WHITE PAPER
MANAGEMENT OF HIGH TONNAGE DAYS PROJECT AT OLINDA ALPHA LANDFILL FOCUSED ENVIRONMENTAL ANALYSIS

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LSA

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1.0 INTRODUCTION

The Final Environmental Impact Report (EIR) 588 for the expansion of the Olinda Alpha Landfill (OAL) was prepared in 2004 and certified by the County of Orange (County) Board of Supervisors on April 17, 2007. Final EIR 588 analyzed a maximum daily permitted tonnage of 8,000 tons per day (tpd) of solid waste. As part of the 2009 Cooperative Agreement with the City of Brea (City) for the expansion of the landfill, the City agreed to allow the landfill to accept up to 10,000 tpd for up to 36 days per year in order to accommodate those high tonnage days that usually precede or follow major holidays, or on days when the landfill receives more in-County generated tonnage than expected. The landfill receives both in-County and importation tonnage, and lately the amount of daily importation tonnage has increased, in association with the closure of the Puente Hills Landfill on October 31, 2013. While the rate and flow of importation waste is controlled by landfill staff, with the majority of importation waste coming to the landfill during early morning hours, it is the County's policy not to turn away in-County generated waste during landfill operating hours, unless absolutely necessary. Therefore, it is critical that the Management of High Tonnage Days Project (project) be implemented, so that on high tonnage days, if the landfill goes over the daily limit of 8,000 tpd, OC Waste & Recycling (OCWR) will not receive a Notice of Violation from the Orange County Health Care Agency, Environmental Health Department, acting in their capacity as the Local Enforcement Agency for the California Department of Resources Recovery and Recycling (CalRecycle). The landfill operates from 6:00 a.m.–4:00 p.m., Monday through Saturday.

This White Paper analyzes the Final EIR 588 air quality, noise, and traffic studies (and associated technical attachments) to determine if the landfill can accept up to 10,000 tpd for up to 36 days per year, without exceeding the air, noise, and traffic impacts analyzed in Final EIR 588. The analyses for the White Paper will assume that the additional 2,000 tpd will come to the landfill between 12:00 p.m.–4:00 p.m. For the 2,000 tpd increase, it is assumed that half of the waste will be importation waste, and the other half will be in-County waste. The designated haul route to the landfill is from the State Route 57 (SR-57) to the Imperial Highway interchange, along Imperial Highway to Valencia Avenue, and Valencia Avenue to the landfill. Waste trucks, other than local packer trucks serving local neighborhoods, are not allowed to use Lambert Road.

Potential traffic, noise, and air quality impacts that could occur with increased maximum daily waste collection on sensitive residential land uses located along landfill access roads need to be identified since solid waste is brought to the landfill in large 18-wheel transfer trucks. In addition, the greenhouse gas (GHG) emissions from operations as described in Final EIR 588 (i.e., 8,000 tpd landfill) are compared to the projected emissions with the increased maximum daily waste collection.

2.0 ANALYSIS METHOD

In order to determine the number of refuse trucks that would be allowed to travel to the landfill, assessments of traffic noise and air quality impacts associated with the increased truck traffic were conducted. First, the amount of additional waste collection was calculated based on the potential increase in haul-truck emissions that would not result in any exceedance of the permitted emissions levels, using the maximum pollutant emissions permitted in Final EIR 588. Second, the number of truck trips was calculated, and potential traffic impacts on intersections affected by the haul trucks were assessed. Lastly, potential noise impacts associated with the increased truck trips were evaluated. This included traffic noise modeling for the access roads leading to the landfill, including Valencia Avenue, Imperial Highway, Kramer Boulevard, Lambert Road, and SR-57. The calculated traffic noise levels were evaluated for any excessive increases in traffic noise levels. If any of these three impact assessments determine that applicable standards or thresholds would be exceeded, and it is determined that the additional landfill traffic is the cause of this exceedance, GeoSyntec/LSA Associates, Inc. (LSA) will propose project features or operational changes that will reduce operational levels to below the applicable thresholds. Finally, the GHG emissions from the operations described in Final EIR 588 (i.e., 8,000 tpd landfill) were calculated and compared to the total GHG emissions, including the additional daily waste collection.

2.1 APPLICABLE THRESHOLDS OF SIGNIFICANCE

The project is subject to the following rules and regulations corresponding to the topical issues evaluated.

