Antelope Valley Public Landfill (AVPL)

Finding of Conformance (FOC)

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Google Map Aerial View of AVPL - 2018

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Background Information

- AVPL is an existing Class III MSW Landfill located within the City of Palmdale in the Antelope Valley area of Los Angeles County
- Receives waste from Palmdale, Lancaster, unincorporated areas of the Antelope Valley, and other areas of Los Angeles County
- On January 11, 2018, the City of Palmdale Commission approved CUP 98-12 Major Modifications taking effect on January 24, 2018.

Background Information

- There was an existing FOC issued by the Task force on November 17, 2011.
- A new FOC is required per the Countywide Siting Element document due to:
  - Changes in their intake capacity
- Obtained a modified land use permit (CUP)

SWFP & WDR (Current Permits)

- AVPL currently operates under a single WDR which was granted to AVPL on June/14/2012
- A new WDR is not required, since there is no expansion to the footprint beyond the originally approved CUP.
- AVPL currently operates under a newly approved SWFP 19-AA-5624, which was issued on August 13, 2018.

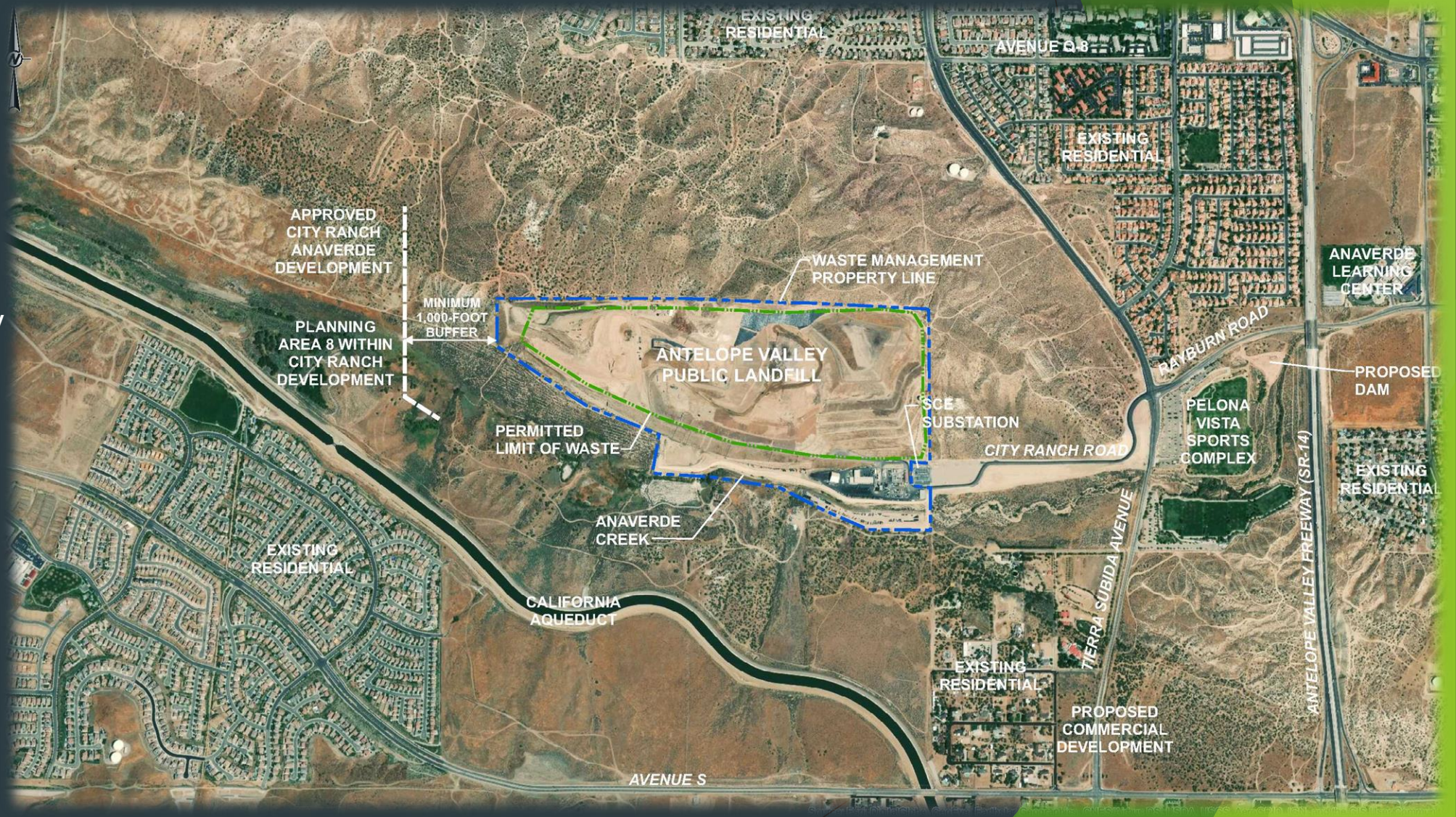
Property Information and Land Use Maps

Location & Vicinity Map

Surrounding Land Use Map

- Based on the City's Resolution the City Council adopted in an indication that the land use is consistent with the City of Palmdale's General Plan because the project is located within the Public Facility (PF)

- The PF designation identifies land which is or will be utilized for various types of public facilities, including landfills.



Summary of FOC Application

AVPLs Proposal:

