

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: Honorable City Council

**FROM: David A. Bobardt, Community Development Director
Prepared By: Joseph R. Vacca, Principal Planner**



DATE: March 3, 2011 (CC Meeting of 3/16/2011)

SUBJECT: Consider an Update on the Proposed Simi Valley Landfill and Recycling Center Expansion Project and Final EIR, Located on the Waste Management Property in the County of Ventura, Adjacent to the City of Simi Valley's Western City Boundary

BACKGROUND

On November 3, 2010, then Mayor Pro Tem Mikos requested that staff prepare a report to the City Council regarding the status of the environmental and entitlement application for the Simi Valley Landfill and Recycling Center, which is proposed on the existing Waste Management property, located adjacent to the City of Simi Valley's western City boundary, on the application of Waste Management of California. On December 1, 2010, staff provided the Honorable City Council with an update on the Simi Valley Landfill and Recycling Center Expansion Project, (Attachment 1).

Members of the City Council raised the following concerns in their discussion:

- The amounts of waste going to the landfill from inside and outside of Ventura County.
- Not enough mitigation details provided, specifically related to biological impacts and going beyond a 1:1 replacement ratio of coastal sage scrub habitat for mitigation and lack of mitigation to address paleontological issues.
- Amounts of open space set aside for buffer and preservation of wildlife corridors.
- Disparity of expanding future waste collection levels and reducing future recycling levels with the proposed expansion.

In conclusion, the City Council determined to hold off on providing comments until the Final EIR was completed.

On February 28, 2011, at the regularly scheduled Simi Valley City Council meeting, Mayor Huber of Simi Valley announced that the Simi Valley City Council is going to hold a community forum on March 23, 2011 at 6:30PM to accept testimony on the proposed Simi Valley Landfill expansion project and Final EIR. The Ventura County Board of Supervisors are the decision makers on the project and on certification of the EIR.

On March 3, 2011, the Ventura County Planning Commission held a regular meeting field investigation / site tour of the Simi Valley Landfill and Recycling Center. Staff attended the meeting and participated in the bus tour of the land fill and listened to public testimony following the tour. The direction of County Counsel to the County Planning Commission was that the meeting was a "receive and file" informative meeting where there was to be no responses provided by the County Planning Commissioners, County Staff or the applicant, Waste Management, to questions or concerns raised during public comment. There were approximately 20-25 participants including the County Planning Commissioners, County staff, the applicant and members of the public. There were six persons who made public comment, five of which voiced concerns and opposition to approving the expansion and one of which only had a question on operating hours.

Dan Klemann, M.A., Manager, Commercial and Industrial Permits Section, County of Ventura, Resource Management Agency, has indicated that the tentative hearing dates for the Simi Valley Landfill Expansion Project (Case No. LU07-0048) and Final EIR, are as follows:

- The Ventura County Planning Commission hearing is scheduled for March 24, 2011 to be held in the City of Simi Valley City Council Chambers at 1:00PM. The County Planning Commission will make a recommendation for certification on the Final EIR and the project, to the County Board of Supervisors
- The County Board of Supervisors' hearing is tentatively scheduled for May 17, 2011.
- The County staff reports for those hearings will be published no later than one week prior to each hearing.
- The Final EIR is complete and has been published on the Ventura County Planning Division website.

Dan Klemann indicated that the County staff anticipates recommending approval of the Reduced Capacity Project Alternative, (RCP Alternative), (Attachment 2). This RCP Alternative allows expansion of the project from the existing 297 acres to 887 acres with approximately 519.5 acres to be used as a buffer around the disposal footprint. The RCP Alternative allows a waste disposal footprint of 367.5 acres in lieu of the 371 requested in the proposed project, but still an increase above the existing 185 acre footprint. The RCP Alternative reduces the landfill capacity from the requested 123.1 million cubic yards to 108.0 million cubic yards, the existing allowed volume is 43.5 million cubic yards. The estimated site closure date at 6,000 tons per day of municipal waste, would be the year 2047 with the RCP Alternative, as opposed to the year 2051,

for the proposed project. The elevation limit of the landfill would be 1,200 feet in total height with the RCP Alternative instead of the 1,270 feet in total height with the proposed project. Both the proposed project and the RCP Alternative would allow the permitted maximum daily vehicle trips, (roundtrip), including the relocation of the GI Waste hauling facility to the SVLRC from off-site to a total of 1,297 trips. This RCP Alternative is preferred to the proposed project in that it reduces potential biological impacts on the Alamos Canyon corridor by having a greater setback than the proposed project.

DISCUSSION

The proposed project (Ventura County Permit Case No. LU07-0048; Major Modification No. 8 to CUP-3142) is an expansion of the existing Simi Valley Landfill and Recycling Center, (SVLRC). The SVLRC's CUP boundary is proposed to be expanded to encompass 887 acres within which the waste disposal area would be expanded north and west from its current permitted location to encompass 186 acres of additional waste disposal area and to increase the total capacity of the landfill from 43.5 to 123.1 million cubic yards. The amount of Municipal Solid Waste, (MSW) that could be received per day is proposed to increase from 3,000 tons to 6,000 tons and the amount of recycling to be reduced from 6,250 tons per day to 3,250 tons per day. The total daily tonnage (i.e., combined MSW and recyclables) permitted for the facility would not change. Additionally, several existing ancillary facilities (such as the waste receiving and recycling facilities) and support facilities (such as administrative offices and maintenance facilities) would be expanded and new facilities constructed within the landfill CUP boundary including: office building; heavy equipment and vehicle maintenance facility; waste hauling yard; material recovery facility/recyclable transfer facility; public household hazardous waste collection facility; new entrance road, scales, and scale house; expanded construction and demolition debris recycling processing area; expanded green waste processing facility; expanded landfill gas-to-energy facility; and landfill gas-to-liquefied natural gas facility. The proposed project requires a major modification to the existing CUP (CUP-3142-7) issued by the County of Ventura.

