, line 6. These paragraphs identify strategies for reduction in GHG emissions and specifically energy and water use. Since the State of California has adopted the position that Climate Change is real and has put in place a statewide cap and trade program to reduce GHG emissions in order to avert a future climate catastrophe, does this mean that reduction of energy and water use have higher priority than other considerations in evaluating the environmental impact?
56. Page 4.3-12, 2nd Paragraph. The number of plastic, paper, and reusable bags are overstated. See comments 11 and 35 above.
57. Page 4.3-12, 4th Paragraph. The number of reusable bags should be revisited that will result in a revised number of laundry loads. See Comment 35 above.
58. Page 4.3-13, Table 4.3-3. Update the number of bags to more reasonable numbers. See comments 11 and 35 above.
59. Page 4.3-15, Table 4.3-5. The table item on "Alternative Fuel: Ethanol" is wrong.
    i. E85 is a blend of gasoline with 51%-83% Ethanol. A gallon of E-85 has 27% less energy than a gallon of regular gasoline with a corresponding decrease in mileage.
    ii. A gallon of No. 2 diesel fuel has 113% of the energy content of a gallon of gasoline.
    iii. A gallon of E-85 would then have 40% less energy than a gallon of No. 2 diesel.
    iv. Trucks that deliver carryout bags from manufacturer to distribution centers and to retail outlets are long haul semi-trucks that use No. 2 diesel fuel. These trucks can carry loads that weigh up as much as 80,000 lbs.
    v. The use of a flex fuel vehicle for long haul semi-trucks would not be practical even if E85 is widely available. The trucks would need larger fuel tanks and consume more fuel per mile with reduced acceleration than existing diesel powered trucks. Operation of a flex fuel truck for long haul use would not appear to be practical.
    vi. The only alternative fuels for trucks is Compressed Natural Gas (CNG) and Propane that are not necessarily universally available and like E-85 would be applicable to short range trucks operating in a small local area.
    vii. Most trucks are owned by large corporations or trucking companies. Truck drivers are usually assigned the truck they drive based upon their commercial driver's license and what the company has available. Truck drivers are assigned the load to haul which will vary from load to load.
    viii. The statement that "Truck drivers delivering carryout bags could choose to purchase flex-fuel vehicles" borders on fantasy. This is not the real world. Delete this item.
60. Page 4.3-15, Table 4.3-5. The item on "Zero Waste – High Recycling" mentions limited availability for consumers to access plastic bag facilities. Currently all retail stores subject to the requirements of California State Law AB 2449 and SB 1219 are required to have recycle bins for the recycling plastic carryout bags and other plastic bags and plastic wraps. In the event, that the proposed ordinance is adopted, and that plastic carryout bags are banned, the retail store will no longer be required to retain a recycle bin. As a result, consumers will no longer be able to recycle "other"

plastic bags and plastic wraps resulting in more plastic going to the landfill. See my paper titled "Plastic Carryout Bag Ban – More Plastic Headed Towards The Landfill" located in the Draft EIR Appendix A, page 242.

61. Page 4.3-15, Table 4.3-5. Item on Fuel-Efficient Replacement Tires & Inflation Programs. There is no such thing as a "Carryout bag delivery driver" see comment 59.vii. Truck drivers are responsible to ensure that truck and trailer tires are properly inflated. Tires are an expensive item and cost between $350 to $500 or more each. A set of 8 drive tires could cost between $3000 and $4000. Both the drive tires and the trailer tires when replaced could be replaced by a retreaded tire. Only the front tires that steer the truck must be replaced by *new* tires. In the event the truck driver encounters a tire failure while on the road, he would call for assistance and a special maintenance team would come and replace the tire. There is no guarantee that the replacement tire is a "Fuel-Efficient" Replacement Tire. In the real world, chances are that the lowest cost tire is chosen, which might be a retread. Therefore the strategy is **Not Consistent**.
62. Page 4.3-16, Table 4.3.5. Item on "*Alternative Fuels: Non-Petroleum Fuels*". Trucks are more than likely owned by large companies rather than by individual drivers. Drivers have little to say about the type of trucks purchased by their companies. Drivers receive assignments to pick up and deliver that freight from and to a specific location. Truck drivers have no say about the type of freight carried by the truck and it will vary from load to load. In other words, there is no such thing as a "Carryout bag delivery driver". While non-petroleum-based fuels such as compressed natural gas (CNG) or Liquefied Natural Gas (LNG) or bio-diesel could be used in semi-trucks for short haul deliveries in local areas, it doubtful these fuels would be suitable for or have the availability required for long haul trucks. Therefore the strategy is **Not Consistent**.
63. Page 4.3-16, Table 4.3-6. Item on "*Solid Waste Reduction Strategy*". Confusing. The paragraph in the left column talks about recycling and the paragraph in the right column talks about reducing waste deposited in the landfill? In the right column it states that the "objective of the proposed ordinance is to reduce single use plastic and paper bag waste in landfills". The proposed ordinance if adopted, will actually reduce the single use plastic carryout bags while increasing paper bag waste to the landfill. A secondary effect of the proposed ordinance will be an increase in the quantity of small, lightweight, plastic bags that also single use to protect the integrity of paper bags and to protect the reusable bag from contamination. These lightweight single use bags if not disposed of properly will also become windblown litter. In addition, the loss of plastic carryout bags will result in consumers purchasing small trash can liners e.g. Costco's Office & Home Wastebasket Liners. These wastebasket liners are less likely to become windblown litter. See comments 13 and 20 for more information. It should be obvious from the discussion that the proposed ordinance required a recycling component, that includes the recycling of plastic bags (not used for trash), paper bags, and reusable bags that are disposed.
64. Page 4.4-1, Last Paragraph. Here is the point where you could discuss that the Trash TMDLs and the installation of trash excluders to prevent trash and plastic bags from entering water bodies. Please do so.
65. Page 4.4-2, 1st Paragraph. Request that you clarify curbside recycling verses in-store recycling bins – see comment 41 above.
66. Page 4.4-2, 1st Paragraph Line 9. It might be beneficial as a matter of completeness to include the fact that up to 40% of plastic carryout bags consumers take home are used as trash bags, in lieu of another plastic bag. If plastic carryout bags are banned, then plastic bag manufacturers will have to produce plastic trash bags which impacts the environment. This has not been considered in the EIR. **Therefore, the EIR is incomplete**. Just as the EIR assumes that 30% of plastic carryout bags will be replaced by paper bags, the EIR should also assume that 40% of plastic bags will be replaced by plastic trash bags and the environmental impact of manufacturing and disposal of these bags should

be evaluated as part of the EIR Environmental calculations. It should be noted that consumption of the additional plastic trash bags is direct consequence of the proposed ordinance.

67. Page 4.4-2, 1st Paragraph, Line 13. While plastic carryout bags can clog catch basins or trash excluders and cause local flooding, this seldom happens because municipal employees regularly clean out catch basins and trash excluders. Furthermore, in the event of a major rainstorm municipal employees will be on duty to ensure that flood control channels and storm drains are clear and not impeding water flow resulting in flooding. This is more of a theoretical problem than an actual problem.
68. Page 4.4-2, 3rd Paragraph. Reusable bags can under high wind conditions become windblown litter (personally observed this) and if it enters a storm drain could cause clogging due to the fact that these bags are heavy duty and resistant to biodegradation.
69. Page 4.4-7, Impact HWQ-1. The installation of trash excluders on storm drains in response to the Trash TMDLs listed on page 4.4-5 will eliminate plastic carryout bags and other plastic debris and trash from entering streams/rivers and the ocean. See comment 8.
70. Page 4.4-7, 2nd To Last Paragraph. The assumptions on the number of plastic, paper and reusable bags are overstated. See comment 11.
71. Page 4.4-8, Top Paragraph. The statement "Single use plastic bag litter that enters the storm drain system can block or clog drains resulting in contamination" is not exactly correct. Plastic bags that the enter the storm drain are trapped by trash excluders or rubbish traps that are cleaned out on regular basis by agency personnel to remove and properly dispose of plastic bags, plastic debris, fast food trash, and leaves. By trapping plastic bags, water quality is maintained. See comment 8.
72. Page 4.4-8, Top Paragraph. The assumption on the number of plastic bags is overstated. See comment 11.
73. Page 4.4-8, 2nd Paragraph. The paragraph omits the fact that paper bags when they degrade in the environment or in waterways release trace amounts of chemicals that were used in their manufacture. Hence, paper bags have a greater impact on degrading water quality than plastic carryout bags that are essentially inert. Although plastic carryout bags deteriorate in the sun and break into small pieces and could impact the water quality of runoff water they are not as apt to release chemicals into the environment like paper bags. See page 4.4-3 2nd To Last Paragraph.
74. Page 4.4-8, 2nd Paragraph. The concept expressed in the paragraph that because paper bags are less resistant to breakdown that they are less likely to block or clog drains compared to single use plastic carryout bags is not exactly true. Plastic carryout bags because they are thin, lightweight, and very flexible have an easier time to run down storm drains with water flow. While paper bags can float they soon become wet and begin to dissolve into smaller pieces that can run down a storm drain and block a rubbish trap along with other debris. Since rubbish traps are cleaned out on a regular basis, clogging and flooding are relatively minor problems particularly in dry Southern California.
75. Page 4.4-8, 3rd Paragraph. As reusable bags become more common, people will use these bags as totes for picnics and to carry clothes or other materials on outings. These reusable bags have the potential to end up as litter just as plastic carryout bags but perhaps less often. These bags with their handles makes them convenient totes for picnics and other outings.
76. Page 4.4-9, 2nd Paragraph. The phrase "promoting a shift" is not part of a proper objective. See Enclosure (1) titled "A Discussion of Project Objectives and Goals" for additional information.
77. Page 4.4-10, 2nd Paragraph. The description of the manufacture of paper bags in this paragraph appears to omit the inclusion of recycled content and that these paper bags made from virgin materials! Recommend that the paragraph be updated to include the recycled content, since this is an important component of the proposed ordinance.
78. Page 4.4-10, 2nd Paragraph. The paragraph describes the chemicals used in the manufacture of paper bags. It should be noted that trace amounts of these chemicals will remain in the paper bag

and cannot be 100% removed. In other words paper bags will have trace amounts of these chemicals which are released when a littered paper bag breaks down and contaminates the environment . See page 4.4-3 2nd To Last Paragraph.

79. Page 4.4-10, 3rd Paragraph, Line 4. The phrase "in Study Area" should say "in the Study Area".
80. Page 4.4-10, Last Paragraph. What is the impact of chemicals used to wash and sanitize reusable bags on a recurring basis?
81. Page 4.4-11, 4th Paragraph, Line 7. Reusable bag manufacturing facilities may or may not manufacture reusable bags from raw materials but may purchase the materials from other manufacturers. For example, a reusable bag manufacturer may purchase cotton from a textile mill and sews the cotton material into a reusable bag. So the term manufacturing facilities should include manufacturers of the raw materials used to construct the reusable bag. There may be a better way to phrase it. In addition, some reusable bags may be made at home by a seamstress or hobbyist.
82. Page 4.4-11, Last Paragraph. Same comment as comment 11 and 35 above.
83. Page 4.4-12, 1st Paragraph. Same comment as comment 11 and 35 above.
84. Page 4.4-12, Last Paragraph. The cumulative impact of the trash excluder installation in area storm drains will overlap the proposed ordinance in that it will remove plastic bags and other plastic debris and other trash from area creeks and rivers. See comment 8 above.
85. Page 4.5-3, 2nd Paragraph. Reference to the quantity of plastic carryout bags. Same comment as comment 11 above.
86. Page 4.5-3, Table 4.5-3 and Table 4.5-4. Reference to the quantity of plastic carryout bags. Same comment as comment 11 above. Overstating the quantity of plastic bags used in the study area distorts the water consumption quantities calculated in the tables.
87. Page 4.5-5, Last Paragraph. Same comment as comment 11.
88. Page 4.5-6, Table 4.5-6. The overstated quantity of plastic bags used in the study area results in an overstatement of waste water generated by plastic carryout bag use. See comment 11 above.
89. Page 4.5.7, Table 4.5-8 and Page 4.5-8, Table 4.5-9. The quantity of plastic carryout bags used are overstated. See comment 11 above. Overstating the quantity of bags results in an overstated amount of solid waste.
90. Page 4.5-10, Table 4.5-10. The following comments apply:
    i. See Comment 35 for a better method of analyzing the number of reusable bags. Adjusting the number of bags will reduce the consumption of water calculated in the table.
    ii. Assume at least 2 gallons of water per bag for hand washing and rinsing as identified on page 20 of "Life Cycle Assessment of Reusable and Single-use Plastic Bags in California", published January 2011, by California State University Chico Research Foundation by author Joseph Greene.
    iii. Because water is a scarce resource – even though the Draft EIR assumes that only 65% of households will use reusable bags, the table should include a worst case calculation assuming 100% of the households using reusable bags. This means that the number of reusable bags will have to be recalculated. In other words show water use with the current assumption for 65% of households and also for 100% of households (worst case). This information is needed by decision makers.
91. Page 4.5-11, Last Two Paragraphs and Page 4.5-12, Tables 4.5-11 and 4.5-12. The number of plastic bags, paper bags, and reusable bags should be adjusted based on previous comments. In addition, the assumption is that a reusable bag is used once per week for 52 weeks with a lifespan of one year. This means that we must assume that all reusable bags will disposed of after 1 year of use. Therefore Table 4.5-11 should show the annual waste generated in one year to be the entire lot of 8.2 million(overstated number) reusable bags. Therefore you need to check your figures.

92. Page 4.5-12, Tables 4.5-11 and 4.5-12, 2nd To Last Paragraph. It appears from the information presented on this page, that all of the waste generated by the different type of bags, end up in the landfill. There needs to be a discussion including tables that would show the volume and weight of waste generated for each type of bag and the amounts that would be diverted from the landfill by recycling. The EIR includes several estimates and projections for recycling e.g. 5% for plastic carryout bags, and 40% for paper bags. More information needs to be supplied. Decision makers need to know the volume and weight of material projected to go to the landfill and how much material is expected to be diverted as a result of recycling.
93. Page 6-1, Paragraph 6.1.2. Alternative 1 would see a difference in the environment because trash excluders would interrupt the flow of trash from the storm drain to the river and to the ocean. This trash which would include plastic bags, plastic debris, fast food trash and other materials and would be properly disposed of in landfills vice flowing to the ocean and potentially harming wildlife. It is well known fact that up to 80% of plastic bags and plastic debris that flow into the ocean originate from land based sources and conveyed to the ocean via storm drains and area rivers.
94. Page 6-1, Paragraph 6.1.2. Alternative 1 is the status quo. The draft EIR assumes that the baseline condition is that everyone is using plastic carryout bags. The EIR should identify the actual baseline which includes a large number of people in Ventura and Santa Barbara counties that use reusable bags. In addition there is small segment that uses paper bags. The baseline should be adjusted to reflect the real world. Decision makers need to know what the current breakdown is in order to determine the amount of improvement that will be achieved with adoption of the proposed ordinance or one of the alternatives. It should be noted that some environmentally conscientious consumers use paper bags or reusable bags in order to avoid using plastic carryout bags.
95. Page 6-2, Paragraph 6.2.1 and Table 6-1. The assumptions about the number of bags needs to be revisited. See comment 11.
96. Page 6-3 and Page 6-4. The assumptions about the number of bags needs to be revisited. See comment 11.
97. Page 6-5, 2nd Paragraph, Line 11. Discarded fishing line and nets are the primary cause of entanglement of marine mammals. Plastic bags do not cause entanglement.
98. Page 6-6, Table 6-5. The assumptions about the number of bags needs to be revisited. See comment 11.
99. Page 6-7, Last Paragraph. In this alternative, there would be an increase in paper bag use. The use of paper bags and reusable bags that are disposed would either be recycled or end up in the landfill. Decision makers need to know the impact to landfill volumes and diversion.
100. Page 6-8, 2nd Paragraph and Table 6-6. The assumptions about the number of bags needs to be revisited. See comment 11.
101. Page 6-9, Table 6-7. The assumptions about the number of bags needs to be revisited. See comment 11.
102. Page 6-10, Table 6-8. The assumptions about the number of bags needs to be revisited. See comment 11.
103. Page 6-12, Table 6-10. The assumptions about the number of bags needs to be revisited. See comment 11.
104. Page 6-14 and Table 6-11. The assumptions about the number of bags needs to be revisited. See comment 11. Alternative 4 would mean 9.7 reusable bags per capita in the study area or 29 reusable bags per household (three people) or 39 reusable bags for a family of four. It should be obvious that the existing methodology does not yield reasonable results.
105. Page 6-15 and Table 6-12. The assumptions about the number of bags needs to be revisited. See comment 11.

106. Page 6-16, Table 6-13. The number of bags per truck load for single use plastic carryout bags is incorrect. Also the truck trips per day do not add up for alternative 3 total.
107. Page 6-17, 2nd Paragraph. The installation of trash excluders on storm drains in 2012 and 2013 would keep the bulk of plastic carryout bags and other trash out of the rivers, coastal areas, and the ocean. This alternative would eliminate windblown litter in sensitive environmental areas.
108. Page 6-17, 3rd Paragraph. Revise bag quantity estimates. See comment 11.
109. Page 6-18, Table 6-15. Why does the table have a row titled "Total GHG Emissions from Alternative 2"?
110. Page 6-19, 3rd Paragraph. Revise bag quantity estimates. See comment 11.
111. Page 6-20, Table 6-16. Revise bag quantity estimates. See comment 11.
112. Page 6-20, Last Paragraph, Line 7. Correct the spelling of the word "sale".
113. Page 6-21, Table 6-17. Revise bag quantity estimates. See comment 11.
114. Page 6-21, Last Paragraph. Truck trips are overstated since bag quantities are overstated.
115. Page 6-23, Second Paragraph. We need to remember that plastic and paper bags are interrupted in their journey to the ocean by trash excluders newly installed in 2012 and 2013 on storm drains that empty into creeks/rivers. Hence reduction in the amount of plastic bags and paper bags that could end up in litter would actually be beneficial as compared to either Alternative 1 or the proposed ordinance.
116. Page 6-24, Table 6-20. Revise the bag quantities. See comment 11.
117. Page 6-25, 1st Paragraph. Trash excluders will prevent the bulk of plastic carryout bags from entering creek/river and ocean environments.
118. Page 6-25, 3rd Paragraph, line 11. The statement that there are sufficient water supplies is as of today. See comment 5 and paragraph 4.3-4 where it is stated that future supplies of water cannot be guaranteed due to drought and uncertain climate conditions in the future as a result of climate change.
119. Page 6-25, Last Paragraph. Under this Alternative the volume and weight of plastic bags, paper bags, and reusable bags that are recycled and disposed of in landfills should be provided. See comment 92.
120. Page 6-26, 3rd Paragraph. The alternative titled "No Charge for Paper Bags" should have been considered. The public will question decision makers about the fact that if plastic bags are bad for the environment why not just ban them and leave it at that. Evaluating this alternative would have provided decision makers specific information as to how this option differs from the proposed ordinance or other alternatives.
121. Page 6-26, 4th Paragraph. The statement that biodegradable bags or compostable bags degrade the plastic recycling stream is noted. Less than 5% of plastic carryout bags are recycled. And increasing recycling of plastic carryout bags is not one of the alternatives considered in the draft EIR. Furthermore, while plastic carryout bags **cannot** be easily digested by marine mammals, a compostable bag will break down in the mammals stomach and be eliminated preventing the potential death of the animal. Hence, all things considered, biodegradable or compostable bags would be a good universal alternative.
122. Page 6-27, Paragraph 6-7. Alternative 4, while eliminating plastic and paper carryout bags would have very limited environmental impact. Trash excluders on storm drains will eliminate the majority of plastic bags, plastic debris, and trash that enter the riverbed and subsequently into the ocean or coastal bays. So the impact of alternative 4 would be limited to windblown litter on the side of the road or perhaps blown into the riverbed or directly into the ocean. These are relatively small amounts in comparison to the amount that used to come from storm drains.