2.1.1 Traffic Thresholds of Significance

To determine the peak-hour levels of service (LOS) of the study area intersections, the intersection capacity utilization (ICU) methodology was used. LOS D (ICU not to exceed 0.90) is the performance standard for eight intersections in the study area. A project causes a significant impact if it contributes 0.01 or more to an ICU when the performance standard is exceeded for the County and the City.

2.1.2 Noise Thresholds of Significance

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the County's Noise Element of the General Plan and its Noise Control Ordinance.

Noise Element of the County's General Plan. The Noise Element of the County of Orange General Plan has developed noise standards for mobile noise sources. These standards address the impacts of noise from adjacent roadways and airports, including John Wayne Airport. The County specifies outdoor and indoor noise limits for residential uses, places of worship, educational facilities, hospitals, hotels/motels, and commercial and other land uses. The noise standard for exterior living areas is 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL). The County prohibits new residential land uses within the 65 dBA CNEL contour from any noise sources, including highways and airports. Nonresidential noise-sensitive land uses such as hospitals, rest homes, convalescent hospitals, places of worship, and schools will not be permitted within the 65 dBA CNEL area from any source unless appropriate mitigation measures are included such that the standards contained in the Noise Element and in appropriate State and federal codes are met. The indoor noise standard is 45 dBA CNEL, which is consistent with the standard in the California Noise Insulation Standard. The County also enforces building sound transmission and indoor fresh air ventilation requirements specified in Chapter 35 of the Uniform Building Code.

Outdoor living area is a term used by the County to define spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include backyards, balconies, patio areas, barbecue areas, jacuzzi areas, etc., associated with residential uses; outdoor patient recovery or resting areas, etc., associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship that have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes that may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas). The County does not specify an outdoor noise standard for non-outdoor living areas.

The County's Standard Conditions of Approval require that all residential and nonresidential noise-sensitive structures be sound attenuated against the combined impact of all present and projected noise from exterior noise sources (including aircraft and highway noise) to meet the interior noise criteria (45 dBA CNEL) as specified in the Noise Element and Land Use/Noise Compatibility Manual.

Noise Control Ordinance. The County's Standard Conditions of Approval require that all construction vehicles or equipment, fixed or mobile, operated within 1,000 feet (ft) of a dwelling shall be equipped with properly operating and maintained mufflers. All operations shall comply with Orange County's Codified Ordinance Division 6 (Noise Control). Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings. As specified in the County's Codified Ordinance Division 6 (Noise Control), construction activities are generally restricted to between 7:00 a.m. and 8:00 p.m. from Monday through Saturday. No construction activity is permitted on Sundays and federal holidays. Construction noise during the allowed construction time periods is exempted from the noise level provisions in the Noise Control Ordinance.

It is stated in the County's Noise Control Ordinance that exterior noise levels at residential properties within Noise Zone 1 shall not exceed the basic noise standard of 55 dBA between the hours of 7:00 a.m. and 10:00 p.m., and shall not exceed 50 dBA between the hours of 10:00 p.m. and 7:00 a.m., plus the following limits:

- Basic noise level for a cumulative period of not more than 30 minutes in any 1 hour (L_{50});
- Basic noise level plus 5 dBA for a cumulative period of not more than 15 minutes in any 1 hour (L_{25});
- Basic noise level plus 10 dBA for a cumulative period of not more than 5 minutes in any 1 hour (L_8);
- Basic noise level plus 15 dBA for a cumulative period of not more than 1 minute in any 1 hour (L_2); or
- Basic noise level plus 20 dBA for any period of time (L_{max}).

The basic interior noise standard for residential uses is set as 45 dBA between 10:00 p.m. and 7:00 a.m., and 55 dBA between 7:00 a.m. and 10:00 p.m., plus the following limits:

- Basic noise level for a cumulative period of not more than 5 minutes in any 1 hour (L_8);
- Basic noise level plus 5 dBA for a cumulative period of not more than 1 minute in any 1 hour (L_2); or
- Basic noise level plus 10 dBA for any period of time (L_{max}).

In the event that the ambient noise level exceeds any of the above noise limits, the cumulative period applicable to that category shall be increased to reflect that ambient noise level. It shall be unlawful for any person at any location within the unincorporated area of the County to create any noise or to allow the creation of any noise that causes the noise level to exceed the residential noise standards stated above. Each of the noise limits above shall be reduced 5 dBA for noise consisting of impact noise, simple tone noise, speech, music, or any combination thereof.