The SVLRC is an existing permitted Class III, non-hazardous MSW landfill owned and operated by Waste Management. The boundary of the SVLRC, as defined by the CUP-3142-7 issued by the County of Ventura, encompasses 297 acres of which 185 acres are used for waste disposal and 112 acres are allocated for buffer area, (Attachment 3). SVLRC is currently permitted to accept a combined permitted limit of 9,250 tpd which includes a maximum of 3,000 tpd of disposal material and 6,250 tpd of recyclable material. Recycling operations include tipping areas for materials such as green waste, asphalt/concrete, white goods (e.g., refrigerators and stoves), tires, and scrap metal. The existing facilities at the site include an operation and maintenance facility with fuel stations; a scale house and scales; a landfill gas flare station; a electric generation facility; three portable office structures; and a condensate knockout and leachate treatment facility. The site generally operates 7 AM to 4 PM, 312 days per year, but is permitted to operate from 6 AM to 8 PM, 365 days per year. Under the terms of the

current CUP-3142-7, the facility is authorized to operate to a fill elevation of 1,118 feet above mean sea level and to continue to receive waste until the designated fill elevations have been reached or until June 2034, whichever comes first.

Project overview

- Expanding the physical limits of the landfill (CUP boundary, landfill footprint, and elevation), boundary is proposed to be expanded to encompass 887 acres;
- Waste disposal area to be expanded north and west from current location to encompass 186 acres of additional waste disposal area whereby the landfill footprint will grow from 185 acres to 371 acres for waste disposal.
- Constructing support/ancillary facility area, expanding existing and construct new recycling facilities, and expanding existing and constructing new energy conversion facilities;
- Extending the operating limits and life of the site (increasing the waste disposal capacity), total capacity of the landfill increases from 43.5 to 130.2 million cubic yards;
- Increase in municipal solid waste from 3,000 tons to 6,000 tons per day;
- Recycling to be reduced from 6,250 tons per day to 3,250 tons per day;
- Currently there are a maximum of 822 truck trips permitted per day; and
- Landfill currently receives approximately 470 truck trips per day and the proposed project will generate up to a total of 892 truck trips per day.

On December 28, 2009, staff sent Becky Linder, Ventura County Resource Management Agency, Planning Division, a comment letter on the Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center. The staff comments, included in Attachment 4, were specific to Chapter 3.6 – Visual Resources/Glare and Chapter 3.11 – Traffic and Circulation, and outlined as follows:

- Mitigation should be included to address impacts to Visual Resources by requiring the applicant employ contour grading techniques along with landscaping to make future landfill fill slopes appear more natural from offsite views.
- A project of this scale could impact the residents and businesses in Moorpark, based on the potential for additional truck trips through the City.
- Cumulative impact analysis should be analyzed and considered on the traffic, noise, and air pollution (including odor), and increases from the truck trips in the context of other proposed projects that would increase truck traffic through Moorpark.

The comments were intended to raise concerns that should be addressed in the Final EIR. The proposed response to our comments, also in Attachment 4, essentially concludes that 1) the contour grading is not part of the project proposal and while it might reduce somewhat the visual effect of the closed landfill, it would not substantially

mitigate visual effects; and 2) it would be speculative to attempt to assess truck trips in Moorpark based on the City's physical distance from the landfill.

On July 27, 2010, new and revised sections of the Draft EIR for the Simi Valley Landfill expansion were recirculated for public comment with comments due September 9, 2010. The recirculation was limited to new and revised sections of the EIR that addressed some changes to the operations, air quality calculations (including greenhouse gas analysis), impact on housing needs from additional employees, and infeasibility of mitigation related to park/recreation in-lieu fees. Staff did not find that the updates had a direct effect on the City of Moorpark and staff did not add to previous comments, originally sent on December 28, 2009. Staff also indicated that the City would provide comments on the proposal itself after the Final EIR was reviewed.

The Final EIR has been prepared and is available on the Ventura County Planning Division website. A copy of the Project Description of the Final EIR, dated December 2010, is provided, (Attachment 5). The proposed Final EIR Mitigation Monitoring and Reporting Program, (MMRP) is also provided, (Attachment 6).

Please note that an errata to the Final EIR was prepared because the Final EIR originally described the project as consistent with certain County Parks and Recreation policies through required in-lieu fees for parks and recreation facilities, easements for the Alamos Canyon Trail, and dedication of land to the Rancho Simi Recreation and Parks District. The corrected pages now say that the County lacks the authority for these measures and therefore the project is inconsistent with the County Parks and Recreation policies, (Attachment 7).

Significant and Unavoidable Impacts

The significant and unavoidable impacts presented in the Final EIR, require the County's adoption of a Statement of Overriding Considerations, and are provided as follows:

Land Use/General Plan Goals, Policies, and Programs: The project would likely result in more than 30 new employees at the SVLRC, which is considered the threshold for adverse impacts to housing. However, the County lacks the legal authority to impose a fee or a mechanism to ensure that fees collected would mitigate impacts to housing. There is as a consequence no feasible mitigation for the housing demand created by additional project employees. The impact is considered significant and unavoidable.

