

**ORDINANCE TO BAN PLASTIC CARRYOUT BAGS
IN THE CITY OF WEST HOLLYWOOD**

**ADDENDUM TO THE ENVIRONMENTAL IMPACT REPORT
(SCH No. 200911104)**

PREPARED FOR:

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SECTION 1.0 INTRODUCTION

This Addendum to the Environmental Impact Report (EIR) has been prepared by the City of West Hollywood (City) to assess the environmental consequences of the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance). This document is prepared as an addendum to the previously certified EIR that was adopted by the County of Los Angeles (County) Board of Supervisors on November 16, 2010 (State Clearinghouse No. 2009111104).¹ As one of the 88 incorporated cities within the County, the City proposes an ordinance to ban plastic carryout bags consistent with the ordinance analyzed in the County's Final EIR and adopted by the County Board of Supervisors. The addendum is required to address the possible environmental effects associated with adoption of such an ordinance within the City. The proposed ordinance would ban the issuance of plastic carryout bags at the point of sale in all retail stores in the City, aside from farmers markets, restaurants, and dry cleaners. The proposed ordinance would either allow paper carryout bags to be distributed free of charge, consistent with the analysis of Alternative 3 in the certified EIR, or place a 10-cent charge on the issuance of paper carryout bags, consistent with the analysis of Alternative 5 in the certified EIR. The ordinance would also require affected stores to provide or make available to a customer only recyclable paper carryout bags or reusable bags.

This document is prepared in accordance with the State California Environmental Quality Act (CEQA) Guidelines Section 15164, which requires that an Addendum to an EIR be prepared when changes to an approved project require minor modifications to the previous EIR rather than major changes due to the potential for new or substantially more adverse environmental effects. CEQA requires that an EIR be prepared for projects that may have a significant effect on the environment.² If changes to a project are necessary after an EIR has been certified and are not considered significant,³ CEQA states that an Addendum to an EIR can be prepared to document minor technical changes or additions to a previously approved project.⁴

The project analyzed in the certified EIR includes an ordinance to ban the issuance of plastic carryout bags at certain stores within the unincorporated areas of the County. The proposed ordinance for which this Addendum to the EIR is prepared proposes a similar ordinance to ban the issuance of plastic carryout bags in the City. The City is one of the 88 incorporated cities considered in the EIR analysis for the County's ordinance. The City would adopt an ordinance similar to the County's plastic carryout bag ordinance with a few minor changes specific to West Hollywood. These minor revisions would cause no new significant environmental effects beyond those identified in the County's certified EIR. Since the proposed ordinance does not require substantial changes to the County's ordinance, major revisions of the EIR analysis are not warranted. As such, a subsequent EIR pursuant to Section 15162 of the State CEQA Guidelines would not be warranted, and an addendum is the appropriate environmental document under CEQA. The City is the lead agency for the refined project pursuant to CEQA.

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² *California Public Resources Code*, Division 13, Section 21002.1.

³ *California Code of Regulations*, Title 14, Chapter 3, Article 11, Section 15162.

⁴ *California Code of Regulations*, Title 14, Chapter 3, Article 11, Section 151624(a).

1.1 PURPOSE AND SCOPE OF THE ADDENDUM TO THE EIR

The City has prepared this document to demonstrate that the proposed ordinance satisfies the requirements contained in Section 15164 of the State CEQA Guidelines regarding preparation of an Addendum to the EIR and does not require the preparation of a Subsequent or Supplemental EIR pursuant to Sections 15162 and 15163, respectively, of the State CEQA Guidelines due to the absence of new or substantially more adverse significant impacts than those analyzed in the certified EIR. This Addendum to the EIR neither controls nor determines the ultimate decision of approval of the proposed ordinance.

SECTION 2.0

PROJECT DESCRIPTION

Consistent with the requirements of Section 15124 of the State California Environmental Quality Act (CEQA) Guidelines,¹ this section of the Addendum to the Environmental Impact Report (EIR)² describes the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (City; proposed ordinance), including the location and boundaries of the area affected by the proposed ordinance; a brief characterization of the existing conditions of bag usage within the City; a statement of objectives for the proposed ordinance; and a general delineation of the technical, economic, and environmental characteristics of the proposed ordinance. The “project” (herein referred to as the proposed ordinance), as defined by CEQA, that is being considered by the City consists of adoption of an ordinance to ban the issuance of plastic carryout bags. To address the issuance of paper carryout bags, the proposed ordinance would either allow paper carryout bags to be distributed free of charge within the City or place a 10-cent charge on the issuance of paper carryout bags. The County evaluated the fee and no-fee options as Alternative 3 and Alternative 5, respectively, in the certified EIR for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (certified EIR).

2.1 PROPOSED PROJECT LOCATION

The proposed ordinance would affect an area of approximately 1.9 square miles encompassing the incorporated City of West Hollywood within the County of Los Angeles (County), California. The affected area is bordered on the north, east, and south by the City of Los Angeles; and is bordered on the west by the City of Beverly Hills (Figure 2.1-1, *Project Location Map*).

2.2 BACKGROUND

2.2.1 Contribution of Plastic Carryout Bags to Litter Stream

The California Integrated Waste Management Board (CIWMB) estimates that plastic grocery and other merchandise bags make up 0.4 percent of California’s overall disposed waste stream by weight,³ but have been shown to make a more significant contribution to litter, particularly within catch basins. The City of San Francisco Litter Audit in 2008 showed that plastic materials were the second most prevalent form of litter, with 4.7 percent of all litter collected being unidentified miscellaneous plastic litter and branded plastic retail bags constituting 0.6 percent of the total number of large litter items collected.⁴ As an example of the prevalence of plastic bag litter found in catch basins, plastic bags constituted 25 percent by weight and 19 percent by volume of the trash collected from 30 catch basins in the Los Angeles River during the Great Los Angeles River

¹ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³ California Environmental Protection Agency, Integrated Waste Management Board. December 2004. “Table ES-3: Composition of California’s Overall Disposed Waste Stream by Material Type, 2003.” *Contractor’s Report to the Board: Statewide Waste Characterization Study*, p. 6. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: <http://www.ciwmb.ca.gov/Publications/default.asp?pubid=1097>

⁴ City of San Francisco, San Francisco Environment Department. 2008. *The City of San Francisco Streets Litter Re-audit*. Prepared by: HDR; Brown, Vence & Associates, Inc.; and MGM Management Environmental and Management Service. San Francisco, CA. Available at: http://www.sfenvironment.org/downloads/library/2008_litter_audit.pdf



FIGURE 2.1-1
Project Location Map

Clean Up.⁵ Results of a California Department of Transportation (Caltrans) study of catch basins alongside freeways in Los Angeles indicated that plastic film composed 7 percent by mass and 12 percent by volume of the total trash collected.⁶ According to research conducted by the Los Angeles County Department of Public Works (LACDPW), approximately 6 billion plastic carryout bags are consumed in the County each year, which is equivalent to approximately 1,600 bags per household per year.^{7,8,9} Public agencies in California spend more than \$375 million each year for litter prevention, cleanup, and disposal.¹⁰ The County of Los Angeles Flood Control District alone spends more than \$18 million annually for prevention, cleanup, and enforcement efforts to reduce litter.^{11,12,13,14} For 2008–2009, the most recent year available, the County of Los Angeles Flood Control District spent over \$24 million on these activities [\$1.9 million on maintenance of structural and treatment control best management practices (BMPs), \$9.3 million on municipal street cleaning, \$1.9 million on catch basin cleaning, \$9.6 million on trash collection and recycling, and \$1.3 million on capital costs].¹⁵ Survey data obtained by the County from employees of solid waste facilities within the County conclusively indicated that plastic carryout bags pose serious operational problems for landfills.¹⁶ All six survey respondents stated that plastic bags cause serious litter issues due to their lightweight nature and propensity to become airborne.¹⁷ Each survey respondent indicated that it was costly and time consuming to provide clean-up crews to

⁵ City of Los Angeles. 18 June 2004. *Characterization of Urban Litter*, pp. 1–5. Prepared by: Ad Hoc Committee on Los Angeles River and Watershed Protection Division. Los Angeles, CA.

⁶ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 2001. *Results of the Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation. Available at: <http://www.owp.csus.edu/research/papers/papers/PP020.pdf>

⁷ California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

⁸ U.S. Census Bureau. 2000. "State & County Quick Facts: Los Angeles County, California." Available at: <http://quickfacts.census.gov/qfd/states/06/06037.html>

⁹ Average of slightly less than three persons per household.

¹⁰ California Department of Transportation. Accessed on: 18 August 2011. "Facts at a Glance." *Don't Trash California*. Available at: <http://www.dontrashcalifornia.info/pdf/Statistics.pdf>

¹¹ Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2009. Available at: <http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2009/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20Annual%20Report.pdf>

¹² Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2008. Available at: <http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2008/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20&%20County%20Annual%20Report%20FY07-08.pdf>

¹³ Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2007. Available at: <http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2007/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Annual%20Rpt%2006-07.pdf>

¹⁴ Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2006. Available at: http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2006/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/PrincipalPermittee_AnnualReportFY05-06.pdf

¹⁵ Los Angeles County Municipal Storm Water Permit (Order 01-182) Individual Annual Report Form. October 2009. Available at: <http://dpw.lacounty.gov/wmd/NPDESRSA/AnnualReport/2009/Appendix%20D%20-%20Principal%20Permittee%20Annual%20Report/Principal%20Permittee%20Annual%20Report.pdf>

¹⁶ County of Los Angeles Department of Public Works. 2007. Survey – All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

¹⁷ County of Los Angeles Department of Public Works. 2007. Survey – All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

address the plastic bag litter problem in neighborhoods in the County unincorporated and incorporated areas adjacent to landfill.¹⁸

2.2.2 Definitions

For the purposes of this Addendum to the EIR, the following terms are defined as follows:

- *Reusable bag(s)*: a bag with handles that is specifically designed and manufactured for multiple reuse and meets all of the following requirements: (1) has a minimum lifetime of 125 uses, which means the capability of carrying a minimum of 22 pounds 125 times over a distance of at least 175 feet; (2) has a minimum volume of 15 liters; (3) is machine washable or is made from a material that can be cleaned or disinfected; (4) does not contain lead, cadmium, or any other heavy metal in toxic amounts; (5) has printed on the bag, or on a tag that is permanently affixed to the bag, the name of the manufacturer, the location (country) where the bag was manufactured, a statement that the bag does not contain lead, cadmium, or any other heavy metal in toxic amounts, and the percentage of postconsumer recycled material used, if any; and (6) if made of plastic, is a minimum of at least 2.25 mils thick.
- *Paper carryout bag(s)*: a carryout bag made of paper that is provided by a store to a customer at the point of sale and can contain some percentage of post-consumer recycled content. Can be interchangeably referred to as a recyclable paper carryout bag.
- *Plastic carryout bag(s)*: any bag made predominantly of plastic derived from either petroleum or a biologically-based source, such as corn or other plant sources, which is provided to a customer at the point of sale. "Plastic carryout bag" includes compostable and biodegradable bags but does not include reusable bags, produce bags, or product bags.
- *Recyclable paper carryout bag(s)*: a paper bag that meets all of the following requirements: (1) contains no old growth fiber; (2) is one hundred percent (100%) recyclable and contains a minimum of forty percent (40%) post-consumer recycled material; (3) can be composted, consistent with the specifications of the American Society for Testing and Materials (ASTM) Standard D6400; (4) is accepted for recycling by the City's curbside programs; (5) has the name of the manufacturer, the location (country) where the bag was manufactured, and the percentage of postconsumer recycled material used printed on the bag; and (6) displays the word "recyclable" in a highly visible manner on the outside of the bag.

2.2.3 Carryout Bag Bans and Fees

There are numerous city and county governments in California that have banned the issuance of plastic carryout bags, including the City and County of San Francisco, City of Malibu, City of Palo Alto, City of Manhattan Beach, City of Calabasas, City of Santa Monica, County of Los Angeles, and Town of Fairfax. In addition, a plastic carryout bag fee ordinance is in effect in the District of Columbia, and ordinances to ban the issuance of plastic carryout bags are in effect in Marshall County, Iowa; Telluride, Colorado; and the Outer Banks of North Carolina. Out of the 88 cities in the County of Los Angeles, at least 6 (the Cities of Pasadena, Long Beach, Calabasas, Santa Monica, Malibu, and Manhattan Beach) had adopted plastic carryout bag bans at the time of preparation of this addendum.

¹⁸ County of Los Angeles Department of Public Works. 2007. Survey – All Solid Waste Facilities: Plastic Bag Analysis for the County of Los Angeles. Los Angeles, CA.

Outside of the United States, jurisdictions that have banned or placed fees on the issuance of plastic carryout bags include Ireland, Switzerland, South Africa, Taiwan, Bangladesh, Belgium, China, and American Samoa.

2.2.4 Litigation History

Numerous city and county governments in California, including the City of Oakland, City of Manhattan Beach, City of Palo Alto, Santa Clara County, City of San Diego, City of Morgan Hill, City of Mountain View, City of San Jose, Marin County, City of Encinitas, and City of Long Beach have attempted to impose bans on plastic carryout bags but have been challenged by some members of the plastic bag industry.

On August 12, 2008, the Save the Plastic Bag Coalition filed a lawsuit against the City of Manhattan Beach for adopting an ordinance to ban the issuance of plastic carryout bags without first preparing an EIR.¹⁹ On February 20, 2009, the Los Angeles Superior Court ruled that the City of Manhattan Beach should have prepared an EIR for the ordinance.²⁰ The trial court found that substantial evidence supported a fair argument that the ordinance may cause increased use of paper bags that may have a significant negative impact on the environment, thus requiring an EIR for further evaluation of the potential environmental impacts.²¹ On January 27, 2010, the Court of Appeal affirmed the trial court decision and vacated the ordinance and disallowed reenactment, pending preparation of an EIR.²² On July 14, 2011, the California Supreme Court overturned the decision and ruled in the case of Manhattan Beach that “a negative declaration was sufficient to comply with the requirements of the California Environmental Quality Act.” The Supreme Court stated that “substantial evidence and common sense support the city’s determination that its ordinance would have no significant environmental effect.”²³ The Supreme Court also stated, “Manhattan Beach is small enough that even the cumulative effects of its ordinance would be negligible.”²⁴ The ordinance was classified by the City of Manhattan Beach as “[a]n activity directly undertaken by [a] public agency,” and was therefore classified as a project under Section 21065(a) of the State CEQA Guidelines. The Supreme Court stated that the legal “analysis would be different for a ban on plastic bags by a larger governmental body, which might precipitate a significant increase in paper bag consumption.”²⁵

¹⁹ Law Offices of Stephen L. Joseph, Esq., Tiburon, California. 12 December 2008. Action filed: 12 August 2008. Petitioner’s Notice of Motion and Motion for Preliminary Injunction Staying Plastic Bag Ordinance; Declarations of Stephen L. Joseph, Peter M. Grande and Catherine Brown. Save the Plastic Bag Coalition v. City of Manhattan Beach, City Council of Manhattan Beach. Case No. BS116362. On behalf of Save the Plastic Bag Coalition, San Francisco, CA. Available at: <http://www.savetheplasticbag.com/UploadedFiles/STPB%20mot%20for%20preliminary%20inj%20against%20Manhattan%20Beach.pdf>

²⁰ Superior Court of California, County of Los Angeles. Hearing on Petition for Writ of Mandate. Save the Plastic Bag Coalition v. City of Manhattan Beach et al. Case No. BS116362. Ruling: 20 February 2009. Available at: <http://www.savetheplasticbag.com/UploadedFiles/Manhattan%20Beach%20ruling.pdf>

²¹ Court of Appeal of the State of California, Second Appellate District, Division Five. Decision: 27 January 2009. Appeal from a judgment of the Superior Court of Los Angeles County, David P. Yaffe, Judge. Save the Plastic Bag Coalition v. City of Manhattan Beach. Available at: <http://www.savetheplasticbag.com/UploadedFiles/Manhattan%20Beach%20appeal%20decision.pdf>

²² Court of Appeal of the State of California, Second Appellate District, Division Five. Decision: 27 January 2009. Appeal from a judgment of the Superior Court of Los Angeles County, David P. Yaffe, Judge. Save the Plastic Bag Coalition v. City of Manhattan Beach. Available at: <http://www.savetheplasticbag.com/UploadedFiles/Manhattan%20Beach%20appeal%20decision.pdf>

²³ Save the Plastic Bag Coalition v. City of Manhattan Beach, 52 Cal. 4th 155 (Cal. 2011).

²⁴ Save the Plastic Bag Coalition v. City of Manhattan Beach, 52 Cal. 4th 155 (Cal. 2011).

²⁵ Save the Plastic Bag Coalition v. City of Manhattan Beach, 52 Cal. 4th 155 (Cal. 2011).

2.3 EXISTING CONDITIONS

2.3.1 Plastic Carryout Bags

In 1977, supermarkets began offering to customers plastic carryout bags designed for single use.^{26,27} By 1996, four out of every five grocery stores were using plastic carryout bags.^{28,29} Plastic carryout bags have been found to contribute substantially to the litter stream and to have adverse effects on marine wildlife.^{30,31,32,33,34,35} The prevalence of litter from plastic bags in the urban environment also compromises the efficiency of systems designed to channel storm water runoff. Furthermore, plastic bag litter leads to increased clean-up costs for the City, the County, Caltrans, and other public agencies, and are ultimately paid by tax payers.^{36,37,38} The presence of litter also contributes to degradation of the environment and of the quality of life for residents and visitors.³⁹ In particular, the prevalence of plastic bag litter in the storm water system and coastal waterways hampers the ability of, and exacerbates the cost to, local agencies to comply with the National Pollution Discharge Elimination System (NPDES) and total maximum daily loads (TMDL) limits for trash, pursuant to the federal Clean Water Act (CWA).^{40,41}

²⁶ SPI: The Plastics Industry Trade Association. 2007. Web site. Available at: <http://www.plasticsindustry.org/>

²⁷ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

²⁸ SPI: The Plastics Industry Trade Association. 2007. Web site. Available at: <http://www.plasticsindustry.org/>

²⁹ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

³⁰ United Nations Environment Programme. April 2009. *Marine Litter: A Global Challenge*. Nairobi, Kenya. Available at : http://www.unep.org/regionalseas/marinelitter/publications/docs/Marine_Litter_A_Global_Challenge.pdf

³¹ California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

³² County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

³³ Bjorndal, K. et. al. 1994. "Ingestion of marine debris by juvenile sea turtles in coastal Florida habitats." *Marine Pollution Bulletin*, 28 (3). Available at: http://accstr.ufl.edu/publications/BjorndalEtAl_1994_IngestionOfMarineDebrisByJuvenileSeaTurtlesInCostalFlorida.pdf

³⁴ Okeanos Ocean Research Foundation. 1989. *Marine Mammal and Sea Turtle Encounters with Marine Debris in the New York Bight and the Northeast Atlantic*. Available at: http://swfsc.noaa.gov/publications/TM/SWFSC/NOAA-TM-NMFS-SWFSC-154_P562.PDF

³⁵ Gomerčić, H. et. al. 2006. "Biological aspects of Cuvier's beaked whale (*Ziphius cavirostris*) recorded in the Croatian part of the Adriatic Sea." In *European Journal of Wildlife Research*. DOI 10.1007/s10344-006-0032-8.

³⁶ California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

³⁷ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

³⁸ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 1998–2000. *Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation.

³⁹ Keep America Beautiful, Inc. Accessed on: 18 August 2011. "Litter Prevention." Available at: http://www.kab.org/site/PageServer?pagename=focus_litter_prevention

⁴⁰ *United States Code*, Title 33, Section 1313, "Water Quality Standards and Implementation Plans." Clean Water Act, Section 303(d).

The CIWMB estimates that approximately 3.9 percent of plastic waste can be attributed to plastic carryout bags related to grocery and other merchandise, which represents approximately 0.4 percent of the total waste stream in California.^{42,43} Several organizations have studied the effects of plastic litter: Caltrans conducted a study on freeway storm water litter;⁴⁴ the Friends of Los Angeles River conducted a waste characterization study on the Los Angeles River;⁴⁵ the City of Los Angeles conducted a waste characterization study on 30 storm drain basins;⁴⁶ and LACDPW conducted a trash reduction and a waste characterization study of street sweeping and trash capture systems near and within the Hamilton Bowl in Long Beach, California.⁴⁷ These studies concluded that plastic film (including plastic bag litter) composed between 7 to 30 percent by mass and between 12 to 34 percent by volume of the total litter collected. Despite implementation of BMPs; installation of litter control devices, such as cover fences for trucks, catch basins, and facilities to prevent airborne bags from escaping; and the use of roving patrols to pick up littered bags, plastic bag litter remains prevalent throughout the County.⁴⁸

Assembly Bill (AB) 2449 requires all supermarkets (grocery stores with more than \$2 million in annual sales) and retail businesses with at least 10,000 square feet with a licensed pharmacy to establish a plastic carryout bag recycling program at each store. As of July 1, 2007, each store must provide a clearly marked bin that is easily available for customers to deposit plastic carryout bags for recycling. The stores' plastic bags must display the words "please return to a participating store for recycling."⁴⁹ In addition, the affected stores must make reusable bags available to their patrons. The bags can be made of cloth, fabric, or plastic with a thickness of 2.25 mils or greater.⁵⁰ The stores are allowed to charge their patrons for reusable bags.⁵¹ Store operators must maintain program records for a minimum of three years and make the records available to the local jurisdiction.⁵² Despite the implementation of AB 2449, the California Department of Resources

⁴¹ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

⁴² California Environmental Protection Agency, Integrated Waste Management Board. December 2004. "Table ES-3: Composition of California's Overall Disposed Waste Stream by Material Type, 2003." *Contractor's Report to the Board: Statewide Waste Characterization Study*, p. 6. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: <http://www.ciwmb.ca.gov/Publications/default.asp?pubid=1097>

⁴³ Note: Plastics make up approximately 9.5 percent of California's waste stream by weight, including 0.4 percent for plastic carryout bags related to grocery and other merchandise, 0.7 percent for non-bag commercial and industrial packaging film, and 1 percent for plastic trash bags.

⁴⁴ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 1998–2000. *Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation.

⁴⁵ Friends of the Los Angeles River and American Rivers. 2004. *Great Los Angeles River*. Los Angeles and Nevada City, CA.

⁴⁶ City of Los Angeles, Sanitation Department of Public Works. June 2006. *Technical Report: Assessment of Catch Basin Opening Screen Covers*. Los Angeles, CA.

⁴⁷ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

⁴⁸ County of Los Angeles, Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

⁴⁹ *Public Resources Code*, Section 42250–42257. 2006. Assembly Bill 2449.

⁵⁰ *Public Resources Code*, Section 42250–42257. 2006. Assembly Bill 2449.

⁵¹ *Public Resources Code*, Section 42250–42257. 2006. Assembly Bill 2449.

⁵² California Integrated Waste Management Board. 12 June 2007. Board Meeting Agenda, Resolution: Agenda Item 14. Sacramento, CA.

Recycling and Recovery (CalRecycle) reported that the most recent statewide recycling rate for regulated plastic carryout bags was only approximately 3 percent.⁵³

2.3.2 Paper Bags

The production, distribution, and disposal of paper carryout bags also have known adverse effects on the environment.^{54,55} There is a considerable amount of energy that is used, trees that are felled, and pollution that is generated in the production process of paper carryout bags.^{56,57} The CIWMB determined in the 2004 Statewide Waste Characterization Study that approximately 117,000 tons of paper carryout bags are disposed of each year by consumers throughout the County. This amount accounts for approximately 1 percent of the total 12 million tons of solid waste generated each year.⁵⁸ However, paper bags have the potential to biodegrade if they are sufficiently exposed to oxygen, sunlight, moisture, soil, and microorganisms (such as bacteria); they are denser and less susceptible to becoming airborne; and they generally have a higher recycling rate than do plastic bags. The U.S. Environmental Protection Agency (USEPA) reported that the recycling rate for high-density polyethylene plastic bags and sacks was 11.9 percent in 2007, compared to a recycling rate of 36.8 percent of paper bags and sacks.⁵⁹ There is nearly universal access to curbside recycling throughout the City and homeowners can conveniently recycle paper items.⁶⁰ The paper used to make standard paper carryout bags is originally derived from wood pulp, which is a naturally biodegradable and compostable material. Therefore, based upon the available evidence, paper carryout bags are less likely to become litter than are plastic carryout bags. The brown paper bags commonly found at supermarkets are made from Kraft paper.⁶¹

2.3.3 Reusable Bags

Reusable bags offer an alternative to plastic carryout bags, compostable plastic carryout bags, and paper carryout bags. The utility of a reusable bag has been noted in various reports, such as the

⁵³ CalRecycle. Last updated: 6 April 2011. *2009 Statewide Recycling Rate for Plastic Carryout Bags*. Available at: <http://www.calrecycle.ca.gov/Plastics/AtStore/AnnualRate/2009Rate.htm>

⁵⁴ County of Los Angeles, Department of Public Works, Environmental Programs Division. October 2008. *County of Los Angeles Single Use Bag Reduction and Recycling Program – Program Resource Packet*. Alhambra, CA.

⁵⁵ Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by: ICF International. San Francisco, CA.

⁵⁶ County of Los Angeles Board of Supervisors. 22 January 2008. *Single Use Bag Reduction and Recycling Program (Resolution and Alternative 5)*. Los Angeles, CA. Available at: <http://dpw.lacounty.gov/epd/PlasticBags/Resources.cfm>

⁵⁷ County of Los Angeles, Department of Public Works, Environmental Programs Division. October 2008. *County of Los Angeles Single Use Bag Reduction and Recycling Program – Program Resource Packet*. Alhambra, CA.

⁵⁸ California Environmental Protection Agency, Integrated Waste Management Board. December 2004. *Contractor's Report to the Board: 2004 Statewide Waste Characterization Study*. Produced by: Cascadia Consulting Group, Inc. Berkeley, CA. Available at: <http://www.ciwmb.ca.gov/publications/localasst/34004005.pdf>

⁵⁹ U.S. Environmental Protection Agency. November 2008. "Table 21: Recovery of Products in Municipal Solid Waste, 1960 to 2007." *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: <http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf>. The referenced table included the recovery of post-consumer wastes for the purposes of recycling or composting, it did not include conversion/fabrication scrap. The report includes the recovery of plastic bags, sacks, and wraps (excluding packaging) for a total of 9.1 percent of plastic recovered in this category. The County of Los Angeles conservatively estimates that the percentage of plastic bags in this category for the County of Los Angeles is less than 5 percent.

⁶⁰ City of West Hollywood. Accessed on: 15 September 2011. Recycling Guide. Available at: <http://www.weho.org/index.aspx?page=629>

⁶¹ American Forest and Paper Association. Accessed on: 18 August 2011. Web site. "Facts About Paper." Available at: <http://www.afandpa.org/FunFacts.aspx>

2008 report by Green Seal, which estimates that a reusable bag has a two- to five-year lifespan.⁶² In 1994, the Green Seal report encouraged an industry standard for reusable bags of a least 300 uses. Today, Green Seal recommends a more ambitious standard of a minimum of 500 uses under wet conditions (bag testing under wet conditions is more stringent testing).⁶³ Furthermore, life cycle studies for plastic products have documented the adverse impacts related to various types of plastic and paper bags; however, life cycle studies have also indicated that reusable bags are the preferable option to both paper bags and plastic bags.^{64,65,66,67}

Reusable bags are intended to provide a viable alternative to the use of paper or plastic carryout bags.⁶⁸ Currently, some stores within the City, such as certain Whole Foods divisions, do not offer plastic carryout bags at checkout and instead offer reusable bags for sale and provide rebates if their patrons bring their own reusable bags. Other stores, such as certain Ralph's divisions, offer reusable bags for purchase at registers and offer various incentives, such as store rewards or store credit, to customers who use reusable bags.⁶⁹

2.4 STATEMENT OF OBJECTIVES

2.4.1 Program Goals

The proposed ordinance supports the goals of the City's Climate Action Plan to reduce waste and encourage the use of reusable materials in retail and commercial establishments.⁷⁰

2.4.2 Objectives

The City's objectives for the proposed ordinance would be similar to the County's objectives for the Countywide ordinance. The County's objectives are as follow:⁷¹

⁶² Green Seal, Inc. is an independent non-profit organization that uses science-based standards and the power of the marketplace to provide recommendations regarding sustainable products, standards, and practices.

⁶³ Green Seal, Inc. 13 October 2008. *Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16)*. Washington, DC. Available at: http://www.greenseal.org/certification/gs-16_reusable_bag_proposed_revised_standard_background%20document.pdf

⁶⁴ Reusable bag manufacturers in the United States are expected to enforce industry standards and recommendations to reduce adverse environmental impacts.