Recommendations On The Proposed Model Ordinance

BEACON Single Use Carryout Bag Ordinance

By

Anthony van Leeuwen

4 March 2013

The following issues are presented for consideration by BEACON and involve modifications to the project, proposed model ordinances, and/or deal with issues that might be deemed outside the scope of the proposed EIR and need to be addressed:

1. The Elderly, Disabled, and Ergonomic Issues. One advantage often touted is that the reusable bag can hold more than the plastic bag. While that is true, often forgotten is the fact that if they hold more they weigh more! The reusable shopping bag presents ergonomic safety issues related to the fact that the weight of individual bags increased from an average of 10 lbs. for a plastic bag or a small reusable bag to 28 lbs. and 38 lbs. for the respective medium and larger versions of the reusable bag. The increase in weight is responsible for an increase in musculoskeletal disorders in retail store workers and could also be a concern for customers when lifting heavy bags including potential liability issues. In addition, heavier reusable bags also pose a significant problem to the elderly and disabled or people who have back problems or have had back surgery and are frequently restricted from lifting more than 10 lbs. **BEACON should consider that proposed reusable bags in the model ordinance take into account the ergonomic issues encountered by various classes of people including children, the elderly, and the disabled. This may be as simple as recommending several bag sizes vice the one size bag that holds as much as 22 lbs.**
2. Public Health Hazards. The proposed model ordinance attempts to shift consumers from using sanitary plastic and paper bags to using dirty reusable bags. My paper[1] identifies a number of health hazards presented to consumers: (1) the buildup of bacteria, yeast, mold, coliforms and E-Coli that can potentially cause foodborne illness or death; and (2) the transmission of contagious viruses including the common cold virus, croup, Giardia, influenza, meningitis, rotavirus diarrhea, norovirus, strep, and many other diseases. In addition, there are hazards associated with cross contamination of food and non-food items including hazardous substances. People with compromised immune systems are at greater risk from bacteria and viruses in reusable bags than people with normal immune systems. In addition, people who are homeless and cannot wash and sanitize reusable bags are also at risk! These health hazards can be overcome by regular washing or sanitization of

[1] Van Leeuwen, Anthony. 12 December 2013. "Negative Health and Environmental Impacts of Reusable Shopping Bags". Located in Appendix A on page 197 of the BEACON Single Use Carryout Bag Ordinance Draft Environmental Impact Report SCH#2012111093

reusable bags. In addition the paper identifies why incidents of illness attributed to Reusable bags are under reported. **Public health officials should review this information and the literature to develop guidelines for properly and safely using reusable bags. Public health officials should make recommendations as to how often reusable bags should be washed taking into account people with both normal immune systems and those whose immune systems are compromised.**

3. Public Awareness and Recycling of Plastic Bags and Wraps. A successful recycling program depends upon public awareness and education. The California legislature through AB 2449 and extended by SB 1219 created the In Store Recycling Program for recycling of plastic carryout bags. While grocery stores and retail stores have attempted to educate their customers about the in-store recycling bins, no one store has had the wherewithal to educated the public as a whole. Retail stores are in the business of selling products and competing with one another for consumer dollars. As a result, many people are not aware that the in-store recycling bins accept not only plastic carryout bags but also other plastic bags and plastic wraps for recycling. Hence, a lot of plastic is going to the landfill that could be easily be diverted if the public was better informed about the In Store Recycling Program. **An effort to reach out and educate the public about this program needs to be undertaken along with education efforts about the proposed ordinance or alternative that is adopted.**
4. Integral Recycling Component. The proposed model ordinance should have an integral recycling component. Not only should paper bags be recycled, but the use of paper bags and reusable bags will have a secondary effect of increasing the use of small lightweight single-use plastic bags in the retail store environment. For example, when a consumer purchases a frozen food item, such as Ice Cream, the package will sweat (condensed water vapor) making the paper bag wet, and when the bag is lifted it will tear and spill the contents. Therefore, items like ice cream will have to be placed in plastic bags and then placed in the paper bag to preserve the integrity of the paper bag. These lightweight single-use plastic bags will end up in the landfill unless recycled. These lightweight single use plastic bags can also become windblown litter even though they do not have the familiar "handles". Similarly, when the consumer purchases a hazardous material, such as a Black Flag Ant Poison, the item should be placed in plastic bag prior to being put in a reusable bag to avoid the possibility of contaminating the bag. Hence, even though there is a net reduction in the quantity of plastic carryout bags issued there will be an increase in non-regulated plastic bags. **This is why the proposed ordinance should have an integral recycling component**; otherwise, we will be back to where we started from.
5. Specific Detailed Comments on the Proposed Model Ordinance. The following comments are concerning the proposed model ordinance, included in Appendix B of the Draft Environmental Impact Report (EIR) dated February 2013, and include recommendations for improvement and consideration by BEACON and by decision makers who intend to implement the proposed model ordinance or one of the alternatives.
    a. Section 9.150.010 Paragraph F. The phrase "to prevent such food items from coming into direct contact with other purchased items" is incomplete. The purpose of a produce bag is to prevent contamination of the food product by preventing contact with contaminated surfaces (shopping cart and checkout stand surfaces, reusable bag surfaces, kitchen counters, etc.) and other food and non-food purchased items.

b. Section 9.150.010 Paragraph I. The reusable bag label or tag should include washing and drying instructions. In other words is the bag machine washable and dryer safe or hand washable or only air dryable.

c. Section 9.150.010 Paragraph I. The reusable bag definition specifies a minimum size of 15 liters and a minimum weight or 22 lbs. that must be carried. See comment 1 above about specifying both the small and medium sizes of reusable bags.

d. Section 9.150.020 Paragraph A. The ordinance should provide an exception for very large plastic carryout bags, such as the one that will hold large pillows or very large items. These plastic bags are distributed in much smaller quantities and do not present the litter problem that are caused by the common HDPE or LDPE plastic carryout bag distributed at grocery and retail stores.

e. Section 9.150.020 Paragraph B. This paragraph should include ”reusable bags” – see Section 9.150.010.D for similar statement.

f. Section 9.150.040 Paragraph D. Purpose 3 should be deleted. See comment 5.i below.

g. Section 9.150.040 Paragraph E. This paragraph states that retail establishments would be required to keep complete and accurate records and report annually to the governing jurisdiction. The intent of this paragraph is to ensure that the ordinance is properly implemented by the grocery or retail store. However, the reporting requirements by each retail establishment represents an increased cost of doing business. Grocery stores in particular are competing with each other and the big box stores and increasing their cost of doing business is certainly not welcome. On the other hand, the city or local jurisdiction must also expend labor hours to review reports from retail establishments and countless staff hours will be expended in preparing annual reports to the city council. **These labor expenditures will continue indefinitely unless the ordinance contains a sunset clause that allows reporting to cease after three years.** Three years should be a long enough of a time period for the city or local jurisdiction to determine that the retail establishment has successfully implemented the ordinance and to assess that the ordinance is accomplishing the intended purpose.

h. Section 9.150.040 Paragraph E. The reporting requirements as stated in this paragraph are very minimal and may not provide an accurate picture of the effectiveness of the proposed ordinance. Therefore it is highly recommended that consideration be given to include the following in the data to be provided by the retail establishments:

    1) The total number of paper bags sold.
    2) The total amount of monies collected from the sale of paper bags.
    3) The total number of paper bags provided free pursuant to Section 9.150.060
    4) The total number of reusable bags sold.
    5) The total number of reusable bags provided free pursuant to Section 9.150.060

i. Section 9.150.060 . The purpose of this section is to exempt a whole class of people who are on specific public assistance programs who are allowed to receive a paper bag or reusable bag at no cost. While some of these public assistance programs limit the type of items that can be purchased with program funds, some of the purchases have to be paid for in cash. Therefore, those on the assistance program would be able to pay cash for the paper bag or pay for reusable bags. If the motivation on the other hand is concern for the financial wellbeing of those on public assistance, then we have to ask the following question. **Why are the elderly who live**

from month to month on meager social security earnings not exempt! This certainly does not demonstrate equal justice for all. Therefore, it is recommended that Section 9.150.060 be removed for the following reasons:

1) The ordinance should apply equally to all people who shop at grocery and retail stores in the jurisdiction that has adopted the ordinance, including those who are on public assistance.
2) People who qualify for the free paper bags have no incentive to use reusable bags since a free paper bag will always be provided. This will create a permanent class of people who use paper bags thereby preventing a further reduction in paper bag use.
3) If the store provides a free reusable bag to shoppers who qualify under this section, there is no guarantee that the exempt shopper would bring the reusable bag with them the next time they shop; after all, the store will always provide a free paper or reusable bag.
4) If the store provides a free reusable bag to shoppers who qualify under this section, the shopper could turn around and sell the free reusable bags to someone else and pocket the money; after all, the store will always provide a free paper or free reusable bag the next time they shop.
5) The exemption for those on specific public assistance programs demonstrate that the goal to reduce paper bag use is not serious.
6) **If the ordinance is good enough for social security recipients who live from month to month on a meager social security earnings, then the ordinance is good enough for those customers who participate in various public assistance programs**.

j. Section 9.150.060, Paragraph A. This paragraph should be removed along with the entirety of Section 9.150.060 of the model ordinance. It creates a new and perpetual administrative burden for the jurisdiction that adopts the proposed ordinance by requiring the expenditure of public funds to pay for staff time and labor to administer this program.

15 March 2013

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Santa Barbara, CA 93101

Subj: Comments on the Draft Environmental Impact Report (DEIR)

Ref: (a) Notice of Availability of a Draft Environmental Impact Report BEACON Single Use Carryout Bag Ordinance dated 12 February 2013
(b) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 4 march 2013

Encl: (1) "Discussion Of Reusable Shopping Bags", by Anthony van Leeuwen, dated 15 march 2013
(2) "Detailed Comments on Draft EIR", by Anthony van Leeuwen, dated 15 March 2013
(3) "Plastic Carryout Bag Ban – More Plastic Headed To The Landfill", by Anthony van Leeuwen, dated 15 March 2013

1. Enclosure (1) and (2) are submitted in accordance with Reference (a) as public input regarding the content of the Draft EIR and the proposed ordinance.
   a. Enclosure (1) discusses reusable shopping bags from the perspective of retail store security including the role of reusable bags in shoplifting and theft as well as water consumption and restricted availability of water supplies in much of Ventura County. These issues will need to be addressed by BEACON and decision makers who implement the proposed ordinance or one of the recommended alternatives.
   b. Enclosure (2) provides a list of detailed comments on the Draft EIR.
   c. Enclosure (3) is resubmitted to emphasize the need for a recycling component in the proposed model ordinance.
2. It is requested that BEACON update the Draft EIR of 12 February 2013 based upon all comments received and post the Final EIR prior to EIR certification for verification by the public that comments and corrections made have been properly incorporated. It is further requested that a short window of opportunity be provided to provide last minute corrections to the Final EIR prior to EIR Certification. This request is based on the magnitude of comments submitted in Reference (b) and in Enclosure (2) of this letter.
3. This memorandum and enclosures are submitted in accordance with reference (a) and should become part of the official record regarding the preparation of this EIR and development of model ordinances. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted].

Respectfully,

Anthony van Leeuwen

Discussion of Reusable Shopping Bags

By Anthony van Leeuwen, 15 March 2013

Introduction

The reusable shopping bag is seen by many people as a solution to environmental, litter, and aesthetic problems associated with the use of plastic carryout bags. California State Legislators passed AB 2449 and SB 1219 that require grocery stores to offer reusable shopping bags for sale and to have a recycling bin for plastic carryout bags. The use of reusable bags by consumers was strictly on a *voluntary* basis with each person having the *freedom of choice*. Consumers who were *environmentally conscientious* and who chose to use reusable bags comprise a sizeable segment of today's shoppers. A study[1] titled "*Unearthing the truth about reusable grocery bags*" reports that **39%** of grocery shoppers use reusable bags, **53%** still use plastic carryout bags, and **8%** use paper carryout bags or no bags. The study further states that **63%** of people who use plastic carryout bags admit that they forgot to bring their reusable bags into the store.

The effort continues to further reduce the use of plastic carryout bags, with proponents proposing local ordinances that would ban plastic carryout bags and impose a fee on paper bags in order to *coerce resistant* consumers into using reusable bags. The proposed ordinance assumes that 65% of shoppers will choose to use reusable bags to avoid paying the per paper bag fee. This means the proposed ordinance would only increase reusable bag use from 39% to 65%, although proponents hope for a much larger increase. Proponents justify banning the plastic carryout bag based upon exaggerated claims of environmental damage as described in the video titled "*Are You Being Told the Truth About Plastic Bags?*":

http://www.youtube.com/watch?v=UdQUzxp9Mfw&feature=youtu.be

In addition, proponents of bag bans, often fail to inform the public and elected officials about an **inconvenient truth**, that other local projects such as the Total Maximum Daily Loads (TMDL) program mitigates the most egregious environmental problem attributed to plastic carryout bags. Trash TMDL projects for county rivers install hundreds of trash screens on storm drain outfalls to prevent plastic bags, other plastic debris, and trash from entering the riverbed and flowing to the ocean and thereby preventing harm to marine wildlife. It is well documented that 80% of plastic bags and plastic debris in the ocean comes from land based sources and are conveyed to the ocean by storm drains and rivers. Although it is still possible for plastic bags to become windblown litter and end up in the riverbed or ocean directly, this amount of plastic bags are deemed insignificant compared to the amount that previously came from storm drains. With the TMDL program preventing harm to biological and marine

[1] MaCorr Research Solutions. 2010. "Unearthing the truth about reusable grocery bags". Located at: http://www.macorr.com/blog/?p=142

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resources, the remaining problem is largely a roadside litter and aesthetics problem where plastic bags comprise less than 1% of roadside litter.

Most important is that the use of reusable bags have not been critically examined from a number of important aspects. First, the impact on retail store security, increased security costs, and merchandise losses due shoplifting and theft. Second, the impact of washing reusable bags for hygienic reasons and the resulting increase in water consumption with respect to water resources and water availability. It should be noted that local officials encourage water and energy conservation, and in times of drought could even prohibit the use of water for certain uses such as watering yards or washing cars. These areas concerning reusable bags are discussed in this paper.

Reusable Bags

Reusable Bags and Shoplifting

In an article[2] entitled "*Store owners say plastic bag ban causes more shoplifting*" Seattle store owners say that thieves with reusable bags are harder to track and in one store, owners reported thousands of dollars in merchandise losses. The highest losses occurred in stores in low income areas with many homeless and transients. According to survey data[3] released by the Seattle Public Utilities (SPU) Solid Waste Division in January 2013, 21.1 percent of business owners surveyed said that an increase in shoplifting occurred since the adoption of the plastic bag ban and customer use of reusable bags. Quoting from the article:

> *"They enter the store with reusable bags and can more easily conceal items they steal. The reusable bags require staff to watch much more closely, and even though the store has a loss-prevention officer and more than a dozen security cameras, it's tough to tell what a customer has paid for and what they may already have brought with them."*

By requiring customers to use reusable bags, the security posture of a retail store is *altered* increasing the problem with shoplifting and theft. In an article[4] entitled "How to Identify Shoplifters" the author describes shoplifting methods as follows:

> *Many of these thieves work in groups of two or more to distract the sales staff while they pilfer. Shoplifters learn to take advantage of busy stores during peak hours or they may hit at times when employees are less alert, such as opening, closing and shift changes.*
>
> *Hiding merchandise is the most common method of shoplifting. Items are concealed in the clothing of the shoplifter, in handbags,* **[reusable bags,]** *strollers, umbrellas or inside purchased*

[2] McNerthey, Casey. 28 February 2013. "Store owners say plastic bag ban causes more shoplifting". Seattle PI, available at: http://www.seattlepi.com/local/article/Store-owners-say-plastic-bag-ban-causes-more-4314744.php
[3] Seattle Public Utilities Plastic Carryout Bag Ban Survey, Seattle Public Utilities, January 2013. Available at: http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/01_025117.pdf
[4] Waters, Shari. 2013. "How to Identify Shoplifters". About.com Retailing. Available at: http://retail.about.com/od/lossprevention/qt/spot_shoplifter.htm

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> *merchandise. Bold shoplifters may grab an item and run out of the store. Other methods include price label switching, short changing the cashier, phony returns, and so on.* [**bold text inserted for completeness and emphasis**]

The number of people who bring handbags into a retail store is relatively small compared to the number of people who bring in reusable shopping bags. In other words, the problem of store security is exacerbated. Reusable shopping bags can be used to hide a weapon which is a particular concern for convenience stores (e.g. Circle K, 7-11, etc.) who are more apt to be robbed. In addition, the reusable shopping bag can used to pilfer merchandise as described in the following scenario:

> *A shoplifter could simply walk into a store and purchase an item. The shoplifter would pay for the item and walk out of the store and hand the item to an accomplice who holds item while the shoplifter either re-enters the same store or a different store and picks up the same item and puts it in the reusable bag. If challenged, the shoplifter would pull out the receipt to show that the item was previously paid for.*

While many variations to the above scenario or scam exist, the scam becomes particularly egregious if the **plastic carryout bags are banned at all retail stores**, such as stores in your local shopping mall where shoppers would carry reusable bags from one store into another as they shop!

The higher security costs and losses due to theft will be offset by higher prices. Since shoplifting losses are predominantly in low income areas, **residents** of these areas will be *disproportionately harmed*.

Reusable Bags and Bag Hygiene

In an article[5] titled "*Negative Health and Environmental Impacts of Reusable Shopping Bags*" the author identifies a number of health hazards to consumers including the following:

1. The buildup of bacteria, yeast, mold, coliforms and E-Coli that can potentially cause foodborne illness or death.
2. The transmission of contagious viruses including the common cold virus, croup, Giardia, influenza, meningitis, rotavirus diarrhea, norovirus, strep, and many other diseases.
3. Bacterial cross-contamination of food items e.g. food items eaten raw by poultry and meats.
4. Cross-contamination of food items with residue from cleaning products or pesticides previously carried in the bag.