Air Quality: Proposed project operations would result in an increase in peak daily emissions that would exceed the VCAPCD daily ROC and NOx emission thresholds (Impact AQ-1o). Mitigation Measure AQ-3 would reduce operational emissions of ROC and NOx emissions, but not to less than the VCAPCD threshold of 25 pounds per day. As a result, ROC and NOx emissions during operations would remain significant and unavoidable.

Project construction would result in off-site ambient air pollutant concentrations that would contribute to exceedances of the following ambient air quality standards: 1) 1-hour CAAQS for NO₂; 2) 24-hour CAAQS and NAAQS for PM₁₀; 3) annual CAAQS for PM₁₀; and 4) 24-hour NAAQS for PM_{2.5} (Impact AQ-2c). In addition, project operations would contribute to exceedances of the annual CAAQS and NAAQS for PM_{2.5}. Implementation of Mitigation Measures AQ-1 and AQ-2 for construction would reduce ambient PM₁₀ impacts to below the 24-hour NAAQS for PM₁₀. Implementation of Mitigation Measures AQ-3 and AQ-4 for operations would reduce ambient PM₁₀ and PM_{2.5} impacts to below the NAAQS for 24-hour PM₁₀ and annual PM_{2.5}. Mitigation Measure AQ-5 would further reduce operations related impacts, but since it is uncertain the extent to which this measure would offset overall project-related vehicular emissions it is not possible to calculate what those reductions might be, these exceedances would remain significant. Greenhouse gas emissions from project operations would exceed 10,000 per year of CO_{2e} even with mitigation. Therefore, all other construction and operational impacts identified above would remain as significant and unavoidable.

Visual Resources/Glare: Buildout of the proposed waste disposal area (i.e., increased landfill footprint and elevation) would obstruct views of important visual resources experienced from State Route 118, resulting in a significant and unavoidable impact (Impact VIS-1). Similarly, buildout of the proposed waste disposal area would be visible from the proposed Alamos Canyon Trail looking eastward. As the final landfill contour would extend above the existing horizon defined by the Santa Susana Mountain ridgelines and due to the close proximity of the viewer on the trail, impacts on visual resources from the proposed Alamos Canyon Trail vantage point would be significant and unavoidable.

Agricultural Resources: The proposed project would convert approximately 165 acres of open space/rural designated farmland of local importance to industrial/commercial uses resulting in a significant and unavoidable impact on agricultural.

Farmlands of local importance extend directly west of the project site in Alamos Canyon. Unmitigated project construction and operational emissions would produce a maximum ambient 24-hour PM₁₀ impact of 543 µg/m³, which would exceed the 24-hour PM₁₀ CAAQS of 50 µg/m³. The overwhelming majority of this impact would occur from fugitive dust generated from proposed earth-moving activities and the operation of mobile sources on paved and unpaved surfaces. The maximum ambient impact estimated for project PM₁₀ and therefore fugitive dust emissions would occur within the farmlands of local importance directly west of the project site in Alamos Canyon. While the 24-hour ambient background concentration of fugitive dust within these areas is not known, it is expected to be somewhat less than 49 µg/m³. Therefore, unmitigated proposed construction and operation would increase ambient fugitive dust levels by more than 10 percent from background levels to farmlands within one-half mile of the project site. Implementation of Mitigation Measure AG-2 would reduce impact from fugitive dust to agricultural resources. However, mitigated proposed construction and operation would increase ambient fugitive dust levels by more than 10 percent to

farmlands within one-half mile of the proposed project site, resulting in a significant impact.

Geology and Seismic Hazards, Mineral Resources, and Paleontological Resources: The proposed project would cause the loss of scientifically important fossils and associated geologic data, resulting in a significant impact on paleontological resources (Impact GEO-8). The ongoing Paleontological Mitigation Program provides a high degree of mitigation for the existing landfill operation. In addition, this program creates a database necessary to determine the need for additional long-term monitoring. Implementation of such monitoring, as outlined in Mitigation Measure GEO-1, would mitigate many of the paleontological impacts of the project. However, since any such program would only recover a small sample of the total number of fossils potentially disturbed by landfill operations, the overall impact of the proposed project on paleontological resources would be considered significant and unavoidable.

Recreation Facilities: Because the County does not have a policy or ordinance in place requiring an applicant to pay a recreation impact fee or dedicate public easements, there is no legal authority to impose a fee or a mechanism to ensure that fees collected would mitigate impacts to recreation. There is therefore no feasible mitigation for the recreation demand created by additional project employees. Since there are no measures that would feasibly mitigate significant project impacts to future development of recreational facilities, impacts to recreation remain significant and unavoidable.

Unresolved Concerns

First, the Final EIR has not addressed Moorpark's concerns relative to traffic analysis. The EIR traffic analysis should analyze impacts for the entire distance of the generated truck trips, not just the truck trips in the vicinity of the landfill. The primary east to west transportation corridor through Moorpark is via State Route 118 (Los Angeles Avenue), which is a surface street in Moorpark. Additional refuse trucks traveling along Los Angeles Avenue, Moorpark's main arterial, would affect both residences and businesses that front on this street. This could be a stronger negative effect than additional refuse truck trips from the east, which would likely travel on the SR-118 freeway through Simi Valley to the Madera Avenue off ramp, separated from local land uses by grade and partially by soundwalls. This issue has not been analyzed in the Final EIR. The Final EIR states that no significant transportation related impacts are anticipated, therefore no mitigation monitoring for transportation impacts is required. Traffic impacts to Moorpark have not been adequately analyzed and no mitigation is offered at this time. Since the landfill is not in Moorpark's "Area of Interest," no traffic impact mitigation fees would be paid to Moorpark as a result of the project.