⁶⁵ Green Seal, Inc. 13 October 2008. *Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16)*. Washington, DC. Available at: http://www.greenseal.org/certification/gs-16_reusable_bag_proposed_revised_standard_background%20document.pdf

⁶⁶ Boustead Consulting & Associates, Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Available at: http://www.americanchemistry.com/s_plastics/doc.asp?CID=1106&DID=7212

⁶⁷ Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by: ICF International. San Francisco, CA.

⁶⁸ Green Seal, Inc. 13 October 2008. *Green Seal Proposed Revised Environmental Standard For Reusable Bags (GS-16)*. Washington, DC. Available at: http://www.greenseal.org/certification/gs-16_reusable_bag_proposed_revised_standard_background%20document.pdf

⁶⁹ Ralphs Grocery Company. 2009. "Doing Your Part: Try Reusable Shopping Bags." Web site. Available at: http://www.ralphs.com/healthy_living/green_living/Pages/reusable_bags.aspx

⁷⁰ City of West Hollywood. April 2011. *Updated Public Review Draft Climate Action Plan*. West Hollywood, CA.

⁷¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

- Conduct outreach to all 88 incorporated cities of the County to encourage adoption of comparable ordinances
- Reduce the Countywide consumption of plastic carryout bags from the estimated 1,600 plastic carryout bags per household in 2007 to fewer than 800 plastic bags per household in 2013
- Reduce Countywide the contribution of plastic carryout bags to litter that blights public spaces by 50 percent by 2013
- Reduce the County's, cities', and Flood Control District's costs for prevention, cleanup, and enforcement efforts to reduce litter in the County by \$4 million
- Substantially increase awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags, and reach at least 50,000 residents (5 percent of the population) with an environmental awareness message

The City's proposed ordinance has five objectives that are consistent with those outlined in the certified EIR:

- Reduce the Citywide use of plastic carryout bags
- Reduce litter
- Assist the County in reducing costs for prevention, clean-up, and enforcement efforts to reduce litter
- Substantially increase awareness of the negative impacts of plastic carryout bags and the benefits of reusable bags
- Reduce Citywide disposal of plastic carryout bags

2.5 PROPOSED PROJECT

The proposed ordinance would ban the issuance of plastic carryout bags at the point of sale in all retail establishments in the City, aside from restaurants, farmers markets, and dry cleaners. The West Hollywood City Council would decide whether the proposed ordinance would also place a fee on the issuance of paper carryout bags or allow paper bags to be distributed free of charge. Six months following adoption of the proposed ordinance by the West Hollywood City Council, the proposed ordinance would apply to large stores within the City, including those that (1) meet the definition of a "supermarket" as found in the California Public Resources Code, Section 14526.5; and (2) are retail spaces that have over 10,000 square feet of retail space that generates sales or use tax pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law and have a pharmacy licensed pursuant to Chapter 9 of Division 2 of the Business and Professions Code; and (3) all other retail spaces that have over 10,000 square feet of retail space that generates sales or use tax pursuant to Chapter 9 of Division 2 of the Business and Professions Code. Twelve months following the adoption of the proposed ordinance by the West Hollywood City Council, the proposed ordinance would apply to all other stores less than 10,000 square feet, including drug stores, supermarkets, pharmacies, grocery stores, convenience food stores, food marts, and all other retail stores, including those stores with a Type 20 or 21 license issued by the Department of Alcoholic Beverage Control. Vendors at City-sponsored events, facilities, or City property would also be required to comply with the proposed ordinance within 12 months following adoption of the proposed ordinance.

The proposed ordinance would provide an exemption for stores that are required to provide plastic carryout bags as a condition of use or as required to abate a nuisance. The proposed ordinance would not apply to produce bags that are used exclusively to carry produce, meats, or other food

items to the point of sale inside a store or that are used to prevent such food items from coming into direct contact with other purchased items. In addition, restaurants and fast food establishments are not included in the scope of the proposed ordinance. The proposed ordinance would also allow plastic and paper carryout bags to be distributed free of charge at farmers markets and explicitly provides an exemption to protect low-income consumers.

If the West Hollywood City Council decides to allow paper carryout bags to continue to be distributed free of charge, the proposed ordinance would be comparable to Alternative 3, “Ban Plastic Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County,” that was analyzed in the certified EIR. If the proposed ordinance would place a fee on the issuance of paper carryout bags, it would be comparable to Alternative 5, “Ban Plastic Carryout Bags and Impose a Fee on Paper Carryout Bags for All Supermarkets and Other Grocery Stores, Convenience Stores, Pharmacies, and Drug Stores in Los Angeles County,” that was in the certified EIR.⁷² Alternative 5 was adopted by the County Board of Supervisors. The City’s proposed ordinance differs from the ordinances analyzed by the County in three ways:

- The proposed ordinance would apply to vendors at City-sponsored events and City-owned facilities and events held on City property.
- The County ordinance requires affected stores to provide to the director of public works quarterly reports summarizing the money collected for recyclable paper carryout bags and the efforts undertaken to promote the use of reusable bags. The City’s proposed ordinance would encourage, but would not require, affected stores to voluntarily report to the director of finance or a department designated by the city manager on a yearly basis.
- The City’s proposed ordinance would take effect 6 months after City Council adoption for stores that meet the definition of a “supermarket” as found in the California Public Resources Code, Section 14526.5 and stores of at least 10,000 square feet with a licensed pharmacy, rather than on July 1, 2011, the operative date for the County’s ordinance. For stores smaller than 10,000 square feet and all other retail stores, the City’s ordinance would take effect 12 months after the ordinance is adopted by City Council rather than on the operative date for the County’s ordinance.

The differences between the City and County ordinances as listed above are minor changes that would not result in any new or significantly more adverse environmental impacts than those analyzed in the certified EIR. As such, the City’s proposed ordinance is consistent with the County’s ordinance but, with minor changes, would be specific to the City of West Hollywood.

2.5.1 Assumptions for Plastic Carryout Bag Use

The businesses with the largest consumption of plastic carryout bags are assumed to be the larger grocery stores and pharmacies. According to an infoUSA database search, there are 27 grocery stores and pharmacies in the City of West Hollywood with a size of 10,000 square feet or more, and 25 grocery stores and pharmacies with a size of less than 10,000 square feet.⁷³ Quantitative

⁷² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁷³The total number of stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A).

calculations throughout this addendum were made consistent with the analysis in the County's EIR by assuming that each store larger than 10,000 square feet uses 10,000 plastic carryout bags per day and each store smaller than 10,000 square feet uses 5,000 plastic carryout bags per day. Therefore, consistent with the County's analysis, it was assumed that the proposed ordinance would prevent the distribution of up to 395,000 plastic carryout bags per day.⁷⁴

However, the County's assumptions of plastic carryout bag use are considered to be substantial overestimates for the City of West Hollywood. It is expected that the grocery stores and pharmacies larger than 10,000 square feet in the City would actually use no more than 5,000 plastic carryout bags per day, which is comparable to the bag average reported by the California Department of Resources Recycling and Recovery (CalRecycle) in 2008 for stores affected by AB 2449. In 2008, 4,700 stores statewide affected by AB 2449 reported an average of 4,695 bags used per store per day.⁷⁵ To assume a usage of 5,000 plastic carryout bags per day for stores larger than 10,000 square feet would be reasonable for the City, especially considering that three of the large grocery stores in the City (two Trader Joe's and one Whole Foods Market) do not regularly offer plastic carryout bags to its customers and have minimal plastic carryout bag use. Approximately 23 percent of the City is zoned as commercial, and the City has approximately 893 retail stores engaged in a variety of businesses. Of these stores, approximately 195 restaurants and 13 dry cleaners would be exempt from the proposed ordinance. Further, at least 165 businesses, including automotive sales, barber shops, hair salons, nightclubs, furniture stores, and carpet and rug stores, would be expected to have little to no plastic carryout bag use due to the nature of the business and/or the types of products sold. For the remaining 494 retail stores in the City, it was assumed that each store uses no more than 500 plastic carryout bags per day on average, which equates to approximately 1 bag per minute during an average 8-hour work day. Therefore, if the proposed ordinance were applied to all retail stores within the City, beyond just the pharmacies and grocery stores, it would be expected to prevent the distribution of approximately 382,000 plastic carryout bags per day,⁷⁶ which is less than the County's conservative estimates for the pharmacies and grocery stores alone. Therefore, including all retail stores in the City's proposed ordinance would not create any new or substantially more adverse significant impacts than those disclosed in the certified EIR.

⁷⁴ (25 stores x 5,000 plastic carryout bags per day) + (27 stores x 10,000 plastic carryout bags per day) = 395,000 plastic carryout bags per day

⁷⁵ Dona Sturgess, California Department of Resources Recycling and Recovery, Sacramento, CA. 29 April 2010. E-mail to Luke Mitchell, California Department of Public Works, Alhambra, CA.

⁷⁶ (494 stores x 500 plastic carryout bags per day) + (27 stores x 5,000 plastic carryout bags per day) = 382,000 plastic carryout bags per day

SECTION 3.0
ENVIRONMENTAL ANALYSIS

The environmental analysis provided in this section describes the information that was considered in evaluating the questions contained in the Environmental Checklist of the State California Environmental Quality Act Guidelines.¹ The information used in this evaluation is derived from the literature review (see Section 4.0, *References*, for a list of reference material consulted), field reconnaissance, and consultation with the City of West Hollywood. The evaluation of direct, indirect, and cumulative impacts considered the existing conditions within the City of West Hollywood and the surrounding County of Los Angeles. A summary of the potential environmental impacts from implementation of the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) is presented in Table 3-1, *Summary of Impacts from Proposed Ordinance*.

TABLE 3-1
SUMMARY OF IMPACTS FROM PROPOSED ORDINANCE

Impact	Level of Significance	Compared to the County's Certified EIR
Aesthetics		
None	No impact	Same; no new impacts
Agricultural and Forest Resources		
None	No impact	Same; no new impacts
Air Quality		
Indirect increase in demand for paper carryout bags and potential subsequent increase in criteria pollutant emissions from manufacture, distribution, and disposal of paper carryout bags; to be partially offset by reduction in plastic carryout bags and increase in reusable bags	Less than significant	Same; no new impacts
Biological Resources		
Beneficial	No adverse impact, but beneficial impact	Same; no new impacts
Cultural Resources		
None	No impact	Same; no new impacts
Geology and Soils		
None	No impact	Same; no new impacts
Greenhouse Gas Emissions		
Indirect increase in demand for paper carryout bags and potential subsequent increase in greenhouse emissions from manufacture, distribution, and disposal; to be partially offset by reduction in plastic carryout bags and increase in reusable bags	Direct: less than significant Cumulative: potentially significant; the City will adopt a Mitigation Monitoring Program and Statement of Overriding Considerations*	Same; no new impacts

¹ California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

**TABLE 3-1
SUMMARY OF IMPACTS FROM PROPOSED ORDINANCE, *Continued***

Impact	Level of Significance	Compared to the County's Certified EIR
Hazards and Hazardous Materials		
None	No impact	Same; no new impacts
Hydrology and Water Quality		
Indirect increase in demand for paper carryout bags with potential subsequent increase in eutrophication impacts from manufacture; to be partially offset by reduction in use of plastic carryout bags (i.e. plastic bag litter in waterways)	Less than significant	Same; no new impacts
Land Use and Planning		
None	No impact	Same; no new impacts
Mineral Resources		
None	No impact	Same; no new impacts
Noise		
None	No impact	Same; no new impacts
Population and Housing		
None	No impact	Same; no new impacts
Public Services		
None	No impact	Same; no new impacts
Recreation		
None	No impact	Same; no new impacts
Transportation and Traffic		
None	No impact	Same; no new impacts
Utilities and Service Systems		
Indirect increase in demand for paper carryout bags and subsequent increase in consumption of water and energy and generation of wastewater and solid waste due to manufacture, distribution, and disposal; to be partially offset by reduction in use of plastic carryout bags	Less than significant	Same; no new impacts

NOTE:

* The "potentially significant" determination is project-specific and is based on the following: (1) worst-case scenario; (2) lack of local, regional, State, or federal cumulative significance threshold; (3) claim by certain representatives of the plastic bag industry that paper bags are significantly worse for the environment from a greenhouse gas emissions perspective. This conclusion is the same as the presented in the County's certified EIR.

3.1 AESTHETICS

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts to aesthetics from those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Aesthetics within the City of West Hollywood (City) were evaluated with regard to the California Department of Transportation Scenic Highway Program designations;² the EIR for the City of West Hollywood General Plan and Climate Action Plan;³ and previously published information regarding the visual character of the City, including the West Hollywood General Plan 2035.⁴

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to aesthetics was evaluated in relation to four questions recommended for consideration by the State California Environmental Quality Act Guidelines and the West Hollywood Environmental Checklist.^{5,6}

Would the proposed ordinance:

- (a) Have a substantial adverse effect on a scenic vista?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to aesthetics; therefore, this environmental issue area was not carried forward for analysis in the certified EIR.⁷ The City does not have any officially designated scenic vistas. However, located at the base of the Santa Monica Mountains, it does offer views of the Hollywood hills and Los Angeles Basin.⁸ The proposed ordinance, which aims to significantly reduce the amount of litter that can be attributed to plastic carryout bags, would potentially lead to an improvement in the visual character of scenic vistas in the City. As indicated in the County of Los Angeles staff report on plastic bags, due to their light weight, plastic bags are easily carried by wind to become entangled in brush, tossed along freeways, and caught on fences throughout the County, thereby becoming visual eyesores.^{9,10}

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² California Department of Transportation. Updated 19 May 2008. "Eligible (E) and Officially Designated (OD) Routes." *California Scenic Highway Program*. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>

³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

⁴ City of West Hollywood, Community Development Department. 6 September 2011. *City of West Hollywood General Plan: Infrastructure, Resources and Conservation*. West Hollywood, CA.

⁵ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁶ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁸ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

⁹ County of Los Angeles Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

Furthermore, the distinct white or bright colors of plastic bags and the difficulty of collecting them result in a greater potential for visual impacts than other types of litter. The proposed ordinance would be expected to reduce the visual prominence of plastic bag litter, and thus would potentially reduce the negative impacts of plastic bags on scenic vistas within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to aesthetics related to substantial adverse effects to scenic vistas.

- (b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to aesthetics; therefore, this environmental issue was not carried forward for the analysis in the certified EIR.¹¹ The City of West Hollywood does not have any scenic highways.¹² The proposed ordinance, which aims to significantly reduce the amount of litter that can be attributed to the use of plastic carryout bags, would potentially lead to an improvement in the quality of scenic resources and scenic highway areas within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to aesthetics related to substantial damage to scenic resources within a state scenic highway.

- (c) Substantially degrade the existing visual character or quality of the site and its surroundings?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to aesthetics; therefore, this environmental issue was not carried forward for the analysis in the certified EIR.¹³ The proposed ordinance would not be expected to result in impacts to aesthetics in relation to the substantial degradation of the existing visual character of the City. The Hollywood Hills are located just to the north of the City boundary, and the street network shifts abruptly at Sunset Boulevard from the rectilinear grid of the Los Angeles area to the twisting network of hillside streets.¹⁴ The City's topography also experiences a transition from flatter neighborhoods south of Santa Monica Boulevard to the hillside neighborhoods below and above Sunset Boulevard.¹⁵ This unique topography is a key visual characteristic of the City. The proposed ordinance would potentially lead to the improvement of the existing visual character of the City by reducing the occurrence of plastic bag litter. Therefore, the proposed ordinance would not be expected to result in new or

¹⁰ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 1998–2000. *Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² California Department of Transportation. Updated 19 May 2008. "Eligible (E) and Officially Designated (OD) Routes." *California Scenic Highway Program*. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹⁵ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

substantially more adverse significant impacts to aesthetics related to degradation of the existing visual character of the City.

- (d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to aesthetics; therefore, this environmental issue was not carried forward for the analysis in the certified EIR.¹⁶ The proposed ordinance would not be expected to result in impacts to aesthetics related to the creation of a new source of substantial light or glare that would adversely affect daytime or nighttime views within the City. The proposed ordinance would ban plastic carryout bags issued by certain stores and would not be expected to create additional sources of light or glare. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to aesthetics related to the creation of a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

3.2 AGRICULTURAL AND FOREST RESOURCES

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts to agricultural and forest resources than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Bags in Los Angeles County (approved ordinances).¹ Agricultural and forest resources in the City of West Hollywood (City) were evaluated with regard to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP),² the County of Los Angeles General Plan,³ the West Hollywood General Plan 2035,⁴ the City of West Hollywood Climate Action Plan,⁵ and City of West Hollywood Zoning Code.⁶

The State California Environmental Quality Act (CEQA) Guidelines (§21060.1(a) Public Resources Code 21000-21177) define agricultural land as "prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California," and is herein collectively referred to as Farmland. Public Resources Code section 12220(g) defines forest land as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to agricultural and forest resources was evaluated in relation to five questions recommended for consideration by the State CEQA Guidelines and the City of West Hollywood Environmental Checklist.^{7,8}

¹ County of Los Angeles Department of Public Works. November 2010. Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

³ County of Los Angeles Department of Regional Planning. November 1980. *County of Los Angeles General Plan*. Contact: 320 West Temple Street, Room 1348, Los Angeles, CA 90012.

⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

⁵ City of West Hollywood, Community Development Department. October 2010. Program Environmental Impact Report, West Hollywood General Plan 2035, and Climate Action Plan. West Hollywood, CA.

⁶ City of West Hollywood Department of Planning. Accessed on: 2 September 2011. City of West Hollywood Zoning Code. West Hollywood, CA. Available at:
<http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>

⁷ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁸ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

Would the proposed ordinance:

- (a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to agricultural and forest resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁹ The City is a developed urban area surrounded by hillsides to the north and northwest. The City contains no prime farmland, unique farmland, or farmland of statewide importance, as shown on the maps pursuant to the FMMP of the California Resources Agency.¹⁰ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include components that would alter the existing land uses within the City. The proposed ordinance would not require the conversion of any existing area designated for agricultural land use or Farmland, as it would not require any construction, demolition, or road-paving activities. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to agricultural and forest resources related to the conversion of Farmland.

- (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to agricultural and forest resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ Williamson Act contracts are contracts between local government and private landowners to restrict specific parcels of land to agricultural or related open-space uses. The City has no land zoned specifically for agricultural use.¹² Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to agricultural and forest resources related to a conflict with existing zoning for agricultural use or a Williamson Act contract.

⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁰ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² City of West Hollywood Department of Planning. Accessed on: 2 September 2011. City of West Hollywood Zoning Code. West Hollywood, CA. Available at: <http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>

- (c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to agricultural and forest resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹³ Based on a review of City of West Hollywood General Plan and Zoning Code, there is no timberland designated or zoned within the City's jurisdiction.^{14,15} The Public Resources Code section 12220(g) defines forest land as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

Public Resources Code section 4526 states,

"Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.¹⁶

Government Code section 51104 (g) states,

"Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, "timberland preserve zone" means "timberland production zone."¹⁷

Sections 51112 and 51113 relate to timberland production within timberland production zones.¹⁸ Finally, subdivision (h) states that a "'compatible use' is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber" and provides six

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation Element*. West Hollywood, CA. Contact: 320 West Temple Street, Room 1348, Los Angeles, CA 90012.

¹⁵ City of West Hollywood Department of Planning. Accessed on: 2 September 2011. City of West Hollywood Zoning Code. West Hollywood, CA. Available at: <http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>

¹⁶ *California Public Resources Code*, Section 4526.

¹⁷ *California Government Code*, Article 1, General Provisions, Sections 51100–51104; Section 51104 (g).

¹⁸ *California Government Code*, Article 2, Timberland Production Zones, Sections 51110–51119.5; Sections 51112–51113.

specific instances where such uses would be “‘contrary’ or inconsistent with the land being considered a ‘compatible use.’”¹⁹

According to the Department of Forestry and Fire Protection, the State of California consists of approximately 5,418,979 acres of land that has been classified as TPZ.²⁰ TPZ is designated in 32 counties within the state. The County of Los Angeles does not contain land that is designated as TPZ.^{21,22} The proposed ordinance would ban the issuance of plastic carryout bags at certain stores and would not conflict with land that is zoned for forest land, timberland, or timberland production. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to agricultural and forest resources in relation to a conflict with existing zoning for, or cause rezoning of, forest land [as defined in Public Resources Code section 12220(g)], timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production [as defined by Government Code section 51104(g)].

(d) Result in the loss of forest land or conversion of forest land to non-forest use?

As a result of the analysis undertaken in the Initial Study for the certified EIR it was determined that the approved ordinances would not be expected to result in significant impacts to agricultural and forest resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.²³ Based on a review of City of West Hollywood General Plan and Zoning Code, there is no forest land designated or zoned within the City’s jurisdiction.^{24,25} The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail components that would result in the loss of forest land or conversion of forest land to nonforest use. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to agricultural and forest resources in relation to the loss of forest land or conversion of forest land to non-forest use.

¹⁹ California Government Code, Article 1, General Provisions, Sections 51100-51104; Section 51104 (h).

²⁰ California Department of Forestry and Fire Protection. 3 January 2002. *Timberland Site Class on Private Lands Zoned for Timber Production*. Technical working paper. Sacramento, CA. Available at: http://frap.cdf.ca.gov/publications/Timberland_Site_Class_on_Private_Lands_Zoned_for_Timber_Production.pdf

²¹ California Department of Forestry and Fire Protection. 3 January 2002. *Timberland Site Class on Private Lands Zoned for Timber Production*. Technical working paper. Sacramento, CA. Available at: http://frap.cdf.ca.gov/publications/Timberland_Site_Class_on_Private_Lands_Zoned_for_Timber_Production.pdf

²² County of Los Angeles Department of Regional Planning. November 1980. *County of Los Angeles General Plan*. Los Angeles, CA.

²³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation Element*. West Hollywood, CA.

²⁵ City of West Hollywood Department of Planning. Accessed on: 2 September 2011. City of West Hollywood Zoning Code. West Hollywood, CA. Available at: <http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>

- (e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to agricultural and forest resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.²⁶ Based on a review of City of West Hollywood General Plan and Zoning Code, there is no agricultural or forest land designated or zoned within the City's jurisdiction.^{27,28} The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not require any construction, conversion, demolition, or road-paving activities. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to agricultural and forest resources related to changes in the existing environment that due to their location or nature could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

²⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation Element*. West Hollywood, CA.

²⁸ City of West Hollywood Department of Planning. Accessed on: 2 September 2011. City of West Hollywood Zoning Code. West Hollywood, CA. Available at:
<http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>

3.3 AIR QUALITY

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts to air quality than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Air quality in the City of West Hollywood (City) was evaluated with regard to the South Coast Air Quality Management District *CEQA Air Quality Handbook*,² the National Ambient Air Quality Standards,³ the California Ambient Air Quality Standards,⁴ the Clean Air Act (CAA),⁵ and a review of life cycle assessments (LCAs) that evaluate plastic and paper carryout bags.^{6,7}

Data on existing air quality conditions in the South Coast Air Basin (SCAB), in which the City is located, are monitored by a network of air monitoring stations operated by the California Environmental Protection Agency, the California Air Resources Board (CARB), and the SCAQMD. The air quality assessment considers all phases of project planning, construction, and operation. The conclusions reflect guidelines outlined in the SCAQMD *CEQA Air Quality Handbook*.⁸

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to air quality was evaluated in relation to five questions recommended for consideration by the State California Environmental Quality Act (CEQA) Guidelines and the City of West Hollywood Environmental Checklist.^{9,10}

Would the proposed ordinance:

- (a) Conflict with or obstruct implementation of the applicable air quality plan?

As a result of the analysis undertaken in the certified EIR, it was determined that impacts to air quality as a result of the approved ordinances would be below the level of significance.¹¹ The proposed ordinance would not be expected to create a new or substantially more adverse significant impact

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

³ U.S. Environmental Protection Agency. Updated 18 April 2011. "National Ambient Air Quality Standards (NAAQS)." *Air and Radiation*. Available at: <http://www.epa.gov/air/criteria.html>

⁴ California Air Resources Board. Reviewed 24 November 2009. *California Ambient Air Quality Standards (CAAQS)*. Available at: <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>

⁵ U.S. Environmental Protection Agency. Updated 1 March 2011. "Title I - Air Pollution Prevention and Control." *Federal Clean Air Act*. Available at: <http://www.epa.gov/air/caa/>

⁶ 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.

⁷ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

⁸ South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

⁹ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

¹⁰ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

to air quality related to conflicts with or obstruction of implementation of the applicable air quality plan. The proposed ordinance would affect certain stores in the City, which is located within the SCAQMD portion of the SCAB. Ozone (O₃) is the pollutant of greatest concern throughout the SCAB. Many sources of O₃ precursors are spread throughout the SCAB. The County is currently designated as a federal nonattainment area for fine particulate matter (PM_{2.5}), an extreme nonattainment area for ozone (O₃) and a serious nonattainment area for suspended particulate matter (PM₁₀).¹² However, the SCAB has achieved the federal 1-hour and 8-hour carbon monoxide (CO) air quality standards since 1990 and 2002, respectively, and the County has met the federal air quality standards for nitrogen dioxide (NO₂) since 1992.¹³

The most recent update to the SCAQMD Air Quality Management Plan (AQMP) was prepared in order for air quality improvements to meet both state and federal CAA planning requirements for all areas under AQMP jurisdiction. This update was adopted by CARB on September 27, 2007, for inclusion in the State Implementation Plan. The AQMP sets forth strategies for attaining the federal PM₁₀ and PM_{2.5} air quality standards and the federal 8-hour O₃ air quality standard, and for meeting state standards at the earliest practicable date. With the incorporation of new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling, the 2007 AQMP focuses on O₃ and PM_{2.5} attainments.

Existing air quality within the City vicinity is characterized by a mix of local emission sources that include stationary activities, such as space and water heating, landscape maintenance, and consumer products, as well as mobile sources. Motor vehicles are the primary source of pollutants within the proposed ordinance vicinity and have the potential to generate localized concentrations of CO called CO "hotspots."

SCAQMD evaluates projects in terms of air pollution thresholds.¹⁴ The proposed ordinance would be considered significant if implementation of the proposed ordinance results in daily construction- or operation-related emissions that cause or exceed the SCAQMD thresholds of significance. The proposed ordinance would not include demolition, construction, or operation of any physical structures that would create direct impacts related to air quality. The proposed ordinance would not be expected to result in a change to the population growth assumptions used by SCAQMD for attainment planning.

Several studies show that production of paper carryout bags generally produces more air pollutant emissions than the production of plastic carryout bags.^{15,16} Although certain representatives of the plastic bag industry have argued that similar ordinances have the potential to increase the demand for paper carryout bags,¹⁷ the West Hollywood City Council is considering placing a 10-cent

¹² U.S. Environmental Protection Agency. 21 April 2011. *The Green Book Nonattainment Areas for Criteria Pollutants*. Available at: <http://www.epa.gov/oar/oaqps/greenbk/>

¹³ South Coast Air Quality Management District. June 2007. *Final 2007 Air Quality Management Plan*. Diamond Bar, CA.

¹⁴ South Coast Air Quality Management District. 1993. "Developing Baseline Air Quality Information." *CEQA Air Quality Handbook*. Diamond Bar, CA.

¹⁵ 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.

¹⁶ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for the Progressive Bag Affiliates.

¹⁷ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

charge on the issuance of paper carryout bags to encourage the use of reusable bags. Nevertheless, the potential for criteria pollutant emissions during the manufacture of paper carryout bags and reusable bags was evaluated consistent with the analysis in the certified EIR.¹⁸

One way to analyze impacts of the production, manufacture, distribution, and disposal of various types of bags is to review available LCAs. An LCA evaluates environmental impacts by analyzing the entire life cycle of a product, process, or activity, including extraction and processing of raw materials, manufacturing, transportation and distribution, use/reuse/maintenance, recycling, and final disposal.¹⁹ Ecobilan, a department of PricewaterhouseCoopers that provides analysis of the environmental performance of products and services,²⁰ prepared a comprehensive LCA in 2004 that quantifies the environmental impacts of paper carryout bags, reusable low-density polyethylene plastic bags, and plastic carryout bags made of high-density polyethylene.²¹ The certified EIR used the Ecobilan study because it is relatively recent; contains relatively sophisticated modeling and data processing techniques; considers a wide range of environmental indicators; considers paper, plastic, and reusable bags; was critically reviewed by the French Environment and Energy Management Agency; and contains detailed emission data for individual pollutants.