2.1.3 Air Quality Thresholds of Significance

Many modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts, such as the South Coast Air Quality Management District (SCAQMD), have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, the *California Environmental Quality Act (CEQA) Air Quality Handbook* (April 1993), were adhered to in the assessment of air quality impacts for the proposed project. The air quality models identified in the document, including an older version of the URBEMIS model, are outdated; therefore, the current model, CalEEMod Version 2013.2.2, was used to estimate project-related mobile- and stationary-source emissions in this White Paper. Table A shows the CEQA significance thresholds that have been established for the region of the project (the South Coast Air Basin). Projects with operation-related emissions that exceed any of the emission thresholds would be considered significant under CEQA.

Table A: SCAQMD Significance Thresholds

Air Pollutant	Operational Phase
ROCs	75 lbs/day
CO	550 lbs/day
NO_X	100 lbs/day
SO_X	150 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
Lead	3 lbs/day

Source: SCAQMD 2014.
CO = carbon monoxide
lbs = pounds
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particular matter less than 2.5 microns in size
PM_{10} = particular matter less than 10 microns in size
ROCs = reactive organic compounds
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides

2.1.4 Climate Change Thresholds of Significance

Based on *Guidelines for the Implementation of the California Environmental Quality Act*, Appendix G, Public Resource Code Sections 15000–15387, a project would normally be considered to have a significant effect on air quality if the project would violate any ambient air quality standards (AAQS), contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

As the SCAQMD has recognized, the analysis of GHGs is a much different analysis than the analysis of criteria pollutants for the following reasons. Significance thresholds for criteria pollutants are based on daily emissions because attainment or nonattainment is based on daily exceedances of applicable AAQS. Further, several AAQS are based on relatively short-term exposure effects on human health (e.g., 1-hour and 8-hour). Since the half-life of carbon dioxide (CO_2) is approximately 100 years, for example, the effects of GHGs are longer term, affecting global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate GHG effects over a longer time frame than a single day.

The recommended approach for GHG analysis included in the Office of Planning and Research's (OPR) June 2008 release is to: (1) identify and quantify GHG emissions; (2) assess the significance of the impact on climate change; and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance.[1] The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide

[1] State of California, 2008. Governor's OPR. *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review*. June 19.

the basis for a programmatic approach to project-specific CEQA analysis and mitigation.... For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews."

The State *CEQA Guidelines* include the following direction regarding determination of significant impacts from GHG emissions (§15064.4):

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the Lead Agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> > (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or
> >
> > (2) Rely on a qualitative analysis or performance based standards.
>
> (b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:
>
> > (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
> >
> > (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
> >
> > (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Individual projects incrementally contribute toward the potential for global climate change (GCC) on a cumulative basis in concert with all other past, present, and probable future projects. While individual projects are unlikely to measurably affect GCC, each project incrementally contributes toward the potential for GCC on a cumulative basis, in concert with all other past, present, and probable future projects.

Revisions to Appendix G of the *CEQA Guidelines* suggest that the project be evaluated for the following impacts:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

However, despite this, currently neither the CEQA statutes, the OPR guidelines, nor the draft proposed changes to the *CEQA Guidelines* prescribed thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

On September 28, 2010, the SCAQMD GHG Working Group proposed the following draft-interim method for determining significance of proposed projects' GHG emissions and contributions to GCC. The proposed interim method utilizes a tiered mechanism, as described below.

A proposed project would be evaluated against the tiers and a determination made as to which tier would be the most appropriate for the individual project. For example, if a project is exempt from CEQA, Tier 1 would be the most appropriate tier, and the project effects related to GHG emissions/ GCC would be less than significant and the analysis would be complete.

If not exempt and there is a local GHG reduction plan in place, then Tier 2 would be the most appropriate tier. If the project is consistent with that plan, then the project effects related to GHG emissions/GCC would be less than significant and the analysis would be complete. If the project is not consistent with the plan, then the project would have a significant impact related to GHG emissions/GCC and the analysis would be complete.

If there is no local GHG reduction plan, the project is compared to the screening Tier 3 threshold. If the project emissions are less than the screening Tier 3 threshold, then the project effects related to GHG emissions/GCC would be less than significant and the analysis would be complete. If the project exceeds the screening Tier 3 threshold, then the project is compared to the performance-based Tier 4 threshold.