The EIR's proposed response to Moorpark's comment on traffic indicates that trips through Moorpark would be so far away that they would be speculative to estimate and analyze. However, due to the limited means in which refuse trucks from the west can get to the landfill, almost all would come through Moorpark on Los Angeles Avenue. If the Toland Landfill is not expanded or replaced after its estimated closure date of 2027,

one could expect all refuse trucks from the west that now use the Toland Landfill to come through Moorpark on Los Angeles Avenue to get to the Simi Valley Landfill. With the proposed expansion, this landfill would have the capacity to accommodate these trips. In addition, the Toland closure date is within the proposed term of the Conditional Use Permit for the expanded Simi Valley Landfill, and therefore, the impacts must be addressed. These additional truck trips through Moorpark would not only pose traffic impacts, but land use impacts as well, as this increase in refuse truck traffic would not be compatible with the residential and commercial development of Los Angeles Avenue.

The visual impacts of the proposed project, primarily from the 118 Freeway have not been mitigated satisfactorily and this is of importance to Moorpark because the landfill will be clearly visible to our residents when traveling eastbound on 118 Freeway. The increase in the landfill footprint and overall height at build out is of concern, as the footprint increases it should be adjusted so that the height of the landfill is reduced not increased.

Appendix K of the Final EIR is comprised of a Waste Capacity Study, (Attachment 8), which indicates that 36% of the existing waste delivered to the existing landfill, comes from outside of Ventura County. The Final EIR does not adequately analyze the impacts of the imminent and potential closures of other regional landfills as cumulative impacts on the Simi Valley Landfill expansion proposal. A final decision should not be made on the project until this has been analyzed in greater detail.

In addition, the biological impacts do not appear to have been mitigated satisfactorily. The loss of Federal or California Endangered botanical species are to be mitigated at a 1:1 replacement ratio and this seems inadequate. Also, compensation for the loss of critical habitat for the coastal California gnatcatcher is only proposed to be mitigated at a 1:1 replacement ratio and this seems inadequate. Mitigation states that Waste Management is to enhance and manage habitat in and adjacent to the Alamos Canyon wildlife corridor with a tool such as a conservation easement over such areas, but the areas seem generally undefined. The preservation of the wildlife corridor in this area is of significant importance. Furthermore, the property owned by Waste Management within the City of Moorpark does not appear to have been addressed in the EIR. This property could aid in preserving wildlife movements, reduce impacts related to potential odor migration and visual impacts as viewed from areas of Moorpark, to the west of the landfill, and provide a buffer to the city.

As discussed above, the proposed Final Environmental Impact Report falls short as a decision-making tool as it does not address the reasonably foreseeable impacts that expansion would have on Moorpark, including traffic, visual, odor, and biological impacts, and it does not analyze cumulative impacts of upcoming landfill closures if the daily allowable capacity is increased. The EIR needs to be corrected before a decision can be made on this project.

STAFF RECOMMENDATION

Direct staff to provide a comment letter to the County Planning Commission to address the unresolved issues in the Environmental Impact Report.

ATTACHMENTS:

1. December 1, 2010 City Council Staff Report Update on the Simi Valley Landfill and Recycling Center Expansion Project (without attachments)
2. The County staff recommended Reduced Capacity Project Alternative for the SVLRC
3. Proposed and Existing boundary of the SVLRC
4. December 28, 2009, staff comment letter to Ventura County, Planning Division on the Draft EIR for the Simi Valley Landfill with Response to Comments from Final EIR
5. Project Description of the Final EIR, dated December 2010
6. Final EIR Mitigation Monitoring and Reporting Program, (MMRP)
7. Errata to the Final EIR
8. Appendix K of the Final EIR - Waste Capacity Study

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: Honorable City Council

FROM: David A. Bobardt, Community Development Director
Prepared By: Joseph R. Vacca, Principal Planner



DATE: November 16, 2010 (CC Meeting of 12/01/2010)

SUBJECT: Consider an Update on the Simi Valley Landfill and Recycling Center Expansion Project, Located on the Waste Management Property in the County of Ventura, Adjacent to the City of Simi Valley's Western City Boundary

BACKGROUND

On November 3, 2010, Mayor Pro Tem Mikos requested that staff prepare a report to the City Council regarding the status of the environmental and entitlement application for the Simi Valley Landfill and Recycling Center, which is proposed on the existing Waste Management property, located adjacent to the City of Simi Valley's western City boundary.

DISCUSSION

On November 6, 2007, staff sent Becky Linder, of the County of Ventura Resource Management Agency – Planning Division, a letter commenting on the proposed Major Modification to CUP-3142 – Simi Valley Landfill expansion, (Attachment 1). Staff indicated that a project of this scale could impact the residents and businesses in Moorpark, based on the potential for additional truck trips through the City. The traffic analysis for this project should use actual current truck trips as a baseline, not permitted truck trips, and it should analyze impacts for the entire distance of the generated truck trips, not just the truck trips in the vicinity of the landfill. A realistic passenger car equivalency (PCE) value should also be used for the trucks in the analysis. Cumulative impact analysis should consider the traffic, noise, and air pollution (including odor) increases from the trucks in the context of other proposed projects that would also increase truck traffic through Moorpark, notably the sand and gravel mines and organics processing operations, which have applications on file with the County, as well as any planned expansion of activities at the Port of Hueneme.