Two different scenarios were modeled to simulate two different options for the proposed ordinance: a scenario with a fee on the issuance of paper carryout bags and a scenario with no fee on the issuance of paper carryout bags. For the scenario with a fee on the issuance of paper carryout bags, it was assumed that the proposed ordinance would result in 50 percent of consumers using paper carryout bags instead of plastic carryout bags and 50 percent of consumers using reusable bags, which is consistent with Alternative 5 in the certified EIR. For the scenario without a fee on the issuance of paper carryout bags, it was assumed the proposed ordinance would cause 85 percent of consumers to use paper carryout bags instead of plastic carryout bags and only 15 percent of consumers to use reusable bags, which is consistent with Alternative 3 in the certified EIR. The calculations were done consistent with the certified EIR, assuming that all grocery stores and pharmacies greater than 10,000 square feet in size currently use 10,000 plastic carryout bags per day, and all grocery stores and pharmacies less than 10,000 square feet in size currently use 5,000 carryout bags per day. However, as explained in Section 2.5.1 of this addendum, the assumptions for bag use are so conservative that the calculations are sufficient to analyze a ordinance that would affect all of the retail stores in West Hollywood, not just the pharmacies and grocery stores.

Based on the Ecobilan study, the proposed ordinance would be expected to result in an overall decrease in emissions of CO, PM, SO_x, and volatile organic compounds (VOCs), but would be expected to result in an increase in NO_x, either with or without a charge on the issuance of paper carryout bags (Table 3.3-1, *Estimated Daily Emission Changes Based on Ecobilan Data*; Appendix A, *Calculations and Modeling Results*). These results are largely inconclusive because the conversion from plastic carryout bags to paper carryout bags would be expected to result in both beneficial and adverse impacts to air quality, depending on which criteria pollutants are analyzed.

¹⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁹ Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by: ICF International. San Francisco, CA.

²⁰ Ecobilan. Accessed on: 8 March 2010. Company Web site. Available at: https://www.ecobilan.com/uk_who.php

²¹ 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.

In addition, these results cannot reasonably be evaluated in relation to the operational thresholds of significance set by SCAQMD because the operational thresholds are intended for specific projects located in the SCAB for the SCAB, whereas LCA data cover all stages of production, distribution, and end-of-life procedures related to a particular product. The production of plastic carryout bags and paper carryout bags is not limited to the SCAB; there are manufacturing facilities located in other air basins in the United States and in other countries that may have different emission thresholds and regulations.

**TABLE 3.3-1
ESTIMATED DAILY EMISSION CHANGES BASED ON ECOBILAN DATA**

Emission Source	Air Pollutant (Pounds/Day) ¹				
	VOCs ²	NO _x	CO	SO _x	PM
Scenario 1: Fee on Paper Carryout Bags					
City Ordinance – All retail stores in West Hollywood ³	-31	12	-57	-14	-22
County Ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	-2,729	1,058	-5,004	-1,190	-1,936
Scenario 2: No Fee on Paper Carryout Bags					
City Ordinance – All retail stores in West Hollywood ³	-18	46	-53	-2	-20
County Ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	-1,588	3,979	-4,628	-140	-1,746

KEY:

- CO = carbon monoxide
- NO_x = nitrogen oxide
- PM = particulate matter
- SO_x = sulfur oxide
- VOC = volatile organic compound

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-41. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. A minus sign (–) indicates a decrease in air pollutant emissions due to the given scenario.
2. Total VOCs include all compounds defined as contributors to the formation of photochemical oxidants in the Ecobilan Study, apart from methane, ethane, and acetone, which are not included in the SCAQMD definition of VOCs under Rule 102.
3. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

Other LCAs state that overall air pollutant emissions due to the life cycle of paper carryout bags would be higher than those emitted during the life cycle of plastic carryout bags.^{22,23} However, as with the Ecobilan data, the majority of these criteria pollutant emissions are likely to originate from

²² Franklin Associates, Ltd. 1990. *Resource and Environmental Profile Analysis of Polyethylene and Unbleached Paper Grocery Sacks*. Prairie Village, KS.

²³ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

processes that occur early in the life cycle of paper and plastic carryout bags, such as raw materials extraction and product manufacturing. Since the majority of paper carryout bags supplied to the greater Los Angeles metropolitan area are produced in and transported from outside of California²⁴ or from foreign countries, such as Canada,²⁵ it is not necessary to extrapolate LCA data to determine emission levels for the SCAQMD portion of the SCAB. In the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that “The impacts of this project in areas outside Manhattan Beach itself are both indirect and difficult to predict.” and “the city could hardly be expected to trace the provenance of all paper bags that might be purchased by Manhattan Beach establishments, in order to evaluate the particular impacts resulting from their manufacture.”²⁶

Although the paper bag manufacturing facilities that supply to the affected stores in the City are not located within the SCAB, landfills that accept plastic and paper carryout bag waste are located within this air basin. Therefore, emissions from the transport of carryout bags to landfills and the decomposition of carryout bags in landfills would have the potential to impact air quality in the SCAB. Using the Ecobilan data, an ordinance with a fee on the issuance of paper carryout bags throughout the entire County would yield an increase in NO_x emissions of approximately 110 pounds per day, and with no fee on the issuance of paper carryout bags would yield an increase in NO_x emissions of approximately 256 pounds per day due to the transport of paper carryout bags to landfills (Table 3.3-2, *Estimated Increase in NO_x Emissions Due to End of Life Based on Ecobilan Data*). The proposed ordinance with a fee on the issuance of paper carryout bags would yield an increase in NO_x emissions of approximately 1 pound per day, and with no fee on the issuance of paper carryout bags would yield an increase in NO_x emissions of approximately 3 pounds per day. These emissions cannot be applied to the SCAQMD operational thresholds, which are only applicable to individual development projects; they do not apply to cumulative development (note that the proposed ordinance does not include any development). In addition, any increases in air pollutant emissions as an indirect impact of the proposed ordinance would be controlled by SCAQMD Rule 1193 and the CARB Solid Waste Collection Vehicle Rule; therefore, the impacts to air quality due to vehicle trips transporting paper carryout bag waste to landfills would be expected to be below the level of significance. In addition, in the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that “Manhattan Beach is small enough that even the cumulative effects of its ordinance would be negligible.”²⁷ Like Manhattan Beach, the City of West Hollywood is also a small city with a population of less than 40,000 that represents a small proportion of regional landfill users. Therefore, it would be reasonable to conclude that the effects of the City of West Hollywood's ordinance would also be negligible.

²⁴ Watt, Stephanie, Sapphos Environmental, Inc., Santa Monica, CA. 15 July 2009. Telephone communication with Ms. Carol Trout, Customer Service Department, Duro Bag Manufacturing Company, Florence, KY.

²⁵ National Council for Air and Stream Improvement. 5 February 2010. *Life Cycle Assessment of Unbleached Paper Grocery Bags*. Prepared for: American Forest and Paper Association and Forest Product Association of Canada.

²⁶ *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155 (Cal. 2011).

²⁷ *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155 (Cal. 2011).

**TABLE 3.3-2
ESTIMATED INCREASE IN NO_x EMISSIONS DUE TO END OF LIFE BASED ON
ECOBILAN DATA**

Emission Source	Scenario 1: Fee on Paper Carryout Bags ¹	Scenario 2: No Fee on Paper Carryout Bags
	NO _x (Pounds/Day) ³	NO _x (Pounds/Day) ³
City Ordinance – All retail stores in West Hollywood ²	+ 1	+ 3
County Ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	+ 110	+ 256

SOURCES:

1. 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.
2. U.S. Environmental Protection Agency. November 2008. *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: <http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf>
3. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-44. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. Assuming 36.8 percent of paper carryout bags are diverted from landfills and 11.9 percent of plastic carryout bags are diverted from landfills, based on the 2007 USEPA recycling rates for bags and sacks.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.
3. A plus sign indicates an increase in NO_x emissions due to the give scenario.

As with the approved ordinances, the proposed ordinance would be expected to cause a potential increase in delivery truck trips required to transport paper carryout bags and reusable bags to affected stores. With or without a fee on the issuance of paper carryout bags, the proposed ordinance would be expected to generate less than 2 additional truck trips per day.^{28,29} The criteria pollutant emissions that would be anticipated to result from 2 additional truck trips per day to and from the stores in the City and up to 96 additional truck trips per day to and from the 6,175 stores in the entire County were calculated using URBEMIS 2007 (Table 3.3-3, *Estimated Daily Operational Emissions from Increased Truck Trips*, and Appendix A). The unmitigated emissions from delivery truck trips would be expected to be well below the SCAQMD thresholds of significance (Table 3.3-3).

²⁸ (25 stores x 5,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) + (27 stores x 10,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) x 13 x 0.5 ≈ 1.1 daily truck trips

²⁹ (25 stores x 5,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) + (27 stores x 10,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) x 13 x 0.85 ≈ 1.9 daily truck trips

**TABLE 3.3-3
ESTIMATED DAILY OPERATIONAL EMISSIONS FROM INCREASED TRUCK TRIPS**

Emission Source	Air Pollutant (Pounds/Day)					
	VOCs	NOx	CO	SOx	PM2.5	PM10
2 delivery truck trips in the City of West Hollywood	0.02	0.04	0.25	0	0.01	0.05
96 delivery truck trips in the entire County	0.80	1.90	12.02	0.01	0.46	2.24
SCAQMD Threshold	55	55	550	150	55	150
Exceedance of Significance?	No	No	No	No	No	No

SOURCES:

1. URBEMIS 2007 v9.2.4 (see Appendix A)
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-45. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

The proposed ordinance would also be expected to result in increased use of reusable bags. However, as discussed in the certified EIR, air quality impacts due to the life cycle of a reusable bag would be expected to be significantly lower than the air quality impacts of a plastic or paper carryout bag when considered on a per-use basis, and any conversion from the use of plastic carryout bags to reusable bags would be reasonably expected to result in an environmental benefit.³⁰ By the definition established in the proposed ordinance, reusable bags must be designed to have a minimum lifespan of 125 uses. In addition, reusable bags are not routinely purchased at the point of sale for every transaction, and certain stores offer discounts or other incentives to encourage people to use reusable bags. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality related to conflicts with or obstruction of implementation of the applicable air quality plan.

- (b) Violate any air quality standard or contribute substantially to existing or projected air quality violation?

As a result of the analysis undertaken in the certified EIR, it was determined that impacts to air quality as a result of the approved ordinances would be below the level of significance.³¹ The proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality in relation to violating an air quality standard or contributing substantially to existing or projected air violation than those disclosed in the certified EIR. The proposed ordinance would not include demolition, construction, or operation of any physical structures that would create direct impacts related to air quality. As discussed in the response to (a) above, emissions due to the proposed ordinance, either with or without a fee on the issuance of paper carryout bags, would result in both beneficial and adverse impacts to air quality, depending on which criteria pollutants are analyzed. The production of plastic carryout bags and paper carryout bags is not limited to the SCAB; there are manufacturing facilities located in other air basins in the United States and in other countries that may have different emission thresholds and regulations. As discussed in the response

³⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-44. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

to (a) above, emissions due to the transport of carryout bags in the City would be well below the SCAQMD thresholds of significance. In addition, as discussed in the certified EIR, air quality impacts due to the life cycle of a reusable bag would be expected to be significantly lower than the air quality impacts of a plastic or paper carryout bag when considered on a per-use basis, and any conversion from the use of plastic carryout bags to reusable bags would be reasonably expected to result in an environmental benefit.³² Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality related to a violation of any air quality standard or substantial contribution to existing or projected air violation.

- (c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

As a result of the analysis undertaken in the certified EIR, it was determined that impacts to air quality as a result of the approved ordinances would be below the level of significance.³³ The proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality in relation to a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. The certified EIR evaluated cumulative impacts by assuming that all 88 incorporated cities in the County, including the City of West Hollywood, would adopt similar ordinances. The analysis concluded that the proposed ordinances would be expected to result in a less than significant cumulative impact to air quality.³⁴ The City of West Hollywood is located within the SCAB, which is designated as a nonattainment area according to the state and federal O₃, PM₁₀, and PM_{2.5} standards. The proposed ordinance would not include demolition, construction, or operation of any physical structures that would create direct impacts related to air quality. O₃ precursors are emitted during the manufacture and transport of paper carryout bags and reusable bags. However, the production of paper carryout bags and reusable bags is not limited to locations within the SCAB, as there are manufacturing facilities located in other air basins in the United States and in other countries that may have different emission thresholds and regulations. As discussed in the response to (a) above, emissions due to the transport of carryout bags in the City would be well below the SCAQMD thresholds of significance. Therefore, the proposed ordinance would be expected to result in a less than significant incremental impact to cumulative criteria pollutant emissions. In addition, as discussed in the certified EIR, air quality impacts due to the life cycle of a reusable bag would be expected to be significantly lower than the air quality impacts of a plastic or paper carryout bag when considered on a per-use basis, and any conversion from the use of plastic carryout bags to reusable bags would be reasonably expected to result in an environmental benefit.³⁵ Therefore, compared

³² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-44. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-30 to 3.1-31. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-44. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality related to a cumulatively considerable net increase of any criteria pollutant.

(d) Expose sensitive receptors to substantial pollutant concentrations?

As a result of the analysis undertaken in the certified EIR, it was determined that impacts to air quality as a result of the approved ordinances would be below the level of significance.³⁶ The proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality in relation to exposure of sensitive receptors to substantial pollutant concentrations from those disclosed in the certified EIR. Sensitive receptors in the City include residences, schools, playgrounds, child care centers, athletic facilities, long-term health-care facilities, rehabilitation centers, convalescent centers, and retirement homes. The proposed ordinance would not include demolition, construction, or operation of any physical structures that would create air quality impacts to sensitive receptors in the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality or sensitive receptors related to criteria pollutants.

(e) Create objectionable odors affecting a substantial number of people?

As a result of the analysis undertaken in the certified EIR, it was determined that impacts to air quality as a result of the approved ordinances would be below the level of significance.³⁷ The proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to air quality in relation to creating objectionable odors than those disclosed in the certified EIR. According to the *CEQA Air Quality Handbook*, odor nuisances are associated with land uses and industrial operations, including agricultural uses, waste water treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities.³⁸ Since the proposed ordinance does not fall into any of these categories, operational odor impacts from the proposed ordinance would be below the level of significance. Any indirect increase in odor emissions from paper carryout bag manufacturing facilities that would be affected by the proposed ordinance—though none are located in the City or the SCAB—would be controlled by the owners of the manufacturing facilities in compliance with applicable local, regional, and national air quality standards. Any indirect increase in odor emissions from the decomposition of paper carryout bags in landfills—though none are located within the City—would also be controlled by landfill managers in compliance with SCAQMD Rule 1150.1, Control of Gaseous Emissions from Active Landfills. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more significant impacts to air quality related to objectionable odors.

³⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.1-31 and 12-40 to 12-46. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁸ South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

3.4 BIOLOGICAL RESOURCES

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to biological resources than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances). As a result of the Initial Study for the approved ordinances, the County of Los Angeles (County) determined that the ordinances would not result in significant adverse impacts to biological resources.¹ However, one of the County's goals in considering the approved ordinances was to provide improved aquatic habitats for plant and wildlife resources through the reduction of total litter through a ban on plastic carryout bags issued by certain stores. Therefore, the biological resources issue area was carried forward for detailed analysis in the certified EIR to characterize the anticipated beneficial effects of the approved ordinances on biological resources.²

Biological resources within the City of West Hollywood (City) were evaluated with regard to the Infrastructure, Resources and Conservation element of the West Hollywood General Plan 2035;³ the Climate Action Plan;⁴ information provided by the National Oceanic and Atmospheric Administration,⁵ the U.S. Fish and Wildlife Service (USFWS),⁶ and the California Department of Fish and Game (CDFG).⁷ The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to biological resources was evaluated in relation to six questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{8,9}

¹ Sapphos Environmental, Inc. 1 December 2009. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Initial Study*. Prepared for: County of Los Angeles, Department of Public Works. Pasadena, CA.

² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation*. West Hollywood, CA.

⁴ City of West Hollywood, Community Development Department. October 2010. Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan. West Hollywood, CA.

⁵ National Oceanic and Atmospheric Administration Fisheries Office of Protected Resources. Updated 8 September 2011. Recovery Plans for Endangered and Threatened Species. Available at: <http://www.nmfs.noaa.gov/pr/recovery/plans.htm#turtles>

⁶ U.S. Fish and Wildlife Service. Accessed on: 15 August 2011. *Natural Community Conservation Planning (NCCP): NCCP Plan Summary – Palos Verdes Peninsula*. Available at: <http://www.dfg.ca.gov/habcon/nccp/status/PalosVerdes/>

⁷ California Department of Fish and Game. April 2011. *Summary of Natural Community Conservation Plans (NCCPs) April, 2011*. Available at: <http://www.dfg.ca.gov/habcon/nccp/>

⁸ City of West Hollywood. Provided on 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁹ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

Would the proposed ordinance:

- (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.¹⁰ As a built-out environment, West Hollywood does not support sensitive vegetation or wildlife habitat.¹¹ Furthermore, the proposed ordinance would not modify any land uses or have any direct effect upon physical landforms, and does not include any elements that would adversely affect existing habitats for candidate, sensitive, or special-status species. Floatable trash has been noted to inhibit the growth of aquatic vegetation, decreasing spawning areas and habitats for fish and other living organisms.¹² The proposed ordinance intends to reduce the amount of litter attributed to plastic bag waste, which would be expected to result in only potentially beneficial indirect impacts upon State-designated sensitive habitats by reducing the amount of litter in these areas.

Twenty-two marine species that occur in Southern California off the coast of Los Angeles County are listed as either endangered or threatened under the Endangered Species Act.¹³ Six marine species that occur in Southern California off the coast of the County are listed as species of concern by the National Marine Fisheries Service, and 11 avian marine species that occur in Southern California off the coast of the County are listed as species of special concern by the CDFG.¹⁴ According to the Regional Water Quality Control Board (RWQCB) for the Los Angeles Region, trash has potentially harmful impacts to species, and plastic bags are one of the most common items of trash observed by RWQCB staff.¹⁵ Seabirds, sea turtles, and marine mammals that feed on or near the ocean surface are especially prone to ingesting floating plastic debris.^{16,17,18} The impacts include fatalities as a result of ingestion, starvation, suffocation, infection, drowning, and

¹⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹¹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹² Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-12, 3.1-14, and 3.2-19. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-13, 3.1-15, and 3.2-20. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁵ Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

¹⁶ California Ocean Protection Council. 20 November 2008. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*. Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf

¹⁷ National Research Council. 2008. "Tackling Marine Debris in the 21st Century." Committee on the Effectiveness of National and International Measures to Prevent and Reduce Marine Debris and Its Impacts.

¹⁸ U.S. Environmental Protection Agency. August 2002. *Assessing and Monitoring Floatable Debris*. Washington, DC.

entanglement.^{19,20} The recovery plan for the endangered leatherback turtle (*Dermochelys coriacea*) lists ingestion of marine debris, including plastic bags, as one of the factors threatening this species. The recovery plan states that leatherback turtles consume floating plastic because they appear to mistake the floating plastic for jellyfish.²¹ The recovery plans for the threatened green turtle (*Chelonia mydas*), loggerhead turtle (*Caretta caretta*), and olive ridley turtle (*Lepidochelys olivacea*) also note plastic bag ingestion as a threat to those species.^{22,23,24} Ingestion of plastics is also noted as a threat in the recovery plan for the federally endangered short-tailed albatross (*Phoebastria albatrus*).²⁵ Preventing trash from entering water bodies has the potential to improve habitats and aquatic life.²⁶

The proposed ordinance would have the potential to improve habitats and aquatic life because the proposed ordinance would be expected to reduce the amount of trash entering water bodies in the City that drain to the Pacific Ocean. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to candidate, sensitive, or special-status species listed in local or regional plans, policies, or regulations, or by the CDFG or USFWS.

- (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.²⁷ As a built-out environment, West Hollywood does not support sensitive vegetation or wildlife habitat.²⁸ As with the approved ordinances, the proposed ordinance would not modify any land uses or have any direct effect upon physical landforms. Also as with the approved ordinances, the proposed

¹⁹ California Ocean Protection Council. 20 November 2008. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*. Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf

²⁰ Gregory, Murray R. 2009. "Environmental Implications of Plastic debris in Marine Settings –Entanglement, Ingestion, Smothering, Hangers-on, Hitch-hiking and Alien Invasions." In *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364: 2013–2025.

²¹ National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Leatherback Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_leatherback_pacific.pdf

²² National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the East Pacific Green Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_green_eastpacific.pdf

²³ National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Loggerhead Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_loggerhead_pacific.pdf

²⁴ National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1998. *Recovery Plan for U.S. Pacific Populations of the Olive Ridley Turtle*. Available at: http://www.nmfs.noaa.gov/pr/pdfs/recovery/turtle_oliveridley.pdf

²⁵ U.S. Fish and Wildlife Service. September 2008. *Short-tailed Albatross Recovery Plan*. Available at: http://alaska.fws.gov/fisheries/endangered/pdf/stal_recovery_plan.pdf

²⁶ Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

²⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁸ City of West Hollywood, Community Development Department. October 2010. Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan. West Hollywood, CA.

ordinance would be anticipated to result in potential beneficial impacts to biological resources by reducing the potential for plastic carryout bag litter to end up in riparian habitats or other sensitive natural communities. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.

- (c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.²⁹ The urban environment in the City does not support any wetlands.³⁰ The proposed ordinance would be anticipated to reduce the amount of plastic carryout bag litter entering water bodies in the County, such as Ballona Creek, thereby potentially improving habitats and aquatic life.³¹ Therefore, as with the approved ordinances, the proposed ordinance would be anticipated to improve surface water quality by reducing the occurrence of plastic carryout bag litter in these waters. In addition, the proposed ordinance would not include any elements that would involve direct removal, filling, or hydrological interruption of federally protected wetlands. Therefore, as compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to federally protected wetlands as defined by Section 404 of the Clean Water Act.

- (d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.³² Preventing trash from entering water bodies, such as the Los Angeles River, has the potential to improve habitats and aquatic life.³³ Plastic litter has been known to block sea turtle hatchling migration.³⁴ The urban environment of West Hollywood does not support migration corridors.³⁵

²⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁰ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

³¹ Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

³² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³³ Regional Water Quality Control Board, Los Angeles Region. Revised 27 July 2007. "Trash Total Maximum Daily Loads for the Los Angeles River Watershed." Los Angeles, CA.

³⁴ California Ocean Protection Council. 20 November 2008. *An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter*. Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf

³⁵ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

Nevertheless, the proposed ordinance would be anticipated to reduce the amount of plastic carryout bag litter entering water bodies in the City that drain to the Pacific Ocean. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to migratory routes or nursery sites.

- (e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.³⁶ Section 11.36.010 of the West Hollywood Municipal Code requires a permit before planting, trimming, pruning, cutting, breaking, defacing, destroying, burning, or removing any shade or ornamental tree, hedge, plant shrub or flower growing, or planted to grow upon any public highway, public ground, or public property within the City.³⁷ The proposed ordinance would not contain any components that would remove or otherwise adversely impact local biological resources. No element of the proposed ordinance would be inconsistent with the goals of the City of West Hollywood General Plan, Municipal Code, or Climate Action Plan. The goals of the General Plan and the Climate Action Plan include reducing litter and protecting the environment, which the proposed ordinance also seeks to accomplish. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to conflicts with any local policies or ordinances protecting biological resources.

- (f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

As a result of the analysis undertaken in the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to biological resources.³⁸ According to the CDFG's National Community Conservation Planning (NCCP) program, the only NCCP region within the County is the Palos Verdes Peninsula NCCP, which is located approximately 38 miles south of the City and addresses the conservation of most of the coastal sage scrub habitat and other habitats on the Palos Verdes Peninsula.^{39,40} There are no adopted NCCPs or Habitat Conservation Plans (HCPs) that would apply to the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

³⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁷ City of West Hollywood Department of Planning. City of West Hollywood Zoning Code. Available at: <http://qcode.us/codes/westhollywood/view.php?topic=19&expand=1&frames=off>, West Hollywood, CA.

³⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.2-24. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁹ California Department of Fish and Game. April 2011. *Summary of Natural Community Conservation Plans (NCCPs) April, 2011*. Available at: <http://www.dfg.ca.gov/habcon/nccp/>

⁴⁰ U.S. Fish and Wildlife Service. Accessed on: 15 August 2011. *Natural Community Conservation Planning (NCCP): NCCP Plan Summary – Palos Verdes Peninsula*. Available at: <http://www.dfg.ca.gov/habcon/nccp/status/PalosVerdes/>

3.5 CULTURAL RESOURCES

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to cultural resources than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to cultural resources was evaluated in relation to four questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{2,3}

Would the proposed ordinance:

- (a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to cultural resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁴ The City has many historical resources and landmarks. As of 2010, 77 buildings have been individually designated as West Hollywood cultural resources and there are six historic districts and groups.⁵ The six districts are Harper Avenue National Register District, Courtyard Historic District, Plummer Park Apartment Grouping, Craftsman District, Lingenbrink Commercial Grouping, and the Old Sherman District.⁶ These districts are home to clusters of buildings that are historically significant.⁷ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City and would not include any activities that could adversely impact historical resources. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to cultural resources related to a substantial adverse change in the significance of an historical resource.

- (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to cultural

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

³ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁵ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Historical Preservation*. West Hollywood, CA.

⁶ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Historical Preservation*. West Hollywood, CA.

⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Historical Preservation*. West Hollywood, CA.

resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁸ The City is largely urbanized. The City is located within the Los Angeles Basin, part of the Los Angeles–Santa Ana prairies, a sensitive setting that was seasonally exploited by indigenous people.⁹ While the area has undergone extensive development in the twentieth century, the City possesses a high potential to contain buried cultural resources.¹⁰ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City and would not include any ground-disturbing activities that would adversely impact archeological resources. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to cultural resources related to a substantial adverse change in the significance of an archeological resource.

- (c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to cultural resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ As mentioned before, the City is located within the Los Angeles Basin, part of the Los Angeles–Santa Ana prairies, a sensitive setting that was seasonally exploited by indigenous people.¹² While the area has undergone extensive development in the twentieth century, the City possesses a high potential to contain buried cultural resources.¹³ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City and would not include any activities that would demolish, destroy, relocate, or alter paleontological resources or geologic features. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource, site, or geologic feature.

- (d) Disturb any human remains, including those interred outside of formal cemeteries?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to cultural resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁴

⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D; *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹⁰ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: *Initial Study*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

Although the City has a high potential to contain buried cultural resources,¹⁵ the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include any ground-disturbing activities that would disturb human remains, including remains interred outside of formal cemeteries. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to human remains.

¹⁵ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

3.6 GEOLOGY AND SOILS

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to geology and soils than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Impacts to geology and soils within the City of West Hollywood (City) were evaluated with regard to the West Hollywood General Plan 2035² and the most recent Alquist-Priolo Earthquake Fault Zoning maps.³

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to geology and soils was evaluated in relation to eight questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{4,5}

Would the proposed ordinance:

- (a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁶ West Hollywood is located in a seismically active zone.⁷ The active Hollywood Fault runs through the City and is capable of producing surface fault rupture during a future earthquake.⁸ Future earthquakes in the region are virtually inevitable and could be of a magnitude that would

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

³ California Geological Survey. [2007 Interim Revision] Supplements 1 and 2 added 1999. *Fault-Rupture Hazard Zones in California*. Special Publication 42. Contact: 655 S. Hope Street, #700, Los Angeles, CA 90017. Available at: <ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf>

⁴ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁵ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

compromise buildings and structures.⁹ Although an active earthquake fault exists in the City, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the development of structures or physical project elements that would expose or place people within vicinity of a known earthquake fault. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exposing people or structures to potential substantial adverse effects involving the rupture of a known earthquake fault than those disclosed in the certified EIR.

ii) Strong seismic ground shaking?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁰ Properties near the Hollywood Fault line would be prone to strong seismic ground shaking in the event of an earthquake.¹¹ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the development of structures or physical project elements that would expose or place people near or in areas susceptible to strong seismic ground shaking. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exposing people or structures to potential substantial adverse effects involving strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹² West Hollywood is susceptible to liquefaction during seismic activity due to conditions of loose, granular alluvial soils and locally shallow water table.¹³ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the development of structures or physical project elements that would expose or place people near or in an area susceptible to seismic-related ground failure, including liquefaction. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exposing people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction.

⁹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹¹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹³ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

iv) Landslides?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁴ Northern portions of the City are located at the base of the Hollywood Hills and are vulnerable to slope landslides and mudslides during earthquakes, rainstorms, and flooding conditions.¹⁵ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not contain components that would require the development of structures or physical project elements that would expose people to potential adverse impacts related to landslides. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exposing people or structures to potential substantial adverse effects involving landslides.

(b) Result in substantial soil erosion or the loss of topsoil?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁶ Northern portions of the City are located at the base of the Hollywood Hills and are vulnerable to soil erosion, particularly during earthquakes, rainstorms, and flooding conditions.¹⁷ The proposed ordinance would not contain physical project elements that would require construction-related activities such as grading or development that would be expected to result in changes to the existing soil conditions or create a loss of topsoil within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to substantial soil erosion or the loss of topsoil.