The problems mentioned above can be solved by consumers washing their reusable bags on a regular basis and/or when they become contaminated. Hand washing or machine washing reusable bags reduces bacterial and viral contamination by more than 99.9%. The importance of washing bags on a regular basis cannot be overemphasized. Most people have the facilities at home to wash reusable bags but it is important to understand that those who are homeless, live in their cars, or live in a homeless encampment, do not have the facilities to wash reusable bags, putting these people at risk. While the

[5] Van Leeuwen, Anthony. 12 December 2012, "Negative Health and Environmental Impacts of Reusable Shopping Bags". Located in Appendix A on Page 197 of the BEACON Single Use Carryout Bag Ordinance Draft Environmental Impact Report SCH#2012111093. Available at: http://www.beacon.ca.gov/index.htm

homeless might get a free paper bag or a free reusable bag, the reusable bags will prove to be particularly attractive because of its durability and because it holds more.

Washing reusable bags increases household consumption of energy and water.

Water Consumption

Reusable Bags and Water Consumption

The requirement to wash reusable shopping bags increases the consumption of electricity, natural gas, and water. Both energy and water are subject to conservation by consumers as required by both state and local jurisdictions. In an article[6] entitled "*Ventura's water supply could shape growth and development*" the author identifies that water may not be as abundant as thought. In a memorandum[7] to the Ventura City Council, the general manager of Ventura Water states:

> *"In the western United States, most water resources have been challenged by drought conditions, increased demand, ecosystem habitat protection and water quality concerns. Ventura is no exception. Changing pressures on our local water sources is driving the need to create a more holistic and integrated approach to water supply, demand and infrastructure management."*

In addition, the memorandum makes the following statement:

> *"prudent planning and collaboration will be needed in the coming years to develop practical strategies to manage demand, balance economic growth, and pursue new water supplies."*

Also, the Draft EIR (page 4.3-4) in the paragraph titled "Water Supply" states that future water supplies in California are **uncertain** and may be limited:

> *Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los*

[6]Martinez, Arlene. 5 March 2013. "Ventura's water supply could shape growth and development". Ventura County Star. Available at: http://www.vcstar.com/news/2013/mar/05/venturas-water-supply-could-shape-growth-and/

[7] City of Ventura Administrative Report, John F. Johnson and Shana Epstein to the Mayor and City Council dated 28 January 2013 and available at: http://www.cityofventura.net/files/file/meetings/city_council/2013/03-04-13/item%2003%282%29.pdf

Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR], 2008; CCCC, May 2009).

It should be noted that Ventura County experienced a number of droughts, and on several occasions water use was prohibited for watering yards and washing cars.

The Draft EIR (page 4.5-10) estimates that washing reusable bags would increase water consumption by **470.5 AFY** for both Ventura and Santa Barbara counties based upon washing an estimated quantity of 8,228,018 reusable bags. The quantity of reusable bags is overstated, and when corrected will reduce the estimated water consumption to about **316 AFY** assuming 65% of households use a reusable bag with a worst case of **396 AFY** if 100% of households use a reusable bag. The draft EIR indicates that these water consumption amounts are within the reserve capacity of study area water supplies.

Reusable Bags, Bag Costs, and Utility Costs

The cheaper reusable bags are made from various plastics and may not really be machine washable or dryable. Cotton or Hemp bags that are durable and machine washable and dryer safe will cost the consumer somewhere between $4 and $23 each. While hand washing and air drying reusable bags uses less water and energy, it is expected that consumers will gravitate toward machine washable and dryable bags for both durability and convenience. Which means more water and energy use.

Utility costs for washing reusable bags depend upon both the frequency at which bags are washed and also depend upon the type of appliances: front loader and top loader washing machine; gas or electric

	Low/High	Yearly Cost (1 X per Month)	Yearly Cost (1 X per Week)
Household	Low	$8.54	$37.00
	Mid	$14.31	$62.00
	High	$17.54	$76.00
Total / Ventura 42,827 Households in City of Ventura	Low	$365,742.58	$1,584,599.00
	Mid	$612,854.37	$2,655,274.00
	High	$751,185.58	$3,254,852.00
Total / Ventura County 243,234 Households in Ventura County	Low	$2,077,218.36	$8,999,658.00
	Mid	$3,480,678.54	$15,080,508.00
	High	$4,266,324.36	$18,485,784.00

Notes: (1) Low assumes front loading washer, gas dryer and water heater.
(2) Mid assumes top loading washer, electric dryer, and gas water heater.
(3) High assumes top loading washer, electric dryer and water heater.
(4) Dollar figures represent the increased utility costs.

Table 1 Yearly Cost Of Washing Reusable Bags Depending Upon Type Of Appliances

NOTE: Table 1 can be adapted for your community/county by multiplying the number of households by Low, Mid, and High values from the per month and per week columns.

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dryer; and, gas or electric water heater. The annual utility cost for washing reusable bags on a monthly and weekly basis using three options for appliance type are denoted in Table 1 as: Low, Mid, and High.

For a typical family that has 12 machine washable reusable cotton bags (12 x $4 = $48 plus 7.25% sales tax is $51.48) and wash them once per month for an annual cost ("Mid" option) of about $14.31 the total **first year cost is $65.79**. In households where a family member has a compromised immune system or other medical condition, reusable bags may have to be washed as often as weekly or between uses. That household's first year costs would increase to about **$113.48**. Most of the bags have to be replaced every other year, so consumers will get hit with the recurring cost of buying new bags. It should be noted that these bags are cotton or canvas bags and not the polypropylene woven bags used weekly for 52 weeks with a lifespan of 1 year as identified in the Draft EIR.

Summary

The adoption of the proposed ordinance to ban plastic carryout bags in favor of consumers using reusable bags will have unintended consequences. First, it will exacerbate retail store security resulting in higher merchandise losses from shoplifting and theft. Increased retail store costs will be offset by higher prices which will disproportionately be felt by low income residents. Second, consumers will be faced with the health consequences and cross contamination issues of reusable shopping bags and the need to wash those bags on a regular basis resulting in higher utility bills plus the additional cost of purchasing reusable bags.

Elected officials and decision makers will have to determine if the proposed ordinance or one of the alternatives selected will improve the plastic bag litter situation in light of the fact that the most egregious environmental impact of plastic carryout bags has been solved by the Total Maximum Daily Loads (TMDL) program. The Trash TMDL project interrupts the flow of plastic bags and debris to the ocean by installing trash screens on storm drain outfalls thereby preventing harm to marine wildlife.

In addition, decision makers will have to determine if reserve water capacity should be saved for future commercial and residential development projects or whether to **squander** a portion of that reserve capacity to wash reusable bags.

The recurring consumption of water and energy to wash reusable bags is a waste of scarce resources especially when you consider that sanitary plastic and paper bags are readily available off-the-shelf! Water and energy can be more efficiently used during the manufacturing process of plastic and paper carryout bags than by consumers washing reusable bags!

Detailed Comments on Draft EIR

BEACON Single Use Carryout Bag Ordinance

By Anthony van Leeuwen, 15 March 2013

The following comments are submitted on the Draft Environmental Impact Report (EIR) dated 12 February 2013.

1. Page ES-1, 1st Paragraph, Line 11. "for recycled paper bags and at the point of sale" should state "for recycled paper bags at the point of sale".
2. Page ES-1, Last Paragraph, Line 3. "Regulated plastic carryout bags" are not defined. Is the single use carryout bags mentioned in line 1 of this paragraph a "regulated" bag?
3. Page ES-2, 1st Paragraph, Line 2. Are "Recyclable paper carryout bags" also considered regulated bags? If so, then you need to clearly define regulated bags. If not, then how can you justify the that the retail establishment charge the customer a fee for each paper bag issued?
4. Page ES-2, 2nd Paragraph, Line 1. The statement "the Proposed Ordinance would prohibit the sale or distribution of single use carryout plastic bags" contradicts the statement on page ES-1: "The ordinance would (1) prohibit the free distribution of single use carryout paper and plastic bags … at the point of sale". NOTE: There is nothing in the proposed ordinance that would prohibit a store from selling plastic carryout bags, packaged in bulk, and sold for a profit just as they sell single use plastic trash bags.
5. Page ES-4, Table ES-1, Impact GHG-1. The Impact Statement is incomplete in that it does not identify the increase in GHG emissions as result of washing reusable bags. Compare with Page ES-5, Impact U-1 and Impact U-2 statements that identify the increase water consumption with washing reusable bags.
6. Page ES-5, Table ES-1, Impact U-3. The Impact Statement is incomplete in that it does not identify disposal of reusable bags. In addition, diversion to recycling activities is not mentioned at all. It should be noted that diversion of bags to recycling activities is an important method to decrease material dumped in a landfill.
7. Page 1-1, 1st Paragraph, Line 3. This paragraph is an introductory paragraph to the Draft EIR which covers the proposed ordinance and a five alternatives. In this paragraph it describes the proposed ordinance as limited to stores that sell "groceries"? What about Alternative 2 that would ban plastic carryout bags in all retail stores? Suggest you rewrite the paragraph to cover the scope of the recommended alternatives, and then narrow it down to the proposed ordinance.
8. Page 1-1, Last Paragraph; Page 1-2, 1st Paragraph. The statement "the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) has prepared a Single-Use Carryout Bag Ordinance … that participating agencies … may consider for adoption" is not correct. BEACON prepared a "model ordinance" or a template (i.e. draft) that local agencies can adapt and customize in preparing their own ordinance.

9. Page 1-2, 3rd Paragraph, Line 3. Since when is the City of Seattle in California? I would certainly like to know where in California it is located!
10. Page 1-2, 3rd Paragraph. What is the purpose of listing these counties and cities that have implemented similar ordinances to ban plastic carryout bags? Are there any lessons learned from these cities that would be applicable to decision makers in Ventura and Santa Barbara counties when adoption of the proposed ordinance or one of the alternatives is considered?
11. Page 1-4, Table 1-1, Topic No. 11. In the Response column, it should indicate that up to 40% of plastic carryout bags are re-used by consumers as trash bags in lieu of purchasing small trash bags. This complements the statement that 5% of plastic carryout bags are recycled.
12. Page 2-9, 5th Paragraph, Lines 1 and 3. Are "Regulated plastic carry out bags" the same as "Single-use carryout bags"? Is a paper bag not also considered a "Single Use carryout bag"? You need a good definition of what a regulated bag is.
13. Page 2-10, Last Paragraph; Page 2-11, 1st Paragraph. In this paragraph it states that 65% of the plastic bags would be replaced by 8,228,018 reusable bags. It further states that this amounts to seven (7) reusable bags per person in the study area. In my book, 100% of plastic carryout bags are used by 100% of the population; therefore, 65% of the plastic carryout bags are used by 65% of the population. If you say each person in the study area is using reusable bags, who is using the 197, 72,422 Single use paper bags? Suggest you relook at this paragraph, correct your conceptual errors and rewrite the paragraph.
14. Page 4.1-6, Table 4.1-3. A research study by MacOrr Research Solutions reports that 39% of market research respondents indicated they have already switched to reusable bags and that 53% still use plastic carryout bags. This study is titled "Unearthing the truth about reusable grocery bags" and available at: http://www.macorr.com/blog/?p=142. The Draft EIR assumes 100% of the population uses plastic carryout bags as the baseline condition. The research study would suggest 53% use plastic carryout bags, 8% paper bags, and 39% reusable bags as a baseline condition. It is recommend that the baseline condition be more representative of reality. If the percentages cited are accurate, then the proposed ordinance would only increase reusable bag use from 39% to 65% for an increase of just 26%! Recommend that you take a hard look at this and update the baseline condition.
15. Page 4.2-2, Last Paragraph, Line 13. The following video challenges the statement that plastic bags cause *physical entanglement* and other myths. The video is available at: http://www.youtube.com/watch?feature=player_embedded&v=UdQUzxp9Mfw
16. Page 4.2-9, 2nd Paragraph. The statement "Plants or animals have "special-status" due to declining populations, vulnerability to habitat change, or restricted distributions" is poorly written. Some plants or animals have been designated as an endangered species and given "special status" because of declining populations, vulnerability to habitat change, etc. However, there is a process required to obtain such a designation and not all plants and animals have this "special status" as implied. Please clarify and rewrite the sentence.
17. Page 4.3-1, 3rd Paragraph, Last Line. Water vapor is produced by evaporation of water from both land and ocean surfaces.
18. Page 4.3-7, Table 4.3-1. The table should be updated to reflect the true baseline condition. See comment 14 above.

19. Page 4.3-9, 5th Paragraph, Line 10. Correct the spelling of "Santa Barbra[sic] County".
20. Page 4.3-15, Table 4.3-5, Heavy-Duty Vehicle Emission Reduction Measures. The statement in the "Consistent" column: "The heavy-duty trucks that deliver carryout bags to and from Study Area retailers on public roadways would be subject to all applicable ARB efficiency standards that are in effect at the time of vehicle manufacture" is **wrong**. The Heavy-Duty Vehicle Emission Reduction Measures program requires both new tractors and trailers to be SmartWay℠ certified (Aerodynamic changes and Low Rolling Resistance Tires). In addition, older trucks and trailers are phased in over a period of 11 years beginning in 2010. More information is available at: http://www.arb.ca.gov/cc/hdghg/hdghg.htm
21. Page 4.3-15, Table 4.3-5, Achieve 50% Statewide Diversion Goal. The diversion of plastic carryout bags, paper carryout bags, and reusable shopping bags are not covered in the Draft EIR. The Draft EIR assumes all discarded bags go the landfill, vice recycled. Established percentages of bags recycled are available and are mentioned in various places in the Draft EIR. Recommend that a recycling component be added to the proposed ordinance and estimated amounts of material diverted to recycling activities be identified.
22. Page 4.4-1, Paragraph 4.4.1, 1st Paragraph. What is meant by the statement "Therefore, impacts to hydrology and water quality are not limited to the local watershed"? This is somewhat confusing and needs more clarification. It is understood that plastic, paper, and reusable bags are not known to be manufactured in the study area. However the comparative hydrology and water quality impacts for the manufacture of different types of bags is to be considered in the Draft EIR in order to identify the solution with a lower environmental impact.
23. Page 4.5-7, 1st Paragraph, Line 6. The statement "a reusable bag (used 52 times) would generate 0.001 kg of waste per bag" does not make sense. Is this solid waste per bag per use or solid waste per bag? A plastic carry out bag generates 0.0065 kilograms or 6.5 grams per bag of solid waste. So how can a reusable bag that weighs at least ten times more than a plastic carryout bag only generate 1 gram of solid waste?
24. Page 4.5-7, 1st Paragraph. Since solid waste is calculated on an annual basis, the estimated solid waste generated from reusable bags should be calculated based upon the lifespan of reusable bags (the Draft EIR assumes a reusable bag is used weekly for 52 weeks with a lifespan of 1 year) and calculated by multiplying the estimated weight of a reusable bag times the quantity of bags. So based upon the Draft EIR, the number of 8,228,018 reusable bags each weighing 6.8 ounces would generate 1,749.45 tons of solid waste per year. In comparison the 658,241,406 plastic carryout bags generates 4,733 tons (Draft EIR Table 4.5-8) of solid waste per year. Because the quantity of plastic carryout bags and reusable bags are overstated actual amounts will be far less. Nevertheless, diversion of plastic carryout bags, paper bags, and reusable bags to recycling activities should be a priority in the proposed ordinance and alternatives because diversion to recycling activities is a stated goal and in order to reduce tipping fees at the landfill.
25. Page 4.5-11, 5th Paragraph. The statement "Solid waste generated within the Study Area is taken to various landfills operating within Santa Barbara and Ventura Counties" ignores the fact that plastic bag, paper bag, and reusable bag waste can be diverted to recycling activities!
26. Page 4.5-11, Last Paragraph. The information in this paragraph is bogus. See comment 24 above. Table 4.5-11 has erroneous data for reusable bags and table 4.5-12 does not account for

reusable bags hence conclusions cannot be drawn for the solid waste generated. Both numeric values in this paragraph are wrong. Please correct.

27. Page 4.5-13, Last Paragraph, Lines 7-9. The statements concerning reduction and increase in solid waste generated need to be corrected. See also comments 24, 25, and 26 above.
28. Page 6-2, Alternative 2. One of the unintended consequences of expanding the plastic carryout bag ban to all retail establishments is the increase in shoplifting and merchandise losses that would result. The increased security costs and merchandise losses will result in increased costs to the consumer through higher prices. See Enclosure (1) to this letter for more information.
29. Page 6-15, Table 6-12. The number of single-use plastic bags cited in the table is incorrect and does not agree with Table 6-11. This will affect other values calculated in this table.
30. Page 6-16, Table 6-13. The number of reusable bags per truckload does not appear to be correct. See Table 6-8 for correct values.
31. Page 6-24, Table 6-20. The line item "Total GHG Emissions from Alternative 2" should refer to the current Alternative 5 and not 2. Perhaps it would be more clear if it stated "Total GHG Emissions for this Alternative".

Plastic Carryout Bag Ban – More Plastic Headed To The Landfill

By Anthony van Leeuwen, 15 March 2013

One of the unintended consequences of banning plastic carryout bags is that more plastic will be headed to the landfill the exact opposite of what proponents of the plastic carryout bag ban want.

California state law (AB 2449) requires retail stores that issue plastic carryout bags at the checkout counter must have a recycling container in or outside each store. This recycling container not only accepts plastic carryout bags, but also other plastic bags and shrink wrap. These include produce bags, dry-cleaning bags, bread bags, newspaper bags and shrink wraps from paper towels, bathroom tissue, napkins, and diapers.

In extending the expiring AB 2449 by SB 1219, California legislators noted that the program enjoyed "modest success" in recovery of plastic carryout bags but they pointed out that the recovery of plastic shrink wrap and film increased "more dramatically" and avoided sending this material to the landfill.

For example, in 2009 retail stores purchased 53,000 tons of plastic carryout bags and 1,520 tons were recycled for a recovery rate of 2.9%. In addition, 17,589 tons of other plastic bags and film was recycled through this program. That means there were 11 tons of other plastic bags and film recycled for every ton of plastic carryout bags.

It should be noted that plastic bags and plastic film that are recycled through the In-store recycling programs are not accepted for recycling in the curbside recycling bins or by the Gold Coast Recycling and Transfer Station. The reason cited is that the cost of separating the plastic bags and wraps from other recycled material makes it uneconomical. In addition, plastic bags and film get stuck in the sorting equipment. [**Note:** The City of Santa Barbara allows residents to put clean plastic bags and film in the blue curbside recycle barrel; whereas, in Ventura County cities, residents cannot.]

One inherent weakness of AB 2449/SB 1219 is that only stores that issue plastic carryout are required to establish and maintain an in-store recycling program; other stores may do so on a voluntary basis.

That means Big Box Stores that do not issue plastic carryout bags do not have to establish an in-store recycling program. These stores can make a profit from the sale of products containing

plastic shrink wrap and film, and the cost of recycling that material is then borne by retailers who do issue plastic carryout bags (i.e. grocery stores).