If the project emissions are less than the performance-based Tier 4 threshold, then the project would have less than significant impacts related to GHG emissions/GCC and the analysis would be complete. If the project exceeds the performance-based Tier 4 threshold, then the project would have a significant impact related to GHG emissions/GCC and the analysis would be complete.

Tier 5 is not a threshold, but rather represents a mitigation option related to the creation/purchase of GHG emissions offsets.

- **Tier 1** consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. If the project qualifies for an exemption, no further action is required.
- **Tier 2** consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing consistency determination requirements in *CEQA Guidelines* Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with Assembly Bill (AB) 32 GHG reduction goals; include an emissions inventory agreed upon by either the California Air Resources Board (ARB) or the SCAQMD, have been analyzed under CEQA, and have a certified Final CEQA document, and have monitoring and enforcement components. If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions.
- **Tier 3** SCAQMD suggested the following GHG screening thresholds: Industrial: 10,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year ($MTCO_2e$[1]/yr); Residential: 3,500 $MTCO_2e$/yr; Commercial: 1,400 $MTCO_2e$/yr; and Mixed-use: 3,000 $MTCO_2e$/yr.
- **Tier 4** establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures.
    - Efficiency Target (2020 Targets)
        - 4.8 $MTCO_2e$/yr per Service Population (SP)[2] for project-level threshold (land use emissions only) and total residual emissions not to exceed 25,000 $MTCO_2e$/yr
        - 6.6 $MTCO_2e$/yr per SP for plan-level threshold (all sectors)
    - Efficiency Target (2035 Targets)
        - 3.0 $MTCO_2e$/yr per SP for project-level threshold
        - 4.1 $MTCO_2e$/yr per SP for plan-level threshold

  If the lead agency or project proponent cannot achieve the performance standards on any of the compliance options in Tier 4, the project-related GHG emissions would be considered significant.
- **Tier 5** would require projects that implement off-site GHG mitigation that includes purchasing offsets to reduce GHG emission impacts to purchase sufficient offsets for the life of the project (30 years) to reduce GHG emissions to less than the applicable GHG screening threshold level.

The appropriate threshold from this SCAQMD list is Tier 3 at 10,000 $MTCO_2e$/yr.

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1 The known GHGs vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of each gas is measured relative to CO_2, the most abundant GHG. GHG emissions are typically measured in terms of MT of CO_2e, which is a quantity that describes, for a given GHG, the amount of CO_2 that would have the same global warming potential when measured over a specific time scale.

2 SP represents the total of all residents and workers for a project.

2.2 IMPACTS

2.2.1 Traffic Impacts

The approved Final EIR No. 588 for the OAL (certified by the County Board of Supervisors on April 17, 2007) analyzed a maximum daily permitted tonnage of 8,000 tpd of solid waste. As part of the 2009 Cooperative Agreement with the City for the expansion of the OAL, the City agreed to allow the landfill to accept up to 10,000 tpd for up to 36 days per year.

The purpose of this traffic analysis is to assess the potential traffic impacts associated with a landfill that processes a maximum of 10,000 tpd of solid waste on site during high-tonnage days (i.e., more than 36 days per year). Specifically, this analysis will determine whether significant impacts to intersections would occur near the OAL with a maximum operation of 10,000 tpd.

Trip Generation.

Existing Operations and Trip Generation. LSA has coordinated with OCWR staff to obtain data for the existing OAL operation (Monday through Saturday between the hours of 6:00 a.m. and 4:00 p.m.). OCWR provided LSA with hourly vehicle and tonnage data for the landfill from Monday, January 6, 2014 through Saturday, January 11, 2014, to identify its existing trip generation and vehicle mix. Based on discussions with OCWR, the landfill processed an average of 6,800 tpd during the survey dates (Monday through Saturday). Approximately 7,100 tpd was processed on weekdays (Monday through Friday).

For purposes of this traffic analysis, the trip generation focuses on weekday peak-hour operations. As shown in Table B, the existing 7,100 tpd weekday operation generates 818 average daily trips (ADT) and 184 a.m. peak-hour trips (92 inbound and 92 outbound). These vehicle trips are represented by different vehicle types (i.e., passenger cars and various trucks). The landfill generates little or no trips during the p.m. peak hour as the landfill closes at 4:00 p.m. each day.