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed ordinance, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁸ Northern portions of the City are located at the base of the Hollywood Hills and are vulnerable to

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁵ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

soil erosion, particularly during earthquakes, rainstorms, and flooding conditions.¹⁹ As previously stated, the proposed ordinance would not require construction-related activities or the development of structures or physical project elements that would be expected to result in impacts related to soil or geologic units that are unstable or that would become unstable. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to location on a geologic unit or soil that is unstable or would become unstable as a result of the proposed ordinance, potentially resulting in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse.

- (d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.²⁰ The West Hollywood area has fine-grained components that are moderately to highly expansive. The City contains loose, granular alluvial soils.²¹ The proposed ordinance would not entail the development of structures or features that would be located on expansive soils. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to location on expansive soil.

- (e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to geology and soils; therefore, this environmental issue area was not carried forward for analysis in the EIR.²² The proposed ordinance would not entail any components requiring the use of septic tanks or alternative waste water disposal systems. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

¹⁹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

²⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²¹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

²² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

3.7 GREENHOUSE GAS EMISSIONS

The analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts to greenhouse gas (GHG) emissions than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ GHG emissions in the City of West Hollywood (City) were evaluated with regard to Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines² and a review life cycle assessments that evaluate plastic and paper carryout bags.^{3,4}

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to GHG emissions was evaluated in relation to two questions recommended for consideration by the State CEQA Guidelines and the City of West Hollywood Environmental Checklist.^{5,6}

Would the proposed ordinance:

- (a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant direct impacts to GHG emissions.⁷ However, because there are no federal, state, regional, or local regulations establishing significance on a cumulative level, and because the County of Los Angeles (County) evaluated the impacts of the approved ordinances from a conservative worst-case scenario, it was determined that the indirect impacts of the approved ordinances may have the potential to be cumulatively significant if all 88 cities adopt similar ordinances.⁸ However, the County has recognized and acknowledged that each city has the authority to render an independent decision regarding implementation of its own ordinance. Each city's determination would be contingent on the exact parameters of the city's proposed ordinance, the percentage increase in conversion to paper carryout bags, the number of stores affected, the actual bag usage per day, the size of the fee or charge, the city's

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

³ 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.

⁴ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

⁵ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁶ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-48. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

adopted thresholds of significance, and the city's projected Assembly Bill (AB) 32 GHG emissions target.⁹

There are currently no adopted quantitative thresholds of significance for evaluating GHG emissions under CEQA in the City. No federal or state agency (e.g. U.S. Environmental Protection Agency, California Air Resources Board, or South Coast Air Quality Management District) responsible for managing air quality emissions in the City has adopted a GHG emission significance threshold that may be used in reviewing newly proposed projects.

Although not mandatory for the proposed ordinance, the Bay Area Air Quality Management District (BAAQMD) is the only regional agency to have adopted operational GHG emission thresholds under CEQA. On June 2, 2010, CEQA projects within the BAAQMD area must consider the following significance thresholds:

Stationary sources:

- 10,000 metric tons CO_{2e}/year

Projects other than stationary sources:

- Compliance with Qualified Greenhouse Gas Reduction Strategy; or
- 1,100 metric tons of CO_{2e}/year; or
- 4.6 metric tons CO_{2e} per year per capita service population (residents plus employees)

Plan-level emissions:

- Compliance with Qualified Greenhouse Gas Reduction Strategy; or
- 6.6 metric tons CO_{2e} per year per capita service population (residents plus employees)

The proposed ordinance was evaluated with regard to the plan-level emission significance threshold of 6.6 metric tons CO_{2e} per year per capita service population. This significance threshold was chosen for analysis of this particular project because the proposed ordinance can be classified as a plan-level project. In addition, the threshold was derived from statewide compliance with AB 32, so it can be appropriate for application to projects in areas outside of the BAAQMD. The City does not recommend adoption of this threshold at this time for any other purpose aside from evaluation of the significance level of potential impacts from the proposed ordinance. The significance level of potential impacts from the proposed ordinance was also evaluated in accordance with the significance thresholds used in the certified EIR. Two significance criteria were used to evaluate the approved ordinances:

- Inconsistency with laws and regulations in managing GHG emissions
- Inconsistency with the goal to reduce GHG emissions to 1990 levels (approximately 427 million metric tons or 9.6 metric tons of CO_{2e} per capita) by 2020 as required by AB 32

⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

Several studies show that production of paper carryout bags generally produces more GHG emissions than the production of plastic carryout bags.^{10,11} Although certain representatives of the plastic bag industry have stated that similar ordinances have the potential to increase the demand for paper carryout bags,¹² the West Hollywood City Council is considering placing a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags. Nevertheless, the potential for GHG emissions during the manufacture of paper carryout bags and reusable bags was evaluated consistent with the analysis in the certified EIR.¹³

Two different scenarios were used to model two options for the proposed ordinance: (1) proposed ordinance with a fee on the issuance of paper carryout bags and (2) proposed ordinance with no fee on the issuance of paper carryout bags. For the fee scenario, it was assumed that the proposed ordinance would compel 50 percent of consumers to switch to paper carryout bags and 50 percent to reusable bags from plastic carryout bags, which is consistent with Alternative 5 in the certified EIR. For the no-fee scenario, the conversion rate was assumed to be 85 percent to paper carryout bags and only 15 percent to reusable bags, which is consistent with Alternative 3 in the certified EIR. The calculations were made consistent with the certified EIR, which assumed that all retail stores including grocery stores and pharmacies greater than 10,000 square feet in size currently use 10,000 plastic carryout bags per day, and all stores and pharmacies less than 10,000 square feet in size currently use 5,000 carryout bags per day. However, as noted in Section 2.5.1 of this addendum, the County's assumptions are so conservative that they cover *all* of the retail stores in West Hollywood, not just the pharmacies and grocery stores.

As stated in the certified EIR, using the Ecobilan LCA, a countywide plastic bag ordinance with a fee on the issuance of paper carryout bags would be expected to reduce GHG emissions.¹⁴ Similarly, the City's proposed ordinance would be expected to result in a reduction of GHG emissions (Appendix A and Table 3.7-1, *GHG Emissions Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*). However, without a fee on the issuance of paper carryout bags, the proposed ordinance would be expected to result in an increase of 124,720 metric tons of CO_{2e} per year throughout the County if all 88 incorporated cities adopted similar plastic bag ordinances.¹⁵ Of that number, the City's proposed ordinance would be responsible for an increase of approximately 1,432 metric tons of CO_{2e} per year, which is less than 1.2 percent of the Countywide emission increase.

¹⁰ 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.

¹¹ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for the Progressive Bag Affiliates.

¹² Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.3-15 to 3.3-38 and 12-47 to 12-55. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-48. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix C: Calculation Data. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

Using the Boustead data, a plastic bag ordinance with a fee on the issuance of paper carryout bags would be expected to result in an increase of 8,284 metric tons of CO_{2e} per year throughout the County if all 88 incorporated cities adopted similar plastic bag ordinances.¹⁶ Of that number, the City's proposed ordinance would be responsible for less than 1.2 percent, or an increase of approximately 95 metric tons, of CO_{2e} per year (Appendix A and Table 3.7-2, *GHG Emissions Due to Plastic and Paper Carryout Bags Based on Boustead Data*). This amount is equivalent to approximately 0.003 metric ton per capita, which is well below the significance threshold of 6.6 metric tons per capita. An ordinance without a fee on the issuance of paper carryout bags would be expected to result in an increase of 242,466 metric tons of CO_{2e} per year throughout the County if all 88 incorporated cities adopted similar plastic bag ordinances.¹⁷ Of that number, the City's proposed ordinance would be responsible for less than 1.2 percent, or an increase of approximately 2,785 metric tons of CO_{2e} per year (Appendix A and Table 3.7-2). A total of 2,785 metric tons is equivalent to approximately 0.081 metric ton per capita, which is well below the significance threshold of 6.6 metric tons per capita. Based on the LCA, the GHG emission impacts would also be expected to be below the level of significance when considering California's GHG emissions target for 2020 of 427 million metric tons per year and the County's GHG emissions target for 2020 of 108 million metric tons per year, either with or without a fee on the issuance of paper carryout bags. For an ordinance with a fee on the issuance of paper carryout bags, the cumulative Boustead LCA results for the entire County, including the City of West Hollywood, would be equivalent to 0.001 metric ton of CO_{2e} per year per capita, which would not conflict with the goals of AB 32 to reduce emissions to approximately 9.6 metric tons per capita by the year 2020. For an ordinance without a fee on the issuance of paper carryout bags, the cumulative Boustead LCA results for the entire County, including the City of West Hollywood, would be equivalent to 0.023 metric ton of CO_{2e} per year per capita, which also would not conflict with the goals of AB 32 to reduce emissions to approximately 9.6 metric tons per capita by the year 2020.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix C: Calculation Data. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix C: Calculation Data. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.7-1
GHG EMISSIONS DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON ECOBILAN DATA**

Emission Source	GHG Emissions			
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance		
		Metric Tons Per Day	Metric Tons Per Day ¹	Metric Tons Per Year ²
Scenario 1: Fee on Paper Carryout Bags				
City ordinance – All retail stores in West Hollywood ¹	6.52	-0.38	-138	-0.004
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	568.08	-32.92	-12,015	-0.001
Scenario 2: No Fee on Paper Carryout Bags				
City ordinance – All retail stores in West Hollywood ¹	6.52	3.92	1,432	0.042
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	568.08	341.70	124,720	0.012

KEY: GHG = greenhouse gas

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-48. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.
3. U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

NOTES:

1. A minus sign indicates a reduction in GHG emissions due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.
3. Per-capita emissions were calculated using the City's 2010 population of 34,339.

**TABLE 3.7-2
GHG EMISSIONS DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON BOUSTEAD DATA**

Emission Source	GHG Emissions			
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance		
	Metric Tons Per Day	Metric Tons Per Day ¹	Metric Tons Per Year ²	Metric Tons Per Year Per Capita ^{2,3}
Scenario 1: Fee on Paper Carryout Bags				
City ordinance – All retail stores in West Hollywood ¹	10.27	+0.26	+95	+0.003
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	893.87	+22.70	+8,284	+0.001
Scenario 2: No Fee on Paper Carryout Bags				
City ordinance – All retail stores in West Hollywood ¹	10.27	+7.63	+2,785	+0.081
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	893.87	+664.29	+242,466	+0.023

KEY: GHG = greenhouse gas

SOURCES:

1. Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix C: Calculation Data. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.
3. U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

NOTE:

1. Negative numbers indicate a reduction in GHG emissions.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.
3. Per-capita emissions were calculated using the City's 2010 population of 34,339.

As discussed in the certified EIR, the proposed ordinance would be expected to significantly increase consumers' use of reusable bags, the production of which would generate less GHG emissions than the production of both paper carryout bags and plastic carryout bags when considered on a per-use basis because reusable bags are designed to be used multiple times.¹⁸ Reusable bags are not routinely purchased at the point of sale for every transaction.

Delivery trucks that transport carryout bags throughout the City would have the potential to generate GHG emissions. The proposed ordinance would be expected to generate less than 2 additional truck trips per day, either with or without a fee on the issuance of paper carryout bags (Appendix A and Table 3.7-3, *Estimated Daily Operational Emissions Due to Increased Vehicle Trips with or without a*

¹⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 12-52 to 12-53. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

Fee on Paper Carryout Bags).^{19, 20, 21} The emissions per capita due to vehicle trips would be significantly lower than the significance threshold of 6.6 metric tons CO_{2e} per year per capita service population (Table 3.7-3). The GHG emission impacts related to vehicle trips would be expected to be below the level of significance when considering the State's and County's GHG emissions targets for 2020 of 427 million metric tons and 108 million metric tons, respectively, per year. The LCA results for the entire County, including the City of West Hollywood, would be equivalent to 0.00002 metric ton of CO_{2e} per year per capita, which would not conflict with the goals of AB 32 to reduce emissions by the year 2020 to approximately 9.6 metric tons per capita.

**TABLE 3.7-3
ESTIMATED DAILY OPERATIONAL EMISSIONS DUE TO INCREASED VEHICLE TRIPS
WITH OR WITHOUT A FEE ON PAPER CARRYOUT BAGS**

Emission Sources	CO ₂ Emissions (Pounds/Day)	CO ₂ Emissions (Metric Tons/Year)	CO ₂ Emissions Per Capita (Metric Tons/Year) ¹
2 delivery truck trips in the City of West Hollywood	32.76	5.42	0.00003
96 delivery truck trips in the entire County	1,572.35	260.32	0.00002

KEY: CO₂ = carbon dioxide

SOURCES:

1. URBEMIS 2007 v9.2.4 (see Appendix A)
2. U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov
3. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix C: Calculation Data, p. 12-55. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTE:

1. Per-capita emissions were calculated using the City's 2010 service population of 34,339.

Once disposed of by customers, carryout bags that are not recycled are disposed in a landfill to decompose and degrade. Depending on the type and materials used, a carryout bag will degrade at various rates. When paper carryout bags degrade in aerobic conditions at a landfill, the GHG methane (CH₄) is produced. As analyzed in the certified EIR based on the Ecobilan LCA, an ordinance with a fee on the issuance of paper carryout bags would be expected to generate approximately 70,250 metric tons of CO_{2e} per year, which is equivalent to approximately 0.0066 metric ton CO_{2e} per year per capita if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.²² An ordinance without a fee on the issuance of paper carryout bags would be expected to generate approximately 120,550 metric tons of CO_{2e} per year, which is equivalent to approximately 0.011 metric ton CO_{2e} per year per capita if all the 88 incorporated cities of the

¹⁹ (25 stores x 5,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) + (27 stores x 10,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) x 13 x 0.5 ≈ 1.1 daily truck trips

²⁰ (25 stores x 5,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) + (27 stores x 10,000 plastic carryout bags per day / 2,304,000 plastic carryout bags per truck) x 13 x 0.85 ≈ 1.9 daily truck trips

²¹ The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). According to infoUSA, approximately 25 of the pharmacies and grocery stores are <10,000 square feet and 27 are ≥ 10,000 square feet. Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

²² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-50. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

County adopted similar plastic bag ordinances.²³ Since West Hollywood is one of the 88 incorporated cities, the certified EIR accounts for impacts from GHG emissions associated with the proposed ordinance. When considered separately, the proposed ordinance, including a fee on paper carryout bags, would generate approximately 807 metric tons of CO_{2e} per year, which is equivalent to approximately 0.023 metric ton CO_{2e} per year per capita, or less than 1 percent of the countywide emissions (Appendix A and Table 3.7-4, *Estimated GHG Emissions Increases Due to End of Life Based on Ecobilan Data*). Under a no-fee scenario, the proposed ordinance would generate approximately 1,385 metric tons of CO_{2e} per year, which is equivalent to approximately 0.040 metric ton CO_{2e} per year per capita (Appendix A and Table 3.7-4).

Using the Boustead data, an ordinance with a fee on the issuance of paper carryout bags would be expected to result in an increase of 184,621 metric tons of CO_{2e} per year throughout the County if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.²⁴ Of that amount, the proposed ordinance would be responsible for an increase of approximately 2,121 metric tons of CO_{2e} per year, which is less than 1.2 percent of the amount calculated for the entire county (Appendix A and Table 3.7-5, *Estimated Increase in GHG Emissions Due to End of Life Based on Boustead Data*). In a scenario with no fee on the issuance of paper carryout bags, an increase of 330,985 metric tons of CO_{2e} per year would be expected to occur throughout the County if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.²⁵ Of the 330,985 metric tons of CO_{2e}, the proposed ordinance would be responsible for less than 1.2 percent, or approximately 3,802 metric tons per year (Appendix A and Table 3.7-5). The Boustead results are likely to be overestimates, as emissions from active landfills in the County are strictly controlled by SCAQMD Rule 1150.1, Control of Gaseous Emissions from Municipal Solid Waste Landfills, and Antelope Valley Air Quality Management District Rule 1150.1, Control of Gaseous Emissions from Active Landfills, and the new state regulations for methane emissions from landfills in accordance with AB 32. Nevertheless, the emissions per capita from the decomposition of bags in landfills would be significantly below the selected emission significance threshold of 6.6 metric tons CO_{2e} per year per capita service population (Tables 3.7-4 and 3.7-5). With or without a fee on the issuance of paper carryout bags, the end-of-life GHG emission impacts would be expected to be below the level of significance when considering the State's and County's GHG emissions targets of 427 million metric tons and 108 million metric tons per year, respectively, to be achieved by the year 2020. In a scenario with a fee on the issuance of paper carryout bags, the LCA results for the entire County, including the City of West Hollywood, would be 0.017 metric ton of CO_{2e} per year per capita, which would not conflict with the goals of AB 32 to reduce emissions to approximately 9.6 metric tons per capita by the year 2020. In a scenario with no fee on the issuance of paper carryout bags, the LCA results for the entire County, including the City of West Hollywood, would be 0.031 metric ton of CO_{2e} per year per capita, which would not conflict with the goals of AB 32.

²³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-50. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.7-4
ESTIMATED INCREASE IN GHG EMISSIONS DUE TO END OF LIFE BASED ON
ECOBILAN DATA**

Emission Source	GHG Emissions ¹	
	Metric Tons CO _{2e} Per Year ²	Metric Tons CO _{2e} Per Year Per Capita ^{2,3}
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ⁴	+ 807	+ 0.0235
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	+ 70,250	+ 0.0066
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ⁴	+ 1,385	+ 0.04025
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	+ 120,550	+ 0.01136

KEY: GHG = greenhouse gas

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-50. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.
3. U.S. Environmental Protection Agency. November 2008. *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: <http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf>
4. U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

NOTES:

1. A plus sign indicates an increase in GHG emissions due to the given scenario.
2. Assuming 36.8 percent of paper carryout bags are diverted from landfills and 11.9 percent of plastic carryout bags are diverted from landfills, based on the 2007 USEPA recycling rates.
3. Per-capita emissions were calculated using the City's 2010 population of 34,399.
4. The total number of pharmacies and grocery stores in Pasadena was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on: 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

3.7-5
ESTIMATED INCREASE IN GHG EMISSIONS DUE TO END OF LIFE BASED ON
BOUSTEAD DATA

Emission Source	GHG Emissions ¹	
	Metric Tons CO _{2e} Per Year	Metric Tons CO _{2e} Per Year Per Capita ²
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ³	+ 2,121	+ 0.0618
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	+ 184,621	+ 0.0174
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ⁴	+ 3,802	+ 0.11051
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	+ 330,985	+ 0.03118

KEY:

CO_{2e} = carbon dioxide equivalent

GHG = greenhouse gas

SOURCES:

1. Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.
3. U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder, Available at: www.census.gov

NOTES:

1. A plus sign indicates an increase in GHG emissions due to the given scenario.
2. Per-capita emissions were calculated using the City's 2010 population of 34,399.
3. The total number of pharmacies and grocery stores in Pasadena was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on: 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

In the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that "Manhattan Beach is small enough that even the cumulative effects of its ordinance would be negligible."²⁶ Like Manhattan Beach, the City of West Hollywood is also a small city with a population of less than 40,000. Therefore, it would be reasonable to conclude that the effects of the City's ordinance would also be negligible. However, the City has assumed that indirect impacts resulting from the end of life of paper carryout bags would be potentially significant on a cumulative level if all 88 cities within the County adopt similar ordinances, which is the same conclusion as the County's certified EIR. As with the approved ordinances, the conservative scenarios as set forth in Table 3.7-4 would be expected to yield potentially cumulatively considerable GHG emissions impacts due to the end of life of paper carryout bags in landfills, based on the threshold, "generate greenhouse gas emissions, either directly or indirectly that may have a significant effect on the environment." However, if, like the fees implemented in Ireland and Washington, D.C., the 10-cent charge on paper carryout bags reduces the conversion to paper carryout bags by 80 to 90 percent, indirect impacts to GHG emissions could be minimal and less than significant when considered cumulatively. Nevertheless, the City of West Hollywood

²⁶ *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155 (Cal. 2011).

proposes to adopt a Mitigation Monitoring Program and Statement of Overriding Considerations in order to be consistent with the County's EIR. Mitigation measure GHG-1 is proposed to address potential impacts to GHG emissions.

Mitigation Measure GHG-1:

- Implement and/or expand public outreach and educational programs to increase the percentage of paper carryout bags that are recycled curbside
- Implement and create a joint outreach and education program with the Chamber of Commerce and select business associations to provide information to citizens and businesses of the City of West Hollywood regarding the City's ban and the environmental harm created by plastic bags
- Implement a fee or charge on the issuance of paper carryout bags of at least \$0.10 to further reduce consumption of paper carryout bags
- Distribute reusable grocery bags, free of charge within the project area to encourage further transitions to reusable bags; consider public/private partnerships to offset costs of distribution
- Implement an outreach program for affected stores to encourage consumer transition to reusable bags, to reduce double bagging, and to encourage reuse and in-store recycling of paper carryout bags.
- In implementing the strategies, programs, policies, and projects related to the City of West Hollywood Climate Action Plan (CAP), the City shall include actions that encourage reduction in emissions on the business and consumer level.

Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to direct or indirect GHG emissions.

- (b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant direct impacts to GHG emissions.²⁷ However, because there are no federal, state, regional, or local regulations establishing significance on a cumulative level, and because the County evaluated the impacts of the approved ordinances based on a conservative worst-case scenario, it was determined that the indirect impacts may have the potential to be cumulatively significant if all 88 cities in the County were to adopt similar ordinances.²⁸ For the proposed ordinance, it was also determined that GHG emissions due to the

²⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-48. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-52. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

end of life of paper carryout bags would have the potential to be cumulatively significant [see response to (a) above]. Assuming the proposed ordinance causes an indirect increase in disposal of paper carryout bags, GHG emissions from active landfills in the County are strictly controlled by SCAQMD Rule 1150.1 and the new state requirements that regulate methane emissions from landfills pursuant to AB 32. Given the small size of the West Hollywood population compared to the County and its other component cities as a whole, it has limited contribution to cumulative impacts. Nevertheless, the City has assumed that indirect impacts resulting from the end of life of paper carryout bags would be potentially significant on a cumulative level, which is the same conclusion drawn in the County's certified EIR. Accordingly, the City of West Hollywood proposes to adopt a mitigation measure similar to the County's, to contribute towards the reduction of cumulative GHG emissions; however, impacts may have the potential to remain cumulatively significant if all 88 cities in the County were to adopt similar ordinances. The City of West Hollywood proposes to adopt a Mitigation Monitoring Program and Statement of Overriding Considerations in order to be consistent with the County's EIR. Mitigation measure GHG-1 is proposed to address potential impacts to GHG emissions. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to GHG emissions related to conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

3.8 HAZARDS AND HAZARDOUS MATERIALS

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to hazards and hazardous materials than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Hazards and hazardous materials within the City of West Hollywood (City) were evaluated based on a review of the West Hollywood General Plan 2035² and the Environmental Impact Report for the West Hollywood Climate Action Plan.³

Hazardous waste can pose a potential or substantial hazard to human health or the environment when improperly managed. Designated hazardous waste possesses at least one of four defined characteristics—ignitability, corrosivity, reactivity, or toxicity—or appears on special U.S. Environmental Protection Agency (USEPA) lists.⁴

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts related to hazards and hazardous materials was evaluated in relation to eight questions recommended for consideration by the State California Environmental Quality Act (CEQA) Guidelines and the City of West Hollywood Environmental Checklist.^{5,6}

Would the proposed ordinance:

- (a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁷ A variety of hazardous materials are transported, used in commercial and production processes, or used by individuals and households in their daily lives throughout the City.⁸ However, the proposed ordinance would not involve the transport, use, or disposal of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act.⁹ The proposed

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

⁴ *Code of Federal Regulations*, Title 40, Chapter 1, Part 261.

⁵ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁶ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

⁹ *Code of Federal Regulations*, Title 40, Chapter 1, Parts 106–180.

ordinance would encourage the use of reusable bags at certain stores, but the definition of a “reusable bag” within the proposed ordinance specifies that the bags must not contain lead, cadmium, or any other heavy metal in toxic amounts. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to hazards and hazardous materials in relation to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁰ The transport and disposal of hazardous materials routinely occur within the City.¹¹ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores, which could potentially reduce the prevalence of plastic bags in the litter stream and could result in a reduction in the accidental release of plastic bags into the environment. The proposed ordinance would not involve any type of construction or activities that would require the use of hazardous materials or that would result in the accidental release of hazardous materials into the environment. Therefore, compared with the approved ordinance, the proposed ordinance would not be expected to result in new or substantially more adverse impacts to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹² Numerous schools exist within the City; however, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include any physical elements, or otherwise, that would involve the emission or handling of hazardous or acutely hazardous materials within 0.25 mile of an existing or proposed school. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

¹⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹¹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

- (d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹³ There are several hazardous materials sites within the City.¹⁴ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail land development or any physical elements that would be located on a physical site or sites, including hazardous materials sites. Therefore, as with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse impacts related to being located on a hazardous waste site.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁵ There are no airports or airstrips within 2 miles of the City, and no portions of the City are subject to land use restrictions based on the requirements of an airport land use compatibility plan.¹⁶ The nearest airports to the City, based on straight-line measurements from the City's boundary, are the Santa Monica Municipal Airport located at 3223 Donald Douglas Loop South in Santa Monica, approximately 5 miles southwest of the City boundary, and the Bob Hope Airport located at 2627 North Hollywood Way in Burbank, California, approximately 7 miles north from the City boundary. The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include elements that would be located on any physical site or sites, including one near a public airport or public use airport or within an airport land use plan. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse impacts related to being located within 2 miles of a public or public use airport.

- (f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁶ City of West Hollywood, Community Development Department. October 2010. Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan. West Hollywood, CA.

hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁷ There are no airports or airstrips within 2 miles of the City, and no portions of the City are subject to land use restrictions based on the requirements of an airport land use compatibility plan.¹⁸ The proposed ordinance would ban plastic carryout bags issued by certain stores and would not include physical elements that would be located on a site or sites within the vicinity of a private airstrip that would be expected to result in impacts related to safety hazards for people residing or working in the vicinity of a private airstrip. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse impacts related to being located within the vicinity of a private airstrip.

- (g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁹ The City has developed multiple emergency response and evacuation plans, such as the West Hollywood Emergency Plan, plans for police and fire services, vulnerable populations and sensitive facilities, as well as plans for community continuity and important networks following a significant disaster.²⁰ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the development of structures or any components that would interfere with emergency response plans or evacuation plans. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to hazards and hazardous materials related to an adopted emergency response plan or emergency evacuation plan.

- (h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to hazards and hazardous materials; therefore, this environmental issue area was not carried forward for analysis in the EIR.²¹ The City is located at the base of the Hollywood Hills, where roads can be difficult to navigate and significant vegetation and brush cover the undeveloped areas between homes and neighborhoods. A fire in the Hollywood Hills could easily spread to the northern region of the

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁸ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁰ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

²¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

City.²² Although wildlands exist within the City, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not contain any components that would expose people or structures to significant risks. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

²² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

3.9 HYDROLOGY AND WATER QUALITY

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to hydrology and water quality than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Hydrology and water quality within the City of West Hollywood (City) were evaluated in relation to the West Hollywood General Plan 2035,^{2,3} the City of West Hollywood Climate Action Plan,⁴ the California Regional Water Quality Control Board Basin Plan for the Los Angeles Region,⁵ and life cycle assessments that evaluate plastic and paper carryout bags.^{6,7}

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts related to hydrology and water quality was evaluated in relation to 10 questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{8,9}

Would the proposed ordinance:

- (a) Violate any water quality standards or waste discharge requirements?

The proposed ordinance would not be expected to create new or substantially more adverse significant impacts to hydrology and water quality in relation to water quality standards or waste discharge requirements than those disclosed in the certified EIR. The proposed ordinance would be expected to assist the City in achieving water quality standards over time through a net reduction of plastic carryout bag litter. The proposed ordinance would be anticipated to reduce the amount of litter found in water sources, such as drain outlets and storm water runoff, that can be attributed to plastic carryout bags, which in turn would be expected to have a positive impact to water quality and waste discharge within the City.

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation*. West Hollywood, CA.

³ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

⁴ City of West Hollywood, Community Development Department. October 2010. Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan. West Hollywood, CA.

⁵ California Regional Water Quality Control Board, Los Angeles Region (4). 13 June 1994. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Los Angeles, CA.

⁶ 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.

⁷ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

⁸ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁹ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., West Hollywood, CA.

The proposed ordinance would not entail elements that would directly violate the standards or requirements specified in the City of West Hollywood General Plan¹⁰ or the Water Quality Control Board Basin Plan for the Los Angeles Region.¹¹ Adoption of the proposed ordinance would not permit or sanction the violation of any established industry standards, management, or policies.