Retail stores are compensated for every ton of plastic bags and plastic wrap turned in for recycling; However, labor costs to maintain the in-store recycling program are much greater with the difference made up by shoppers through higher prices. Hence, there is little incentive for retail stores to continue the In-store recycling program once plastic carryout bags are banned and the stores are no longer subject to AB 2449/SB 1219. In San Francisco the plastic carryout bag ban has led grocery stores to **shut down** their plastic bag recycling programs.

In the event a ban on plastic carryout bags is adopted in Ventura County or one of the incorporated cities, retail stores will more than likely terminate their in-store recycling programs. As a result, consumers will lose access to facilities for recycling plastic bags and plastic shrink wrap. Since this material is NOT accepted in the curbside recycling bin, consumers will have no other option than to dispose of this material in the trash bin resulting in more plastic going to the landfill instead of being recycled.

Ventura County and incorporated cities would do well to build upon the existing infrastructure of in-store recycling programs by NOT banning plastic carryout bags. Many consumers are unaware that other plastic bags and plastic shrink wrap can also be recycled through the in-store recycling programs. A better job of educating the public will help to improve not only the recovery rate of plastic carryout bags but other plastics bags and wraps as well - keeping more plastic out of the landfill.

Diversion of plastic from landfills to recycling activities should be a component of the proposed ordinance.

25 March 2013

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Subj: Comments on the Draft Environmental Impact Report (DEIR)

Ref: (a) Notice of Availability of a Draft Environmental Impact Report BEACON Single Use Carryout Bag Ordinance dated 12 February 2013
(b) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 4 March 2013
(c) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 15 March 2013

Encl: (1) "Detailed Comments on BEACON Draft EIR", by Anthony van Leeuwen, dated 25 March 2013

1. Detailed comments in Enclosure (1) are submitted in accordance with reference (a) as public input regarding the content of the BEACON Draft EIR and the proposed project.

2. Based on the magnitude of comments submitted in this letter and previously submitted in references (b) and (c) and that substantial changes to the Draft EIR are required, it requested that a revised Draft EIR be posted for a second 45-day public review and public comment period in accordance with CEQA Guidelines § 15088.5.

3. This memorandum and enclosures are submitted in accordance with reference (a) and should become part of the official record, including links to documents available on the internet, regarding the Preparation of this EIR and development of model ordinances. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted].

Respectfully,

Anthony van Leeuwen

Detailed Comments on Draft EIR

BEACON Single Use Carryout Bag Ordinance

By Anthony van Leeuwen, 25 March 2013

1. Page ES-1, 2nd Paragraph, Line 12. Allowing a regulated retail establishment to distribute reusable bags free of charge, other than for a short term promotion, will result a proliferation of reusable bags since customers would be issued a new reusable bag every time they forget to bring reusable bags to the store. In an article[1] titled "*Bag the bag: a new green monster is on the rise*" the author identifies Australia's growing mountain of green reusable bags which end up in the landfill and are causing a concern. It turns out that stores profit from the sale of reusable bags and sell more than required by the public. Since the majority of reusable bags are not recyclable, except for LDPE or HDPE bags, they end up in the landfill. It follows that free giveaways unless limited to a short term promotion would result in a worse environmental problem than the use of plastic carryout bags. It is recommended, that the proposed ordinance limit reusable bag giveaways and modify language in the proposed ordinance to reflect that.
2. Page ES-2, 1st Paragraph, Line 6 and 7. The requirement that the recyclable paper bag contain no "old growth fiber" should be deleted. There is no way to determine that paper bags are not made from old growth fiber. This requirements is for appearance and political correctness only. Since there is no county, state, or federal agency identified in the ordinance assigned to test recyclable paper bags in the laboratory (if even possible) to verify no old growth fiber was used in manufacturing, it is recommended that this requirement be deleted. Furthermore, certification by the manufacturer is meaningless without certification from the paper manufacturer and without certification from the lumber jack that he did not harvest an old growth tree. Recommend you drop this unneeded requirement. See also comment #3 below.
3. Page ES-2, 1st Paragraph, Line 6 and 7. The requirement that recyclable paper bags have printed on them the amount or percentage of post-consumer content is also meaningless. For example, on the reverse side of the DEIR title page is printed: "*This report is printed on 50% recycled paper with 30% post-consumer content and chlorine-free virgin pulp*." This statement likewise is meaningless and incorporated merely for appearance and political correctness. There is no guaranty that any printed copy of the DEIR used paper with 30% post-consumer content, despite the statement. Similarly, printing the percentage of post-consumer content on the recyclable paper bag doesn't mean that the bag was manufactured from paper having that percentage of post-consumer or recycled content. Since, no testing of bags or of the paper is required by an independent laboratory, the requirement to print the percentage of post-consumer content on paper bags should be removed. The statement is for appearance and political correctness only.

[1] Munro, Peter. 24 January 2010. "Bag the bag: a new green monster is on the rise." Located at: http://www.theage.com.au/national/bag-the-bag-a-new-green-monster-is-on-the-rise-20100123-mrqo.html

4. Page ES-4, Table ES-1, Impact BIO-1 and Impact GHG-1. General Comment. The terms "recycled paper bag" and "recyclable paper bag" are both used to describe paper bags. Which is correct? This occurs in multiple places. It is recommended, that the correct terminology be used and standardized throughout the Draft EIR.
5. Page ES-4, Table ES-1, Impact HWQ-2. The reference to AB 258 should be removed. AB 258 applies to pre-production plastic and is irrelevant to paper bag manufacturing. AB 258 applies only to manufacturers of single-use plastic carryout bags and potentially to manufactures of plastic reusable carryout bags.
6. Page 1-1, 2nd Paragraph, Line 3. Would the proposed ordinance be applicable to a fabric store that has a candy and soda machine on its premises to sell candy and soda to customers? Recommend that language in the DEIR and the Proposed Ordinance be clarified.
7. Page 2-6, 1st Paragraph. The following statement demonstrates a prejudicial bias in favor of paper bags since a corresponding statement on behalf of plastic bags was not provided: "*Paper bags have many other uses outside of grocery stores, including use as recycling and composting containers, school book covers, gift wrap, and other craft projects, and use for picnics or sporting events*". In contrast, throughout the DEIR reuse of plastic carryout bags is described as follows: "*Post-use from a retail store, a customer may reuse a single use plastic bag at home, but eventually the bags are disposed of in the landfill, recycling facility, or discarded as litter*." In the article[2] entitled "*Why not to Ban Plastic Carry Out Bags*" (DEIR, page 228 of 333) the author cites that plastic carry out bags are used for: trash bags, waste bin liners, dog or cat litter, lunch bags, gym or sports gear, picnic supplies, hold toys, hold wet clothes, and are used in a multitude of craft projects including making mats for the homeless, place mats, totes, and even items for sale. In fairness, it is recommend that plastic carryout bags also be described in the DEIR as having multiple uses just like paper carry out bags.
8. Page 2-6, 4th Paragraph. The statement "*The production stages in reusable bag life cycles depend on the materials used. Once used, these bags are reused until worn out through washing or regular use, and then typically disposed either in the landfill or recycling facility*" is nothing more than an assumption. The fact is, no one knows how long a reusable bag will be used before being discarded. It could be discarded when the bag gets dirty or contaminated or when the consumer receives a new free reusable bag or purchases a replacement bag. Furthermore only LDPE or HDPE reusable bags (these are hard to find) are recyclable and the most common bag made from non-woven polypropylene (PP) is not recyclable in Ventura County and most likely not in Santa Barbara county as well. The DEIR should address the recyclability and availability of recycling centers in Ventura and Santa Barbara Counties for all types of reusable bags. If recycling facilities are not available to consumers, than **consumers would be replacing a recyclable plastic carry out bag with a non-recyclable reusable bag** and thereby negatively impacting the landfill.
9. Page 2-7, Last Paragraph, Line 3. The DEIR should identify that in the event of a plastic carryout bag ban, that retail stores would no longer be required by state law to provide a recycling bin for

[2] Van Leeuwen, Anthony. 23 December 2012, "Why Not To Ban Plastic Carry Out Bags", Located in Beacon Single Use Carryout bag Ordinance Draft Environmental Report SCH #2012111093 dated February 2013, Page 228 of 333.

plastic carryout bags. This means that the consumer would lose access to the only recycling facility available in Ventura County for produce bags, newspaper bags, plastic wraps, and reusable LDPE and HDPE plastic carryout bags. Hence, a loss of recycling capability available to the consumer. **The Draft EIR should make this information available to decision makers and to the public. The loss or potential loss of recycling facilities affect State and County goals to divert material from landfills for reuse, repurpose, or recycling.**

10. Page 2-8, 1st Paragraph. In the event of a plastic carryout bag ban, retail stores will no longer be required by state law to maintain records and make them available to CalRecycle. **The Draft EIR should make this information available to decision makers and to the public.**

11. Page 2-9, 1st Paragraph. Would the proposed ordinance be applicable to a "fabric" store that sells a limited line of snacks, soda, water, ice-cream on the premises? See also comment #6 above.

12. Page 2-9, 5th Paragraph, Line 8 and Line 9. How will you determine that the paper bag does not contain old growth fiber? How will you determine that the paper bag has 40% post-consumer recycled material? The proposed ordinance has no means identified to test paper bags either to determine that they have no old growth fiber or to determine the percentage of post-consumer content. In both cases, you have to take the word of the paper bag manufacturer and paper manufacturer, the lumber mill, the lumberjack. Hence it is recommended that these requirement be deleted since they are unenforceable. See also comment #2 and #3 above.

13. Page 2-10, 1st Paragraph. Stores that currently issue paper bags in Ventura County such as Trader Joes routinely double bag groceries because the paper handles have a tendency to tear off. It is expected that widespread use of paper bags will result in close to double the number of paper bags estimated because of double bagging. This means that environmental calculations will be off. Perhaps the proposed ordinance should require that paper bags have no handles in an effort to discourage double bagging. Also, in computing the number of paper bags used, a factor should be applied that would estimate the effect of double bagging on total quantities of paper bags estimated. In addition, the proposed ordinance should address double bagging in relation to the fee charged per paper bag.

14. Page 4.1-5, 2nd Paragraph, Line 7. **General Comment and applicable throughout this DEIR**. The LDPE reusable bag used for environmental analysis throughout the DEIR, is not representative of reusable bags used by the consumer. In fact, the LDPE reusable bags are hard to find and represent a very small fraction of reusable bags. The most common reusable bag is the non-woven Polypropylene bag and that is what most consumers use who are not using fabric bags. The environmental analysis in the EIR should be conducted using the type of bags most commonly used by consumers in the study area. It is suggested that BEACON consider the non-woven Polypropylene and Cotton reusable bags as being representative of reusable bags for analysis purposes.

15. Page 4.1-9, 2nd To Last Paragraph. **General Comment**. The following statement is **FALSE**: "*However, because LDPE reusable bags are one of the most **common** types of reusable bags and are of similar durability and weight (approximately 50 to 200 grams) as other types of reusable bags, this Program EIR utilizes the best available Information regarding specific metrics on a per bag basis to disclose environmental impacts associated with the Proposed Ordinance.*" A Low

Density Polyethylene (LDPE) or High Density Polyethylene (HDPE) bag is a thick plastic bag. This bag is very hard to find. The most common bags are the nonwoven polypropylene (PP) and cotton bags. The statement that LDPE reusable bags are representative of all reusable bags because they are of similar durability and weight is **baseless and wrong**. The material from which the reusable bags are made from is critical to their environmental impacts. **To base the environmental analysis on an LDPE Reusable bag that almost no one uses invalidates the finding in the DEIR**. The DEIR should be based upon the most common bag types that will be available to consumers and it suggested that BEACON consider the non-woven Polypropylene (PP) and Cotton bags for this analysis. This comment affects many of the sections in the DEIR having to do with environmental analysis and calculations.

16. Page 4.1-9, 2nd To Last Paragraph. This a general comment and is applicable to other places in the DEIR. The assumption that a reusable bag is used weekly for 52 weeks with a lifespan of 1 year is not based upon factual evidence, but on guesswork. Since most reusable bags must be used more than a 100 times in order to offset the negative environmental impacts it is recommended that the usage model for the reusable bag be changed, such that the environmental impacts of reusable bags on a per use basis is less than using a plastic carry out bag. Unless this is accomplished, the environmental impact of the proposed ordinance would be greater than the status quo, or Alternative 1.
17. Page 4.2-12, 2nd Paragraph, Line 5. The following statement does not make sense: "*Therefore sensitive species such as sea turtles, mammals, and bird species would benefit from the Proposed Ordinance, which would reduce the amount of litter that could enter the marine environment*." The benefit a marine species receives from the proposed ordinance does not cause a reduction in the amount of litter that would enter the marine environment. It should be noted that the TMDL program and installation of trash excluders or full capture devices will reduce the amount of litter that enters the marine environment, thereby preventing harm to marine wildlife! Furthermore, the proposed ordinance will have little benefit on marine wildlife. The sentence needs to be rewritten.
18. Page 4.3-13, Table 4.3-3. This is a general comment and applicable to other places in the DEIR. The **GHG Impact Rate per Bag** for **Reusable Bag Type** of 2.6 is applicable to the LDPE reusable bags but not to other types of reusable bags. According to the British report[3] with 40.3% of plastic carryout bags re-used as bin liners or trash bags a Paper bag must be used 4 times to equal a plastic carryout bag; an LDPE reusable bag, 5 times; a Non-woven PP reusable bag, 14 times; and a Cotton reusable bag, 173 times. The Los Angeles County DEIR[4] uses a figure of 104 to represent an averaging of the most commonly available PP and Cotton bags. The DEIR should update the environmental impacts of reusable bags by using realistic assumptions. Note: This comment is applicable to Table 6-5, Table 6-10, Table 6-15, and Table 6-20.
19. Page 4.3-16, Table 4.3-6. The statement in the item "Solid Waste Reduction Strategy" is incomplete: "*An objective of the Proposed Ordinance is to reduce single use plastic and paper*

[3] UK Environment Agency, "Lifecycle assessment of supermarket carrier bags available in 2006" Report SC030148. Page 61.

[4] County of Los Angeles, 2 June 2010. "Ordinances to Ban Plastic Carryout Bags in Los Angeles County – Draft Environmental Impact Report ". SCH # 2009111104. Available at: http://ladpw.org/epd/aboutthebag/PDF/DEIR.pdf

bag waste in landfills. The Proposed Ordinance would require reusable bags to be available for sale at retail establishments and would require paper bags to be made from recyclable material." Since the most common reusable bags are not recyclable in Ventura County, the DEIR should address the impact to local landfills, since reusable bags weigh many times more than plastic carry out bags the impact to landfills due to disposal of reusable bags and paper bags would result in a negative environmental impact of the proposed ordinance. The DEIR should identify impacts to landfill because most of the commonly available types of reusable bags are not recyclable and decision makers and the public need to know the impact of the proposed ordinance on landfills.

20. Page 4.3-16, Table 4.3.6. The statement in the Project Consistency column for the item on "Recycling Education" is not addressed by the response: "*The Proposed Ordinance would require reusable and recyclable paper bags to be available at retail establishments*." The DEIR should be updated to reflect the education requirements by retail establishments in recycling of paper and reusable bags.
21. Page 4.4-2, 1st Paragraph, Line 9. The statement "Only about 5% of the plastic bags in California are currently recycled" is incomplete and prejudicial since it does not provide a complete picture to the public and decision makers. You should change the statement to something like: "Only about 5% of the plastic bags in California are recycled and about 40% are reused as trash bags."
22. Page 4.4-2, 1st Paragraph, Line 11. The statement: "*The majority of single use plastic bags end up as litter or in the landfill.*" is prejudicial and implies more plastic bags end up as litter. The statement should be rewritten as: "*The majority of single use plastic bags end up in the landfill or as litter."* With the exception of LDPE or HDPE reusable bags (very hard to find), **the majority of reusable bags will end up in the landfill or as litter**. Why is this not discussed?
23. Page 4.4-2, 3rd Paragraph, line 6. The DEIR states that reusable bags are typically disposed of either in the landfill or recycling facility. The most common bags made from non-woven Polypropylene (PP) and cotton are **not** recyclable in Ventura County and most likely not in Santa Barbara county as well. Decision makers and the public need to know the impact that the proposed ordinance will have on landfills and recycling facilities. The impact of a typical reusable bag on the landfill is equivalent to 30 plastic carry out bags. Therefore, the impact on landfills should be analyzed in the DEIR not only for paper bags, but also for reusable bags. Both the weight and volume should be estimated based on the best statistics available.
24. Page 4.4-2, 3rd Paragraph, line 5. The statement "*Reusable bags are typically reused until worn out through washing or multiple uses, …*" is not necessarily substantiated by evidence. While common sense may indicate that this is the case, reusable bags are often disposed because the consumer got a new "free" bag, or because the old bag got dirty (bacteria buildup or contamination by a hazardous substance such as a pesticide?) and a replacement was purchased. Recommend that the statement be expanded to include some of the other reasons why bags may be replaced.
25. Page 4.4-3, 4th Paragraph. The following statement is false and borders on nonsense: "*Water quality **may be affected by bags in two different ways**: litter from bags and the use of materials for processing activities. ... While single use plastic bags are more likely to affect water quality as a result of litter, the plastic bag manufacturing process utilizes "pre-production plastic pellets,"*

which may also degrade water quality if released either directly to a surface water body or indirectly through storm water runoff." It should be noted that pre-production plastic pellets are raw materials and **not plastic bags**. Pre-production plastic pellets are raw materials that could be molded into any of thousands of different plastic items besides plastic carryout bags.

- The handling and transportation of Pre-production plastic pellets are controlled under AB 258 which prescribes requirements for manufacturers to contain pellets and prevent release into the environment.
- **Also, since plastic bags are the intent of the proposed ordinance, there is NO requirement to cover pre-production plastic pellets as part of the DEIR anymore than the potential of toxic emissions that would result from a fire in a plastics plant.**
- **Since no manufacturing facilities are located in the study area that use pre-production plastic pellets to manufacture plastic carryout bags or plastic reusable bags, there is no requirement to cover pre-production plastic pellets.**
- **Even if a plastic carryout bag or a plastic reusable bag manufacturer were to establish facilities in the Study Area, their activities with respect to AB 258 and pre-production plastic pellets would not be regulated by the proposed ordinance, and hence there is no need to cover this information.**
- **Even if a truck carrying pre-production plastic pellets were traveling through the Study Area and overturned on the freeway or roadway the material spilled would be treated in accordance with current regulations and require an environmental cleanup. None of these activities are regulated by the proposed ordinance and therefore there is no need to cover this information.**
- **Please remove all references in the DEIR to pre-production plastic pellets and AB 258.**

26. Page 4.4-3, 5th and 6th Paragraph. This paragraph talks about paper bags and that paper bags as litter may cause a discharge of chemicals and materials into water bodies and increase the potential for higher than natural concentrations of trace metals, etc. What is missing in the discussion is that reusable bags also may contain lead, cadmium, and other heavy metals although not in amounts toxic to humans, the amounts could be toxic to biological resources both plant and animal life including endangered species if released from reusable bags that end up as litter in the environment.
27. Page 4.4-3, 5th and 6th Paragraph. General Comment - applicable to other places in the DEIR, as well. Both paragraphs talk about the use of fertilizers and pesticides in the production of resources such as trees (that produce wood pulp) and cotton. It is highly unlikely that fertilizers would be present in the wood pulp or cotton used in the manufacturing of paper bags and cotton reusable bags. Fertilizers are used in agriculture to grow tomatoes and vegetables. Since tomatoes and vegetables are consumed by Study Area residents in great quantities and no harm has been detected it would suggest that fertilizers are not consumed by residents. It should be noted, that plants absorb the nutrients from the soil and fertilizers in the soil and the nutrients are reused by complex chemical processes involved in plant growth. Furthermore, it should be noted that both the tree and cotton absorb CO_2 from the atmosphere and produce oxygen which is a great an environmental benefit!