- AVPL is proposing to increase the daily waste disposal tonnage in the landfill from 1,800 tpd to 3,600 tpd.
  - This amount does not include recyclables and materials used for ADC and BU.
- The “total” proposed daily intake of refuse for disposal and recyclables is 5,548 tpd.
- AVPL will add a litter fence up to 20 ft. in height for additional Litter Control.

Permitted Hour:

- Waste Disposal Activity
  - Monday – Saturday
  - 6:00 am – 8:00 pm
- Operational Activity
  - Monday – Saturday
  - 5:00 am - 10:00 pm

AVPLs Acreage & Design Capacity

	Facility Acreage	Disposal Acreage	Design Capacity	Remaining Capacity	Permitted Daily Capacity for MSW (Refuse, tpd)	Estimated Remaining Life	Expected Closure Date
AVPL SWFP 19-AA-5624 (2011)	185[2]	125[2]	20.4 million cy[2]	17.9 million cy[2]	1,800[3]	24 years[2]	2042[2]
AVPL SWFP 19-AA-5624 (2018)	185[1]	125[1]	30.2 million cy[5]	16.6 million cy[1]	3,600[4]	26 years[1]	2044[1]

1. Information based on Application for FOC AVPL, dated July 2018
2. Information based on FOC AVPL Expansion Project, dated December 21, 2011
3. Information based on CUP 98-12, dated June 9, 2011
4. Information based on CUP 98-12 Major Modifications, dated January 11, 2018
5. Information based on AVPL SWFP 19-AA-5624, dated August 13, 2018

Off-Site Structures Within 1,000 Feet of Permitted Waste Limit

- The proposal is also consistent with Objective L6.2.2 of the City of Palmdale General Land Use
  - Policy L6.2.2: Provide a 1,000 foot buffer between property designated as PF-Landfill on the General Plan Land Use Map and future residential developments.
- The existing off-site structures within 1,000 feet of the permitted limit of waste are: SCE Substation and a 1-Story Industrial Bldg.
- There are no proposed structures/projects located within 1,000 feet of the permitted waste limit.