Although certain representatives of the plastic bag industry have stated that similar ordinances have the potential to increase the demand for paper carryout bags,¹² West Hollywood City Council is considering including a 10-cent charge on the issuance of paper carryout bags to encourage the use of reusable bags. Nevertheless, the potential for eutrophication during the manufacturing of paper bags was evaluated consistent with the analysis in the certified EIR.¹³ Eutrophication occurs when high level of nutrients, such as fertilizers, enter a water body and cause excessive growth of plants, such as algae, resulting in a reduction in water quality.

Several life cycle assessments (LCAs) have analyzed the impacts of bag manufacturing to eutrophication and concluded that paper carryout bag manufacturing releases more pollutants, such as nitrates and phosphates, into water than plastic carryout bag manufacturing.^{14,15} As analyzed in the certified EIR based on the Ecobilan LCA, under a scenario with a fee on the issuance of paper carryout bags, the limited increase in the use of paper carryout bags would be expected to increase eutrophication by approximately 50.87 additional kilograms of phosphate per day if all 88 incorporated cities of the County adopted similar ordinances.¹⁶ Under a scenario with no fee on the issuance of paper carryout bags, the increase in the use of paper carryout bags would be expected to increase eutrophication by approximately 93.74 additional kilograms of phosphate per day if all 88 incorporated cities of the County adopted similar ordinances.¹⁷ Since West Hollywood is one of the 88 cities, the certified EIR accounts for impacts from eutrophication associated with the City's proposed ordinance. The increase in eutrophication just from the City's proposed ordinance would be approximately 0.58 kilograms of phosphate per day under a scenario with a fee on the issuance of paper carryout bags, or approximately 1.08 kilograms of phosphate per day under a scenario with no fee on the issuance of paper carryout bags (Appendix A and Table 3.9-1, *Eutrophication Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*).

¹⁰ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation*. West Hollywood, CA.

¹¹ California Regional Water Quality Control Board, Los Angeles Region (4). 13 June 1994. *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Los Angeles, CA.

¹² Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.4-13 to 3.4-17 and 12-57 to 12-59. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ Franklin Associates, Ltd. 1990. *Resource and Environmental Profile Analysis of Polyethylene and Unbleached Paper Grocery Sacks*. Prairie Village, KS.

¹⁵ 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.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-58. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-58. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.9-1
EUTROPHICATION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON ECOBILAN DATA**

Eutrophication Source	Eutrophication (kilograms phosphate equivalent)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ²
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.12	+ 0.58
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.12	+ 1.08
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	10.39	+ 93.74

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-58. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTE:

1. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.
2. "+" numbers indicate the extent of the increase in eutrophication that would be expected if 50 or 85 percent of consumers in West Hollywood switched to using paper carryout bags instead of plastic carryout bags.

Since there are no known facilities that manufacture and produce paper carryout bags in the County or in the City, there would be no expected impacts to water quality resulting from eutrophication within the City. As stated in the certified EIR, since there are no significance thresholds related to eutrophication and since there are no known paper bag manufacturing facilities located within the County (or in the City), determining the level of significance of eutrophication impacts from bag manufacturing in areas outside of the County would be inapplicable and speculative. In the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that "The impacts of this project in areas outside Manhattan Beach itself are both indirect and difficult to predict." and "the city could hardly be expected to trace the provenance of all paper bags that might be purchased by Manhattan Beach establishments, in order to evaluate the particular impacts resulting from their manufacture."¹⁸ Further, any indirect increase in pollutant discharge from manufacturing plants due to increased demand for paper carryout bags or reusable bags would be regulated and controlled by the federal, regional, and local laws applicable to each manufacturing plant. Within the United States, pollutant discharges from bag manufacturing facilities would be required to comply with National Pollutant Discharge Elimination System requirements and permits.

Increased demand for reusable bags may also have the potential to indirectly increase eutrophication impacts from facilities that manufacture reusable bags. However, impacts of

¹⁸ *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155 (Cal. 2011).

reusable bag manufacturing to eutrophication are likely to be less significant than the impacts due to plastic and paper carryout bag manufacturing, when considered on a per-use basis.¹⁹ The proposed ordinance requires that reusable bags be designed for a minimum of 125 uses. Therefore, eutrophication impacts due to the life cycle of a reusable bag would be expected to be significantly lower than the eutrophication impacts of a plastic or paper carryout bag when considered on a per-use basis, and any conversion from the use of plastic carryout bags to reusable bags would be reasonably expected to result in an environmental benefit.

Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to water quality standards or waste discharge requirements.

- (b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to groundwater supplies or groundwater recharge.

The City's potable water service is provided entirely by two outside agencies: the City of Beverly Hills and the Los Angeles Department of Water and Power. The City of Beverly Hills imports 90 percent of the water used in its service area from Northern California through the Metropolitan Water District (MWD); the remaining 10 percent of the water it provides are pumped through ground water rights in the Hollywood Basin and the La Brea subarea of the Central Basin. Currently, Beverly Hills receives approximately 1 percent of all MWD water. LADWP, which provides the remainder of West Hollywood's current potable water needs; provides water to over 4 million people throughout the City of Los Angeles and portions of West Hollywood, Culver City, and unincorporated Los Angeles County. Water sources for the LADWP include the MWD, the Los Angeles Aqueduct, and local ground water.²⁰

The proposed ordinance does not require the construction of new structures and therefore would not result in the creation of impervious surfaces that would potentially reduce ground water recharge. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to groundwater levels.

¹⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.4-15 and 12-58. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁰ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation*. West Hollywood, CA.

- (c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site. The City is primarily urbanized and does not have any natural blue-line streams.²¹ The proposed ordinance would not entail construction elements and would not involve any changes to existing physical property that would result in a change in drainage patterns. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation in the City.

- (d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in flooding on site or off site. The City is primarily urbanized and does not have any natural blue-line streams.²² The proposed ordinance would not entail construction elements and would not involve any changes to existing physical property that would result in a change in drainage patterns. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to alteration of existing drainage patterns of the City or substantially increase the rate or amount of surface runoff in a manner that would result in flooding in the City.

- (e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to creating or contributing runoff water that would exceed the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City. Due to the thin film used to create plastic carryout bags (0.057 millimeter or less), their low density, and their light weight (which has been noted as anywhere between 6 to 10 times lighter than paper bags), plastic carryout bags have a very high propensity to become airborne and to ultimately contribute to the pollution in storm water drainage systems and runoff. In addition, several studies have shown that plastic film, particularly that of plastic carryout bags, composes a significant portion of the trash collected in storm drains. For example, a study assessing the litter content of storm drain catch basins during the Great Los Angeles River Clean Up estimated the weight and volume of plastic bag litter to be

²¹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

²² City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

25 percent and 19 percent, respectively.²³ A California Department of Transportation study of catch basins alongside freeways in Los Angeles indicated that plastic film composed 7 percent and 12 percent by mass and volume, respectively, of the total trash collected.²⁴ Plastic carryout bags that end up in storm drains can clog catch basins, storm drain inlet racks, and other devices, effectively reducing the capacity of the system to channel storm water runoff, which may result in flooding of adjacent areas. The proposed ordinance would have the potential to significantly reduce the amount of plastic carryout bag trash that may originate from the City and be transported from rivers to oceans. A study performed for Washington, District of Columbia, showed that plastic bag trash accounted for 45 percent of the amount of trash collected in tributary streams and 20 percent of the amount of trash collected in rivers.²⁵ However, the same study found that paper products were not found in the streams except in localized areas and were not present downstream.²⁶ Paper carryout bags degrade when in contact with water, so they are less likely to accumulate in the storm drain system. Similarly, reusable bags pose less of an issue for the storm drain system as they are not disposed of less frequently because they designed to be used multiple times and are not littered the way plastic carryout bags are littered. Therefore, the proposed ordinance would have the potential to improve the existing drainage capacity by removing a significant source of trash that can clog features of the system and reduce its capacity.²⁷

The proposed ordinance would be expected to result in a significant reduction in the consumption of plastic carryout bags and to significantly increase the use of reusable bags within the City. The proposed ordinance would not entail construction elements and would not involve any changes to existing physical property. Consequently, there would be no potential for impacts to hydrology and water quality in relation to creating or contributing runoff water that would exceed the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff.

(f) Otherwise substantially degrade water quality?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to otherwise substantially degrading water quality. Water quality and use within California is regulated by the State Water Resources Control Board. The proposed ordinance would not entail construction elements and would not involve any changes to existing physical property that would adversely affect water quality. Further, although manufacturing facilities for paper and plastic carryout bags could potentially release pollutants that may affect water quality, the discharge of pollutants locally and nationally is regulated by the U.S.

²³ City of Los Angeles. 18 June 2004. *Characterization of Urban Litter*. Prepared by: Ad Hoc Committee on Los Angeles River and Watershed Protection Division. Los Angeles, CA.

²⁴ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. 2001. *Results of the Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation. Available at: <http://www.owp.csus.edu/research/papers/papers/PP020.pdf>

²⁵ Anacostia Watershed Society. December 2008. *Anacostia Watershed Trash Reduction Plan*. Prepared for: District of Columbia Department of the Environment. Bladensburg, MD.

²⁶ Anacostia Watershed Society. December 2008. *Anacostia Watershed Trash Reduction Plan*. Prepared for: District of Columbia Department of the Environment. Bladensburg, MD.

²⁷ Green Cities California. March 2010. *Master Environmental Assessment on Single-Use and Reusable Bags*. Prepared by: ICF International. San Francisco, CA.

Environmental Protection Agency and the Regional Water Quality Control Boards under the federal Clean Water Act (CWA). Pollutant discharges from manufacturing facilities would be required to comply with the CWA. Further, as noted in the response to (a) above, since there appears to be no manufacturing and production of paper carryout bags in the County or in the City, there would be no expected impacts to water quality due to a potential increase in demand associated with conversion from plastic carryout bags to paper carryout bags. The reduction of plastic bag litter in the litter stream resulting from implementation of the proposed ordinance would be expected to benefit the City. Therefore, compared with the approved ordinances, the proposed ordinances would not be expected to result in new or substantially more adverse significant impacts related to substantial degradation of water quality.

- (g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or dam inundation area as shown in the City of West Hollywood adopted Safety Element of the General Plan or other flood hazard delineation map?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to the placement of housing within a 100-year flood hazard area. The City is entirely enclosed by land and does not include any coastlines and therefore unlikely to experience direct inundation from rising sea levels. However, West Hollywood is susceptible to flooding from watercourses that flow through narrow, steep canyons from the natural drainage basin in the hills above the City.²⁸ However, no portions of the City are within a 100-year floodplain identified by the Federal Emergency Management Agency (FEMA).²⁹ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the construction of housing units. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to placement of housing within a 100-year flood hazard area.

- (h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to the placement of structures within a 100-year flood hazard area. No portions of the City are within a 100-year floodplain identified by FEMA.³⁰ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail the construction or placement of structures. Therefore, compared with the approved ordinances, the proposed ordinances would not be expected to result in new or substantially more adverse significant impacts related to placement of structures (other than housing) within a 100-year flood hazard area.

²⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

²⁹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

³⁰ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

- (i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to the failure of a levee or dam. Parts of the City are located within a potential dam inundation area. Portions of the eastern section of the City have the potential to be inundated by the Hollywood Reservoir (Mulholland Dam). In addition, portions of the southern section of the City have the potential by inundated by the Greystone Reservoir (the Lower Franklin Dam).³¹ However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include any changes to landforms or any physical elements, and therefore would not result in flooding or expose people to areas that are susceptible to flooding. Therefore, compared with the approved ordinances, the proposed ordinances would not be expected to result in new or substantially more adverse significant impacts related to failure of a levee or dam.

- (j) Inundation by seiche, tsunami, or mudflow?

As with the approved ordinances, the proposed ordinance would not be expected to result in impacts to hydrology and water quality in relation to inundation by seiche, tsunami, or mudflow. Due to the distance from the City to the Pacific Ocean (approximately 9 miles to the west), and the numerous structures between the City and the ocean, there is no risk or hazard due to tsunamis. There are also no large enclosed water bodies in the City that could create a risk of inundation due to a seiche.³² Specific hazards of concern to West Hollywood include earthquakes, landslides, and mudflows. Mudslides are especially a common threat due to the heavy rains within the Santa Monica Mountains, especially in areas recently affected by fire.³³ Although there are areas located within the City where mudflows are potential threats, the proposed ordinance would not entail components that would result in or be subject to a potential threat by such occurrences. The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include any changes to landforms or any physical elements, and therefore would not be expected to impact lakes and/or flood control basins or areas adjacent to any steep-sided slopes covered with soils and/or vegetation. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to inundation by seiche, tsunami, or mudflow.

³¹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

³² City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

³³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

3.10 LAND USE AND PLANNING

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to land use and planning from those disclosed in the certified 2010 Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Land use and planning within the City of West Hollywood (City) was evaluated in light of the adopted plans, including the West Hollywood General Plan 2035.²

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts related to land use and planning was evaluated in relation to three questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{3,4}

Would the proposed ordinance:

- (a) Physically divide an established community?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to land use and planning; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁵ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City. Specifically, the proposed ordinance would require that no store subject to the proposed ordinance would be allowed to make available or distribute plastic bags to customers. The proposed ordinance would not involve construction, or renovation of a site that would physically divide an established community. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to physical division of an established community.

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Land Use and Urban Form*. West Hollywood, CA.

³ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁴ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

- (b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to land use and planning; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁶

A review of the Land Use element of the West Hollywood General Plan 2035 identifies Goal LU-7 to protect the natural environment. Goal LU-7 seeks to expand urban green spaces and sustainable landscapes.⁷ The intent of Goal LU-7 is to enhance environmental sustainability, create ecologically healthy spaces, and provide residents with the physical and mental health benefits that come from an enhanced connection to nature.⁸ The proposed ordinance would adhere to the City's General Plan and promote sustainability and environmental stewardship by reducing the amount of litter attributable to plastic bags. The proposed ordinance would also comply with strategy SW-1.3 in the City's Climate Action Plan to encourage the use of reusable and biodegradable materials in retail and commercial establishments.⁹ The proposed ordinance would correspond with Action SW-1.3A in the Climate Action Plan, which specifically requires the City to develop a plastic bag ban.¹⁰ Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to a conflict with adopted or proposed land use plans, policies, or regulations and would support City adopted plans and policies for environmental conservation and stewardship.

- (c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to land use and planning; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ According to the National Community Conservation Planning (NCCP) program of the California Department of Fish and Game, the only NCCP planning region¹² within the County of Los Angeles is the Palos Verdes Peninsula NCCP, located approximately 38 miles south of the City and addresses the conservation of most of the coastal sage scrub habitat as well as other habitats on the

⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Land Use and Urban Form*. West Hollywood, CA.

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Land Use and Urban Form*. West Hollywood, CA.

⁹ City of West Hollywood. April 2011. Updated Public Review Draft Climate Action Plan. West Hollywood, CA.

¹⁰ City of West Hollywood. April 2011. Updated Public Review Draft Climate Action Plan. West Hollywood, CA.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² California Department of Fish and Game. April 2011. *Summary of Natural Community Conservation Plans (NCCPs) April, 2011*. Available at: <http://www.dfg.ca.gov/habcon/nccp/>

Palos Verdes Peninsula.¹³ There are no adopted NCCPs or Habitat Conservation Plans (HCPs) that would apply to the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to a conflict with any adopted HCP or NCCP.

¹³ U.S. Fish and Wildlife Service. Accessed on: 15 August 2011. *Natural Community Conservation Planning (NCCP): NCCP Plan Summary – Palos Verdes Peninsula*. Available at: <http://www.dfg.ca.gov/habcon/nccp/status/PalosVerdes/>

3.11 MINERAL RESOURCES

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to mineral resources from those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Mineral resources within the City of West Hollywood (City) were evaluated with regard to the California Geological Survey publication,² County of Los Angeles (County) General Plan,³ West Hollywood General Plan 2035,⁴ and the City of West Hollywood Climate Action Plan.⁵

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to mineral resources was evaluated in relation to two questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{6,7}

Would the proposed ordinance:

- (a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to mineral resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁸ Based on a review of California Geological Survey publications, there are no known mineral resources of statewide or regional importance located within the City.⁹

According to *Mines and Minerals Producers Active in California (1997–1998)*, there are 25 active mines located within the County.¹⁰ The County contains active sand and gravel, dimension stone, clay, decorative rock, and tungsten producers. However, there are no mining districts located in or

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² California Department of Conservation, California Geological Survey. [1966] Reprint released 13 March 2008. *Bulletin 189: Minerals of California*. Centennial Volume (1866–1966). Los Angeles, CA.

³ County of Los Angeles Department of Regional Planning. November 1980. *County of Los Angeles General Plan, Conservation/Open Space Element*. Los Angeles, CA.

⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

⁵ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

⁶ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁷ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁹ California Department of Conservation, California Geological Survey. [1966] Reprint released 13 March 2008. *Bulletin 189: Minerals of California*. Centennial Volume (1866–1966). Los Angeles, CA.

¹⁰ California Department of Conservation, California Geological Survey. Revised 1999. *Mines and Mineral Producers Active in California (1997–1998)*. Special Publication 103. Los Angeles, CA.

around the vicinity of the City. The proposed ordinance would ban plastic carryout bags issued at certain stores and does not propose to modify any landforms or otherwise block or reduce accessibility to mineral resources; therefore, the proposed ordinance would not affect the extraction of mineral resources. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the loss of availability of a known mineral resource.

- (b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to mineral resources; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ Based on a review of California Division of Mines and Geology publications, in conjunction with the Conservation elements of the County General Plan and the West Hollywood General Plan 2035, there are no known mineral resources of state-wide or regional importance located within the City.^{12,13,14} Furthermore, the proposed ordinance would ban plastic carryout bags issued at certain stores and does not propose to modify any landforms or otherwise block or reduce accessibility to mineral resources; therefore, the proposed ordinance would not be expected to alter the availability of locally important mineral resources. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the loss of availability of a known locally important mineral resource recovery site.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² California Department of Conservation, California Geological Survey. [1966] Reprint released 13 March 2008. *Bulletin 189: Minerals of California*. Centennial Volume (1866–1966). Los Angeles, CA.

¹³ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources, and Conservation*. West Hollywood, CA.

¹⁴ County of Los Angeles Department of Regional Planning. November 1980. *County of Los Angeles General Plan, Conservation/Open Space Element*. Los Angeles, CA.

3.12 NOISE

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to noise than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Noise within the City of West Hollywood (City) was evaluated with regard to the Noise Control Ordinance of the County of Los Angeles (County),² the West Hollywood Municipal Code Chapter 9.08 Noise,³ and the West Hollywood General Plan 2035.⁴

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts related to noise was evaluated in relation to six questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{5, 6}

Would the proposed ordinance result in:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁷ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City. The City has a wide range of noise environments, from quiet residential and rural areas to relatively noisy commercial and industrial areas. Major sources of noise include, but are not limited to, street traffic, commercial/industrial activity, hospitality businesses, entertainment venues, community events, landscape equipment, and emergency vehicle sirens.⁸ The method commonly used to quantify environmental noise involves evaluation of all frequencies of sound, with an adjustment to reflect the constraints of human hearing. Since the human ear is less sensitive to low and high frequencies than to midrange frequencies, noise measurements are weighted more heavily within those frequencies of maximum human sensitivity in a process called "A-weighting." A measured noise level is called the A-weighted sound level measured in A-weighted decibels, written as dBA.

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² County of Los Angeles. 1978. "Noise Control Ordinance of the County of Los Angeles." Ordinance 11778, Section 2 (Article 1, Section 101), and Ordinance 11773, Section 2 (Article 1, Section 101). Available at: <http://ordlink.com/codes/lacounty/index.htm>

³ City of West Hollywood. Community Development Department. August 2011. West Hollywood Municipal Code. West Hollywood, CA. Available at: <http://qcode.us/codes/westhollywood/>

⁴ City of West Hollywood Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

⁵ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁶ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinance to Ban Plastic Carryout Bags in the Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁸ City of West Hollywood. Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

The City has set guidelines for the maximum desirable noise within certain existing land uses within the City.⁹

The proposed ordinance aims to significantly reduce the amount of litter in the City that can be attributed to plastic carryout bags, which would potentially lead to a reduction in the amount of waste transported throughout the City. Although certain representatives of the plastic bag industry have stated that similar ordinances have the potential to increase the use, disposal, and transport of paper carryout bags,¹⁰ the West Hollywood City Council is considering placing a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags, thereby reducing the total number of carryout bags used, disposed of, and transported throughout the City compared to existing conditions. Although the number of vehicles on the roads does affect ambient noise levels, neither the decrease in vehicles transporting plastic carryout bags nor the potential increase in the number of vehicles transporting paper carryout and reusable bags would be on a scale large enough to result in a discernable change in noise levels around roadways in areas in and around the City, with or without a charge on the issuance of paper carryout bags.

Although the proposed ordinance is expected to alter the current demand for plastic and paper carryout bags and reusable bags, there are no paper bag manufacturing plants located in the County or in the City. It is assumed that bag manufacturing facilities would be located within areas zoned for industrial uses where noise-sensitive receptors would not be expected to be impacted and where higher noise levels are permitted. The facilities would also be required to comply with the relevant local or County noise ordinances. Therefore, as compared with the approved ordinance, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to exposure or generation of noise levels in excess of established standards.

(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ The City does not have specific guidelines for groundborne vibration or groundborne noise levels. The County deems it a violation of the Noise Control Ordinance to operate or permit the operation of any device that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way. The County Noise Control Ordinance considers the perception threshold to be a motion velocity of 0.01 inch per second over the range of 1 to 100 Hertz.¹²

⁹ City of West Hollywood. Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹⁰ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² County of Los Angeles. 1978. *Noise Control Ordinance of the County of Los Angeles*. Ordinance 11778, Section 2 (Article 1, Section 101), and Ordinance 11773, Section 2 (Article 1, Section 101). Available at: <http://ordlink.com/codes/lacounty/index.htm>

The proposed ordinance aims to significantly reduce the amount of litter in the City that can be attributed to the use of plastic carryout bags, which would potentially lead to a reduction in the amount of waste transported throughout the City. Although certain representatives of the plastic bag industry have stated that similar ordinances have the potential to increase the use, disposal, and transport of paper carryout bags,¹³ the West Hollywood City Council is considering placing a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags, thereby resulting in a reduction in the total number of carryout bags used, disposed of, and transported throughout the City compared to existing conditions. Although the number of vehicles on the roads does affect vibration levels in the roadway vicinity, neither the decrease in the number of vehicles transporting plastic bags nor the potential increase in the number of vehicles transporting paper carryout bags and reusable bags would likely be on a scale large enough to discernibly change groundborne vibration or groundborne noise levels at sensitive receptors near roadways in the City, with or without a charge on the issuance of paper carryout bags.

Although the proposed ordinance would be expected to alter the current demand for plastic and paper carryout bags and reusable bags, there are no paper bag manufacturing plants located in the County or in the City. It is assumed that paper bag manufacturing facilities would be located within areas zoned for industrial uses, where receptors sensitive to vibration would not be expected to be impacted and where higher noise levels are permitted. The facilities would be required to comply with the relevant local or County noise ordinances. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to generation of excessive groundborne vibration or groundborne noise.

- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁴ The County and West Hollywood Noise Control Ordinances do not define “substantial.” In general, one way of estimating a person's subjective reaction to a new noise is to compare the new noise with the existing noise environment to which the person has become adapted; for example, the increase over the so-called “ambient” noise level. An increase of 1 dBA over the ambient noise level cannot be perceived unless it occurs in carefully controlled laboratory experiments; a 3-dBA increase is considered as a just-perceivable difference; an increase of at least 5 dBA is a noticeable change, thereby causing community response and often being considered a significant impact; and a 10-dBA increase is subjectively heard as approximately a doubling in loudness, almost always causing an adverse community response. As a 5-dBA increase is often considered a significant increase, in lieu of a City standard, this analysis will consider an increase in noise levels of 5 dBA to be considered substantial.

¹³ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

A doubling of traffic volumes on a roadway would be expected to result in a 3-dBA increase in noise generated by traffic, which is the human threshold for perceiving a change in the ambient noise level. Implementation of the proposed ordinance would not be expected to generate a substantial number of vehicle trips and would not have the potential to double traffic volumes on the roadways in and around the City. Although the proposed ordinance is expected to alter the current demand for plastic and paper carryout bags and reusable bags, it is assumed that existing and new manufacturing facilities would be located in areas zoned for industrial uses, where noise-sensitive receptors would not be expected to be impacted and where higher noise levels are permitted. Consequently, any increase in ambient noise levels would not be considered a significant impact. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to permanent increases in ambient noise levels.

- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁵ The proposed ordinance would not include components that would be sources of temporary or periodic noise. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to a substantial temporary or periodic increase in ambient noise levels within the City.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁶ The City does not have a public use airport. The nearest airports to the City are the Santa Monica Municipal Airport located at 3223 Donald Douglas Loop South in Santa Monica, approximately 5 miles southwest of the City boundary, and the Bob Hope Airport located at 2627 North Hollywood Way in Burbank, California, approximately 7 miles north from the City boundary. The proposed ordinance would not require people to be located or to work near any public airport. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to public airports.

¹⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

- (f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to noise; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁷ The proposed ordinance would not require people to be located or to work near any private airstrips. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to private airstrips.

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

3.13 POPULATION AND HOUSING

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to population and housing from those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Population and housing within the City of West Hollywood (City) were evaluated with regard to regional data and forecasts for population and housing.^{2,3}

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to population and housing was evaluated in relation to three questions recommended for consideration by the State California Environmental Quality Act (CEQA) and the City of West Hollywood Environmental Checklist.^{4,5}

Would the proposed ordinance:

- (a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to population and housing; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁶ Pursuant to State CEQA Guidelines Section 15064.7, typical established local thresholds of significance for housing and population growth include effects that would induce substantial growth or concentration of a population beyond General Plan projections; alter the location, distribution, density, or growth rate of the population beyond that projected in the General Plan; result in a substantial increase in demand for additional housing; or create a development that significantly reduces the ability of the City to meet housing objectives set forth in the General Plan.⁷

According to the most recently available U.S. Census data, the City's population was 34,399 in 2010,⁸ which is a 3.7-percent decrease from a population of 35,716 in 2000 and a 4.8 percent

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood. Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Housing*. West Hollywood, CA.

³ U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

⁴ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁵ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁷ City of West Hollywood. Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Housing*. West Hollywood, CA.

⁸ U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

decrease from a population of 36,118 in 1990.⁹ The City is the 52nd-largest city in the County of Los Angeles. Over the past 40 years, the City's population has remained stable; the population was 34,622 in 1970.¹⁰

The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City. As such, the proposed ordinance would not be anticipated to increase the demand for new housing nor would it require expansion of existing roadways or the construction of new homes. Population growth within the City would remain consistent with the existing population growth projection because the proposed ordinance would not entail development or other features that would be expected to shift or influence the growth or migration rates within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to inducing substantial direct or indirect population growth.

- (b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to population and housing; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ The proposed ordinance would aim to reduce the amount of litter that can be attributed to plastic carryout bags within the City and would not entail any components that would result in the removal or displacement of existing housing. The areas that would be affected by the proposed ordinance provide residences and employment for approximately 34,399 people in the City.¹² The implementation of the proposed ordinance would have no effect on the City's projected population and housing growth and would not necessitate construction of replacement housing. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the displacement of substantial amounts of existing housing.

- (c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to population and housing; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹³ The proposed ordinance would aim to reduce the amount of litter that can be attributed to plastic carryout bags within the City and would not contain any components that would result in the

⁹ U.S. Census Bureau. 1990. 1990 Summary Tape File (STF 1) – 100-Percent Data, Table P001. Available at: www.census.gov

¹⁰ U.S. Census Bureau. 2010. Census figures from 1960 to 1980 were enumerated prior to incorporation in 1984 as West Hollywood CDP. Available at: www.census.gov

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² U.S. Census Bureau. 2010. American Community Survey 2010. American Fact Finder. Available at: www.census.gov

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

displacement of substantial numbers of people. Implementation of the proposed ordinance would not be expected to lead to an increase in population, but rather would be expected to be consistent with the City's projected population growth. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the displacement of substantial numbers of people.

3.14 PUBLIC SERVICES

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to public services than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Public Services within the City of West Hollywood (City) were evaluated based on a review of the West Hollywood General Plan 2035.^{2,3,4}

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to public services was evaluated in relation to one question recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{5,6}

- (a) Would the proposed ordinance result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
- i) Fire protection?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to public services; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁷ Fire services in West Hollywood are provided by the Los Angeles County Fire Department, which has two fire stations in West Hollywood. The two fire stations within the City are staffed by 19 firefighters and a battalion chief who works 24-hour shifts.⁸ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores in the City and would not entail any development or features that would be expected to affect population growth in the City in such a way that would lead to an increase in the demand for fire protection services or related facilities. In addition, the proposed ordinance would not include the provision of new or physically altered fire protection services. Therefore, compared with the approved ordinances, the proposed ordinance

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

³ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Parks and Recreation*. West Hollywood, CA.

⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Human Services*. West Hollywood, CA.