28. Page 4.4-4, 3rd Paragraph. The reference to AB 258 and pre-production plastic pellets should be removed from the DEIR. Pre-production plastic pellets are not plastic carry out bags and are not the subject of the proposed ordinance. See also comment # 25 above.
29. Page 4.4-6, 3rd Paragraph. In a presentation[5] about the Ventura County Municipal Stormwater Permit a director of the Ventura County Watershed Protection District stated that: (1) "Trash is not a significant issue in the water-ways of Ventura County …"; (2) "we [watershed protection district] support taking an aggressive approach to trash management …"; and (3) that "Trash Excluders and Receptacles" would be installed "in all High Priority catch basins, …". The fact that the watershed protection district does not think trash (which would include plastic carry out bags) in Ventura County water-ways to be a significant issue and that aggressive steps are already being taken to solve what problem there is, should have been disclosed in the DEIR, and made available to the public and to decision makers.
30. Page 4.4-7, Impact HWQ-1. The assertion that a reduction in plastic bags in the study area would result in a reduction in the amount of litter and waste entering storm drains is **unsubstantiated and highly speculative** because plastic carry out bags represent less than 1% of roadside litter. You need to reword the impact statement.
31. Page 4.4-8, 1st Paragraph, Line 6. The reference to the 64% reduction in the overall number of carryout bags appears to be correct based upon numbers in the DEIR. The 64% reduction of plastic carryout bags is **misleading**, since a portion of those bags are replaced by other plastic bags. Approximately 40% of plastic carryout bags were reused as waste can liners and to dispose of trash, consumers will have to replace those bags with other plastic bags. Hence the net reduction in plastic bags is much less than the 64% cited for carryout bags. The DEIR should address secondary effects of the proposed ordinance as well as the primary effects. In other words, the fact that consumers will purchase replacement plastic bags for the plastic carryout bags that were banned should be part of the environmental analysis. The DEIR should analyze the environmental impact of consumers purchasing replacement trash bags for the "reused" carryout bags used to dispose of trash.
32. Page 4.4-8, 4th Paragraph, Line 3 and Line 4. The statement that the "*Proposed Ordinance would be expected to reduce the amount of litter that could enter storm drains and local waterways*" is not exactly true. Trash Excluders on storm drain outfalls would prevent litter from entering the waterways. Also, the amount of litter in Ventura County waterways is not significant. See comment # 29 above.
33. Page 4.4-9, 1st Paragraph. This paragraph fails to adequately address reusable bags and the levels of lead, cadmium, and other heavy metals allowed in non-toxic amounts. There are no standards defined in the proposed ordinance as to what the maximum levels of lead, cadmium, or other heavy metals that are allowed or what the toxic limits are. Since most reusable bags are not recyclable, vast quantities of reusable bags each containing minute amounts of heavy

[5] Hubner, Gerhardt. 15 July 2009. "Update on Adopted Ventura County Municipal Stormwater Permit" Presentation to Calleguas Creek Watershed Steering Committee, Page 34. Available at: http://www.calleguascreek.org/ccwmp/meetings/Steering_Comm/071509/CC%20Steering%20Committee%20Final%20Permit%20SW%20Permit%20Overview%2007-14-.pdf

metals will be sent to the landfill and potentially pose a problem. In addition, reusable bags that are littered could leach heavy metals into the environment and potentially harm wildlife including endangered species. The DEIR should address this issue, as decision makers and the public need to know if there are any restrictions to disposal of reusable bags in the landfill and the hazards of reusable bags disposed of as litter in the environment.

34. Page 4.4-9, 1st Paragraph. Please remove the reference to pre-production plastic pellets. **Pre-production plastic pellets are not plastic carryout bags, paper bags, or reusable bags**.
35. Page 4.4-9, 2nd Paragraph. The statement is not accurate: "*The Proposed Ordinance is anticipated to reduce the overall number of single use plastic bags used in the Study Area by 95% and reduce the use of all types of bags (including plastic, single use paper, and reusable) by 64%. These shifts in the types and amounts of bags used could potentially alter processing activities related to bag production.*" First, the reduction in single use plastic carryout bags by 95% will also result in an increased consumption of single-use plastic trash bags by 40%. Hence, the reduction in all types of bags could not be 64%. Second, the phrase "*could potentially alter processing activities related to bag production*" is confusing and should be rewritten. What is meant by processing activities related to bag production? Please rewrite.
36. Page 4.4-9, 3rd and 4th Paragraph. Please remove the reference to pre-production plastic pellets and AB 258. **Pre-production plastic pellets are not plastic carryout bags, paper bags, or reusable bags**.
37. Page 4.4-10, Last Paragraph. Paragraph fails to disclose that the reusable bag may contain levels of lead, cadmium, and or other heavy metals in less than toxic amounts. See comment # 33.
38. Page 4.4-11, 4th Paragraph. Please remove the reference to pre-production plastic pellets and AB 258. **Pre-production plastic pellets are not plastic carryout bags, paper bags, or reusable bags**.
39. Page 4.5-3, 1st Paragraph. The "reusable bags (used 52 times) use 1.096 liters of water" refers to the LDPE reusable bags. LDPE reusable bags are not representative of reusable bags. See comment # 14.
40. Page 4.5-7, 1st Paragraph, Line 6. The amount of waste generated by a reusable (used 52 times) is the full weight of the bag, not the weight divided by 52 to produce a per use weight of 0.001 kg of waste per bag. As an aside, Rincon measured the weight of a reusable bag as 6.8 ounces or 192.7798 grams or 0.1927798 kg. A plastic carryout bag weighs 6.5 grams or 0.0065 kg. In other words, **Rincon's reusable bag weighs 30 times as much as a plastic carryout bag**. So the waste per use for this reusable bag is 0.003707 kg per bag. This is different that the figure of 0.001 kg cited. It seems that calculating the amount of waste per bag depends upon the type of reusable bag and the material it is made from. The material a bag is made from is central to the environmental analysis in the DEIR. Please update.
41. Page 4.5-9, 4th Paragraph. This paragraph talks about washing reusable bags so that they can be cleaned or disinfected. The DEIR does not identify why reusable bags should be washed and

disinfected. In the article[6] titled "*Negative Health and Environmental Impacts of Reusable Shopping Bags*", the author explains that bacteria buildup and cross-contamination by food and non-food items, as well as fomite transmission of viruses pose a health threat. In addition, in article[7] titled "Grocery Bag Bans and Foodborne Illness" the authors show that **immediately following a plastic bag ban in San Francisco that Emergency Room visits for intestinal illnesses and deaths from food poisoning increased by about 50%.** Although not stated in the article, it is suspected that the population of people with compromised immune systems are particularly susceptible to bacteria buildup and cross-contamination hazards in reusable bags. Hence, the importance of washing and sanitizing reusable bags on a regular basis. It is recommended that some information be provided in the DEIR so that the public and decision makers understand why washing of reusable bags is so important.

42. Page 4.5-11, 2nd To Last Paragraph. The amount of plastic, paper, and reusable bags in terms of weight and volume together with estimates for recycling should be identified in the DEIR.
43. Page 6-1, Paragraph 6.1.1. This paragraph should be updated to include baseline conditions and specify the percentages of consumers that uses reusable bags, plastic bags, and paper bags. The public and decision makers need to know the current baseline condition, since that condition is a result of California State Law AB 2449 and SB 1219 and represents the status quo.
44. Page 6-1, Last Paragraph, Line 12. The following statement is FALSE: "*On the other hand, this alternative would not achieve the Proposed Ordinance's beneficial effects relative to air quality and biological resources (sensitive species).*" Alternative 1 or the status quo is superior to the adoption of the proposed ordinance because it avoids: (1) Increased water, energy, and generation of greenhouse gases as a result of washing reusable bags; (2) Increased truck trips to transport paper bags to retailers; and (3) Increased use of plastic trash bags and manufacturing of those trash bags that replace plastic carryout bags originally repurposed as trash bags. All three items increase GHG emissions. The TMDL program and installation of trash excluders or trash screens on storm drains will have a beneficial effect on biological resources including sensitive species by eliminating not only plastic bags but other plastic debris that is harmful to wildlife. The only benefit of the proposed ordinance is an aesthetic one in eliminating less than 1% of roadside litter.
45. Page 6-1, Last Paragraph, Line 13. The following statement is FALSE: "*As discussed in Section 4.4, Hydrology and Water Quality, several programs are in place to reduce trash and pollution in Ventura Comity waterways. These existing programs would be in place in the No Project alternative and may reduce the plastic bag waste that enters and impairs waterways. However, these programs are not expected to reduce litter as much as the Proposed Ordinance and do not apply to the entire Study Area; therefore, this alternative would not result in the general benefits with respect to litter reduction, hydrology, and water quality that are expected to result from*

[6] Van Leeuwen, Anthony. 12 December 2012. "Negative Health and Environmental Impacts of Reusable Shopping Bags". Located in Beacon Single Use Carryout bag Ordinance Draft Environmental Report SCH #2012111093 dated February 2013, Page 197 of 333.

[7] Klick, Jonathan and Wright, Joshua D., Grocery Bag Bans and Foodborne Illness (November 2, 2012). U of Penn, Inst for Law & Econ Research Paper No. 13-2. Available at SSRN: http://ssrn.com/abstract=2196481 or http://dx.doi.org/10.2139/ssrn.2196481

implementation of the Proposed Ordinance. Solid waste generation would not change from existing conditions and, therefore, mere would be no impact related to solid waste facilities." The statement refers to the Total Maximum Daily Loads program and the installation of trash capture devices that prevent plastic carryout bags and plastic debris from entering waterways and flowing down the river to the ocean and negatively impacting the marine coastal and ocean environments and marine wildlife. Plastic carryout bag litter are only a concern where people live, work, travel, and play. This area is smaller than the Study Area and is expected to be so, since there are large areas in both counties that consist of mountainous and remote terrain. While Alternative 1 does not reduce roadside litter, it uses less water and energy, and trash excluders will improve water quality by capturing trash including plastic bags.

46. Page 6-5, 3rd Paragraph. There is no evidence that paper bags cause entanglement of biological species, hence the risk is null. Remove the statement since it is unsubstantiated. This is a general comment and applies to other areas in the DEIR as well.
47. Page 6-7, 2nd Paragraph, Line 4. The reference to AB 258 should be removed. AB 258 is only applicable to pre-production plastic and not paper manufacturing.
48. Page 6-12, Table 6-10. The Total Electricity Use Per Year (KW) is 13,608,210 vice 9,938,578. Please correct.
49. Page 6-13, 2nd Paragraph, Line 4. The reference to AB 258 should be removed. AB 258 is only applicable to pre-production plastic and not paper manufacturing.
50. Page 6-13, 3rd Paragraph, Line 7. What is the increase in energy consumption with respect to washing reusable bags for Alternative 3?
51. Page 6-8, Paragraph 6.3.1. Clarification Requested. At first glance it appears that Alternative 3 changes the $0.10 charge for paper bags to $0.25. However, Alternative 3 also appears to includes Alternative 2, as indicated in the statement: "This alternative would continue to prohibit Study Area retail establishment from providing single-use plastic bags …". Alternative 3 needs clarification so that the public and decision makers know exactly how it is different from the proposed ordinance. On page 6-9, 1st Paragraph, Line 4 the phrase "Because this alternative would apply to the same retailers as the Proposed Ordinance …" is one clue that this Alternative does not include Alternative 2. Clarification requested.
52. Page 6-10, 1st Paragraph, Line 2. General Comment. By referencing the "Initial Study (Appendix A)"in the DEIR means that the initial study must be included with the final EIR. Unless required by CEQA guidelines, recommend that the information referenced be included in the current document.
53. Page 6-11, 4th Paragraph, Line 7. The reference to "2.6 times the emissions" applies only to LDPE reusable bags and not to the reusable bags that are most commonly used by consumers. See comment # 14.
54. Page 6-13, 2nd Paragraph, Line 4. The reference to AB 258 should be removed. AB 258 is only applicable to pre-production plastic and plastic manufacturers and potentially to plastic reusable bag manufacturers and not paper bag manufacturers.
55. Page 6-13, 4th Paragraph, Line 5. Alternative 3 does not necessarily generate less waste. All calculation are with respect to an LDPE reusable bag that weighs 10 times as much as a reusable bag, while Rincon's reusable bag (6.8 ounces) weighs 30 times as much as a reusable bag. Since

non-woven Polypropylene reusable bags are not recyclable in Ventura County, all such bags must be disposed of in the landfill. In addition, since consumers must replace plastic carryout bags reused as trash bags, the total amount of plastic going to the landfill will more than likely increase. Recommend a new analysis.

56. Page 6-13, Last Paragraph. Alternative 4 needs to be clarified as to whether it applies to all retail establishments or just the regulated retail establishments in the Proposed Ordinance.
57. Page 6-17, 3rd Paragraph, Line 7. The reference to "2.6 times the emissions" applies only to LDPE reusable bags and not to the reusable bags that are most commonly used by consumers. This comment also applies to Table 6-15 on page 6-18. See comment # 14.
58. Page 6-18, Table 6-15. The Total Electricity Use Per Year (KW) is 13,608,210 vice 9,938,578 based upon 3,557,702 loads per year cited. The number of loads per year was not updated based upon the increased/decreased quantity of reusable bags for this alternative. Please correct.
59. Page 6-19, 3rd Paragraph, Line 7. What is the increase in electrical energy for washing reusable bags for Alternative 4? The Total Electricity Use Per Year (KW) is 13,608,210 vice 9,938,578 based upon 3,557,702 loads per year cited. The number of loads per year was not updated based upon the increased/decreased quantity of reusable bags for this alternative. Please correct.
60. Page 6-25, 3rd Paragraph, Line 7. What is the decrease in electrical energy for washing reusable bags for Alternative 5?
61. Page 6-27, Paragraph 6.7. Alternative 4 is identified in the DEIR as the Environmentally Superior Alternative because it bans both plastic carryout and paper carryout bags. But is it? Alternative 4 accomplishes the following and demonstrates it is inferior to Alternative 1, the status quo:
    - Has negligible impact on litter in county waterways and marine environment.
    - Reduces or eliminates less than 1% of roadside litter.
    - Increases consumption of energy (by 13,608,210 kW) and water (by 688 AFY) for washing reusable bags.
    - Non-woven polypropylene and cotton reusable bags are NOT recyclable in Ventura County and Santa Barbara County.
    - Each reusable bag weighs (Rincon's bag = 6.8 ounces) as much as 30 plastic carryout bags resulting in the **equivalent** of **361 million** plastic carryout bags deposited in landfills each year.
    - **31,266,466** plastic carryout bags will end up in landfill (95% of 32,912,070)
    - **263 million** plastic trash bags purchased to replace plastic carryout bags reused by consumers. (40% of **658,241,406** plastic carryout bags reused as trash bags).
    - 361 + 263 + 31 = **655 million** plastic carryout bag "equivalents" deposited in landfills.
62. Page 6-27, Paragraph 6.7. I would suggest that the environmentally superior alternative is Alternative 1. Alternative 1 avoids the increase in water and energy consumption and generation of greenhouse gases to wash reusable bags. In addition, Alternative 1 avoids increased truck traffic due to transport of paper bags. Plastic and paper bags are recyclable whereas the majority of reusable bags are **not recyclable** in Ventura County and must be

deposited in the landfill at the end of life. Alternative 1 also avoids the purchase of 263 million trash bags by consumers to replace 40% of plastic carryout bags that are repurposed as trash bags.

63. Page 6-27, Last two Paragraphs. These paragraphs are misleading. The following statement indicates that are impacts from implementing the proposed ordinance or one of the alternatives: "*It should be noted that the Proposed Ordinance would not result in any significant impacts;*" Therefore, the impacts associated with the proposed and each alternative compared to doing nothing (Alternative 1) should be clearly identified. For example in comment # 61 above, we demonstrate that there are real impacts and in the end, it doesn't make a lot of difference, other than angering the public.
64. Page 6-28, Table 6-21. **Rework table. The table compares each alternative to the proposed ordinance rather than to the baseline condition which is Alternative 1. In so doing, it misleads and hides from the public and from decision makers the true impact upon the environment that the proposed ordinance and the alternatives provide. Alternative 1 has the least impact to the environment. Every other Alternative including the propose ordinance are detrimental to the environment.**
65. Entire Document. Recommendation. The DEIR can be simplified by not regurgitating the same information over and over. For example, the manufacturing of plastic, paper, and reusable bags could be placed in one section of the DEIR, discussed and left there. Since no plastic, paper, or reusable bag manufacturers are located in the Study Area, this information does not have to be repeated over and over again.
66. Entire Document. The environmental analysis in the DEIR is based upon an LDPE reusable bag. These bags are extremely rare and not normally found in major supermarkets. The most common bag is the non-woven polypropylene bag which cannot be recycled in Ventura County and most likely not in Santa Barbara County either. The DEIR analysis should be based upon the most common reusable bags such as the non-woven polypropylene bag and the cotton bag. **The DEIR as written is INVALID since the analysis was not based upon the reusable bags that consumers in the study area are expected to use.**
67. Entire Document. While the Total Maximum Daily Loads (TMDL) program is discussed in one section with a few words about reduction of trash in waterways the information is largely segregated from the rest of the document. No mention that the Trash TMDLs could eliminate plastic bags and other plastic debris from flowing into the ocean and sensitive environmental habitat areas thereby preventing harm to marine wildlife. The document continues to describe plastic bags flowing from the storm drain to the river and to the ocean and trash excluders are never mentioned. It is important for the public and for decision makers to accurately understand the magnitude of the problem as well as other projects that solve all or part of the problems this project intends to solve. **In addition, the public and decision makers also need to know that Watershed Protection District directors have stated that trash in county water-ways is NOT a significant problem.** (See comment # 29 above.)