Subsequently, on January 18, 2008, staff sent a letter to Dan Klemann, Senior Planner, Ventura County Resource Management Agency, Planning Division, regarding the City's receipt of a Notice of Preparation of the Draft EIR on the proposed landfill expansion, (Attachment 2). Once again, the letter reiterated that a project of this scale could impact the residents and businesses in Moorpark, based on the potential for additional truck trips through the City. Staff also stated that additional comments will be provided by the City on the Draft EIR for this project when it is available and requested that the County include the Moorpark Community Development Department on the notification list for environmental review and for any hearings regarding this project proposal.

On December 28, 2009, staff sent Becky Linder, Ventura County Resource Management Agency, Planning Division, a comment letter on the Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center. The comments were specific to Chapter 3.6 – Visual Resources/Glare and Chapter 3.11 – Traffic and Circulation, (Attachment 3). The comments were intended to raise issues that should be addressed in the Final EIR.

On July 27, 2010, new and revised sections of the Draft EIR for the Simi Valley Landfill expansion were recirculated for public comment with comments due September 9, 2010. The recirculation was limited to new and revised sections of the EIR that addressed some changes to the operations, air quality calculations (including greenhouse gas analysis), impact on housing needs from additional employees, and infeasibility of mitigation related to park/recreation in-lieu fees. Staff did not find that these issues have a direct effect on the City of Moorpark and staff did not add to previous comments, originally sent on December 28, 2009. Staff also indicated that the City would provide comments on the proposal itself after the Final EIR was reviewed. Based on the recirculation, the Final EIR will most likely not be available until early 2011.

The County still needs to complete the Final Environmental Impact Report. Once it is complete, a draft of the Final Environmental Impact Report (FEIR) will be presented to the County's Environmental Report Review Committee (ERRC) to review the adequacy of the FEIR and make a recommendation for certification on only the environmental analysis, not the merits of the project, to the County Planning Commission.

On November 15, 2010, staff contacted Peter Lyons, Director of Simi Valley Planning Division under the Department of Environmental Services to discuss the status of Simi Valley's review and commenting on the Draft EIR for the – Simi Valley Landfill expansion. Mr. Lyons indicated that the City of Simi Valley created an extra territorial review process for review of the Draft EIR for the landfill expansion. The extra territorial review process was created by the Simi Valley City Council to facilitate and enhance the review process outside of Simi Valley's City limits, understanding that the project has the potential to affect the City. The extra territorial review process included the presentation of the Draft EIR to all four of Simi Valley's Neighborhood Councils, the Planning Commission and the City Council for review and comment. On December 9, 2009 the City of Simi Valley sent Becky Linder, Ventura County Resource Management

Agency, Planning Division, a comment letter on review of the Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center, (Attachment 4). On December 18, 2009, Simi Valley staff sent the County a comment letter on behalf of the extra territorial review of the Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center, (Attachment 5). On September 7, 2010, Simi Valley staff sent the County a comment letter on review of the Recirculated Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center, (Attachment 6).

In speaking further with Mr. Lyons, he also indicated that there has been the creation of a citizen advocacy group known as the Simi Valley Landfill Task Force, who believes the Draft EIR is inadequate in many respects. Three documents from the Simi Valley Landfill Expansion Task Force (Attachment 7) demonstrate their position on the adequacy of the Draft EIR and Recirculated Draft EIR.

Copies of the original Executive Summary of the Draft EIR, dated September 9, 2009 and the Executive Summary of the Recirculated Draft EIR, dated July 2010, are also provided, (Attachment 8).

Staff recommends that if the City Council wishes to provide comments on the project at this time, that the comments be provided as preliminary comments with the ability for City Council to provide additional comments once the Final EIR has been prepared.

FISCAL IMPACT

None

STAFF RECOMMENDATION

Direct Staff as deemed appropriate.

ATTACHMENTS:

1. November 6, 2007, staff letter to Ventura County, Planning Division, on the Simi Valley Landfill
2. January 18, 2008, staff letter to Ventura County, Planning Division on the Notice of Preparation of the Draft EIR for the Simi Valley Landfill
3. December 28, 2009, staff comment letter to Ventura County, Planning Division on the Draft EIR for the Simi Valley Landfill
4. December 9, 2009, Simi Valley letter to Ventura County, Planning Division, on review of the Draft EIR for the Simi Valley Landfill

5. December 18, 2009, Simi Valley letter to Ventura County, Planning Division, on behalf of the extra territorial review of the Draft EIR for the Simi Valley Landfill
6. September 7, 2010, Simi Valley letter to Ventura County, Planning Division, on review of the Recirculated Draft EIR for the Simi Valley Landfill
7. Task Force key points on the Draft EIR; Task Force comments to Draft EIR; and Task Force comments to Recirculated Draft EIR
8. Original Executive Summary of the Draft EIR, dated September 9, 2009 and the Executive Summary of the Recirculated Draft EIR, dated July 2010