⁵ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁶ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

would not be expected to result in new or substantially more adverse significant impacts related to fire protection.

ii) Police protection?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to public services; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁹ The City receives its police protection through the Los Angeles County Sheriff's Department.¹⁰ The West Hollywood Sheriff's Department headquarters is located at 780 North San Vicente Boulevard West, Hollywood, California 90069. However, the proposed ordinance would ban the issuance of plastic carryout bags by certain stores in the City and would not entail any development or features that would be expected to affect population growth in the City in such a way that would lead to an increase in the demand for police protection. In addition, the proposed ordinance would not include or require the provision of new or physically altered facilities for police protection services. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to police protection.

iii) Schools?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to public services; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹¹ The Los Angeles Unified School District (LAUSD) provides public school services to the City. Two public schools are located within City limits: one elementary school and one alternative high school.¹² The proposed ordinance would ban the issuance of plastic carryout bags by certain stores in the City and would not entail any development or features that would be expected to affect population growth in the City in such a way that would lead to an increase in the demand for and use of schools or related facilities. In addition, the proposed ordinance would not include or require the provision of new or physically altered governmental facilities related to schools. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to schools.

iv) Parks?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to public services;

⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁰ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Safety and Noise*. West Hollywood, CA.

¹¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Human Services*. West Hollywood, CA.

therefore, this environmental issue area was not carried forward for analysis in the EIR.¹³ The City contains a total of six parks, including two large community parks, two neighborhood parks, and two pocket parks.¹⁴ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores in the City and would not entail any development or features that would be expected to affect population growth in the City in such a way that would lead to an increase in the demand for and use of park facilities. Furthermore, the proposed ordinance, which would aim to significantly reduce the amount of litter that can be attributed to plastic carryout bags, would potentially lead to an improvement in the aesthetic appearance of existing recreational facilities and open spaces in the City. As found in the County of Los Angeles staff report on plastic bags, due to their expansive and lightweight characteristics, plastic bags are easily carried by wind to become entangled in brush, tossed along freeways, and caught on fences, thereby becoming eyesores.¹⁵ Furthermore, the distinct white or bright colors of plastic bags and the difficulty of collecting the bags result in a greater potential for visual impacts than other types of litter. The proposed ordinance would not physically alter any existing parks in the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to parks.

v) Other public facilities?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to public services; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁶ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores in the City and would not entail any development or features that would be expected to affect population growth in the City in such a way that it would lead to an increase in the demand for and use of other public facilities such as libraries. Furthermore, the proposed ordinance would not include elements that would directly or indirectly require residential development or the construction of public facilities. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to other public facilities.

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Parks and Recreation*. West Hollywood, CA.

¹⁵ County of Los Angeles Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

3.15 RECREATION

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood¹ (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to recreation from those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Recreation in the City of West Hollywood (City) was evaluated with regard to information contained in the West Hollywood General Plan 2035.²

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to recreation was evaluated in relation to two questions recommended for consideration by the State California Environmental Quality Act and the City of West Hollywood Environmental Checklist.^{3,4}

- (a) Would the proposed ordinance increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to recreation; therefore, this environmental issue was not carried forward for the analysis in the EIR.⁵ The City owns and/or controls approximately 15.31 gross acres of public parkland in six sites:⁶ Plummer Park (8.5 acres), West Hollywood Park (5.3 acres), William S. Hart Park (0.75 acre), Kings Road Park (0.5 acre), Havenhurst Pocket Park (0.15 acre), and Formosa Pocket Park (0.11 acres).⁷ Landscape areas, such as the street medians, parkways, and other green areas, throughout the City also provide valuable public space areas.⁸

The proposed ordinance would not contain any components that would increase or impact the demand for the existing recreational facilities. As discussed in Section 3.13 of this Addendum to the EIR, the proposed ordinance would not be expected to cause an increase in residents or visitors because the proposed ordinance would not entail development or other features that would be expected to shift or influence the growth within the City. Furthermore, the proposed ordinance, which would aim to significantly reduce the amount of litter that can be attributed to the use of plastic carryout bags, would potentially lead to an improvement in the aesthetic appearance of

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035 Parks and Recreation*. West Hollywood, CA.

³ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁴ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁶ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035 Parks and Recreation*. West Hollywood, CA.

⁷ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035 Parks and Recreation*. West Hollywood, CA.

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035 Parks and Recreation*. West Hollywood, CA.

existing recreational facilities and open spaces in the City. As found in the County of Los Angeles staff report on plastic bags, due to their expansive and lightweight characteristics, plastic bags are easily carried by wind to become entangled in brush, tossed along freeways, and caught on fences, thereby becoming eyesores.⁹ Furthermore, the distinct white or bright colors of plastic bags and the difficulty of collecting the bags result in a greater potential for visual impacts than other types of litter. ²The proposed ordinance would not be expected to result in a significant increase in the number of people, residents, or visitors who use existing park facilities. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to increased use of existing neighborhood and regional parks or other recreational facilities that would contribute to or accelerate the physical deterioration of existing facilities.

- (b) Does the proposed ordinance include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to recreation; therefore, this environmental issue was not carried forward for the analysis in the EIR.¹⁰ The proposed ordinance would not increase or impact the demand for the existing recreational facilities in the City and would not involve construction or expansion of recreational facilities. The proposed ordinance would have the potential to improve the appearance of recreational facilities by reducing the amount of plastic bag litter in the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the construction or expansion of recreation facilities.

⁹ County of Los Angeles Department of Public Works, Environmental Programs Division. August 2007. *An Overview of Carryout Bags in Los Angeles County: A Staff Report to the Los Angeles County Board of Supervisors*. Alhambra, CA. Available at: http://dpw.lacounty.gov/epd/PlasticBags/PDF/PlasticBagReport_08-2007.pdf

¹⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

3.16 TRANSPORTATION AND TRAFFIC

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to transportation and traffic from those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Transportation and traffic within the City of West Hollywood (City) were evaluated in light of the West Hollywood General Plan 2035,² and the Congestion Management Plan for the County of Los Angeles (County).³

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts related to transportation and traffic was evaluated in relation to seven questions recommended for consideration by the State California Environmental Quality Act Guidelines and the City of West Hollywood Environmental Checklist.^{4,5}

Would the proposed ordinance:

- (a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁶ The proposed ordinance aims to significantly reduce the amount of litter in the City that can be attributed to the use of plastic carryout bags, which would potentially lead to a reduction in the amount of waste transported throughout the City. Although certain representatives of the plastic bag industry have maintained that similar ordinances have the potential to increase the use, disposal, and transport of paper carryout bags,⁷ the West Hollywood City Council is considering placing a 10-cent charge on the issuance of paper carryout bags to encourage the use of reusable bags, thereby resulting in a reduction in the total number of carryout bags used, disposed of, and transported throughout the City compared to existing conditions. Page 6-3, *West Hollywood's*

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Mobility*. West Hollywood, CA.

³ County of Los Angeles Metropolitan Transportation Authority. 2004. *2004 Congestion Management Program for Los Angeles County*. Los Angeles, CA.

⁴ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁵ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁷ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

Philosophy on Mobility and Access, of the West Hollywood General Plan Mobility element states that the quality, comfort, safety, walkability, livability, and bikeability of the City's streets, sidewalks and multimodal transportation system are of utmost importance to the future of the City.⁸ A decrease in the number of plastic and paper carryout bags used, delivered, and disposed of within the City would not conflict with this policy. The proposed ordinance would not be expected to generate a substantial number of vehicle trips that would contribute to the existing traffic within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, with or without a charge on the issuance of paper carryout bags.

- (b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.⁹ The City participates in the Congestion Management Program (CMP). The CMP is required of every county in California with a population of 50,000 or more (including all of the Southern California Association of Governments six-County area) to qualify for certain state and federal funds. The CMP requires annual development reporting and biennial data collection at designated intersections and roadway segments. The CMP sets performance standards for roads and public transit, and requires the City to meet these standards.¹⁰ The proposed ordinance aims to significantly reduce the amount of litter that can be attributed to the use of plastic carryout bags, which would have the potential to lead to a reduction in the amount of waste transported throughout the County. Although certain representatives of the plastic bag industry have argued that similar ordinances have the potential to result in an increase in the use, disposal, and transportation of paper carryout bags,¹¹ the West Hollywood City Council is considering placing a 10-cent charge on the issuance of paper carryout bags to encourage the use of reusable bags, thereby resulting in a reduction in the total number of carryout bags used, disposed of, and transported throughout the City compared to existing conditions. The County congestion management program set the threshold for arterial roadways to achieve a level of service E or better.¹² The proposed ordinance would not directly generate new or additional trips and would not include any new development in the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse

⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Mobility*. West Hollywood, CA.

⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁰ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Mobility*. West Hollywood, CA

¹¹ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹² County of Los Angeles Metropolitan Transportation Authority. 2004. *2004 Congestion Management Program for Los Angeles County*. Los Angeles, CA.

significant impacts to transportation and traffic related to conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways, with or without a charge on the issuance of paper carryout bags.

- (c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹³ The City does not have a public use airport. The nearest airports to the City are the Santa Monica Municipal Airport located at 3223 Donald Douglas Loop South in Santa Monica, approximately 7 miles west of the City boundary, and the Bob Hope Airport located at 2627 North Hollywood Way in Burbank, California, approximately 7 miles north from the City boundary. The proposed ordinance would not include any direct physical development, and as such it would not entail elements that would be located near a private or public airport. The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not result in any direct or indirect effects upon air traffic patterns. Therefore, as with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to transportation and traffic related to a change in air traffic patterns that would result in substantial safety risks.

- (d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁴ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not entail elements that require construction or would have the potential to result in any direct or indirect effects upon increasing traffic hazards due to a design feature. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to transportation and traffic related to substantially increasing hazards due to a design feature.

- (e) Result in inadequate emergency access?

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁵

¹³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

The West Hollywood General Plan Mobility Element requires that the City maintain adequate emergency access provisions when evaluating and approving new development projects, investigate solutions for intersections and roadway segments with high accident rates, and coordinate enforcement programs with the Police Department.¹⁶ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include elements that would require or alter the availability of or access to any emergency route within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to transportation and traffic related to inadequate emergency access.

- (f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks?)

As a result of the analysis undertaken in the Initial Study for the certified EIR, it was determined that the approved ordinances would not be expected to result in significant impacts to transportation and traffic; therefore, this environmental issue area was not carried forward for analysis in the EIR.¹⁷ The City promotes alternative transportation methods, such as walking, biking, and public transit.¹⁸ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores and would not include any components that would be expected to result in any direct or indirect effects upon alternative transportation within the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to a conflict with adopted policies, plans, or programs supporting alternative transportation.

¹⁶ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Mobility*. West Hollywood, CA

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. Appendix D: Initial Study. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁸ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Mobility*. West Hollywood, CA.

3.17 UTILITIES AND SERVICE SYSTEMS

This analysis is undertaken to determine if the proposed Ordinance to Ban Plastic Carryout Bags in the City of West Hollywood (proposed ordinance) would result in new or substantially more adverse significant impacts in relation to utilities and service systems than those disclosed in the certified Environmental Impact Report (EIR) for the Ordinances to Ban Plastic Carryout Bags in Los Angeles County (approved ordinances).¹ Utilities and service systems within the City of West Hollywood (City) were evaluated with regard to the West Hollywood General Plan 2035,² the City of West Hollywood Climate Action Plan,³ the California Regional Water Quality Control Board (RWQCB) Basin Plan for the Los Angeles Region,⁴ the Water Conservation Municipal Code,⁵ and a review of life cycle assessments that evaluate plastic and paper carryout bags.^{6,7}

The potential for the proposed ordinance to result in new or substantially more adverse significant impacts to utilities and service systems was evaluated in relation to seven questions recommended for consideration by the State California Environmental Quality Act (CEQA) Guidelines and the City of West Hollywood Environmental Checklist, plus one additional question related to energy consumption.^{8,9}

Would the proposed ordinance:

- (a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.¹⁰ The sewer system within the City consists of 39 miles of gravity piping. This gravity sewer system includes over 850 pipe reaches and manholes, providing local sewer service to every

¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

⁴ California Regional Water Quality Control Board, Los Angeles Region (4). February 1995. *Water Quality Control Plan: Los Angeles Region*. Monterey Park, CA.

⁵ City of West Hollywood, Water Conservation Municipal Code. Accessed on: 19 September 2011. Available at: http://qcode.us/codes/westhollywood/view.php?topic=15-3_15_52&highlightWords=15.52&frames=off

⁶ 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.

⁷ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

⁸ *California Code of Regulations*, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

⁹ City of West Hollywood. Provided on: 22 September 2011. Initial Study Template. On File at Sapphos Environmental, Inc., Pasadena, CA.

¹⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

parcel within the City.¹¹ The City's sewer lines are connected to City of Los Angeles sewer lines. The City of Los Angeles has a contract with the County Sanitation District No. 4 to receive sewage generated in West Hollywood and to transport that sewage to the City of Los Angeles conveyance system, which conveys wastewater to the Hyperion Treatment Plant (HTP) in the Playa Del Rey area of the City of Los Angeles.¹² The HTP, which receives wastewater from West Hollywood, processes approximately 340 million gallons per day (MGD). The dry and wet weather capacities, respectively, are 450 MGD and 850 MGD.¹³ The proposed ordinance would not be expected to cause an exceedance in the treatment requirements of the HTP.

The manufacturing processes of plastic carryout bags, paper carryout bags, and reusable bags generate wastewater, but to different extents. Although certain representatives of the plastic bag industry have argued that similar ordinances have the potential to increase the demand for paper carryout bags,¹⁴ West Hollywood City Council is considering including a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags. Nevertheless, the potential for wastewater generation during the manufacture of paper bags was evaluated consistent with the analysis in the certified EIR.¹⁵

As analyzed in the certified EIR based on the Ecobilan life cycle assessment (LCA), a scenario with a fee on the issuance of paper carryout bags would be expected to generate approximately 0.21 MGD of wastewater if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.¹⁶ Under a scenario with no fee on the issuance of paper carryout bags, approximately 0.84 MGD of wastewater would be generated if all the 88 incorporated cities of the County were to adopt similar plastic bag ordinances.¹⁷ Since West Hollywood is one of the 88 incorporated cities in the County, the certified EIR accounts for impacts from wastewater generation associated with the proposed ordinance. When considered separately, the proposed ordinance would generate a negligible amount of wastewater (Appendix A and Table 3.17-1, *Wastewater Generation Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*). The Sanitation Districts of Los Angeles County currently treat approximately 510 MGD.¹⁸ Therefore, an additional 0.21 or 0.84 MGD due to paper carryout bag use throughout the County, including approximately 0.002 or 0.010 MGD in West Hollywood, which is equivalent to approximately 0.04 or 0.17 percent of the

¹¹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹² City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹³ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

¹⁴ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

¹⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinance to Ban Plastic Carryout Bags in the Los Angeles County Environmental Impact Report*, pp. 3.5-7 to 3.5-11 and 12-60. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-60. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-60. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

¹⁸ Sanitation Districts of Los Angeles County. Accessed on: 8 March 2010. "Wastewater Facilities." Web site. Available at: http://www.lacsd.org/contact/facility_locations/wastewater_facilities.asp

current amount of wastewater treated per day, respectively, would not be a significant increase in wastewater and would not necessitate construction of new wastewater treatment facilities or expansion of existing facilities. It is also important to note that there are no known manufacturing facilities for paper carryout bags located within the County (or the City). In the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that “The impacts of this project in areas outside Manhattan Beach itself are both indirect and difficult to predict.” and “the city could hardly be expected to trace the provenance of all paper bags that might be purchased by Manhattan Beach establishments, in order to evaluate the particular impacts resulting from their manufacture.”¹⁹

Although the manufacture of reusable bags also will also produce wastewater, it is expected that the amount of wastewater generated will be lower than the amount of wastewater generated by the manufacture of plastic carryout bags when considered on a per-use basis, due to the fact that reusable bags are designed to be reused multiple times.²⁰ As banning the issuance of plastic bags is expected to increase the use of reusable bags, the wastewater impacts are anticipated to be reduced. The proposed ordinance requires that reusable bags must be designed for a minimum of 125 uses. Therefore, a conversion from plastic carryout bags to reusable bags would be anticipated to have reduced impacts upon wastewater generation.

Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to utilities and service systems related to exceedance of wastewater treatment requirements.

¹⁹ *Save the Plastic Bag Coalition v. City of Manhattan*, 52 Cal. 4th 155 (Cal. 2011).

²⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-10. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.17-1
WASTEWATER GENERATION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON ECOBILAN DATA**

Wastewater Sources	Wastewater Generation (MGD)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.01	+0.002
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	0.69	+0.21
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.01	+0.010
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	0.69	+0.84

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-60. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTE:

1. A plus sign indicates an increase in wastewater generation due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

- (b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.²¹ The proposed ordinance would be expected to result in a significant reduction in the consumption of plastic carryout bags and an increase the use of reusable bags within the City. Although certain representatives of the plastic bag industry have stated that similar ordinances have the potential to increase the demand for paper carryout bags,²² the West Hollywood City Council is considering including a charge of 10 cents on the issuance of paper carryout bags in order to encourage the use of reusable bags. A potential increase in the production of paper bags and reusable bags would not be expected to increase the requirement for water or wastewater treatment facilities and would not affect the HTP. As described in the response to (a) above, an

²¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²² Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

ordinance with or without a fee on the issuance of paper carryout bags in the City would be expected to cause a negligible increase in wastewater generated by paper bag manufacturing facilities. In the case of *Save the Plastic Bag Coalition v. Manhattan Beach*, the Supreme Court stated that “Manhattan Beach is small enough that even the cumulative effects of its ordinance would be negligible.”²³ Like Manhattan Beach, the City of West Hollywood is also a small city with a population of less than 40,000. Therefore, it would be reasonable to conclude that the effects of the City of West Hollywood's ordinance would also be negligible. Manufacturing facilities for paper carryout bags are not known to be located within the County (or the City), so any increase in wastewater generation due to paper carryout bag manufacturing would not impact wastewater treatment facilities in the County or the City. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to utilities and service systems related to expansion or construction of new water or wastewater treatment facilities.

- (c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.²⁴ The storm drain infrastructure in the City is jointly owned and operated by the City and the County. The County Flood Control District maintains the backbone flood-control system, which is a network of catch basins and underground storm drain pipes. The City owns and maintains a few catch basins and small storm drain pipes that directly flow into the County Flood Control District system.²⁵ The proposed ordinance would ban the issuance of plastic carryout bags by certain stores within the City, which would not be expected to result in an increase in storm water runoff in the City. The anticipated reduction in plastic carryout bag use that would result from implementation of the proposed ordinance would reduce the amount of disposal and potential littering of plastic carryout bags, which would in turn reduce the contribution of plastic carryout bags to runoff and accumulation in storm drains. As such, the proposed ordinance would be expected to indirectly reduce operational impacts associated with maintenance of the storm drain system (e.g., cleaning plastic carryout bag litter out of catch basin racks) and would not increase the potential need for storm drain system improvements.

A study performed for Washington, D.C., showed that plastic bag trash accounted for 45 percent of the amount of trash collected in tributary streams and 20 percent of the amount of trash collected in rivers.²⁶ However, the same study found that paper products were not found in the streams except in localized areas and were not present downstream.²⁷ Paper carryout bags degrade when in contact with water, paper carryout bags are less likely to accumulate in the storm drain system. Similarly, reusable bags pose less of an issue for the storm drain system because they are not

²³ *Save the Plastic Bag Coalition v. City of Manhattan*, 52 Cal. 4th 155 (Cal. 2011).

²⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁵ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

²⁶ Anacostia Watershed Society. December 2008. *Anacostia Watershed Trash Reduction Plan* Prepared For: District of Columbia Department of the Environment.

²⁷ Anacostia Watershed Society. December 2008. *Anacostia Watershed Trash Reduction Plan* Prepared For: District of Columbia Department of the Environment.

disposed of as frequently as plastic carryout bags because they are designed to be used multiple times and are not littered the way plastic carryout bags are. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to create new or substantially more adverse significant impacts to utilities and service systems related to construction of new storm water drainage facilities or expansion of existing facilities.

- (d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.²⁸

The City receives its water supplies from the City of Beverly Hills and the City of Los Angeles Department of Water and Power (LADWP).²⁹ The manufacturing processes of plastic carryout bags, paper carryout bags, and reusable bags consume water, but to different extents. Although certain representatives of the plastic bag industry have argued that similar ordinances have the potential to increase the demand for paper carryout bags,³⁰ West Hollywood City Council is considering placing a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags. Nevertheless, the potential for water consumption during the manufacture of paper bags was evaluated consistent with the analysis in the certified EIR.³¹

As analyzed in the certified EIR using the Ecobilan LCA, a scenario with a fee on the issuance of paper carryout bags would be expected to require approximately 0.47 MGD of water if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.³² A scenario without a fee on the issuance of paper carryout bags would be expected to require approximately 1.30 MGD of water if all 88 incorporated cities of the County adopted similar plastic bag ordinances.³³ Since West Hollywood is one of the 88 incorporated cities in the County, the certified EIR accounts for water consumption associated with the City's proposed ordinance. When considered separately, the City's proposed ordinance would cause approximately 0.01 MGD to be consumed by paper manufacturing facilities, which is negligible compared with the water consumption for the County (Appendix A and Table 3.17-2, *Water Consumption Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*). As noted before, the City of West Hollywood is a small city with a population of

²⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

²⁹ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

³⁰ Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

³¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 3.5-12 to 3.5-16 and 12.61 to 12.63. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³² County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-61. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³³ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-61. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

less than 40,000 and a limited number of large retail stores, so it would be reasonable to conclude that the effects of the City of West Hollywood's ordinance would be negligible. Using the Boustead LCA, the certified EIR determined that under a scenario with a fee on the issuance of paper carryout bags, approximately 10.21 MGD of water would be required if all the 88 incorporated cities of the County adopted similar plastic bag ordinances.³⁴ Out of that number, the proposed ordinance would result in the consumption of 0.12 MGD of water (Appendix A and Table 3.17-3, *Water Consumption Due to Plastic and Paper Carryout Bags Based on Boustead Data*). Using the Boustead LCA, a scenario with a fee on the issuance of paper carryout bags would be expected to require approximately 18.26 MGD of water if all 88 incorporated cities of the County adopted similar plastic bag ordinances.³⁵ Out of that number, the proposed ordinance would result in the consumption of 0.21 MGD of water (Appendix A and Table 3.17-3). The water districts within the County supplied approximately 1,563 MGD of water in fiscal year 2007/2008.³⁶ Based on the Ecobilan data, the daily increase of water use due to the adoption of ordinances throughout the County with or without a fee on the issuance of paper carryout bags would represent approximately 0.03 or 0.08 percent, respectively, of the total water supplied by water districts in the County. Within West Hollywood, the daily increase of water consumption based on the Ecobilan data would represent less than 0.001 percent of the total water supplied by the water districts. The increase of water consumption countywide based on the Boustead data would represent 0.65 or 1.17 percent of the total water supplied and the City's increase of water as a result of the proposed ordinance would only represent 0.008 or 0.013 percent, respectively, of the total water supplied by the water districts. These increases in water consumption would not be considered to be significant. It is also important to note that manufacturing facilities for paper carryout bags appear not to be located within the County (or the City). Therefore, any increase in water consumption due to paper carryout bag manufacturing would not impact wastewater treatment providers in the County or the City.

³⁴ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-62. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁵ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-62. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.17-2
WATER CONSUMPTION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON ECOBILAN DATA**

Wastewater Sources	Wastewater Generation (MGD)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.01	+ 0.01
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	0.72	+ 0.47
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.01	+ 0.01
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	0.72	+ 1.30

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-61. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. A plus sign indicates an increase in water consumption due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on: 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

As discussed in the certified EIR, the proposed ordinance would be expected to significantly increase consumers' use of reusable bags, the production of which would consume less water than the production of both paper carryout bags and plastic carryout bags when considered on a per-use basis, because reusable bags are designed to be used multiple times.³⁷ Therefore, the additional water supply that may be required by reusable bag manufacturing facilities as an indirect result of the proposed ordinance would not necessitate new or expanded entitlements for water and would not constitute a significant impact under CEQA. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to sufficient water supplies.

³⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 12-62 to 12-63. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.17-3
WATER CONSUMPTION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON BOUSTEAD DATA**

Wastewater Sources	Wastewater Generation (MGD)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.01	+0.12
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	1.30	+10.21
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.01	+0.21
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	1.30	+18.26

SOURCES:

1. Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-62. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTE:

1. A plus sign indicates an increase in wastewater generation due to the given scenario. 2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

- (e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.³⁸ The sewer system within the City consists of 39 miles of gravity piping. This gravity sewer system includes over 850 pipe reaches and manholes, providing local sewer service to every parcel within the City. The City's sewer lines are connected to City of Los Angeles sewer lines. The City of Los Angeles has a contract with County Sanitation District No. 4 to receive sewage generated in West Hollywood and transport that sewage to the City of Los Angeles conveyance system, which conveys wastewater to the HTP in the Playa Del Rey area of the City of Los Angeles.³⁹ As described in the response to (a) an ordinance with or without a fee on the issuance of paper carryout bags would be expected to cause a negligible increase in wastewater generated by paper bag manufacturing facilities. The City of West Hollywood is a small city with a population of less than 40,000 and a limited number of large retail stores, so it would be reasonable to conclude that the effects of the City of West Hollywood's ordinance would be negligible. There are no

³⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

³⁹ City of West Hollywood, Community Development Department. October 2010. *Program Environmental Impact Report City of West Hollywood General Plan and Climate Action Plan*. West Hollywood, CA.

known manufacturing facilities for paper carryout bags located within the County (or the City), so any increase in wastewater generation due to paper carryout bag manufacturing would not impact wastewater treatment providers in the County (or the City). Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to the wastewater treatment provider's capacity to serve the project within existing commitments.

- (f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.⁴⁰ The City represents a small proportion of regional landfill users. Solid waste in West Hollywood is disposed of primarily in the Puente Hills Landfill in unincorporated Los Angeles County. The Puente Hills Landfill is located at 13130 Crossroads Parkway South, City of Industry, California. The Puente Hills Landfill has a total permitted capacity of 74,000,000 cubic yards of waste, and a permitted maximum disposal of 13,200 tons per day.⁴¹ After closure of the landfill, solid waste will be transferred by rail from Puente Hills to the Mesquite Regional Landfill in Imperial County and the Eagle Mountain Landfill in Riverside County. The Mesquite Regional Landfill is located on 4,425 acres of land in Imperial County. The landfill will provide capacity for approximately 600 million tons of residual municipal solid waste (approximately 100 years of capacity).⁴²

Several studies have shown that the production, use, and subsequent disposal of paper carryout bags would generate more solid waste than that of plastic carryout bags;^{43,44,45} however, West Hollywood City Council is considering including a charge of 10 cents on the issuance of paper carryout bags to encourage the use of reusable bags.

As noted in the certified EIR, based on Ecobilan data, a scenario with a fee on the issuance of paper carryout bags would result in a reduction in the amount of solid waste sent to landfills.⁴⁶ A scenario with no fee on the issuance of paper carryout bags would result in an increase of approximately 134 tons of solid waste per day (Appendix A and Table 3.17-4, *Solid Waste Generation Due to*

⁴⁰ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁴¹ CalRecycle. Accessed on: 19 September 2011. *Puente Hills Landfill*. Available at: <http://www.calrecycle.ca.gov/profiles/Facility/Landfill/LFProfile1.asp?COID=19&FACID=19-AA-0053>.

⁴² City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

⁴³ 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.

⁴⁴ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for the Progressive Bag Affiliates.

⁴⁵ The ULS Report. 1 June 2007. *Review of Life Cycle Data Relating to Disposable Compostable Biodegradable, and Reusable Grocery Bags*. Rochester, MI.

⁴⁶ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 12-63 to 12-64. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

Plastic and Paper Carryout Bags Based on Ecobilan Data).⁴⁷ Using the Boustead data, the certified EIR determined that a scenario with a fee on the issuance of paper carryout bags would result in an increase of approximately 255 tons of solid waste per day, and a scenario with no fee on the issuance of paper carryout bags would result in an increase of approximately 555 tons of solid waste per day.⁴⁸ As stated in the certified EIR, the permitted daily maximum capacity of all the County landfills is approximately 43,749 tons per day and currently the landfills combined accept an average of 21,051 tons per day.⁴⁹ Thus, the potential increase of approximately 114, 255, or 555 tons of solid waste per day would represent less than 2.5 percent of the remaining total daily maximum capacity of 22,698 tons per day. Since West Hollywood is one of the 88 incorporated cities in the County, the certified EIR accounts for solid waste generation associated with the City's proposed ordinance. Considered separately using the Ecobilan data, the proposed ordinance would result in a reduction in the amount of solid waste sent to landfills if there were a fee on the issuance of paper carryout bags, and would result in an increase of 1.54 tons of solid waste per day if there were no fee on the issuance of paper carryout bags (Appendix A and Table 3.17-4, *Solid Waste Generation Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*). Based on Boustead data, the proposed ordinance would generate up to approximately 3 tons of solid waste per day in a scenario with a fee on the issuance of paper carryout bags, and up to approximately 6 tons of solid waste per day in a scenario with no fee on the issuance of paper carryout bags (Appendix A and Table 3.17-5, *Solid Waste Generation Due to Plastic and Paper Carryout Bags Based on Boustead Data*). This potential increase in solid waste would not exceed the maximum permitted disposal of 13,200 tons per day at the Puente Hills Landfill.