17 May 2013

Mr. Gerald Comati, P.E.
Program Manager
Beach Erosion Authority for Clean Oceans and Nourishment
206 East Victoria Street
Santa Barbara, CA 93101

Subj: Comments on the Final Environmental Impact Report (FEIR)

Ref:
(a) Email: Ashley Meyers (Rincon Consultants) to Anthony van Leeuwen, "Notice of Public Hearing – BEACON Single-Use Bag Ordinance", dated 7 may 2013.
(b) "BEACON Single Use Carryout Bag Ordinance, Final Environmental Impact Report", document SCH #2012111093 dated May 2013.
(c) Letter, From Anthony van Leeuwen To Gerald Comati (BEACON) dated 18 April 2013.
(d) "BEACON Single Use Carryout Bag Ordinance, Final Environmental Impact Report", document SCH #2012111093 dated April 2013
(e) BEACON Board of Directors' Meeting Announcement for 17 May 2013.
(f) Staff Report from Executive Director to BEACON Board of Directors, dated 3 May 2013.

1. In reference (a) notification of the availability of reference (b) the Full and Final EIR was made. Reference (c) was submitted in response to reference (d) the Final EIR due to outstanding issues that were not adequately resolved by BEACON as a result of comments on the draft EIR. Reference (c) was not included in reference (b) and no corrections were made to reference (b) as a result of comments supplied in reference (c) and testimony by the undersigned at the 19 April 2013 BEACON Meeting. In reference (c) comments were made and information supplied that showed the final EIR dated April 2013 still had flaws and omitted important data needed by decision makers. In reference (c) we showed the following:
    a. That incorrect modeling was used to calculate the annual weight of reusable bags deposited in the landfill. The final EIR identified 0.075 tons per year or 150 lbs. of reusable bags (or approximately 353 reusable bags out of 8,228,018 reusable bags) deposited in the landfill per year. At this rate it would take more than 20,000 years to dispose of 8,228,018 reusable bags most of which are not recyclable because there is no recycling infrastructure for polypropylene (PP) or cotton bags. Obviously, this is a demonstration that the final EIR is seriously flawed and omits important information.
    b. That landfill quantities of plastic bags pre-ban was at most 3,876.46 tons that would be replaced by up to 16,168.37 tons of remaining plastic bags, paper bags, reusable bags, replacement bags, and other plastic bags and wraps. In other words, more than <u>four times as much</u> material goes to the landfill as a direct result of the ban on plastic carryout bags. <u>No mitigation measures are identified</u> in the Final EIR to reduce the landfill amounts.
    c. An article titled "Fact Sheet - Landfill Impacts" was provided including a document that calculated "Landfill and Recycling Impacts" for the proposed ordinance and each of the alternatives as information that could be used by BEACON to improve the Final EIR.
    d. Comments titled "Reclama of Issues Previously Raised" and not satisfactorily resolved by BEACON was also provided. This included the following issues:
        i. All direct and indirect impacts of the carryout bag ban should be addressed including (1) the environmental impacts associated with the purchase of (including manufacturing, transportation, and disposal) of replacement plastic bags and (2) the

potential loss of the At-Store Recycling Program when plastic carryout bags are banned.

ii. Information presented regarding solid waste disposal is misleading, inaccurate, and incomplete. At the very minimum, supplementary information should be supplied either in the body of the EIR or in an Appendix regarding Solid Waste disposal in the landfill and/or diversion to recycling.

iii. Sufficient information should be provided for all carryout bags types including end-of-life disposal methods including recycling and landfill disposal. The EIR should include mitigation measures and strategies to reduce the quantity of material headed for the landfill as a direct result of the proposed ordinance.

2. In reference (e) and reference (f), BEACON states that they have no intention of certifying the EIR as the Lead Agency as stated in reference (d). Reference (d) was modified in reference (b) to change the role of BEACON from a Lead Agency to a Co-Lead Agency. This means that either a county or municipality would have to certify the Full and Final EIR along with adoption of an ordinance. While it is understandable that this change was made as a result of potential litigation, it would be more desirable for BEACON to avoid litigation by working with interested parties to rewrite the EIR and to ensure that the EIR is complete and factual. The undersigned is willing to assist BEACON in rewriting the EIR to ensure the EIR is complete and factual and present decision makers with information to make a fully informed decision.
3. **Based upon information previously submitted and reiterated in this letter, the undersigned objects to certification or approval of the Final EIR, reference (b) or (d), without substantial revision. In addition, the undersigned objects to distribution of the Final EIR by BEACON to BEACON member agencies and other jurisdictions without substantial revision.** The undersigned reserves the right to take legal action. This memorandum is submitted and should become part of the official record regarding the preparation of this EIR. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted].

Respectfully,

Anthony van Leeuwen

18 April 2013

Mr. Gerald Comati, P.E.
Program Manager
Beach Erosion Authority for Clean Oceans and Nourishment
206 East Victoria Street
Santa Barbara, CA 93101

Subj: Comments on the Final Environmental Impact Report (FEIR)

Ref: (a) Email: Ashley Meyers (Rincon Consultants) to Anthony van Leeuwen, "BEACON Single-Use Bag Ordinance – Notice of Public Hearing", dated 10 April 2013
(b) Email: Gerald Comati (BEACON) to Anthony van Leeuwen, "Questions on Public Hearing - Single-Use Carryout Bag Ordinance", dated 15 April 2013

Encl: (1) "Public Hearing Handouts", by Anthony van Leeuwen, dated 16 April 2013
(2) "Fact Sheet – Landfill Impacts", by Anthony van Leeuwen, dated 16 April 2013
(3) "Landfill and Recycling Impacts", by Anthony van Leeuwen, dated 16 April 2013
(4) "Reclama of Issues Previously Raised", by Anthony van Leeuwen dated 18 April 2013

1. In accordance with reference (a) and (b) the following information is submitted for the public record regarding the content of the Final EIR.
    a. Enclosure (1) is the handout prepared for the Public Hearing on 19 April 2013.
    b. Enclosure (2) is a paper that discusses the landfill impacts before and after the plastic carryout bag ban.
    c. Enclosure (3) is a spreadsheet printout showing the landfill and recycling impacts for the proposed ordinance and each of the alternatives.
    d. Enclosure (4) are detailed comments submitted for consideration by BEACON and involve changes to the FEIR.
2. **Based upon information submitted in Enclosures (1) through (4), the undersigned objects to certification of the Final EIR without substantial revision.** Enclosure (1) and (4) identifies specific data in the Final EIR that is suspect and requires validation. In addition, the information presented regarding solid waste disposal is misleading, inaccurate, and incomplete. At the very minimum, supplementary information should be supplied either in the body of the EIR or in an Appendix regarding Solid Waste disposal in the landfill and/or diversion to recycling. Sufficient information should be provided for all carryout bags types including end-of-life disposal methods. The discussion should include mitigation measures and strategies to reduce the quantity of material headed for the landfill as result of the proposed ordinance. In addition, all significant impacts of the carryout bag ban should be addressed including the environmental impacts associated with the purchase of replacement plastic bags and the potential loss of the In-Store Recycling Program when carryout bags are banned.
3. This memorandum and enclosures are submitted in accordance with reference (a) and should become part of the official record regarding the preparation of this EIR and development of model ordinances. For more information, please feel free to contact Mr. Anthony van Leeuwen at [redacted] or by email at [redacted].

Respectfully,

Anthony van Leeuwen

BEACON Final EIR – Santa Barbara and Ventura Counties. Page 4.5-12.

Table 4.5-11
Solid Waste Due to Carryout Bags Based on Ecobilan Data

Type of Bags	Number of Bags	Solid Waste		
		Solid Waste per Bag per day (kg)	Solid Waste Per Day (tons)*	Solid Waste per Year (tons)
Plastic	32,912,070	0.0065	0.065	237
Paper	197,472,422	0.0087	5.21	1,900
Reusable (used 52 times)	8,228,018	0.001	0.0002	0.075
		Total	**5.28**	**2,137**
		Existing	12.97	4,733
		Net Change (Total minus Existing)	**(7.69)**	**(2,596)**

** Calculations are contained in the Utility Worksheets contained in Appendix E*
Source: Ecobilan, February 2004
See Appendix E for Solid Waste for individual municipalities' bag use

0.075 tons = 150 lbs.

150 lbs. = ~353 bags

1

2

County of San Mateo Draft EIR. Page 4.5-11

3.29 tons = 6,580 lbs.

6,580 lbs. = ~ 15,482 bags

Table 4.5-9
Solid Waste Due to Carryout Bags Based on Ecobilan Data

Type of Bags	Number of Bags	Solid Waste		
		Solid Waste per Bag per day (kg)	Solid Waste Per Day (tons)*	Solid Waste per Year (tons)
Plastic	27,646,568	0.0065	0.054	199
Paper	165,879,409	0.0087	4.37	1,596
Reusable (used 52 times)	6,911,642	0.001	0.009	3.29
		Total	**4.43**	**1,798.29**
		Existing	**10.89**	**3,979**
		Net Change (Total minus Existing)	**(6.46)**	**(2,180.71)**

**Calculations are contained in the Utility Worksheets contained in Appendix C*
Source: Ecobilan, February 2004. Environmental Impact Assessment of Carrefour Bags: An Analysis of the Life Cycle of Shopping Bags of Plastic, Paper, and Biodegradable Material. Prepared for: Carrefour Group, Neuilly-sur-Seine, France; and Ordinances to Ban Plastic Carryout Bags in Los Angeles County FEIR (SCH#2009111104, November 2010.
See Appendix C for Solid Waste for individual municipalities' bag use

3

4

1. San Mateo County has fewer bags but a higher quantity of solid waste disposed than Santa Barbara and Ventura Counties. Indicates there is something wrong.
2. Ecobilan Data analyzes a Reusable Bag that is made from LDPE plastic which is recyclable.
3. Reusable Bags in Study Area – most are made from non-woven polypropylene (PP) or Cotton – No recycling infrastructure and will be disposed at end of life at landfill.

SANTA BARBARA AND VENTURA COUNTIES
SINGLE-USE CARRYOUT BAG ORDINANCE

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (5%)	32,912,070
Paper Bags (30%)	197,472,422
Reusable bags (65%/52)	8,228,018
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

Proposed Ordinance

NOTE: Numbers are raw and not adusted for losses, weights, and other factors.

	Pre Ban				Post Ban			
	Quantity	Weight Per Bag	Weight (lbs.)	Weight (tons)	Quantity	Weight Per Bag	Weight (lbs.)	Weight (tons)
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	32,912,070	0.01213	399,223.41	199.61
Paper Carryout Bags	0	0.14875			156,003,213	0.14875	23,205,477.97	11,602.74
Reusable Carryout Bags	0	0.42500			8,228,018	0.42500	3,496,907.47	1,748.45
Replacement Bags (40%)	0	0.01213			263,296,562	0.01213	3,193,787.30	1,596.89
"Other Plastic"	0	0.140708			14,507,641	0.140708	2,041,341.09	1,020.67
Total Weight Deposited in Landfill				**3,876.46**				**16,168.37**
Post Ban / Pre Ban Ratio								**4.17**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	0	0.01213	0	0.00
Paper Carryout Bags	0	0.14875	-	-	41,469,209	0.14875	6,168,544.78	3,084.27
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	-	-
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	-	-
"Other Plastic"	19,089,001	0.140708	2,685,975.12	1,342.99	4,581,360	0.140708	644,634.03	322.32
Total Weight of Material Recycled				**1,458.76**				**3,406.59**
Post Ban / Pre Ban Ratio								**2.34**

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FACT SHEET – LANDFILL IMPACTS

Unintended Consequences Of A Plastic Carryout Bag Ban

By Anthony van Leeuwen, 16 April 2013

Executive Summary. The Single-Use Carryout Bag Ordinance has a detrimental impact on the landfills that has not been clearly identified. While the Environmental Impact Report (EIR) identifies that plastic carryout bags currently end up in the landfill, unbeknownst to proponents of the ordinance is that the amount of material deposited in the landfill after the ban has been implemented is far greater than before the ban. Landfill impacts for both the City of Los Angeles and for Santa Barbara and Ventura Counties is presented in Tables 1 and 2 respectively.

When plastic carryout bags are banned there are direct consequences that impact the amount of material that will end up in the landfill. This includes the following material: plastic carryout bags, paper bags, reusable bags, replacement bags, and "other plastic". This material is defined in the following paragraphs:

> Plastic Carryout Bags. A plastic carryout bag is the lightweight plastic shopping bag given to the consumer at checkout to take their purchases home. The bag is made from either High Density Polyethylene (HDPE) or Low Density Polyethylene (LDPE) plastic and has built in handles that make the bag a favorite for reuse. Not all plastic carryout bags weigh the same, but for purposes of this paper we will assume that plastic carryout bags weigh 5.5 grams or 0.01213 lbs. each.
>
> Paper Carryout Bags. A recyclable paper bag has at least 40% post-consumer recycled content and weighs between 45 and 90 grams and has approximately 1.5 times the volume of plastic carryout bag. A paper bag from Trader Joe's weighs 67.47 grams or 2.38 ounces each.
>
> Reusable Bags. Reusable bags come in small, medium, and large sizes and can hold 10, 25, and 35 lbs. respectively when filled. The most common bags are made from non-woven polypropylene plastic and from cotton or Jute with handles and intended to be used multiple times. Reusable bags weigh between 50 and 200 grams. The weight of a reusable bags for purposes of this paper is assumed to be 6.8 ounces as weighed by Rincon Consultants on 8/10/2010.[1] The least common Reusable bags are made from LDPE or HDPE plastic which is nothing more than a thick plastic bag. Reusable bags are assumed to be used once per week for 52 weeks and have a lifespan of 1 year.

[1] Beacon Single Use Carryout Bag Ordinance Draft Environmental Report SCH #2012111093 dated February 2013. Located at:
http://www.beacon.ca.gov/assets/PDFs/Bag-Ordinance/BEACON_Single_Use_Carryout_Bag_Ordinance_DEIR.pdf

Replacement Plastic Bags. A direct effect of a plastic carryout bag ban is the purchase of replacement plastic trash bags to line small trashcans, pick up pet litter, etc. About 40% of the plastic carryout bags[2] are reused as trash bags and disposed of in the landfill and it is expected that consumers will purchase replacement plastic bags to fill this niche. For purposes of this fact sheet, a Replacement Plastic Bag is assumed to weigh the same as plastic carryout bag. The total number of replacement bags is equal to 40% of plastic carryout bags pre-ban.

"Other Plastic" . The In-Store Recycling Bin is primarily for recycling of plastic carryout bags. However, an added benefit is that "other plastic" bags and wraps can also be recycled in this bin including: produce bags, bread bags, newspaper bags, dry cleaning bags, and plastic wrap from toilet paper, paper towels, diapers, etc. This "other plastic" material is not accepted in the curbside recycling bins in the City of Los Angeles and also Ventura County because it is uneconomical to recycle and the material get caught in the sorting machinery. In Santa Barbara County this material[3] can be put in the curbside recycle bins. Hence, for Ventura County, this "other plastic" can only be recycled through the In-Store Recycling Bin. In 2009, only 2.9% of plastic bags issued were recovered through the In-Store Recycling Program. However, for every ton of plastic carryout bags that were recycled, 11.6 tons of "other plastic" was recovered[4] preventing this material from ending up in the land fill.

Adverse impacts of the ordinance includes the following:

Most Reusable Bags Are Not Recyclable. The LDPE and HDPE reusable bag are fully recyclable through the In-Store Recycling Bins. The non-woven Polypropylene (PP) bag and cotton fabric bags are not recyclable since no recycling facilities exist[5] in the City of Los Angeles or in Santa Barbara and Ventura Counties; hence, disposal is in the landfill. This is another example of a negative unintended consequence of a plastic bag ban, where a recyclable plastic carryout bag is replaced by a reusable bag that cannot be recycled.

Recycle Bin Shutdown. Under California State Law AB 2449 and SB 1219, retail stores that issue plastic carryout bags at the checkout stand have to provide an In-Store Recycling Bin so that customers can bring plastic carryout bags back for recycling. The cost of this recycling program is shouldered by customers through higher prices. When a plastic carryout bag ban is implemented, retail stores will no longer be legally required to retain the recycling bin. Stores are in business of selling groceries and not in the recycling business. In San Francisco, after a

[2] UK Environment Agency, "Lifecycle assessment of supermarket carrier bags available in 2006", Report SC030148. Page 61. Located at: http://publications.environment-agency.gov.uk/dispay.php?name=SCHO0711BUAN-E-E

[3] Santa Barbara County Public Works Department, 2012-2013 Edition, "Recycling Resource Guide for Santa Barbara County", Available at: http://www.lessismore.org/system/files/54/original/SBCountyRecycleGuide_2012_English.pdf

[4] CalRecycle, "At-Store Recycling Program – 2009 Statewide Recycling Rate for Plastic Carryout Bags", Available at: http://www.calrecycle.ca.gov/plastics/AtStore/AnnualRate/2009Rate.htm

[5] Herrera Environmental Consultants, Inc. 29 January 2008. "Alternatives to Disposable Shopping Bags and Food Service Items, Volume 1". Available at: http://www.seattlebagtax.org/herrera1.pdf

plastic bag ban went into effect many retail stores[6,7] shut down their plastic bag recycling bins. An unintended consequence of a plastic carryout bag ban is that "other plastic" will end up in the landfill if retail stores shut down the In-Store Recycling Bins and the material is not accepted in the curbside recycle bin. This Fact Sheet assumes that the In-Store Recycling bins will be shut down.

Double Bagging Paper Bags. Double bagging at the checkout stand normally occurs when the customer purchases items that are heavy e.g. canned food, etc. Observations from one market shows that double bagging may occur as much as 40% to 80% of the time. While the weight of the items carried in the bag is one factor, the other factor is that the paper handles break off easily. Double bagging of paper bags in not taken into account in the analysis of landfill impacts.

Reusable Bag Proliferation. Proliferation of reusable bags is a perverse side effect of the plastic carryout bag ban. Customers purchase more reusable bags than they really need (for example, they don't have any with them on a spur of the moment shopping trip) or receive free bags during promotions. As a result, an extraordinary quantity of reusable bags will be disposed of in landfills. This occurred in Australia[8] where the reusable bag has been dubbed the "new green monster". Reusable Bag Proliferation is not taken into account in landfill impacts discussed in this Fact Sheet.

When bags reach their end of life they are disposed of either by recycling or by disposal in the landfill. Pre Ban we assume 100% use of plastic carryout bags in the Study Area with 2.9% disposed[9] of by recycling and 97.1% disposed of in the landfill. While we recognize that there are people who use paper bags and reusable bags at the current time, there are no bag usage statistics that can determine the quantity of bags presently used. Post Ban we are concerned with disposal of plastic carryout bags (the remaining 5%), paper bags, reusable bags, replacement bags, and "other plastic".