**SIMI VALLEY LANDFILL AND RECYCLING CENTER (SVLRC) EXPANSION
PROJECT – REDUCED CAPACITY PROJECT DESCRIPTION
CASE NO. LU07-0048 (MAJOR MODIFICATION NO. 8 TO CUP 3142-7)**

The proposed project consists of a request for a Major Modification to Conditional Use Permit (CUP) Case No. 3142-7 in order to allow the following activities at the Simi Valley Landfill and Recycling Center (SVLRC):

- a. Accept non-hazardous and inert refuse as defined by California Code of Regulations (CCR) Title 27, Section 20220 for non-hazardous waste and Section 20230 for inert waste;
- b. Place non-hazardous and inert material other than temporary soil stockpiles within the limits of the proposed waste fill area;
- c. Excavate cover material within the proposed excavation areas and contours;
- d. Accept and dispose sewage sludge, as defined by Item “a” above, consistent with the requirements of the Los Angeles Regional Water Quality Control Board;
- e. Fill the refuse columns based on the proposed phasing plans;
- f. Complete final cut slopes as shown in the proposed site plan;
- g. Construct access/landfill roads; and,
- h. Receive recyclable materials such as green waste, clean soil, construction and demolition related materials, or Alternative Daily Cover (ADC) for processing and/or stockpiling and use on-site (including treated auto shredder waste or any other ADC as approved by the appropriate regulatory agency).

The CUP also will allow the applicant to construct the facilities and operate the SVLRC in the manner described below.

Disposal Area Physical Limits

The SVLRC CUP boundary will expand from 297 acres to 887 acres to accommodate:

- An expansion of the existing disposal footprint from 185 acres to 367.5 acres;

- An increase in waste capacity from 43,500,000 cubic yards (34,800,000 tons) to approximately 108,000,000 cubic yards (86,500,000 tons), for a net increase of 64,500,000 cubic yards (51,700,000 tons); and,
- Approximately 519.5 acres to be used as a buffer around the disposal footprint.

The buffer area surrounding the landfill will primarily consist of open space areas, but will also include access roads, material and equipment storage yards, mitigation areas, recycling facilities and equipment, and drainage structures.

The final grades will increase from the currently permitted fill elevation of 1,118 feet above mean sea level (msl) to approximately 1,200 feet above msl, for a net increase of 82 feet above msl. The increase in elevation will begin with lower elevations within the southern portions of the project site (i.e., within the existing landfill footprint) to the maximum elevation within the expansion area to the north. The fill operation will be completed in four phases. Phase I will include additional filling of the existing landfill area, while Phases II through IV will include filling the expansion areas. The landfill footprint will be located between existing ridgelines, which vary between approximately 1,000 and 1,350 feet above msl, and the fill areas will be designed to blend with the adjacent hilltops and ridges. After closure of the landfill, the applicant will revegetate the site with native drought-tolerant vegetation to stabilize the final cover and prevent erosion.

Operational Limits

The proposed project will not alter the current combined permitted limit of 9,250 tons per day (TPD) for all incoming materials, which include both municipal solid waste (MSW) and recyclables. However, the allocation of material types will change from 3,000 TPD of MSW and 6,250 TPD of recyclables, to 6,000 TPD of MSW and 3,250 TPD of recyclables.

Ancillary and Support Facilities¹

The SVLRC Expansion Project includes the construction and use of the following ancillary and support facilities. The facilities will be located on approximately 30 acres (designated as the support/ancillary facilities area) within the existing CUP boundary. The buildings associated with these facilities will be constructed to meet (at a minimum) the Silver Level under the Leadership in Energy and Environmental Design (LEED[®]) Green Building Rating System, developed by the U.S. Green Building Council. The applicant will remove

¹ The Reduced Capacity Project Alternative includes all of the buildings and structures that were included in the original, proposed project description. Please see the plans for these facilities which are included at the end of this project description. For visual simulations of these facilities, please see Chapter 2 of the Final Environmental Impact Report (FEIR), which is available on-line at: <http://www.ventura.org/rma/planning/ceqa/eir.html>.

the facilities upon cessation of the landfill and/or transfer operations. The ancillary and support facilities are as follows.

Material Recovery Facility (MRF)/Recyclables Transfer Facility (RTF)

The facilities area will include a MRF/RTF to enhance recycling capabilities for the community. The MRF/RTF will be located on approximately two acres and will be comprised of a 50,000 square foot, 35 foot tall building for recycling activities. The facility will accommodate the front-end processing of up to 500 TPD of source separated recyclables and/or the transfer of recyclables to off-site locations for further processing. Build-out of the facility to the maximum capacity of 500 TPD will be completed in phases based on the volume of recyclable materials received. The facility will be a partially enclosed structure with a concrete tipping floor for initial receipt of recyclable material. Light and heavy equipment including loaders, grapples, and sweepers will be used within the MRF/RTF. Processing of recyclables may include hand and/or mechanized sorting (using conveyor-sort lines, trammels, screens, bailers, etc.) and shipping of processed material for off-site advanced processing/sale. Pre-sorted recyclables may be immediately reloaded into transfer vehicles without on-site processing, for marketing at off-site facilities. The operating hours will be limited from 6:00 AM to 8:00 PM daily, other than recognized holidays, 312 days per year

Public Household Hazardous Waste Collection Facility – Simi Valley Environmental Collection Center (SVECC)

The project includes the construction and use of a public household hazardous waste collection facility, which will accept items such as household paints, solvents, antifreeze, flammables, and electronic waste. An approximately 750 sq. ft. building, approximately 25 feet in height and attached to the MRF/RTF building, will house the public household hazardous waste collection facility. The facility will contain two to four skid-mounted units for the storage of materials collected from the public. The operating schedule for this facility will be based on agreements and funding from State and local agencies.