⁴⁷ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, pp. 12-63 to 12-64. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁴⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-65. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁴⁹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-65. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

**TABLE 3.17-4
SOLID WASTE GENERATION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON ECOBILAN DATA**

Solid Waste Sources	Solid Waste Generation (tons)	
	Plastic Carryout Bags (Existing Conditions) ²	After Implementation of Ordinance ^{1,2}
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ³	2.77	-0.24
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	241.03	-20.54
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ³	2.77	1.54
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	241.03	133.81

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p.-64. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.
3. www.infousa.com (see Appendix A)

NOTES:

1. A plus sign indicates an increase in solid waste generation due to the given scenario..
2. Assuming that 36.8 percent of paper carryout bags are diverted from landfills and 11.9 percent of plastic carryout bags are diverted from landfills, based on the 2007 USEPA recycling rates.
3. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

The proposed ordinance would also be expected to increase the use and eventual disposal of reusable bags, which, by the definition established by the proposed ordinance, must be designed to have a minimum lifespan of 125 uses. The Hyder Study analyzes life cycle impacts of several different types of bags and concludes that a polypropylene reusable bag that is used 104 times results in environmental impacts that are significantly less than the impacts resulting from paper and plastic carryout bags.⁵⁰ Therefore, environmental impacts due to the life cycle of a reusable bag would be expected to be significantly less than the environmental impacts of a plastic or paper carryout bag when considered on a per-use basis, and any conversion from the use of plastic carryout bags to reusable bags would be reasonably expected to result in an environmental benefit.

Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to utilities and service systems related to a landfill with sufficient space to accommodate the refined project's waste disposal needs.

⁵⁰ Hyder Consulting. 18 April 2007. *Comparison of Existing Life Cycle Analyses of Plastic Bag Alternatives*. Prepared for: Sustainability Victoria, Victoria, Australia.

**TABLE 3.17-5
SOLID WASTE GENERATION DUE TO PLASTIC AND PAPER CARRYOUT BAGS
BASED ON BOUSTEAD DATA**

Solid Waste Sources	Solid Waste Generation (tons)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	1.99	+ 2.93
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	173.29	+ 254.84
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	1.99	+ 6.37
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	173.29	+ 554.53

SOURCES:

1. Boustead Consulting and Associates Ltd. 2007. Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper. Prepared for: Progressive Bag Affiliates.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-65. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. A plus sign indicates an increase in solid waste generation due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

(g) Comply with federal, state, and local statutes and regulations related to solid waste?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts to utilities and services systems.⁵¹ The California Integrated Waste Management Act of 1989 (AB 939) requires the County to attain specific waste diversion goals. These goals can be met through the implementation of waste reduction policies, which could include the proposed ordinance once adopted. Although certain representatives of the plastic bag industry have argued that similar ordinances have the potential to result in an increase in the number of paper carryout bags that are disposed of in landfills,⁵² it is anticipated that the proposed ordinance would also promote an increase in the use of reusable bags, thereby resulting in a reduction in the total number of carryout bags disposed of in the City compared to existing conditions. In addition, paper bags are more likely to be recycled than plastic bags, as supported by the higher recycling rate of paper as compared to that of

⁵¹ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 3.5-25. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁵² Save the Plastic Bag. 2008. *The ULS Report: A Qualitative Study of Grocery Bag Use in San Francisco*. Available at: <http://www.savetheplasticbag.com/ReadContent700.aspx> or <http://www.use-less-stuff.com/Field-Report-on-San-Francisco-Plastic-Bag-Ban.pdf>

plastic.⁵³ Therefore, the proposed ordinance would not conflict with the California Integrated Waste Management Act of 1989.

The California Department of Resources and Recycling and Recovery (CalRecycle) sets a target for resident and employee per-day disposal rates. The target is 5.8 pounds per day for residents and 7.7 pounds per day for employees. In both 2007 and 2008, West Hollywood's waste generation rates were slightly below CalRecycle resident and employee targets. West Hollywood is committed to diverting additional landfill waste through the solid waste policies outlined in the West Hollywood General Plan.⁵⁴ The proposed ordinance would not conflict with the policies offset forth in the West Hollywood General Plan.

The Los Angeles RWQCB adopted a Basin Plan Amendment on March 4, 2004, requiring the TMDL of trash in the Ballona Watershed to be incrementally reduced to zero within 10 years.⁵⁵ In addition, the Los Angeles RWQCB adopted a Basin Plan Amendment on August 9, 2007, requiring the TMDL of trash in the Los Angeles River Watershed to be incrementally reduced to zero within 9 years.⁵⁶ The Los Angeles RWQCB acknowledges that the majority of the trash in these watersheds comes primarily from trash in storm water runoff, and it has been documented that a significant percentage of trash in storm water runoff in the County is composed of plastic film, such as plastic carryout bags.⁵⁷ The proposed ordinance, which would aim to significantly reduce the amount of litter attributable to plastic carryout bags, would comply with the TMDL requirements of the Los Angeles RWQCB. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts to utilities and service systems related to compliance with federal, state, and local statutes.

(h) Use non-renewable resources in a wasteful and inefficient manner?

As a result of the analysis undertaken in certified EIR, it was determined that the approved ordinances would be expected to result in less than significant impacts with regard to energy conservation.⁵⁸ Several studies have shown that the production of paper carryout bags requires more energy than does the production of plastic carryout bags.^{59,60,61} The results of the Ecobilan

⁵³ U.S. Environmental Protection Agency. November 2008. *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Washington, DC. Available at: <http://www.epa.gov/waste/nonhaz/municipal/pubs/msw07-rpt.pdf>

⁵⁴ City of West Hollywood, Community Development Department. 6 September 2011. *West Hollywood General Plan 2035: Infrastructure, Resources and Conservation*. West Hollywood, CA.

⁵⁵ Los Angeles Regional Water Quality Control Board. 4 March 2004. *Amendments to the Water Quality Control Plan – Los Angeles Region for the Ballona Creek Trash TMDL*. Available at: http://63.199.216.6/larwqcb_new/bpa/docs/2004-023/2004-023_RB_BPA.pdf

⁵⁶ Los Angeles Regional Water Quality Control Board. 9 August 2007. *Amendments to the Water Quality Control Plan – Los Angeles Region to Incorporate the TMDL for Trash in the Los Angeles River Watershed*. Available at: http://63.199.216.6/larwqcb_new/bpa/docs/2007-012/2007-012_RB_BPA.pdf

⁵⁷ Combs, Suzanne, John Johnston, Gary Lippner, David Marx, and Kimberly Walter. *Results of the Caltrans Litter Management Pilot Study*. Sacramento, CA: California Department of Transportation. Available at: <http://www.owp.csus.edu/research/papers/papers/PP020.pdf>

⁵⁸ County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-67. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

⁵⁹ 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.

⁶⁰ Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.

LCA indicated that the ordinance would be expected to result in a reduction in energy consumption (Table 3.17-6, *Consumption of Non-renewable Energy Due to Plastic and Paper Carryout Bags Based on Ecobilan Data*, and Appendix A). However, the Boustead LCA results indicated that the potential increase in energy consumption with or without a fee on the issuance of paper carryout bags would be approximately 0.04 or 0.11 million kilowatts per hour (kWh), respectively, for the City, and approximately 3.61 or 9.45 million kWh in total if similar ordinances were adopted throughout the County (Table 3.17-7, *Consumption of Nonrenewable Energy Due to Plastic and Paper Carryout Bags Based on Boustead Data*, and Appendix A). The estimated total electricity consumption in the County in 2007 was 68,120 million kWh, with 47,484 million kWh in the nonresidential sector;⁶² the indirect estimated electricity demands due to bag manufacturing would be negligible compared to the total energy demand of the County's nonresidential sector. Therefore, compared with the approved ordinances, the proposed ordinance would not be expected to result in new or substantially more adverse significant impacts related to energy conservation.

**TABLE 3.17-6
CONSUMPTION OF NONRENEWABLE ENERGY DUE TO PLASTIC AND PAPER
CARRYOUT BAGS BASED ON ECOBILAN DATA**

Energy Consumption Sources	Energy Consumption (million kWh)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.05	-0.02
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	4.14	-2.01
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.05	-0.01
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	4.14	-0.51

SOURCES:

1. 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.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-66. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. A minus sign indicates a decrease in consumption of nonrenewable due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

⁶¹ The ULS Report. 1 June 2007. *Review of Life Cycle Data Relating to Disposable Compostable Biodegradable, and Reusable Grocery Bags*. Rochester, MI.

⁶² California Energy Commission. Accessed on: 4 May 2010. "Electricity Consumption by County." *California Energy Consumption Data Management System*. Available at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>

**TABLE 3.17-7
CONSUMPTION OF NONRENEWABLE ENERGY DUE TO PLASTIC AND PAPER
CARRYOUT BAGS BASED ON BOUSTEAD DATA**

Energy Consumption Sources	Energy Consumption (million kWh)	
	Plastic Carryout Bags (Existing Conditions)	After Implementation of Ordinance ¹
Scenario 1: Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ²	0.05	+0.04
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	4.74	+ 3.61
Scenario 2: No Fee on Paper Carryout Bags		
City ordinance – All retail stores in West Hollywood ¹	0.05	+0.11
County ordinance – 5,084 stores in incorporated areas plus 1,091 stores in unincorporated areas	4.74	+9.45

SOURCES:

1. Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper*. Prepared for: Progressive Bag Affiliates.
2. County of Los Angeles Department of Public Works. November 2010. *Ordinances to Ban Plastic Carryout Bags in Los Angeles County Environmental Impact Report*, p. 12-67. SCH No. 2009111104. Contact: Sapphos Environmental, Inc., Pasadena, CA.

NOTES:

1. A plus sign indicates an increase in consumption of renewable energy due to the given scenario.
2. The total number of pharmacies and grocery stores in West Hollywood was determined from the infoUSA database for businesses with North American Industry Classification System codes 445110 and 446110. Database accessed on 9 September 2011 (see Appendix A). Due to the conservative assumptions for bag use, the results presented in this table would account for an ordinance banning the issuance of plastic carryout bags in all retail stores in West Hollywood, beyond just the pharmacies and grocery stores.

3.18 CONCLUSION

This Addendum to the EIR was prepared for a proposed ordinance that would ban the issuance of plastic carryout bags at the point of sale in certain retail stores in the City of West Hollywood. The proposed ordinance would either allow paper carryout bags to be distributed free of charge, consistent with the analysis of Alternative 3 in the County's certified EIR, or place a 10-cent charge on the issuance of paper carryout bags, consistent with the analysis of Alternative 5 in the County's certified EIR. The City of West Hollywood is a small city with a population of less than 40,000 and a limited number of retail stores. Based on the analysis described in this Addendum to the EIR, it is reasonable to conclude that the effects of the City of West Hollywood's ordinance would be negligible. Therefore, the proposed ordinance would cause no new significant environmental effects beyond those identified in the County's certified EIR.

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SECTION 5.0
REPORT PREPARATION PERSONNEL

The following individuals contributed to the preparation of this document.

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APPENDIX A
CALCULATIONS AND MODELING RESULTS

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NAICS Codes and Ranges	445110	Remove
NAICS Codes and Ranges	446110	Remove
NAICS Codes and Ranges	445120	Remove

Size Of Business [Add](#)

Square Footage	0 - 2,499 Feet	Remove
Square Footage	2,500 - 9,999 Feet	Remove
Square Footage	10,000 - 39,999 Feet	Remove
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Stores in city > 10,000 sq ft	25		
Stores in whole county > 10,000 sq ft	529	Reusable Bag Size (liters)	37
Stores in city < 10,000 sq ft	27	Ratio of Reusable to Plastic Bags	2.6
Stores in whole county < 10,000 sq ft	5646		
Plastic bag size (liters)	14		
Paper bag size (liters)	20.48		
Plastic bags / day / store > 10,000 sq ft	10000		
Paper bags / day / store > 10,000 sq ft *	3418	*based on 50% conversion from plastic to paper	
Plastic bags / day / store < 10,000 sq ft	5000		
Paper bags / day / store < 10,000 sq ft *	1709	*based on 50% conversion from plastic to paper	

Eutrophication - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
grams phosphate per 9000 liters groceries	0.20	2.35	2.15
grams phosphate per 1 liter groceries	0.00002	0.00026	0.00024
grams phosphate per bag	0.00031	0.00535	0.00504
kg phosphate per day in city	0.12	0.70	0.58
kg phosphate per day in whole county	10.39	61.25	50.87

*based on 50% conversion from plastic to paper

Eutrophication - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
grams phosphate per 9000 liters groceries	0.20	0.18	-0.02	0.03	-0.17
grams phosphate per 1 liter groceries	0.00002	0.00002	0.00000	0.00000	-0.00002
grams phosphate per bag	0.00031	0.00075	0.00044	0.00011	-0.00020
kg phosphate per day in city	0.12	0.11	-0.01	0.02	-0.10
kg phosphate per day in whole county	10.39	9.54	-0.85	1.43	-8.96

*based on 3 uses

**based on 20 uses

Ecobilan Data - Utilities	Plastic Bags	Paper Bags	Reusable Bags
Water Used (total) (liters)	52.6	173	137
Water Generated (unspecified) (liters)	4.1	1.3	-0.186
Water Generated (chemically polluted) (liters)	34.3	107	105
Water Generated (thermally polluted) (liters)	11.6	22.4	31.8
Total Wastewater Generated (liters)	50	130.7	136.614
Waste Generated (total) (kg)	2.59	4.73	6.99
Non-renewable energy consumption (MJ)	286	295	805
Total solid waste due to disposal (kg)*	4.76	12.14	13.11

*Assuming all bags are sent to landfill

Water Consumption - Ecobilan Data	Plastic LCA	Paper LCA*	Difference*
Liters H2O per 9000 liters groceries	52.60	173.00	33.90
Liters H2O per 1 liter groceries	0.01	0.02	0.00377
Liters H2O per bag	0.08182	0.39367	0.31185
Gallons H2O per bag	0.02162	0.10400	0.08238
MGD per day in city	0.01	0.01	0.01
MGD per day in whole county	0.72	1.19	0.47

*based on 50% conversion from plastic to paper

Water Consumption - Ecobilan Data	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
Liters H2O per 9000 liters groceries	52.60	45.67	-6.93	6.85	-45.75
Liters H2O per 1 liter groceries	0.01	0.01	0.00	0.00	-0.01
Liters H2O per bag	0.08182	0.18774	0.10592	0.02816	-0.05366
Gallons H2O per bag	0.02162	0.04960	0.02798	0.00744	-0.01418
MGD per day in city	0.01	0.01	0.00	0.00	-0.01
MGD per day in whole county	0.72	0.63	-0.10	0.09	-0.63

*based on 3 uses

**based on 20 uses

Water Consumption - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
Gallons H2O 1000 paper bags (1500 plastic)	58.00	1004.00	946.00
Gallons H2O per bag	0.04	1.00	0.97
MGD per day in city	0.01	0.13	0.12
MGD per day in whole county	1.30	11.50	10.21

*based on 50% conversion from plastic to paper

Wastewater Generation - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
Liters H2O per 9000 liters groceries	50.00	45.54	-4.46	6.83	-43.17
Liters H2O per 1 liter groceries	0.01	0.01	0.00	0.00	0.00
Liters H2O per bag	0.07778	0.18721	0.10943	0.02808	-0.04970
Gallons H2O per bag	0.02055	0.04946	0.02891	0.00742	-0.01313
MGD per day in city	0.01	0.01	0.00	0.00	-0.01
MGD per day in whole county	0.69	0.63	-0.06	0.09	-0.59

*based on 3 uses

**based on 20 uses

Wastewater Generation - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
Liters H2O per 9000 liters groceries	50.00	130.70	80.70
Liters H2O per 1 liter groceries	0.01	0.01	0.01
Liters H2O per bag	0.07778	0.30	0.22
Gallons H2O per bag	0.02055	0.07857	0.05802
MGD per day in city	0.01	0.01	0.002
MGD per day in whole county	0.69	0.90	0.21

*based on 50% conversion from plastic to paper

Solid Waste - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
kg waste per 1000 paper bags (1500 plastic)	7.04	33.90	26.87
kg waste per bag	0.00469	0.03390	0.02921
tons waste per bag	0.00001	0.00004	0.00003
tons waste per day in city	1.99	4.92	2.93
tons waste per day in whole county	173.29	428.13	254.84

*based on 50% conversion from plastic to paper

Solid Waste - Ecobilan Data						
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**	
kg waste per 9000 liters groceries	4.76	4.37	-0.39	0.66	-4.10	
kg waste per 1 liter groceries	0.00	0.00	0.00	0.00	0.00	
kg waste per bag	0.00740	0.01797	0.01056	0.00269	-0.00471	
tons waste per bag	0.00	0.00	0.00001	0.00	-0.00001	
tons waste per day in city	3.14	2.88	-0.26	0.43	-2.71	
tons waste per day in whole county	273.59	251.17	-22.42	37.68	-235.91	
*based on 3 uses						
**based on 20 uses						

Solid Waste - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
kg waste per 9000 liters groceries	4.76	12.14	7.38
kg waste per 1 liter groceries	0.00	0.00	0.00
kg waste per bag	0.00740	0.02763	0.02022
tons waste per bag	0.00001	0.00003	0.00002
tons waste per day in city	3.14	4.01	0.86
tons waste per day in whole county	273.59	348.89	75.29
*based on 50% conversion from plastic to paper			

2007 recycle rate - plastic bags and sacks	11.9%
2007 recycle rate - paper bags and sacks	36.8%

Solid Waste - Ecobilan Data			
	Adjusted for 2007 EPA Recycle Rates		
	Plastic LCA	Paper LCA*	Difference*
kg waste per 9000 liters groceries	4.19	7.67	3.48
kg waste per 1 liter groceries	0.00	0.00	0.00
kg waste per bag	0.00652	0.01746	0.01
tons waste per bag	0.00001	0.00002	0.00
tons waste per day in city	2.77	2.53	-0.24
tons waste per day in whole county	241.03	220.50	-20.54
*based on 50% conversion from plastic to paper			

Energy Consumption - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
MJ per 9000 liters groceries	286.00	295.00	9.00
MJ per 1 liter groceries	0.03	0.03	0.00
MJ per bag	0.44489	0.67129	0.23
kWh per bag	0.12358	0.18647	0.06
Million kWh per day in city	0.05	0.02	-0.02
Million kWh per day in whole county	4.14	2.14	-2.01

*based on 50% conversion from plastic to paper

Energy Consumption - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
MJ per 9000 liters groceries	286.00	268.33	-17.67	40.25	-245.75
MJ per 1 liter groceries	0.03	0.03	0.00	0.00	-0.03
MJ per bag	0.44489	1.10315	0.66	0.16547	-0.28
kWh per bag	0.12358	0.30643	0.18	0.04596	-0.08
Million kWh per day in city	0.05	0.04	0.00	0.01	-0.04
Million kWh per day in whole county	4.14	3.89	-0.26	0.58	-3.56

*based on 3 uses

**based on 20 uses

Energy Consumption - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
MJ per 1000 bags	763.00	2622.00	1859.00
MJ per bag	0.51	2.62	2.11
kWh per bag	0.14130	0.72833	0.59
Million kWh per day in city	0.05	0.10	0.04
Million kWh per day in whole county	4.74	8.34	3.61

*based on 50% conversion from plastic to paper

Conversion Factors	
liters to gallons	0.26417205
kg to short tons	0.00110231
MJ to kWh	0.27777778

Stores in city > 10,000 sq ft	25	
Stores in whole county > 10,000 sq ft	529	
Stores in city < 10,000 sq ft	27	
Stores in whole county < 10,000 sq ft	5646	
Plastic bag size (liters)	14	Reusable Bag
Paper bag size (liters)	20.48	Size (liters)
Plastic bags / day / store > 10,000 sq ft	10000	
Plastic bags / day / store < 10,000 sq ft	5000	Ratio of Reusable
Ratio of Paper Bags to Plastic Bags	1.5	to Plastic Bags
Population in the City	34,339	
Population in the County	10,615,700	

Ecobilan Data - VOCs	Plastic Bags	Paper Bags	Reusable Bag (1 Use)
	g output	g output	g output
(a) Hydrocarbons (unspecified)	4.01E-01	6.16E+00	1.40E+00
(a) VOC (Volatil Organic Compounds)	5.38E-01	0.00E+00	0.00E+00
(a) VOC (Volatile Organic Compounds)	2.25E+01	2.65E-01	1.58E+01
(a) Acetaldehyde	-2.80E-04	1.08E-01	-1.61E-03
(a) Acetylene	2.30E-03	-1.15E-02	-2.26E-03
(a) Alcohol	7.02E-02	7.21E-01	0.00E+00
(a) Aldehyde	2.06E-03	4.61E-04	5.96E-03
(a) Alkane	1.35E-02	1.19E+00	-3.39E-02
(a) Aromatic Hydrocarbons	3.04E-01	7.55E-01	3.47E-01
(a) Benzaldehyde	5.65E-11	2.51E-09	-6.48E-11
(a) Benzene	5.06E-03	1.50E-02	-4.65E-03
(a) Butane	4.23E-03	2.03E-01	-2.13E-02
(a) Butene	4.23E-03	2.23E-03	1.72E-04
(a) Ethanol	-5.69E-04	3.11E-03	-3.21E-03
(a) Ethyl Benzene	1.70E-04	1.16E-02	1.96E-04
(a) Ethylene	7.89E-02	2.75E+00	-8.47E-02
(a) Formaldehyde	-2.63E-04	7.39E-03	-5.72E-03
(a) Heptane	1.59E-03	2.20E-02	1.72E-03
(a) Hexane	3.17E-03	4.32E-02	3.42E-03
(a) Hydrocarbons (except methane)	1.40E+01	1.58E+01	3.03E+01
(a) Methanol	-9.67E-04	5.28E-03	-5.45E-03
(a) Propane	-1.97E-03	2.29E-01	-7.41E-02
(a) Propionaldehyde	1.55E-10	6.92E-09	-1.78E-10
(a) Propylene	2.69E-03	-6.70E-03	-2.14E-03
(a) Tetrachloroethylene	2.40E-06	1.18E-02	6.61E-06
(a) Toluene	2.42E-03	9.00E-02	-7.63E-04
Total VOCs	37.9294734	28.37487101	47.61867161

Ecobilan Plastic Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions (grams) per 9,000 liters groceries	37.9294734	27.1	48.2	23.4	19.2
Emissions (grams) per 1 liter groceries	0.004214386	0.003011111	0.005355556	0.0026	0.002133333
Emissions per bag (grams)	0.06	0.04	0.07	0.04	0.03
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	50	36	64	31	25
Emissions in the whole county (pounds)	4,360	3,115	5,541	2,690	2,207

Ecobilan Paper Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	28.37487101	72.6	9.34	26.1	4.72
Emissions (grams) per 1 liter groceries	0.003152763	0.008066667	0.001037778	0.0029	0.000524444
Emissions per bag (grams)	0.06	0.17	0.02	0.06	0.01
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	37	96	12	34	6
Emissions in the whole county (pounds)	3,262	8,346	1,074	3,000	543

Ecobilan Emission differences caused by a 50% conversion from plastic to paper					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions in the city (pounds)	-31	12	-57	-14	-22
Emissions in the whole county (pounds)	-2,729	1,058	-5,004	-1,190	-1,936

Ecobilan Plastic Bag LCA End-of-life - All bags disposed		Adjusted for 2007 Recycle Rates	
Emissions Sources	NOx	NOx	
Emissions (grams) per 9,000 liters groceries	0.97		
Emissions (grams) per 1 liter groceries	0.000107778		
Emissions per bag (grams)	0.00		
Emissions per bag (pounds)	0.00		
Emissions in the city (pounds)	1	1	
Emissions in the whole county (pounds)	112	98	

Ecobilan Paper Bag LCA End-of-life - All bags disposed		Adjusted for 2007 Recycle Rates	
Emissions Sources	NOx	NOx	
Emissions per 9,000 liters of groceries (in grams)	5.74		
Emissions (grams) per 1 liter groceries	0.000637778		
Emissions per bag (grams)	0.01		
Emissions per bag (pounds)	0.00		
Emissions in the city (pounds)	8	5	
Emissions in the whole county (pounds)	660	417	

Ecobilan NOx Emissions End of Life	50% conversion from plastic to paper	Adjusted for 2007 Recycle Rates
Emissions in the city (pounds)	3	1
Emissions in the whole county (pounds)	218	110

Ecobilan Reusable Bag LCA -- 4 Uses					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	11.9046679	19.125	7	17.475	13.35
Emissions (grams) per 1 liter groceries	0.001322741	0.002125	0.000777778	0.001941667	0.001483333
Emissions per bag (grams)	0.05	0.08	0.03	0.07	0.05
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	16	25	9	23	18
Emissions in the whole county (pounds)	1,368	2,198	805	2,009	1,535

Boustead Plastic Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions (miligrams) per 1,000 bags	994	45,400	67,400	50,500	14,300
Emissions (grams) per 1,000 bags	0.994	45.4	67.4	50.5	14.3
Emissions per bag (grams)	0.00	0.05	0.07	0.05	0.01
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	1	39	57	43	12
Emissions in the whole county (pounds)	73	3,355	4,981	3,732	1,057

Boustead Paper Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	2	264,000	121,000	579,000	128,000
Emissions (grams) per 1,000 bags	0.002	264	121	579	128
Emissions per bag (grams)	0.00	0.26	0.12	0.58	0.13
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	0	153	70	336	74
Emissions in the whole county (pounds)	0	13,336	6,113	29,249	6,466

Boustead Emission differences caused by a 50% conversion from plastic to paper					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions in the city (pounds)	-1	38	-22	125	25
Emissions in the whole county (pounds)	-73	3,313	-1,925	10,893	2,176

Ecobilan Data - Greenhouse Gas Emissions	Reusable Bag (1 Use)		
	GWP (IPCC)	g output	g CO2e
(a) Carbon Dioxide (CO2, fossil)	1	2.65E+04	2.65E+04
(a) Methane	23	8.76E+01	2.01E+03
(a) Nitrous Oxide	296	7.10E-02	2.10E+01
(a) Carbon Tetrafluoride	5700	-5.21E-08	-2.97E-04
(a) Halon 1301	6900	1.95E-05	1.35E-01
Total			2.85E+04

* GWP = Global Warming Potential

Ecobilan Data - Greenhouse Gas Emissions	Plastic Bags			Paper Bags	
	GWP (IPCC)	g output	g CO2e	g output	g CO2e
(a) Carbon Dioxide (CO2, fossil)	1	1.01E+04	1.01E+04	1.67E+04	1.67E+04
(a) Methane	23	3.37E+01	7.75E+02	1.58E+02	3.63E+03
(a) Nitrous Oxide	296	6.63E-02	1.96E+01	6.46E-01	1.91E+02
(a) Carbon Tetrafluoride	5700	4.54E-08	2.59E-04	2.02E-06	1.15E-02
(a) Halon 1301	6900	1.83E-05	1.26E-01	2.71E-04	1.87E+00
Total			1.09E+04		2.05E+04

* GWP = Global Warming Potential

Ecobilan GHG emissions	CO _{2e} Emissions from Plastic Bags	CO _{2e} Emissions from Paper Bags	CO _{2e} Emission Increase Caused by 50 Percent Conversion from Plastic to Paper	per year	per year per capita
Emissions (grams) per 9,000 liters groceries	10894.8513	20527.0974	9632.2461	3515769.820	0.331
Emissions (metric tons) per 9,000 liter groceries	0.0109	0.0205	0.0096	3.516	0.000
Emissions (metric tons) per 1 liter groceries	0.0000	0.0000	0.0000	0.000	0.000
Emissions (metric tons) per bag	0.0000	0.0000	0.0000	0.011	0.000
Emissions in the city (metric tons)	6.52	6.15	-0.38	-138	-0.004
Emissions in the whole county (metric tons)	568.08	535.16	-32.92	-12,015	-0.001