City of Los Angeles Landfill Impact. The impact to landfills is calculated using bag quantities assumed in the Draft EIR which are based upon the assumption that Californians use 20 billion plastic carryout bags per year. A total of 2,031,232,707 plastic carryout bags were assumed Pre Ban. Post Ban it was assumed that 5% of plastic carryout bags or 101,561,635 would remain; 30%, would be replaced by 609,369,812 paper bags; and 65%, would be replaced by 25,390.409 reusable bags. 79% of paper bags were assumed to be landfilled with 21% recycled.[10] 97.1% of plastic carryout bags were assumed to be landfilled with 2.9% recovered through recycling. The Post Ban "other plastic" is calculated from the

[6] Brown, Nat, 29 March 2011. "Bag the Plastic Ban". National Review Online. Located at: http://www.nationalreview.com/blogs/print/263178

[7] The ULS Report. "A Qualitative Study of Grocery Bag Use in San Francisco". Use Less Stuff. Located at: http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf

[8] Munro, Peter. 24 January 2010. "Bag the bag: a new green monster is on the rise." Located at: http://www.theage.com.au/national/bag-the-bag-a-new-green-monster-is-on-the-rise-20100123-mrqo.html

[9] CalRecycle, "At-Store Recycling Program – 2009 Statewide Recycling Rate for Plastic Carryout Bags", Available at: http://www.calrecycle.ca.gov/plastics/AtStore/AnnualRate/2009Rate.htm

[10] Green Cities California, "Master Environmental Assessment on Single-Use and Reusable Bags" (MEA) March 2010. Page 18. The MEA assumes that 20% of paper bags are recycled and 80% are disposed in the landfill.

2.9% of Pre Ban plastic carryout bags recycled multiplied by 11.6[11] times the weight of a single plastic carryout bag or 0.140708 lbs. per bag.

Post Ban/Pre Ban Ratio. The ratio of material deposited in the landfill Post Ban compared to the material deposited in the landfill Pre Ban is calculated as follows:

$$Post\ Ban\ /\ Pre\ Ban\ Ratio\ = \frac{Post\ Ban\ Landfill\ Weight\ Deposited}{Pre\ Ban\ Landfill\ Weight\ Deposited}$$

The Post Ban/Pre Ban Ratio as described in the above equation provides a figure of merit comparing the Post Ban verses the Pre Ban amount that is deposited in the landfill. The Post Ban/Pre Ban Ratio for City of Los Angeles is 4.25 in table 1 and for Santa Barbara and Ventura Counties is also 4.17 in Table 2.

	Quantity	Weight per bag (lbs.)	Weight (lbs.)	Weight (tons)
Pre-Ban				
Plastic Carryout Bags	1,972,326,958	0.01213	23,924,326.01	**11,962.16**
Post Ban				
Plastic Carryout Bags	101,561,635	0.01213	1,231,942.64	615.97
Reusable Bags	25,390,409	0.42500	10,790,923.76	5,395.46
Paper Bags	481,402,152	0.14875	71,608,570.04	35,804.29
Replacement Bags	812,493,083	0.01213	9,855,541.09	4,927.77
Other Plastic	58,905,749	0.140708	8,288,510.06	4,144.26
Total				**50,887.74**
Post Ban /Pre Ban Ratio				**4.25**

Table 1. City of Los Angeles Landfill Impacts

Santa Barbara and Ventura County Landfill Impacts. A total of 658,241,406 plastic carryout bags were assumed Pre Ban. Post Ban it was assumed that 5% of plastic carryout bags or 32,912,070 would remain; 30%, would be replaced by 197,472,422 paper bags; and 65%, would be replaced by 8,228,018 reusable bags. 79% of paper bags were assumed to be landfilled with 21% recycled[12]. 97.1% of plastic carryout bags were assumed to be landfilled with 2.9% recovered by recycling. The Post Ban "other plastic" is calculated from the 2.9% of Pre Ban plastic carryout bags recycled multiplied by 11.6[13] times the weight of a single plastic carryout bag or 0.140708 lbs. per bag and multiplied by 76% to account for Ventura County only based upon population.

[11] CalRecycle, "At-Store Recycling Program – 2009 Statewide Recycling Rate for Plastic Carryout Bags", Available at: http://www.calrecycle.ca.gov/plastics/AtStore/AnnualRate/2009Rate.htm

[12] Green Cities California, "Master Environmental Assessment on Single-Use and Reusable Bags" (MEA) March 2010. Page 18. The MEA assumes that 20% of paper bags are recycled and 80% are disposed in the landfill.

[13] CalRecycle, "At-Store Recycling Program – 2009 Statewide Recycling Rate for Plastic Carryout Bags", Available at: http://www.calrecycle.ca.gov/plastics/AtStore/AnnualRate/2009Rate.htm

Summary of Landfill Impacts. Both Table 1 and Table 2 show that for both for the City of Los Angeles and for Santa Barbara and Ventura counties that the amount deposited in landfill after the ban and as a direct consequence of the ban in more than four times as much as before the ban. It should be understood that the quantities in Table 1 and Table 2 have not been adjusted for loss and other factors that reduce the actual amounts that end up in the landfill. Table 1 and Table 2, clearly show that the perverse unintended consequence of the plastic carryout bag ban is more material in the landfill and not less.

	Quantity	Weight per bag (lbs.)	Weight (lbs.)	Weight (tons)
Pre-Ban				
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	**3,876.46**
Post Ban				
Plastic Carryout Bags	32,912,070	0.01213	399,223.41	199.61
Reusable Bags	8,228,018	0.42500	3,496,907.84	1,748.45
Paper Bags	156,003,213	0.14875	23,205,477.97	11,602.74
Replacement Bags	263,296,562	0.01213	3,193,787.30	1,596.89
Other Plastic (Ventura County)	14,507,641	0.140708	2,041,341.09	1,020.67
Total				**16,168.37**
Post Ban /Pre Ban Ratio				**4.17**

Table 2. Santa Barbara and Ventura County Landfill Impacts

Even if you change some assumptions, you will still have more material in landfill Post Ban:

- Even if one were to assume that the lifespan of reusable bag is two years vice one year, the Post Ban/Pre Ban Ratio will not change substantially.
- If you ignore paper bags and consider only the remaining material, you still will have more material going into the landfill after the ban than before.
- If you consider the potential impact of double bagging paper bags and reusable bag proliferation the amount of material going to the landfill would be much more!

Since the plastic carryout bag ban intended to reduce the amount of material going to the landfill, the opposite has occurred instead. This is clearly a perverse unintended consequence.

Recommendations. While Table 1 and Table 2 contain raw numbers, these tables are instructive in they can help us to identify strategies to reduce landfill amounts and mitigate the effects of the proposed ordinance. For Example, the following strategies could be initiated:

- Set a recycling goal for paper carryout bags at 60% vice the national average of 21%. An public education program will be needed.

- Modify the ordinance so that the Reusable Bags sold by retail stores in the Study Area must have an existing recycling infrastructure.
- For Ventura County, modify the curbside recycling program to allow for collection of clean plastic bags and wraps in the curbside recycling bin (material may have to be put in a bag and secured). Requires an education program.

It should be noted that in evaluating the proposed ordinance and all of the alternatives, only Alternative #2 (Status Quo) has the lowest amount of material headed to the landfill. **Therefore, it is recommended that the Plastic Carryout Bag Ban be dropped.**

LANDFILL AND RECYCLING IMPACTS

	LANDFILL			RECYCLING		
	Pre-Ban Weight (tons)	Post Ban Weight (tons)	Ratio	Pre-Ban Weight (tons)	Post Ban Weight (tons)	Ratio
Proposed Ban	3,876.46	16,168.37	4.17	1,458.76	3,406.59	2.34
Alternative #2	3,876.46	17,555.71	4.53	1,458.76	3,817.83	2.62
Alternative #3	3,876.46	7,531.76	1.94	1,458.76	939.17	0.64
Alternative #4	3,876.46	5,507.10	1.42	1,458.76	322.32	0.22
Alternative #5	3,876.46	10,292.28	2.66	1,458.76	1760.25	1.21

ASSUMPTIONS:

In-Store Recycling Program shut down with Plastic Carryout Bag Ban (The ULS Report,"A qualitative Study of Grocery Bag Use in San Francisco")
Plastic Carryout Bag Recycling Rate of 2.9% based on CalRecycle "2009 Statewide Recycling Rate for Plastic Carryout Bags"
"Other Plastic" is by multiplying the weight of 2.9% of plastic carryout bags recycled by 11.6 (CalRecycle, 2009)
21% of all paper bags are recycled and 79% are disposed in the landfill. (Geen Cities MEA, 2010)
No reusable bags recycling facilities in Ventura and Santa Barbara Counties (Herrera Environmental Consultants, Inc. 29 January 2008.)
Alternative #1 represents the Pre-Ban condition of the Proposed Ban.
The Ratio represents a figure of merit comparing the Post Ban Condition to the Pre Ban Condition.

SANTA BARBARA AND VENTURA COUNTIES
SINGLE-USE CARRYOUT BAG ORDINANCE

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (5%)	32,912,070
Paper Bags (30%)	197,472,422
Reusable bags (65%/52)	8,228,018
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

Proposed Ordinance

NOTE: Numbers are raw and not adusted for losses, weights, and other factors.

	Pre Ban				Post Ban			
	Quantity	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**	**Quantity**	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	32,912,070	0.01213	399,223.41	199.61
Paper Carryout Bags	0	0.14875			156,003,213	0.14875	23,205,477.97	11,602.74
Reusable Carryout Bags	0	0.42500			8,228,018	0.42500	3,496,907.47	1,748.45
Replacement Bags (40%)	0	0.01213			263,296,562	0.01213	3,193,787.30	1,596.89
"Other Plastic"	0	0.140708			14,507,641	0.140708	2,041,341.09	1,020.67
Total Weight Deposited in Landfill				**3,876.46**				**16,168.37**
Post Ban / Pre Ban Ratio								**4.17**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	0	0.01213	0	0.00
Paper Carryout Bags	0	0.14875	-	-	41,469,209	0.14875	6,168,544.78	3,084.27
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	-	-
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	-	-
"Other Plastic"	19,089,001	0.140708	2,685,975.12	1,342.99	4,581,360	0.140708	644,634.03	322.32
Total Weight of Material Recycled				**1,458.76**				**3,406.59**
Post Ban / Pre Ban Ratio								**2.34**

SANTA BARBARA AND VENTURA COUNTIES
SINGLE-USE CARRYOUT BAG ORDINANCE

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (1%)	6,582,414
Paper Bags (34%)	223,802,078
Reusable bags (65%/52)	8,228,018
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

ALTERNATIVE #2

Ban plastic carryout bags in all retail establishments

	Pre Ban				Post Ban			
	Quantity	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**	**Quantity**	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	6,582,414	0.01213	79,844.68	39.92
Paper Carryout Bags	0	0.14875			176,803,642	0.14875	26,299,541.70	13,149.77
Reusable Carryout Bags	0	0.42500			8,228,018	0.42500	3,496,907.47	1,748.45
Replacement Bags (40%)	0	0.01213			263,296,562	0.01213	3,193,787.30	1,596.89
"Other Plastic"	0	0.140708			14,507,641	0.140708	2,041,341.09	1,020.67
Total Weight Deposited in Landfill				**3,876.46**				**17,555.71**
Post Ban / Pre Ban Ratio								**4.53**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	0	0.01213	0	0.00
Paper Carryout Bags	0	0.14875	-	-	46,998,436	0.14875	6,991,017.41	3,495.51
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	0	0.00
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	0	0.00
"Other Plastic"	19,089,001	0.140708	2,685,975.12	1,342.99	4,581,360	0.140708	644,634.03	322.32
Total Weight of Material Recycled				**1,458.76**				**3,817.83**
Post Ban / Pre Ban Ratio								**2.62**

SANTA BARBARA AND VENTURA COUNTIES
SINGLE-USE CARRYOUT BAG ORDINANCE

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (5%)	32,912,070
Paper Bags (6%)	39,494,484
Reusable bags (89%/52)	11,266,055
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

ALTERNATIVE #3

25 cents per paper bag

	Pre Ban				Post Ban			
	Quantity	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**	**Quantity**	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	32,912,070	0.01213	399,223.41	199.61
Paper Carryout Bags	0	0.14875			31,200,643	0.14875	4,641,095.59	2,320.55
Reusable Carryout Bags	0	0.42500			11,266,055	0.42500	4,788,073.30	2,394.04
Replacement Bags (40%)	0	0.01213			263,296,562	0.01213	3,193,787.30	1,596.89
"Other Plastic"	0	0.140708			14,507,641	0.140708	2,041,341.09	1,020.67
Total Weight Deposited in Landfill				**3,876.46**				**7,531.76**
Post Ban / Pre Ban Ratio								**1.94**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	0	0.01213	0	0.00
Paper Carryout Bags	0	0.14875	-	-	8,293,842	0.14875	1,233,708.96	616.85
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	0	0.00
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	0	0.00
"Other Plastic"	19,089,001	0.140708	2,685,975.12	1,342.99	4,581,360	0.140708	644,634.03	322.32
Total Weight of Material Recycled				**1,458.76**				**939.17**
Post Ban / Pre Ban Ratio								**0.64**

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (5%)	32,912,070
Paper Bags (0%)	-
Reusable bags (100%/52)	12,658,489
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

ALTERNATIVE #4

Ban Plastic and Paper Carryout Bags

	Pre Ban				Post Ban			
	Quantity	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**	**Quantity**	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	32,912,070	0.01213	399,223.41	199.61
Paper Carryout Bags	0	0.14875			-	0.14875	-	-
Reusable Carryout Bags	0	0.42500			12,658,489	0.42500	5,379,857.65	2,689.93
Replacement Bags (40%)	0	0.01213			263,296,562	0.01213	3,193,787.30	1,596.89
"Other Plastic"		0.140708	0		14,507,641	0.140708	2,041,341.09	1,020.67
Total Weight Deposited in Landfill				**3,876.46**				**5,507.10**
Post Ban / Pre Ban Ratio								**1.42**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	0	0.01213	0	0.00
Paper Carryout Bags	0	0.14875	-	-	-	0.14875	-	0.00
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	0	0.00
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	0	0.00
"Other Plastic"	19,089,001	0.140708	2685975.121	1,342.99	4,581,360	0.140708	644,634.03	322.32
Total Weight of Material Recycled				**1,458.76**				**322.32**
Post Ban / Pre Ban Ratio								**0.22**

SANTA BARBARA AND VENTURA COUNTIES
SINGLE-USE CARRYOUT BAG ORDINANCE

Proposed Ordinance

Study Area Population	1,239,626
Study Area Households	413,209
Study Area Plastic Carry Out Bag Quantity	658,241,406
Post Ban Plastic Carry Out Bag Quantity (22%)	144,813,109
Paper Bags (14%)	92,153,797
Reusable bags (64%/52)	8,101,433
Plastic Carryout Bag Recycling Rate	2.9%
Paper Carryout Bag Recycling Rate	21.0%

ALTERNATIVE #5

Charge 10 cents for plastic and paper bags

	Pre Ban				Post Ban			
	Quantity	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**	**Quantity**	**Weight Per Bag**	**Weight (lbs.)**	**Weight (tons)**
LandFill								
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	3,876.46	140,613,529	0.01213	1,705,642.11	852.82
Paper Carryout Bags	0	0.14875			72,801,500	0.14875	10,829,223.05	5,414.61
Reusable Carryout Bags	0	0.42500			8,101,433	0.42500	3,443,108.89	1,721.55
Replacement Bags (40%)	0	0.01213			207,051,151	0.01213	2,511,530.46	1,255.77
"Other Plastic"	0	0.140708			14,889,421	0.140708	2,095,060.59	1,047.53
Total Weight Deposited in Landfill				**3,876.46**				**10,292.28**
Post Ban / Pre Ban Ratio								**2.66**
Recycling								
Plastic Carryout Bags	19,089,001	0.01213	231,549.58	115.77	4,199,580	0.01213	50,940.91	25.47
Paper Carryout Bags	0	0.14875	-	-	19,352,297	0.14875	2,878,654.23	1439.33
Reusable Carryout Bags	0	0.42500	-	-	0	0.42500	0	0.00
Replacement Bags (40%)	0	0.01213	-	-	0	0.01213	0	0.00
"Other Plastic"	19,089,001	0.140708	2,685,975.12	1,342.99	4,199,580	0.140708	590,914.53	295.46
Total Weight of Material Recycled				**1,458.76**				**1760.25**
Post Ban / Pre Ban Ratio								**1.21**

Reclama of Issues Previously Raised

By Anthony van Leeuwen, 18 April 2013

Letter Dated 4 March 2013

1. Page 2-10, 1st Paragraph and Table 2-2. The EIR assumes that 5% of plastic carryout bags remain, 30% are replaced by paper carry bags, and 65% is replaced by reusable carryout bags. The impact of the proposed ordinance will also increase the consumption of single-use plastic garbage bags that will replace the up to 40% of plastic carryout bags previously used as wastebasket liners and trash bags. Because the increased consumption of plastic trash bags is a direct consequence of the proposed ordinance, the environmental impact of manufacturing and disposal of those bags should be accounted for in the environmental calculations throughout this EIR.

   Beacon Response 1.47
   The commenter suggests that the analysis should take into account the increase of plastic trash liners and the associated impacts that may occur since area residents won't be able to reuse plastic bags as trash liners. Regarding the commenter's opinion that plastic bags are reused, the Draft Program EIR acknowledges that single-use plastic bags can be used more than once. As discussed in Section 2.0, Project Description, single-use plastic bags can be re-used by customers and are recyclable. There may likely be an increase in plastic trash liners used in the Study Area. However, these types of trash bags are intended for such use and are not the type of bags that generally end up as litter (which impact biological resources, clog storm drains, and enter the marine environment). The objective of the Proposed Ordinance is intended to reduce existing impacts associated with plastic carryout bags including those impacts related to biological resources (plastic bag litter affecting wildlife species and habitat) and water quality (plastic bag litter clogging storm drains and entering creeks and waterways within the Study Area).

   Response to Beacon by Anthony van Leeuwen . Approximately 40% or plastic carryout bags that consumers receive as “free” bags at retail stores are reused as small trash can liners, trash bags, and to pick up pet litter (UK Environment Agency, “Lifecycle assessment of supermarket carrier bags available in 2006”, Report SC030148. Page 61). The reuse of the plastic carryout bags as trash bags is beneficial to the environment in that it avoids the purchase of plastic bags. By banning plastic carryout bags, local agencies are creating a new market and demand for a product seldom bought. The purchase by consumers of so called “replacement plastic trash bags” impacts the environment in the increased manufacturing of these bags, truck trips to deliver these bags to local stores, and disposal of the plastic in the landfill. The purchase of “replacement plastic trash bags” is a direct consequence of the proposed ordinance that impacts the environment by their manufacture, transport to the local area, and disposal in the landfill. The environmental impact of these “replacement bags” was not addressed in the Final EIR.

2. Page 4.3-15, Table 4.3-5. The item on “Zero Waste – High Recycling” mentions limited availability for consumers to access plastic bag facilities. Currently all retail stores subject to the requirements of California State Law AB 2449 and SB 1219 are required to have recycle bins for the recycling plastic carryout bags and other plastic bags and plastic wraps. In the event, that the proposed ordinance is adopted, and that plastic carryout bags are banned, the retail store will no longer be

required to retain a recycle bin. As a result, consumers will no longer be able to recycle "other" plastic bags and plastic wraps resulting in more plastic going to the landfill. See my paper titled "Plastic Carryout Bag Ban – More Plastic Headed Towards The Landfill" located in the Draft EIR Appendix A, page 242.