Waste Hauling Yard Relocation

The project includes relocating the GI Rubbish refuse hauling operation, which is currently located at 195 West Los Angeles Avenue in Simi Valley, to the SVLRC. The operation of the waste hauling yard will involve 250 refuse vehicles as well as support vehicles and equipment. Relocation of the waste hauling yard will entail construction of new facilities to be shared by hauling and landfill operations, including a main office facility and employee parking and vehicle maintenance facility. The facilities will be located on approximately 15 acres within the proposed 30-acre support/ancillary facilities area.

Office Building

The project includes the construction and use of an approximately 25,000 square foot, 32 foot tall, two-story, main office building located within the proposed 30-acre facilities area. The main office will accommodate up to approximately 150 office personnel for the landfill, MRF/RTF, and GI Rubbish. The office building will include staff/management offices, a conference room, a dispatch location, a driver

locker/bathroom/shower facility, a customer service area, a break room/lunchroom, and a visitor/environmental education center. The environmental education center will be used for tours and site visits to educate visitors about the landfill, hauling operations, recycling, and renewable energy.

Heavy Equipment and Vehicle Maintenance Facility

The project includes the construction and use of an approximately 30,000 sq. ft., approximately 39 feet in height, heavy equipment and vehicle maintenance facility, which will be constructed within the proposed 30-acre support/ancillary facilities area. The building will consist of enclosed bays, a parts/supplies room, maintenance offices, employee restrooms, and a break room. The facility will be used for routine maintenance and repair of the hauling vehicle fleet and heavy equipment associated with operation of the MRF/RTF and the landfill. The heavy equipment and vehicle maintenance facility area will be equipped with a vehicle and equipment wash rack, a paint booth for containers and vehicles, and fueling facilities. The applicant will use facility design features and Best Management Practices to prevent the discharge of pollutants to storm water from the Heavy Equipment and Vehicle Maintenance Facility.

New Entrance Road, Scales, and Scalehouse

The project includes an expansion of the existing entrance road to accommodate three inbound queue lanes and one bypass lane within the gates of the SVLRC. The applicant will construct three inbound scales and one outbound scale, as well as a new scale house facility, for processing and weighing all vehicles entering the site.

Recycling and Resource Recovery/Conversion Areas and Facilities

Construction and Demolition (C&D) Debris Recycling

The project will include processing of up to 500 TPD for C&D debris recycling. The C&D debris recycling area will migrate within the waste disposal footprint depending on operational considerations as each phase of the landfill is developed. Vehicles containing construction and demolition materials as defined by the California Code of Regulations [Title 14, §17381(e)] will be routed to the C&D debris sorting operation. The applicant will remove recyclable material either by hand or machine for further processing on- or off-site. The applicant will grind residual material meeting the definition of C&D alternative daily cover (ADC) for use on the active face. The applicant will implement dust control measures to manage fugitive dust. The applicant will remove refuse from the C&D loads, and dispose the loads within the landfill working face. The hours of operation will be from 6:00 AM to 8:00 PM, daily, except holidays, 312 days per year.

Expanded Green Waste Processing Facility

The project includes a 10-acre green waste processing facility. The greenwaste processing area will receive up to 500 TPD of green material. The applicant will remove most of the processed materials off-site after chipping. The applicant will use material that remains on-site for mulch (erosion control) and/or ADC. The applicant will apply dust control during green waste processing to control fugitive dust. The project does not

include composting. The hours of operation will be from 6:00 AM to 8:00 PM, daily, except holidays, 312 days per year.

Expanded Landfill Gas to Energy (LFGTE) Operations

The project includes the installation of up to three additional LFGTE generation systems similar to those currently located at the SVLRC. These systems will use excess landfill gas generated by the SVLRC, which otherwise would be lost through flaring, to generate additional electricity. Electricity generated from these additional systems will be used internally to power new and expanded buildings and facilities with the excess sold to the local utility grid and/or to support a LFGTLNG facility at the SVLRC. The expanded LFGTE systems will be located adjacent to the existing LFGTE operation and flare station in the southwest portion of the landfill CUP boundary.

The electrical generation systems will operate continuously 24 hours a day, seven days a week, 52 weeks a year, except when maintenance activities occur. Annual maintenance, including cleaning burner tips and flame arrestors, as well as inspecting the refractory and calibrations, will require the flares to be down for a total of six to eight hours throughout the year. The flares (and engines) will also be taken offline periodically (approximately one to 1.5-percent of the time annually). The project also includes the continued use of an existing LFGTE facility, for the generation of electricity that is used onsite. The facility is part of the SVLRC landfill gas control system and includes two pre-packaged 1.35-megawatt (MW) electrical generation systems. The LFGTE facility maintains the SVLRC onsite load requirement and the SVLRC provides the remaining electricity to local utility companies.