Ecobilan GHG emissions	CO _{2e} Emissions from Plastic Bags	CO _{2e} Emissions from Reusable Bags Used Three Times	CO _{2e} Emission Increase From 100 % Conversion from Plastic to Reusable	per year	per year per capita
Emissions (grams) per 9,000 liters groceries	10894.8513	9511.9834	-1382.8679	-504746.788	-0.048
Emissions (metric tons) per 9,000 liter groceries	0.0109	0.0095	-0.0014	-0.505	0.000
Emissions (metric tons) per 1 liter groceries	0.0000	0.0000	0.0000	0.000	0.000
Emissions (metric tons) per bag	0.0000	0.0000	0.0000	0.008	0.000
Emissions in the city (metric tons)	6.52	5.70	-0.83	-302	-0.009
Emissions in the whole county (metric tons)	568.08	495.98	-72.11	-26,319	-0.002

Boustead GHG emissions	CO_{2e} Emissions from Plastic Bags	CO_{2e} Emissions from Paper Bags	CO_{2e} Emission Increase with 50 Percent Conversion from Plastic to Paper	per year	per year per capita
metric tons for 1,000 paper or 1,500 plastic bags	0.0400	0.0800	0.04	14.600	0.000
Emissions (metric tons) per bag	0.0000	0.0001	0.00	0.019	0.000
Emissions in the city (metric tons)	10.27	10.53	0.26	95	0.003
Emissions in the whole county (metric tons)	893.87	916.56	22.70	8,284	0.001

ExcelPlas GHG emissions	CO_{2e} Emissions from Plastic Bags	CO_{2e} Emissions from Paper Bags	CO_{2e} Emission Increase with 50 Percent Conversion from Plastic to Paper	per year	per year per capita
kilograms for 520 bags	6.0800	30.5000	24.42	8913.300	0.001
Emissions (metric tons) per bag	0.0000	0.0001	0.0000	0.017	0.000
Emissions in the city (metric tons)	4.50	11.29	6.79	2,478	0.072
Emissions in the whole county (metric tons)	391.93	983.04	591.11	215,756	0.020

Greenhouse Gas Emissions due to Mobile Sources			
	CO₂ Emissions (Pounds/Day)*	CO₂ Emissions (Metric Tons/Year)	CO₂ Emissions per Capita (metric)
17 Delivery Truck Trips in the City of Los Angeles	32.76	5.42	0.00016
96 Delivery Truck Trips in the whole county of Los Angeles	1,572.35	260.32	0.00002

*Numbers from URBEMIS 2007

Conversion Factors	
grams to pounds	0.002204623
pounds to metric tons	0.000453592

2007 recycle rate - plastic bags and sacks	11.9%
2007 recycle rate - paper bags and sacks	36.8%

Ecobilan Data - Greenhouse Gas Emissions Just End of Life	GWP (IPCC)	Plastic Bags		Paper Bags	
		g output	g CO2e	g output	g CO2e
(a) Carbon Dioxide (CO2, fossil)	1	8.70E+01	8.70E+01	5.15E+02	5.15E+02
(a) Methane	23	2.60E-01	5.98E+00	4.96E+02	1.14E+04
(a) Nitrous Oxide	296	1.00E-02	2.96E+00	7.00E-02	2.07E+01
(a) Carbon Tetrafluoride	5700	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(a) Halon 1301	6900	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			9.59E+01		1.19E+04

* GWP = Global Warming Potential

Ecobilan Plastic Bag LCA - Just end-of-life		Adjusted for 2007 Recycle Rates		
Emissions Sources	CO2e	CO2e	Annual CO2e	Per Capita
Emissions (grams) per 9,000 liters groceries	9.59E+01			
Emissions (grams) per 1 liter groceries	0.01066			
Emissions per bag (grams)	0.15			
Emissions per bag (metric tons)	0.00			
Emissions in the city (metric tons)	0	0	18	0.0005
Emissions in the whole county (metric tons)	5	4	1609	0.0002

Ecobilan Paper Bag LCA - Just end-of-life		Adjusted for 2007 Recycle Rates		
Emissions Sources	CO2e	CO2e	Annual CO2e	Per Capita
Emissions per 9,000 liters of groceries (in grams)	1.19E+04			
Emissions (grams) per 1 liter groceries	1.327591111			
Emissions per bag (grams)	27.19			
Emissions per bag (metric tons)	0.00			
Emissions per store (metric tons)	0.09	0.06		
Emissions in the city (metric tons)	7	5	1651	0.0481
Emissions in the whole county (metric tons)	623	394	143716	0.0135

Ecobilan Emission differences caused by an 50% conversion from plastic to paper			Adjusted for 2007 Recycle Rates	
Emissions Sources			Annual CO ₂ e	Per Capita
Emissions in the city (metric tons)			807	0.02350
Emissions in the whole county (metric tons)			70,250	0.00662

Boustead GHG emissions - Just end of life	CO ₂ e Emissions from Plastic Bags	CO ₂ e Emissions from Paper Bags	CO ₂ e Emission Increase with 50 Percent Conversion from Plastic to Paper	per year	per year per capita
metric tons for 1,000 paper or 1,500 plastic bags	0.0030	0.0500	0.05	17.155	0.000
Emissions (metric tons) per bag	0.0000	0.0001	0.00	0.018	0.000
Emissions (metric tons) per store	0.0100	0.0854	0.08	27.539	0.000
Emissions in the city (metric tons)	0.77	6.58	5.81	2,121	0.06175
Emissions in the whole county (metric tons)	67.04	572.85	505.81	184,621	0.01739

Emission Sources	Air Pollutants (Pounds/Day)*					
	VOCs	NO _x	CO	SO _x	PM _{2.5}	PM ₁₀
17 Delivery Truck Trips in the City	0.02	0.04	0.25	0	0.01	0.05
96 Delivery Truck Trips in the whole County	0.8	1.9	12.02	0.01	0.46	2.24
SCAQMD Threshold	55	55	550	150	55	150
AVAQMD Threshold	137	137	548	137	-	82
Exceedance of Significance?	No	No	No	No	No	No

*Numbers from URBEMIS 2007

Scenario: Proposed Ordinance with Fee on Paper Carryout Bags

Stores in city > 10,000 sq ft	25		
Stores in whole county > 10,000 sq ft	529	Reusable Bag Size (liters)	37
Stores in city < 10,000 sq ft	27	Ratio of Reusable to Plastic Bags	2.6
Stores in whole county < 10,000 sq ft	5646		
Plastic bag size (liters)	14		
Paper bag size (liters)	20.48		
Plastic bags / day / store > 10,000 sq ft	10000		
Paper bags / day / store > 10,000 sq ft *	5811	*based on 85% conversion from plastic to paper	
Plastic bags / day / store < 10,000 sq ft	5000		
Paper bags / day / store < 10,000 sq ft *	2905	*based on 85% conversion from plastic to paper	

Eutrophication - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
grams phosphate per 9000 liters groceries	0.20	2.35	2.15
grams phosphate per 1 liter groceries	0.00002	0.00026	0.00024
grams phosphate per bag	0.00031	0.00535	0.00504
kg phosphate per day in city	0.12	1.20	1.08
kg phosphate per day in whole county	10.39	104.13	93.74

*based on 50% conversion from plastic to paper

Eutrophication - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
grams phosphate per 9000 liters groceries	0.20	0.18	-0.02	0.03	-0.17
grams phosphate per 1 liter groceries	0.00002	0.00002	0.00000	0.00000	-0.00002
grams phosphate per bag	0.00031	0.00075	0.00044	0.00011	-0.00020
kg phosphate per day in city	0.12	0.11	-0.01	0.02	-0.10
kg phosphate per day in whole county	10.39	9.54	-0.85	1.43	-8.96

*based on 3 uses

**based on 20 uses

Scenario: Proposed Ordinance with Fee on Paper Carryout Bags

Ecobilan Data - Utilities	Plastic Bags	Paper Bags	Reusable Bags
Water Used (total) (liters)	52.6	173	137
Water Generated (unspecified) (liters)	4.1	1.3	-0.186
Water Generated (chemically polluted) (liters)	34.3	107	105
Water Generated (thermally polluted) (liters)	11.6	22.4	31.8
Total Wastewater Generated (liters)	50	130.7	136.614
Waste Generated (total) (kg)	2.59	4.73	6.99
Non-renewable energy consumption (MJ)	286	295	805
Total solid waste due to disposal (kg)*	4.76	12.14	13.11

*Assuming all bags are sent to landfill

Water Consumption - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
Liters H2O per 9000 liters groceries	52.60	173.00	33.90
Liters H2O per 1 liter groceries	0.01	0.02	0.00377
Liters H2O per bag	0.08182	0.39367	0.31185
Gallons H2O per bag	0.02162	0.10400	0.08238
MGD per day in city	0.01	0.02	0.01
MGD per day in whole county	0.72	2.03	1.30

*based on 50% conversion from plastic to paper

Water Consumption - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
Liters H2O per 9000 liters groceries	52.60	45.67	-6.93	6.85	-45.75
Liters H2O per 1 liter groceries	0.01	0.01	0.00	0.00	-0.01
Liters H2O per bag	0.08182	0.18774	0.10592	0.02816	-0.05366
Gallons H2O per bag	0.02162	0.04960	0.02798	0.00744	-0.01418
MGD per day in city	0.01	0.01	0.00	0.00	-0.01
MGD per day in whole county	0.72	0.63	-0.10	0.09	-0.63

*based on 3 uses

**based on 20 uses

Scenario: Proposed Ordinance with Fee on Paper Carryout Bags

Water Consumption - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
Gallons H2O 1000 paper bags (1500 plastic)	58.00	1004.00	946.00
Gallons H2O per bag	0.04	1.00	0.97
MGD per day in city	0.01	0.22	0.21
MGD per day in whole county	1.30	19.55	18.26

*based on 50% conversion from plastic to paper

Wastewater Generation - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
Liters H2O per 9000 liters groceries	50.00	45.54	-4.46	6.83	-43.17
Liters H2O per 1 liter groceries	0.01	0.01	0.00	0.00	0.00
Liters H2O per bag	0.07778	0.18721	0.10943	0.02808	-0.04970
Gallons H2O per bag	0.02055	0.04946	0.02891	0.00742	-0.01313
MGD per day in city	0.01	0.01	0.00	0.00	-0.01
MGD per day in whole county	0.69	0.63	-0.06	0.09	-0.59

*based on 3 uses

**based on 20 uses

Wastewater Generation - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
Liters H2O per 9000 liters groceries	50.00	130.70	80.70
Liters H2O per 1 liter groceries	0.01	0.01	0.01
Liters H2O per bag	0.07778	0.30	0.22
Gallons H2O per bag	0.02055	0.07857	0.05802
MGD per day in city	0.01	0.02	0.010
MGD per day in whole county	0.69	1.53	0.84

*based on 50% conversion from plastic to paper

Solid Waste - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
kg waste per 1000 paper bags (1500 plastic)	7.04	33.90	26.87
kg waste per bag	0.00469	0.03390	0.02921
tons waste per bag	0.00001	0.00004	0.00003
tons waste per day in city	1.99	8.36	6.37
tons waste per day in whole county	173.29	727.82	554.53

*based on 50% conversion from plastic to paper

Solid Waste - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
kg waste per 9000 liters groceries	4.76	4.37	-0.39	0.66	-4.10
kg waste per 1 liter groceries	0.00	0.00	0.00	0.00	0.00
kg waste per bag	0.00740	0.01797	0.01056	0.00269	-0.00471
tons waste per bag	0.00	0.00	0.00001	0.00	-0.00001
tons waste per day in city	3.14	2.88	-0.26	0.43	-2.71
tons waste per day in whole county	273.59	251.17	-22.42	37.68	-235.91
*based on 3 uses					
**based on 20 uses					

Solid Waste - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
kg waste per 9000 liters groceries	4.76	12.14	7.38
kg waste per 1 liter groceries	0.00	0.00	0.00
kg waste per bag	0.00740	0.02763	0.02022
tons waste per bag	0.00001	0.00003	0.00002
tons waste per day in city	3.14	6.81	3.67
tons waste per day in whole county	273.59	593.10	319.51
*based on 50% conversion from plastic to paper			

2007 recycle rate - plastic bags and sacks	11.9%
2007 recycle rate - paper bags and sacks	36.8%

Solid Waste - Ecobilan Data			
	Adjusted for 2007 EPA Recycle Rates		
	Plastic LCA	Paper LCA*	Difference*
kg waste per 9000 liters groceries	4.19	7.67	3.48
kg waste per 1 liter groceries	0.00	0.00	0.00
kg waste per bag	0.00652	0.01746	0.01
tons waste per bag	0.00001	0.00002	0.00
tons waste per day in city	2.77	4.31	1.54
tons waste per day in whole county	241.03	374.84	133.81
*based on 50% conversion from plastic to paper			

Energy Consumption - Ecobilan Data			
	Plastic LCA	Paper LCA*	Difference*
MJ per 9000 liters groceries	286.00	295.00	9.00
MJ per 1 liter groceries	0.03	0.03	0.00
MJ per bag	0.44489	0.67129	0.23
kWh per bag	0.12358	0.18647	0.06
Million kWh per day in city	0.05	0.04	-0.01
Million kWh per day in whole county	4.14	3.63	-0.51

*based on 50% conversion from plastic to paper

Energy Consumption - Ecobilan Data					
	Plastic LCA	Reusable LCA*	Difference*	Reusable LCA**	Difference**
MJ per 9000 liters groceries	286.00	268.33	-17.67	40.25	-245.75
MJ per 1 liter groceries	0.03	0.03	0.00	0.00	-0.03
MJ per bag	0.44489	1.10315	0.66	0.16547	-0.28
kWh per bag	0.12358	0.30643	0.18	0.04596	-0.08
Million kWh per day in city	0.05	0.04	0.00	0.01	-0.04
Million kWh per day in whole county	4.14	3.89	-0.26	0.58	-3.56

*based on 3 uses

**based on 20 uses

Energy Consumption - Boustead Data			
	Plastic LCA	Paper LCA*	Difference*
MJ per 1000 bags	763.00	2622.00	1859.00
MJ per bag	0.51	2.62	2.11
kWh per bag	0.14130	0.72833	0.59
Million kWh per day in city	0.05	0.16	0.11
Million kWh per day in whole county	4.74	14.19	9.45

*based on 50% conversion from plastic to paper

Conversion Factors	
liters to gallons	0.26417205
kg to short tons	0.00110231
MJ to kWh	0.27777778

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Stores in city > 10,000 sq ft	25	
Stores in whole county > 10,000 sq ft	529	
Stores in city < 10,000 sq ft	27	
Stores in whole county < 10,000 sq ft	5646	
Plastic bag size (liters)	14	Reusable Bag
Paper bag size (liters)	20.48	Size (liters)
Plastic bags / day / store > 10,000 sq ft	10000	
Plastic bags / day / store < 10,000 sq ft	5000	Ratio of Reusable
Ratio of Paper Bags to Plastic Bags	1.5	to Plastic Bags
Service Population in the City	34,399	
Population in the County in 2010	10,615,700	

Ecobilan Data - VOCs	Plastic Bags	Paper Bags	Reusable Bag (1 Use)
	g output	g output	g output
(a) Hydrocarbons (unspecified)	4.01E-01	6.16E+00	1.40E+00
(a) VOC (Volatil Organic Compounds)	5.38E-01	0.00E+00	0.00E+00
(a) VOC (Volatile Organic Compounds)	2.25E+01	2.65E-01	1.58E+01
(a) Acetaldehyde	-2.80E-04	1.08E-01	-1.61E-03
(a) Acetylene	2.30E-03	-1.15E-02	-2.26E-03
(a) Alcohol	7.02E-02	7.21E-01	0.00E+00
(a) Aldehyde	2.06E-03	4.61E-04	5.96E-03
(a) Alkane	1.35E-02	1.19E+00	-3.39E-02
(a) Aromatic Hydrocarbons	3.04E-01	7.55E-01	3.47E-01
(a) Benzaldehyde	5.65E-11	2.51E-09	-6.48E-11
(a) Benzene	5.06E-03	1.50E-02	-4.65E-03
(a) Butane	4.23E-03	2.03E-01	-2.13E-02
(a) Butene	4.23E-03	2.23E-03	1.72E-04
(a) Ethanol	-5.69E-04	3.11E-03	-3.21E-03
(a) Ethyl Benzene	1.70E-04	1.16E-02	1.96E-04
(a) Ethylene	7.89E-02	2.75E+00	-8.47E-02
(a) Formaldehyde	-2.63E-04	7.39E-03	-5.72E-03
(a) Heptane	1.59E-03	2.20E-02	1.72E-03
(a) Hexane	3.17E-03	4.32E-02	3.42E-03
(a) Hydrocarbons (except methane)	1.40E+01	1.58E+01	3.03E+01
(a) Methanol	-9.67E-04	5.28E-03	-5.45E-03
(a) Propane	-1.97E-03	2.29E-01	-7.41E-02
(a) Propionaldehyde	1.55E-10	6.92E-09	-1.78E-10
(a) Propylene	2.69E-03	-6.70E-03	-2.14E-03
(a) Tetrachloroethylene	2.40E-06	1.18E-02	6.61E-06
(a) Toluene	2.42E-03	9.00E-02	-7.63E-04
Total VOCs	37.9294734	28.37487101	47.61867161

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Ecobilan Plastic Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions (grams) per 9,000 liters groceries	37.9294734	27.1	48.2	23.4	19.2
Emissions (grams) per 1 liter groceries	0.004214386	0.003011111	0.005355556	0.0026	0.002133333
Emissions per bag (grams)	0.06	0.04	0.07	0.04	0.03
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	50	36	64	31	25
Emissions in the whole county (pounds)	4,360	3,115	5,541	2,690	2,207

Ecobilan Paper Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	28.37487101	72.6	9.34	26.1	4.72
Emissions (grams) per 1 liter groceries	0.003152763	0.008066667	0.001037778	0.0029	0.000524444
Emissions per bag (grams)	0.06	0.17	0.02	0.06	0.01
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	37	96	12	34	6
Emissions in the whole county (pounds)	3,262	8,346	1,074	3,000	543

Ecobilan Emission differences caused by a 85% conversion from plastic to paper					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions in the city (pounds)	-18	46	-53	-2	-20
Emissions in the whole county (pounds)	-1,588	3,979	-4,628	-140	-1,746

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Ecobilan Plastic Bag LCA End-of-life - All bags disposed		Adjusted for 2007 Recycle Rates
Emissions Sources	NOx	NOx
Emissions (grams) per 9,000 liters groceries	0.97	
Emissions (grams) per 1 liter groceries	0.000107778	
Emissions per bag (grams)	0.00	
Emissions per bag (pounds)	0.00	
Emissions in the city (pounds)	1	1
Emissions in the whole county (pounds)	112	98

Ecobilan Paper Bag LCA End-of-life - All bags disposed		Adjusted for 2007 Recycle Rates
Emissions Sources	NOx	NOx
Emissions per 9,000 liters of groceries (in grams)	5.74	
Emissions (grams) per 1 liter groceries	0.000637778	
Emissions per bag (grams)	0.01	
Emissions per bag (pounds)	0.00	
Emissions in the city (pounds)	8	5
Emissions in the whole county (pounds)	660	417

Ecobilan NOx Emissions End of Life	85% conversion from plastic to paper	Adjusted for 2007 Recycle Rates
Emissions in the city (pounds)	5	3
Emissions in the whole county (pounds)	449	256

Ecobilan Reusable Bag LCA -- 4 Uses					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	11.9046679	19.125	7	17.475	13.35
Emissions (grams) per 1 liter groceries	0.001322741	0.002125	0.000777778	0.001941667	0.001483333
Emissions per bag (grams)	0.05	0.08	0.03	0.07	0.05
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	16	25	9	23	18
Emissions in the whole county (pounds)	1,368	2,198	805	2,009	1,535

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Boustead Plastic Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions (miligrams) per 1,000 bags	994	45,400	67,400	50,500	14,300
Emissions (grams) per 1,000 bags	0.994	45.4	67.4	50.5	14.3
Emissions per bag (grams)	0.00	0.05	0.07	0.05	0.01
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	1	39	57	43	12
Emissions in the whole county (pounds)	73	3,355	4,981	3,732	1,057

Boustead Paper Bag LCA					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions per 9,000 liters of groceries (in grams)	2	264,000	121,000	579,000	128,000
Emissions (grams) per 1,000 bags	0.002	264	121	579	128
Emissions per bag (grams)	0.00	0.26	0.12	0.58	0.13
Emissions per bag (pounds)	0.00	0.00	0.00	0.00	0.00
Emissions in the city (pounds)	0	153	70	336	74
Emissions in the whole county (pounds)	0	13,336	6,113	29,249	6,466

Boustead Emission differences caused by a 85% conversion from plastic to paper					
Emissions Sources	VOCs	NOx	CO	SOx	Particulates
Emissions in the city (pounds)	-1	92	2	243	51
Emissions in the whole county (pounds)	-73	7,981	215	21,130	4,439

Ecobilan Data - Greenhouse Gas Emissions	Reusable Bag (1 Use)	
	GWP (IPCC)	g output g CO2e
(a) Carbon Dioxide (CO2, fossil)	1	2.65E+04 2.65E+04
(a) Methane	23	8.76E+01 2.01E+03
(a) Nitrous Oxide	296	7.10E-02 2.10E+01
(a) Carbon Tetrafluoride	5700	-5.21E-08 -2.97E-04
(a) Halon 1301	6900	1.95E-05 1.35E-01
Total		2.85E+04

* GWP = Global Warming Potential

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Ecobilan Data - Greenhouse Gas Emissions	Plastic Bags		Paper Bags		
	GWP (IPCC)	g output	g CO2e	g output	g CO2e
(a) Carbon Dioxide (CO2, fossil)	1	1.01E+04	1.01E+04	1.67E+04	1.67E+04
(a) Methane	23	3.37E+01	7.75E+02	1.58E+02	3.63E+03
(a) Nitrous Oxide	296	6.63E-02	1.96E+01	6.46E-01	1.91E+02
(a) Carbon Tetrafluoride	5700	4.54E-08	2.59E-04	2.02E-06	1.15E-02
(a) Halon 1301	6900	1.83E-05	1.26E-01	2.71E-04	1.87E+00
Total			1.09E+04		2.05E+04

* GWP = Global Warming Potential

Ecobilan GHG emissions	CO _{2e} Emissions from Plastic Bags	CO _{2e} Emissions from Paper Bags	CO _{2e} Emission Increase Caused by 85 Percent Conversion from Plastic to Paper	per year	per year per capita
Emissions (grams) per 9,000 liters groceries	10894.8513	20527.0974	9632.2461	3515769.820	0.331
Emissions (metric tons) per 9,000 liter groceries	0.0109	0.0205	0.0096	3.516	0.000
Emissions (metric tons) per 1 liter groceries	0.0000	0.0000	0.0000	0.000	0.000
Emissions (metric tons) per bag	0.0000	0.0000	0.0000	0.011	0.000
Emissions in the city (metric tons)	6.52	10.45	3.92	1,432	0.042
Emissions in the whole county (metric tons)	568.08	909.78	341.70	124,720	0.012

Ecobilan GHG emissions	CO _{2e} Emissions from Plastic Bags	CO _{2e} Emissions from Reusable Bags Used Three Times	CO _{2e} Emission Increase From 100 % Conversion from Plastic to Reusable	per year	per year per capita
Emissions (grams) per 9,000 liters groceries	10894.8513	9511.9834	-1382.8679	-504746.788	-0.048
Emissions (metric tons) per 9,000 liter groceries	0.0109	0.0095	-0.0014	-0.505	0.000
Emissions (metric tons) per 1 liter groceries	0.0000	0.0000	0.0000	0.000	0.000
Emissions (metric tons) per bag	0.0000	0.0000	0.0000	0.008	0.000
Emissions in the city (metric tons)	6.52	5.70	-0.83	-302	-0.009
Emissions in the whole county (metric tons)	568.08	495.98	-72.11	-26,319	-0.002

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Boustead GHG emissions	CO_{2e} Emissions from Plastic Bags	CO_{2e} Emissions from Paper Bags	CO_{2e} Emission Increase with 85 Percent Conversion from Plastic to Paper	per year	per year per capita
metric tons for 1,000 paper or 1,500 plastic bags	0.0400	0.0800	0.04	14.600	0.000
Emissions (metric tons) per bag	0.0000	0.0001	0.00	0.019	0.000
Emissions in the city (metric tons)	10.27	17.90	7.63	2,785	0.081
Emissions in the whole county (metric tons)	893.87	1558.16	664.29	242,466	0.023

ExcelPlas GHG emissions	CO_{2e} Emissions from Plastic Bags	CO_{2e} Emissions from Paper Bags	CO_{2e} Emission Increase with 85 Percent Conversion from Plastic to Paper	per year	per year per capita
kilograms for 520 bags	6.0800	30.5000	24.42	8913.300	0.001
Emissions (metric tons) per bag	0.0000	0.0001	0.0000	0.017	0.000
Emissions in the city (metric tons)	4.50	19.19	14.69	5,363	0.156
Emissions in the whole county (metric tons)	391.93	1671.17	1279.24	466,922	0.044

Greenhouse Gas Emissions due to Mobile Sources			
	CO₂ Emissions (Pounds/Day)*	CO₂ Emissions (Metric Tons/Year)	CO₂ Emissions per Capita (metric)
17 Delivery Truck Trips in the City	32.76	5.42	0.00016
96 Delivery Truck Trips in the whole county	1,572.35	260.32	0.00002

*Numbers from URBEMIS 2007

Conversion Factors	
grams to pounds	0.002204623
pounds to metric tons	0.000453592

2007 recycle rate - plastic bags and sacks	11.9%
2007 recycle rate - paper bags and sacks	36.8%

Ecobilan Data - Greenhouse Gas Emissions	GWP (IPCC)	Plastic Bags		Paper Bags	
		g output	g CO2e	g output	g CO2e
Just End of Life					
(a) Carbon Dioxide (CO2, fossil)	1	8.70E+01	8.70E+01	5.15E+02	5.15E+02
(a) Methane	23	2.60E-01	5.98E+00	4.96E+02	1.14E+04
(a) Nitrous Oxide	296	1.00E-02	2.96E+00	7.00E-02	2.07E+01
(a) Carbon Tetrafluoride	5700	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(a) Halon 1301	6900	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			9.59E+01		1.19E+04

* GWP = Global Warming Potential

Ecobilan Plastic Bag LCA - Just end-of-life	CO2e	Adjusted for 2007 Recycle Rates		
		CO2e	Annual CO2e	Per Capita
Emissions (grams) per 9,000 liters groceries	9.59E+01			
Emissions (grams) per 1 liter groceries	0.01066			
Emissions per bag (grams)	0.15			
Emissions per bag (metric tons)	0.00			
Emissions in the city (metric tons)	0	0	18	0.0005
Emissions in the whole county (metric tons)	5	4	1609	0.0002

Ecobilan Paper Bag LCA - Just end-of-life	CO2e	Adjusted for 2007 Recycle Rates		
		CO2e	Annual CO2e	Per Capita
Emissions per 9,000 liters of groceries (in grams)	1.19E+04			
Emissions (grams) per 1 liter groceries	1.327591111			
Emissions per bag (grams)	27.19			
Emissions per bag (metric tons)	0.00			
Emissions per store (metric tons)	0.09	0.06		
Emissions in the city (metric tons)	7	5	1651	0.0480
Emissions in the whole county (metric tons)	623	394	143716	0.0135

Scenario: Proposed Ordinance without Fee on Paper Carryout Bags

Ecobilan Emission differences caused by an 85% conversion from plastic to paper			Adjusted for 2007 Recycle Rates	
Emissions Sources			Annual CO _{2e}	Per Capita
Emissions in the city (metric tons)			1,385	0.04025
Emissions in the whole county (metric tons)			120,550	0.01136

Boustead GHG emissions - Just end of life	CO _{2e} Emissions from Plastic Bags	CO _{2e} Emissions from Paper Bags	CO _{2e} Emission Increase with 85 Percent Conversion from Plastic to Paper	per year	per year per capita
metric tons for 1,000 paper or 1,500 plastic bags	0.0030	0.0500	0.05	17.155	0.000
Emissions (metric tons) per bag	0.0000	0.0001	0.00	0.018	0.000
Emissions (metric tons) per store	0.0100	0.0854	0.08	27.539	0.000
Emissions in the city (metric tons)	0.77	11.19	10.42	3,802	0.11051
Emissions in the whole county (metric tons)	67.04	973.85	906.81	330,985	0.03118

Emission Sources	Air Pollutants (Pounds/Day)*					
	VOCs	NO _x	CO	SO _x	PM _{2.5}	PM ₁₀
17 Delivery Truck Trips in the City	0.02	0.04	0.25	0	0.01	0.05
96 Delivery Truck Trips in the whole County	0.8	1.9	12.02	0.01	0.46	2.24
SCAQMD Threshold	55	55	550	150	55	150
AVAQMD Threshold	137	137	548	137	-	82
Exceedance of Significance?	No	No	No	No	No	No

*Numbers from URBEMIS 2007