Large vehicles utilize more roadway capacity than passenger vehicles due to their larger size, slower start-up times, and reduced maneuverability. In order to account for the increase in roadway capacity utilized by large vehicles, passenger car equivalent (PCE) factors are used. These factors are applied to the vehicle trip generation to account for the differences in operational characteristics of heavy vehicles. To determine the PCEs, for the various types of trucks that utilize the OAL, LSA consulted the Highway Capacity Manual (HCM) adjustments for heavy vehicles and the San Bernardino County Congestion Management Program (CMP). Based on this information, the vehicle trip generation has been converted into PCEs, as shown in Table B. The PCE trip generation of the existing 7,100 tpd landfill is approximately 2,294 ADT and 530 a.m. peak-hour trips (265 inbound and 265 outbound).

Table B: Existing Olinda Alpha Landfill Trip Generation

		Existing Trip Generation				Existing PCE Trip Generation				
			AM Peak Hour			PCE		AM Peak Hour		
	Vehicle Type	ADT	In	Out	Total	Factor	ADT	In	Out	Total
1	Transfer Truck Combo	353	35	35	70	3.0	1,059	105	105	210
2	Tractor-Trailer Combo	38	4	4	8	3.0	114	12	12	24
3	Tractor with Double Trailer	56	6	6	12	3.0	168	18	18	36
4	3-Axle DOB	20	3	3	6	2.0	40	6	6	12
5	3-Axle Dump Truck-Trailer	1	0	0	0	2.0	2	0	0	0
6	3-Axle Front Loader	3	0	0	0	2.0	6	0	0	0
7	3-Axle Side Loader	3	0	0	0	2.0	6	0	0	0
8	4-Axle Front Loader	10	0	0	0	3.0	30	0	0	0
9	4-Axle Side or Rear Loader	4	0	0	0	3.0	12	0	0	0
10	Passenger Car	1	0	0	0	1.0	1	0	0	0
11	≤ 0.44-Ton Truck	41	3	3	6	1.0	41	3	3	6
12	2.00- to 2.49-Ton Truck	1	0	0	0	1.0	1	0	0	0
13	2.50- to 2.99-Ton Truck	5	0	0	0	1.0	5	0	0	0
14	3.00- to 3.49-Ton Truck	4	0	0	0	1.5	6	0	0	0
15	3.50- to 3.99-Ton Truck	5	1	1	2	1.5	8	2	2	4
16	4.00- to 4.49-Ton Truck	11	1	1	2	2.0	22	2	2	4
17	4.50- to 4.99-Ton Truck	3	0	0	0	2.0	6	0	0	0
18	5.00- to 5.99-Ton Truck	10	0	0	0	2.0	20	0	0	0
19	6.00- to 6.99-Ton Truck	7	0	0	0	3.0	21	0	0	0
20	7.00- to 7.99-Ton Truck	5	0	0	0	3.0	15	0	0	0
21	8.00- to 8.99-Ton Truck	3	1	1	2	3.0	9	3	3	6
22	9.00- to 11.99-Ton Truck	36	5	5	10	3.0	108	15	15	30
23	≥ 12.00-Ton Truck	198	33	33	66	3.0	594	99	99	198
	Total	**818**	**92**	**92**	**184**	**–**	**2,294**	**265**	**265**	**530**

Note: Existing trip generation based on information provided by OC Waste & Recycling for the existing 7,100-ton landfill operation (i.e., surveys conducted between Monday and Friday, January 6, 2014 and January 10, 2014).
ADT = average daily traffic
PCE = passenger car equivalent

Proposed High-Tonnage Operation and Trip Generation. As previously discussed, the City allows the landfill to process a maximum of 10,000 tpd of solid waste on site during high-tonnage days. Based on existing weekday operations of 7,100 tpd, the landfill could accommodate an additional 2,900 tpd of solid waste. As shown in Table C, an additional 2,900 tpd on site would generate approximately 937 ADT and 216 a.m. peak-hour trips (108 inbound and 108 outbound) in PCEs based on the time-of-day trip generating characteristics of the existing landfill. It should be noted that the a.m. peak-hour trip generation assumption is extremely conservative as most of the new trips would occur between 12:00 p.m. and 4:00 p.m. (outside of the a.m. peak hour).

High-Tonnage Analysis. LSA prepared a traffic analysis to determine if the OAL could accommodate an additional 2,900 tpd of solid waste (for a total of 10,000 tpd on weekdays) without causing a significant impact to surrounding intersections.