Off-Site Structures Within 1,000 Feet of Permitted Waste Limit

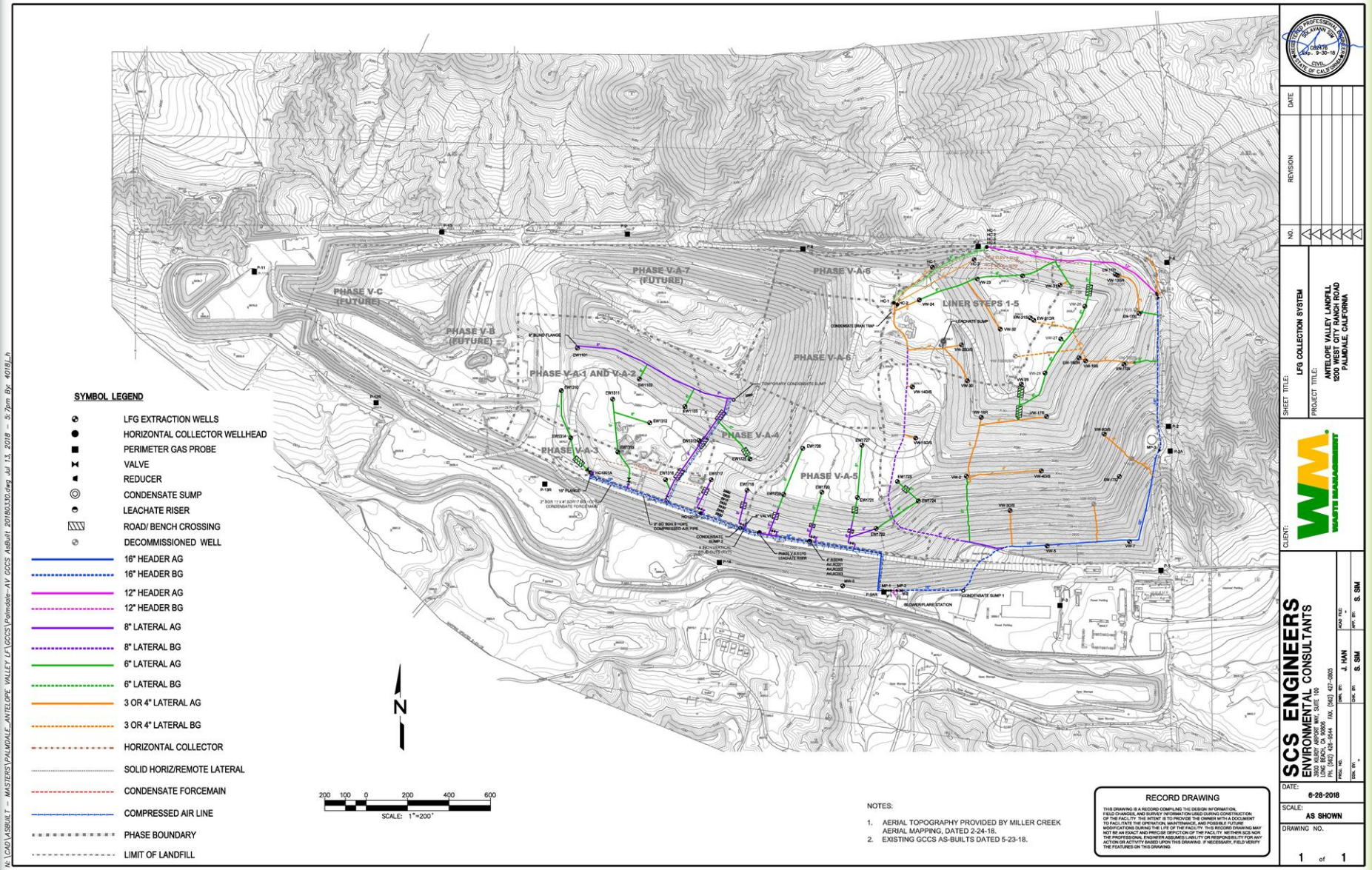
To protect the on-site existing structures and those within 1,000 ft of the landfill footprint against subsurface landfill gas migration, Condition 85 of the CUP has provisions to protect these facilities.