Beacon Response 1.85

The commenter states a concern that the Proposed Ordinance would result in the loss of plastic bag recycling bins at stores, which also collect other recyclable products such as other plastic bags and plastic wraps. He further states concern that if these bins are removed, recyclable material would be sent to landfills.

This comment is speculative. The Proposed Ordinance would ban plastic bags and would therefore eliminate the need for customers to return plastic bags to the stores for recycling, in regard to the concern about other recyclable materials being sent to the landfill, the AB 2449 plastic bag recycle bins are intended for plastic carryout bag recycling and is not the only recycling infrastructure in the Study Area. The cities and counties within the Study Area provide curbside recycling in private recycling bins for both residents and businesses, in addition, each jurisdiction provides drop-off centers where the public can recycle products such as plastic wraps and other plastic bags. The Proposed Ordinance would not eliminate recycling of other materials. The commenter has provided no evidence to support the contention that bins for recyclable materials other than plastic bags would be removed or that higher amounts of such materials would be sent to landfills as a result of the Proposed Ordinance. In addition, see Response 1.66.

Response to Beacon by Anthony van Leeuwen . The potential that retail stores that no longer issue plastic carryout bags, and therefore no longer legally required to maintain a recycle bin for plastic carryout bags, will remove the recycle bin is real. In San Francisco, a number of stores removed those recycle bins after a plastic carryout bag ban was implemented (Brown, Nat, 29 March 2011. "Bag the Plastic Ban". National Review Online; and The ULS Report. "A Qualitative Study of Grocery Bag Use in San Francisco". Use Less Stuff.) in Ventura County, consumers are not allowed to place clean plastic bags, newspaper bags, bread bags, dry cleaning bags, and plastic wraps from various products in the curbside recycle bin. The only place we have available is the local retail store recycle bin that will accept these products for recycling. Since, the cost to maintain the recycle bins is shouldered by the store's customers in terms of higher prices, and the fact that grocery stores are in competition with one another, more than likely will result in decisions to remove the plastic carryout bag recycling bins when plastic carryout bags are banned. Again, this occurred in San Francisco.

Beacon states that each jurisdiction provides drop off centers where plastic bags and wraps can be turned in for recycling. Beacon should provide a list of such centers, other than retail stores, for Ventura County that are willing to accept this type of material for recycling. It should be stated that for Ventura, the drop off center at Gold Coast Recycling and Transfer station does not accept plastic bags and wraps.

Furthermore, even if drop off centers exist, the probability that someone would drive across town to drop off plastic bags and wraps is very unlikely. More than likely this material will end up in the trash can instead.

3. Page 4.5-12, Tables 4.5-11 and 4.5-12, 2nd To Last Paragraph. It appears from the information presented on this page, that all of the waste generated by the different type of bags, end up in the landfill. There needs to be a discussion including tables that would show the volume and weight of waste generated for each type of bag and the amounts that would be diverted from the landfill by recycling. The EIR includes several estimates and projections for recycling e.g. 5% for plastic carryout bags, and 40% for paper bags. More information needs to be supplied. Decision makers need to know the volume and weight of material projected to go to the landfill and how much material is expected to be diverted as a result of recycling.

   Beacon Response 1.117
   The commenter opines that more information needs to be supplied related to recycling and that decision makers need to know the volume and weight of material projected to go to the landfill and how much material is expected to be diverted as a result of recycling. As described in Section 4.5, Utilities and Service Systems, on 4.5-7, the estimated solid waste generation rate for each type of bag utilizes EPA recycling rates to estimate the amount of solid waste that could eventually be sent to a landfill. In regard to the amount of material diverted, the volume of recyclable material is not pertinent to the impact of the Proposed Ordinance. The salient question is whether the Proposed Ordinance would generate solid waste exceeding the capacity of local solid waste disposal facilities. As discussed in Section 4.5, future solid waste generation changes associated with the Proposed Ordinance would remain within the capacity of regional landfills.

   Response to Beacon by Anthony van Leeuwen. One objective of the Proposed Ordinance is: "Reducing the amount of single-use bags in trash loads to reduce landfill volumes". The EIR should address the impacts to the landfill as a direct consequence of the proposed ordinance and should not be limited to the impacts of single-use bags. While the Final EIR uses Ecobilan and Boustead models to calculate the impact to the landfill. Table 4.5-11 shows a decrease of about 2500 tons and Table 4.5-12 shows an increase of about 1800 tons. These Tables give the decision maker a false picture of landfill impacts. Data in table 4.5-11 is not only suspect but is the only data in the EIR that shows solid waste impact from Reusable bags. There is no discussion in the EIR about the different bag types and which ones are recyclable in the local area not a discussion of mitigation efforts that must be undertaken to reduce amounts deposited in landfill as a result of the proposed ordinance. Please see enclosures (1), (2), and (3) to this letter.

Letter dated 15 March 2013

4. Page ES-5, Table ES-1, Impact U-3. The Impact Statement is incomplete in that it does not identify disposal of reusable bags. In addition, diversion to recycling activities is not mentioned at all. It should be noted that diversion of bags to recycling activities is an important method to decrease material dumped in a landfill.

   Beacon Response 2.14
   The commenter states that the impact statement for Impact U-3 does not identify disposal of reusable bags and does not discuss diversion/recycling of carryout bags. In regard to diversion and recycling of carryout bags, please see Response 1.117. In regard to Impact U-3, the statement in Section 4.5, Utilities and Service Systems, and in the Executive Summary has been revised as follows:

Impact U-3. The Proposed Ordinance would alter the solid waste generation rates in the Study Area due to an increase in paper bag and reusable bag use and reduction in plastic carryout bag use. However, projected future solid waste generation would remain within the capacity of regional landfills. Impacts would therefore be Class III, less than significant.

The Draft EIR analysis does consider disposal of reusable bags (as discussed in greater detail in responses 1.116 and 2.32). The estimate of solid waste discussed in Impact U-3 utilizes two different life cycle assessment studies to quantify the estimated amount of solid waste that would be deposited into local landfills. The life cycle assessment models used for Impact U-3 have some variability associated within them. For this analysis, the Ecobilan Data would represent a more likely scenario for the Study Area as it takes into account reusable bag solid waste in addition to plastic and paper bags. Therefore, impact U-3 does in fact consider the disposal of reusable bags. As described above, under the Ecobilan Data, the Proposed Ordinance would actually reduce solid waste compared to the existing conditions. However, the Boustead Data, which although unlikely for the Study Area as this study does not take into consideration reusable bags (only plastic and paper bags), represents a conservative worst case scenario under CEQA and therefore is included in this analysis. Nevertheless, even using the worst case scenario, the impact to solid waste facilities as a result of the Proposed Ordinance (due to the estimated increase in solid waste in the Boustead study) would be less than significant.

Response to Beacon by Anthony van Leeuwen. See # 6 below.

5. Page 4.5-7, 1st Paragraph. Since solid waste is calculated on an annual basis, the estimated solid waste generated from reusable bags should be calculated based upon the lifespan of reusable bags (the Draft EIR assumes a reusable bag is used weekly for 52 weeks with a lifespan of 1 year) and calculated by multiplying the estimated weight of a reusable bag times the quantity of bags. So based upon the Draft EIR, the number of 8,228,018 reusable bags each weighing 6.8 ounces would generate 1,749.45 tons of solid waste per year. In comparison the 658,241,406 plastic carryout bags generates 4,733 tons (Draft EIR Table 4.5-8) of solid waste per year. Because the quantity of plastic carryout bags and reusable bags are overstated actual amounts will be far less. Nevertheless, diversion of plastic carryout bags, paper bags, and reusable bags to recycling activities should be a priority in the proposed ordinance and alternatives because diversion to recycling activities is a stated goal and in order to reduce tipping fees at the landfill.

   Beacon Response 2.32
   The commenter reiterates that the amount of solid waste associated with reusable bags in Section 4.5 appears to be low and should be reevaluated. The commenter also suggests that the Draft EIR should assume that the weight of all reusable bags (approximately 8.2 million bags at 6.8 ounces per bag) is deposited into a landfill each year. The Draft EIR assumes that a reusable bag is used 52 times per year. Nevertheless, using the commenter's suggested rate of solid waste from reusable bags (6.8 ounces per bag x 8.2 million reusable bags per year) that would be deposited into a landfill, the Proposed Ordinance would result in an increase of approximately 1,748.45 tons of solid waste per year from reusable bags. Adding this total to the solid waste generated from paper bags (1,900 tons) and the waste from the remaining single use plastic carryout bags in the Study Area (237 tons) as shown in Table 4.5-11, the Proposed Ordinance would result in approximately 3,885 tons per year of solid waste. The current amount of solid waste associated with the approximately 658 million single

use plastic carryout bags is estimated at 4,733 tons per year (as shown in Table 4.5-11). Thus, using the commenter's suggested rate, the Proposed Ordinance would result in a net decrease of approximately 848 tons per year of solid waste compared to existing conditions. This is less than the 2,596 tons per year reduction identified in the Draft EIR, but there would still be a reduction as compared to existing conditions. In addition, the significance determination is based on the Boustead data, which shows an incremental increase in solid waste generation as compared to existing conditions. Even based on this "worst case" scenario, the impact would not be significant.

Response to Beacon by Anthony van Leeuwen. See # 6 below.

6. Page 4.5-11, Last Paragraph. The information in this paragraph is bogus. See comment **5** above. Table 4.5-11 has erroneous data for reusable bags and table 4.5-12 does not account for reusable bags hence conclusions cannot be drawn for the solid waste generated. Both numeric values in this paragraph are wrong. Please correct.

   Beacon Response 2.34
   The commenter suggests that tables 4.5-11 and 4.5-12 may have errors and that Table 4.15-12 does not consider reusable bags. In regard to potential calculation errors for reusable bags in Table 4.5-11, see Response 2.32. In regard to Table 4.5-12 not considering reusable bags, see Response 2.14.

   Response to Beacon by Anthony van Leeuwen.

   Page 4.5-12, Table 4.5-11 and 4.5-12. Both tables fail to approximate the waste that will go to the landfill. Table 4.5-11 would imply a reduction in landfill amounts by 2596 tons of solid waste per year, and Table 4.5-12 would imply an increase in landfill amounts by 1814 tons of solid waste. Table 4.5-11 includes “reusable bags” and table 4.5-12 does not. The following are some detailed discussion points:

   - Table 4.5-11, column on Solid Waste per Bag per day (kg). Where do the numbers come from and how are they calculated? I thought I found the number in Appendix E but it states 0.01 vice 0.0087 for Paper bags. Same with reusable bags. Beacon needs to adjust decimal points in appendix E for more precision so that the amounts track with what is in tables.
   - Table 4.5-11, column on Solid Waste per Year (tons). The solid waste per year for reusable bags shows 0.075 tons or 150 lbs. per year or approximately 353 reusable bags. At 353 reusable bags per year it would take more than 20,000 years to landfill the 8,228,018 reusable bags since the majority of these bags are not recyclable.
   - Table 4.5-11, column on Solid Waste per Year (tons). The 0.075 tons or 150 lbs. per year does not compare well with Table 4.5-9 from the Draft EIR for the County of San Mateo. The County of San Mateo shows 6,911,642 reusable bags with 3.29 tons of solid waste or approximately 15,482 bags. Why would San Mateo which has approximately 1.3 million less reusable bags have 42 times the amount waste production using Ecobilan data? It appears that Table 4.5-11 has erroneous data.

- Table 4.5-11, Ecobilan Model Is The Wrong Model. Using Ecobilan data to estimate Solid Waste for Reusable Bags is the wrong model. Ecobilan data uses the Low Density Polyethylene (LDPE) Reusable Bags which is recyclable. The reusable bags in the Study area are made from non-woven polypropylene (PP) and or cotton for which there is no recycling infrastructure meaning that at end of life these bags are disposed of in the landfill. The Ecobilan model does not model the type of bags used in the Study Area.
- Reusable Bag Lifespan. The EIR makes a conservative estimate that reusable bags are used once per week for 52 weeks with a lifespan on 1 year. The EIR also indicates that they can be used as many as 104 times or about two years. Once you make this conservative estimate of a lifespan of 1 year, it follows that the 8,228,018 reusable bags are disposed of in each calendar year.
- Reusable Bag Waste Generated. Since the majority of reusable bags are not recyclable, it can be safely assumed that at the end of life, the entire lot of 8,228,018 reusable bags weighing 1748.45 tons, using the weight of 6.8 ounces per bag as weighed by Rincon Consultants 0n 8/10/2010, would be disposed of as solid waste. The Ecobilan data in Table 4.5-11 shows the "Solid Waste per Year" of 0.075 tons or 150 lbs. or approximately 353 reusable bags per year. It would take over twenty thousand years just to dispose of 8,228,018 reusable bags. This demonstrates that this is the wrong model. No other information is provided in the FEIR to show projected amounts of solid waste that are realistic.
- Ecobilan Data is Suspect. In Table 4.5-11 the total Solid Waste per Year for Paper Carryout Bags is shown as 1900 tons. This is amount equal to approximately 13% of the 197,472,422 paper bags. This would assume a very high recycle rate or loss rate that is not explained or justified in the EIR. The validity of the data is questioned.
- Ecobilan Data is Suspect. In Table 4.5-11 the total Solid Waste per Year for 8,228,018 reusable bags is shown as 0.075 tons or 150 lbs. or about 353 bags. In a similar table, table 4.5-9 of the County of San Mateo Draft EIR, for 6,911,642 reusable bags the Solid Waste per Year was 3.29 tons, or 6580 lbs. or about 15,482 bags. The discrepancy is revealing in that it shows the data in one or both EIRs is bogus. Beacon needs to validate the data.
- EIR Misleads Decision Makers. The results in Tables 4.5-11 and 4.5-12 would lead a decision maker to assume that the impact to the landfill is minimal. When the exact opposite is true as shown in the Table 1:

	Quantity	Weight per bag (lbs.)	Weight (lbs.)	Weight (tons)
Pre-Ban				
Plastic Carryout Bags	639,152,405	0.01213	7,752,918.68	**3,876.46**
Post Ban				
Plastic Carryout Bags	32,912,070	0.01213	399,223.41	199.61
Reusable Bags	8,228,018	0.42500	3,496,907.84	1,748.45
Paper Bags	157,977,937	0.14875	23,499,218.19	11,749.61
Replacement Bags	263,296,562	0.01213	3,193,787.30	1,596.89
Other Plastic	14,507,641	0.140708	2,041,341.09	1,020.67
Total				**16,168.37**
Post Ban /Pre Ban Ratio				**4.17**

Table 1. Landfill Impacts in Santa Barbara and Ventura Counties

- County Landfill Impacts. Table 1 clearly shows that more than 4 times as much material is put into the landfill after a ban and as a direct result of the ban and before the ban. These numbers are raw number and are not adjusted for losses, or for varying weights of different manufactured items. For assumptions and detailed information please see my paper titled "Fact Sheet – Landfill Impacts".
- Impact to Landfill By Replacement Bags. Table 1 shows an item called "Replacement Bags". These are the plastic trash bags consumers will purchase to replace the "free" plastic carryout bags formerly used as waste can liners and to pick up pet litter. By banning plastic carryout bags, the ordinance will create a new market for small trash can liners and small plastic bags to pick up pet litter. The environmental impact of that new industry, which is a direct result of the ban, should be identified and analyzed in the EIR even though these bags are not a litter problem. Note: The Ecobilan Summary Report (page 9) identifies that bin liners were included in the Scottish report and included in the analysis and analyzed with the same life cycle impacts as plastic carryout bags from manufacture to disposal.
- Other plastic and Wraps. Table 1 shows an item called "other plastic" which is the material other than plastic carryout bags deposited and recycled through the in-store recycle bins. This material consists of the following: clean produce bags, bread bags, newspaper bags, dry-cleaning bags, and various plastic wraps such as from toilet paper, paper towels, diapers, etc. Since a ban on plastic carryout bags, has a very strong potential to shut down the in-store recycling program. If this occurs, this "other plastic" will be disposed of in the landfill. In Santa Barbara County, other plastic bags and wraps are allowed in the curbside recycling bin. In Ventura county, other plastic bags and wraps are not allowed in the curbside recycling bin and must be recycled through the In-Store Recycling Bins.

7. Appendix E, (Final EIR Page 567 of 615). On this page in the upper right hand corner is a box that shows the 2007 **recycling rate for plastic bags at 11.90% and paper Bags at 36.80%**. In the

text of the EIR in numerous places the recycling rate for plastic bags is less than 5% and paper bags is 21%. Could you explain where these numbers come from and why they are different than the numbers in the text of the EIR? Why would the rates in the calculations be different from what is disclosed in the text of the document?

8. Page ES-1, 2nd Paragraph, Line 12. Allowing a regulated retail establishment to distribute reusable bags free of charge, other than for a short term promotion, will result a proliferation of reusable bags since customers would be issued a new reusable bag every time they forget to bring reusable bags to the store. In an article titled "*Bag the bag: a new green monster is on the rise*" the author identifies Australia's growing mountain of green reusable bags which end up in the landfill and are causing a concern. It turns out that stores profit from the sale of reusable bags and sell more than required by the public. Since the majority of reusable bags are not recyclable, except for LDPE or HDPE bags, they end up in the landfill. It follows that free giveaways unless limited to a short term promotion would result in a worse environmental problem than the use of plastic carryout bags. It is recommended, that the proposed ordinance limit reusable bag giveaways and modify language in the proposed ordinance to reflect that.

Beacon Response 5.2

The commenter speculates that the Proposed Ordinance would result in a proliferation of reusable bags since customers would be issued new reusable bags when they forget reusable bags and this would increase solid waste. The commenter recommends that the Proposed Ordinance limit reusable bag giveaways and limit the promotion and **sale** of reusable bags. The commenter does not provide any data to support this claim; therefore, the comment is speculative. The Draft EIR does analyze impacts to solid waste from carryout bags as a result of the Proposed Ordinance in Section 4.5, Utilities.

Response to Beacon by Anthony van Leeuwen. The problem with proliferation of reusable bags was documented and a reference was given via a footnote. The reference is as follows: *Munro, Peter. 24 January 2010. "Bag the bag: a new green monster is on the rise." Located at: http://www.theage.com.au/national/bag-the-bag-a-new-green-monster-is-on-the-rise-20100123-mrqo.html*.

The commenter recommended that there be very strict limits on promotions where free bags are provided in order to prevent proliferation of reusable bags. It is recommended that customers pay for reusable bags in order to deter reusable bag proliferation.

In addition, the Final EIR in Section 4.5, Utilities does not adequately analyze the impacts to solid waste from carryout bags. Ecobilan data analyzes a reusable bag made from Low Density Polyethylene (LDPE) which is recyclable. The bags in the Study Area are mostly made from non-woven polypropylene (PP) or cotton, neither of which has a recycling infrastructure, and will be disposed of in the landfill. There is no information provided that is satisfactory related to Solid Waste disposal.