The Condition 85 states that should any residential development be constructed within 1,000 feet of the limits of refuse:

- The permittee, for the life of this permit and until closure of the landfill, provide for the monitoring of methane gas at all off-site residential locations within 1,000 feet of the limits of refuse.
- Further, for any residential development proposed within 1,000 feet of the limits of refuse, the applicant shall provide at no cost to the builder or developer, an engineered design for the structure based on Title 27, Section 21190, including the following provisions of Section 21190 (g) modified as follows:
  - All residential construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed in accordance with the following, or in accordance with an equivalent design which will prevent gas migration into the building: 1) a geomembrane or equivalent system with low permeability to landfill gas shall be installed between the concrete floor slab of the building and subgrade; (2) a permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches shall be installed between the geomembrane and the subgrade or slab; (3) a geotextile filter shall be utilized to prevent the introduction of fines into the permeable layer; (4) perforated venting pipes shall be installed within the permeable layer, and shall be designed to operate without clogging; (5)the venting pipe shall be constructed with the ability to be connected to an induced draft exhaust system; (6) automatic methane gas sensors shall be installed within the permeable gas layer, and inside the building to trigger an audible alarm when methane gas concentrations are detected; and (7) periodic methane gas monitoring shall be conducted inside all buildings and underground utilities…

LFG Collection & Perimeter Monitoring System

- The following systems have been installed at the landfill to protect the environment in accordance with 27 CCR:
- Liner System
- Leachate Collection and Removal System (LCRS)
- Landfill Gas Collection and Control System (GCCS)
- AVPL consists of approximately 53 vertical extractions wells in addition to horizontal collectors.
- Currently, the collected LFG is combusted at the flare station.
- AVPL consists of 14 perimeter Gas Probes.



Conclusion

Based on the staff's review of the application, staff determined that it meets the requirements, and therefore, recommends granting the FOC subject to the "Conditions of Approval" specified in the Staff Report.

Some of the conditions are as below:

- Permitted Operations/Activities
- Types of Waste Materials
- Waste Quantities
- Hours of Operation
- Maximum elevation
- Mitigation measures
- Subsurface gas migration
- Odor mitigation

Any Questions or Comments?

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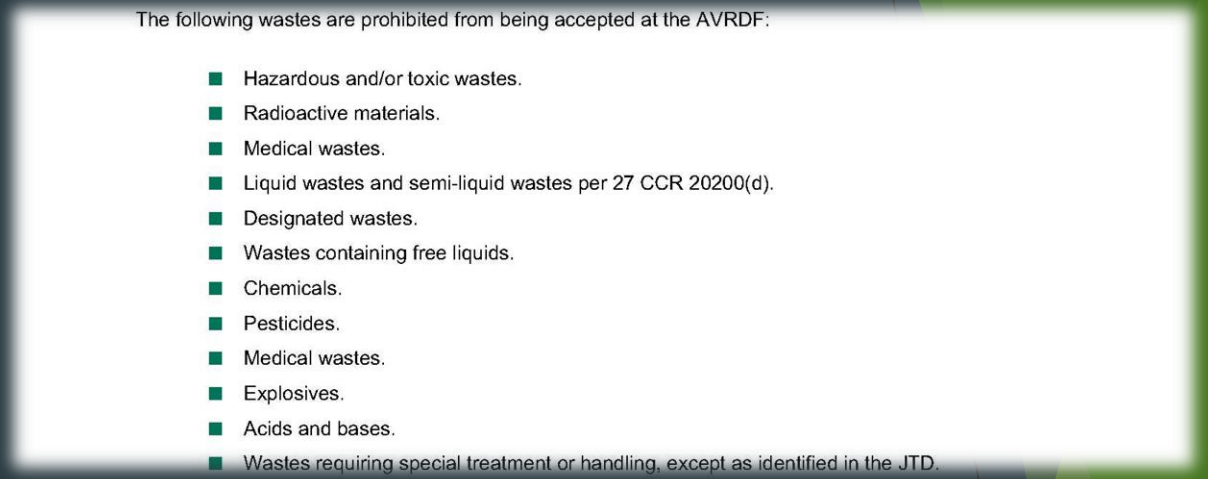
Extra Info

Prohibited Waste & Typical Waste Stream

- Prohibited Types of Waste:
- Hazardous and/or toxic wastes
- Radioactive Materials
- Medical Wastes
- Wastes containing free liquids
- Chemicals
- Pesitcides
- Medical Wastes
- Explosives
- Acids and Bases
- Wastes requiring special treatment or handling, except as identified in the JTD



The following wastes are prohibited from being accepted at the AVRDF:

- Hazardous and/or toxic wastes.
- Radioactive materials.
- Medical wastes.
- Liquid wastes and semi-liquid wastes per 27 CCR 20200(d).
- Designated wastes.
- Wastes containing free liquids.
- Chemicals.
- Pesticides.
- Medical wastes.
- Explosives.
- Acids and bases.
- Wastes requiring special treatment or handling, except as identified in the JTD.

Traffic Impact Analysis

- The TIA & JTD included a peak inflow conditions of 5,548 tpd in their study.
  - Conclusion: during peak conditions, the daily volume reaches 1,594 trips per day (see table 4.7-1A)
- Kunzman Associates analyzed the Original Traffic Analysis (October 6, 2017):
  - Kunzman concluded that a reduction in number of trucks required to deliver the same tonnage to the landfill less than what was assumed in the Original Traffic Analysis.
    - Reason 1: Trucks now average more tons per truck
    - Reason 2: there are less private owned vehicles coming in with recyclables and yard waste.

The findings of the September 2005 report are summarized in **Table 4.7-1A**, below and in this section. The report in its entirety is contained in **Appendix G** of this EIR.

TABLE 4.7-1A
EXISTING / PROJECT DAILY TRAFFIC GENERATION SUMMARY

Descriptor	Tons Per Truck	Truck Loads In	Cars In	Trucks and Cars In	Total Trips (In + Out)
Average Existing Conditions (1,372 T/D)	6.596	208	105	313	626
Proposed Average Condition (3,613 T/D)	8.363	432	230	662	1,324
Traffic Increase		**224**	**125**	**349**	**698**
Average Existing Conditions (1,372 T/D)	6.596	208	105	313	626
Proposed Peak Condition (5,548 T/D)	9.785	567	230	797	1,594
Traffic Increase		**359**	**125**	**484**	**968**
Traffic Local in Palmdale (approx. 85%)		*288*	*125*	*413*	*826*
Traffic From Outside of Palmdale (approx. 15%)		*71*	*0*	*71*	*142*
Peak Permitted Condition (3,564 T/D)	6.480	550	180	730	1,460
Proposed Peak Condition (5,548 T/D)	9.785	567	230	797	1,594
Traffic Increase		**17**	**50**	**67**	**134**

Notes:

1. Details concerning the types of material hauled and the types of truck are contained in **Table 4.7-4**.
2. Details concerning the time of day the traffic occurs, including peak hours, are contained in **Table 4.7-5**.
3. A trip occurs when something is taken from point A to point B. When a vehicle enters the facility, deposits material, and leaves, that results in a "trip in" and a "trip out" (totaling 2 trips).
4. Per **Figure 4.7-5**, Landfill Trip Distribution, 15 percent of the project traffic is assumed to come to Palmdale via the State Route 14 Freeway.
5. The anticipated number of transfer trucks coming to the facility from State Route 14 Freeway is 71 loads per day. Per **Table 4.7-4**, this is an increase over the existing average of 16 loads per day for both the average and peak conditions. The 71 loads is 142 in plus out trips (i.e., total trips). The 142 trips is approximately 15 percent of the peak total traffic.

Source: Kunzman Associates