Landfill Gas to Liquefied Natural Gas (LFGTLNG) Facility

The project includes the construction and operation of a LFGTLNG facility located just north of the existing landfill gas flare station. The facility will treat landfill gas to remove impurities, condense the gas to a liquid phase by chilling, separate out the natural gas component, and store the gas in cryogenic tanks for use as a transportation fuel to power heavy-duty landfill vehicles including sanitation trucks. The proposed facility will produce up to 18,000 gallons of liquefied natural gas per day. The applicant will treat and liquefy landfill gas for use in heavy-duty vehicles, such as sanitation trucks, transit buses, and tractor-trailers.

The applicant will store the final liquefied natural gas product in four 15,000 gallon cryogenic tanks. The majority of fuel that will be produced will be exported by tanker truck (typically 10,000 gallon capacity trucks) for use at various locations. The applicant will install a liquefied natural gas fueling station concurrent with the production facility at the landfill. The fueling station will fuel liquefied natural gas trucks that are already in use at the SVLRC for the disposal of waste.

The LFGTLNG facility will operate up to 24 hours per day, seven days per week, and 52 weeks per year. The LFGTLNG facility will be equipped with advanced data monitoring, tracking, and recording hardware and software.

Hours of Operation

The hours of operation for waste receipt and/or disposal, waste handling and/or cover operations, site grading and/or excavation, and other heavy equipment operations on the surface of areas surrounding the refuse column, will be limited to 6:00 AM to 8:00 PM, seven days per week, 365 days per year. Other activities such as landfill gas and leachate collection/disposal, equipment and vehicle maintenance, MRF/RTF operations, and compliance tasks will normally occur over a 24 hour period except for periodic maintenance and other downtime.²

The applicant's operation of the hauling vehicle fleet, will be limited to the hours between 4:00 AM and 8:00 PM, seven days per week, 365 days per year.

The applicant will be able to operate the SVLRC outside of the permitted hours of operation, only after receiving prior written approval from the Planning Director to do so.

Personnel and Equipment

The project will result in an increase from 25 to 50 employees for the landfill operation. The expanded hauling facility will accommodate 250 personnel, of which 25 are currently located at the SVLRC and 225 (135 drivers and 90 customer service, shop, support, and management personnel) are currently located off-site at the existing GI Rubbish hauling facility located in the City of Simi Valley. The project includes the relocation of the existing hauling facility to the SVLRC and the hauling facility personnel will increase from 225 to 350 people (225 drivers and 125 customer service/billing staff, shop, support, and management personnel) over the life of the project. The expanded hauling facility will accommodate 250 refuse collection vehicles. Therefore, the project will increase the number of personnel from 250 to 400 employees, for a net increase of 150 employees.

The operational activities at the SVLRC will increase in relation to the increased disposal tonnage. Therefore, the landfill equipment inventory for the proposed project will increase incrementally.

Water Supply

The project is estimated to require an annual water supply of 174 acre feet (AF), which the Ventura County Waterworks District No. 8 will provide. The existing on-site and offsite water distribution facilities will be upgraded to provide the required fire flow at a maximum velocity of eight cubic feet per second. The applicant will connect the off-site facilities to an existing 16-inch pipeline near the SVLRC.

² See the description of these facilities, above, which specify their days and hours of operation.

Domestic Wastewater

The support/ancillary facilities (described above) will be serviced by an on-site package sewage treatment plant. The package sewage treatment plant will include the installation of wastewater processing equipment on-site. The wastewater processing equipment, which will occupy an approximately 400 sq.ft. area, will physically separate, biologically treat and coagulate, filtrate, and disinfect wastewater generated on-site. The final effluent may be utilized for landscape irrigation and/or dust control. The project does not include the use of a leach field or off-site discharge of domestic waste. The facility will require a permit from the Los Angeles Regional Water Quality Control Board (LARWQCB) and must meet the operation and maintenance guidelines of the California Department of Public Health.

Table 1 (below) includes a comparison of the: existing, permitted landfill operations; original, proposed project description for the SVLRC expansion project; and, Reduced Capacity Project Alternative discussed above.

Table 1 - Comparison of the Existing Landfill, Proposed Landfill Expansion Project, and Reduced Capacity Project Alternative

Total CUP Area - including easements (acres)	297	887	887
Waste Disposal Footprint (acres)	185	371	367.5
Landfill Volume (cubic yards)	43.5 million	123.1 million	108.0 million
Waste Capacity (tons)	29.6 million	98.5 million ²	86.5 million ²
Permitted Daily Disposal (tons)	3,000	6,000 ³	6,000 ³
Permitted Daily Recyclables (tons)	6,250	3,250 ³	3,250 ³
Total Permitted Daily Volume (tons Disposal & Recyclables)	9,250	9,250 ³	9,250 ³
Site Closure Date per existing CUP	2034	Not Applicable	Not Applicable
Est. Closure Date @3,000 tpd Disposal Tonnage	2024	Not Applicable	Not Applicable
Est. Site Closure Date @6,000 tpd	Not Applicable	2051	2047
Elevation Limit	1,118	1,270	1,200
Hours of Operation	6:00AM- 8:00PM	6:00AM – 8:00PM	6:00AM – 8:00PM
LFG to Energy Generators	2	5	5
LFG to LNG Facility	0	1	1
Numbers of Employees	25	400 (incl. GI Rubbish)	400 (incl. GI Rubbish)
Square Footage of Building Improvements	20,000	127,000 (w/consolidated offices & maint. shop)	127,000 (w/consolidated offices & maint. shop)
Permitted Maximum Daily Vehicle Trips (Roundtrip)	822	1,297 ⁴	1,297 ⁴

Source: Psomas 2007

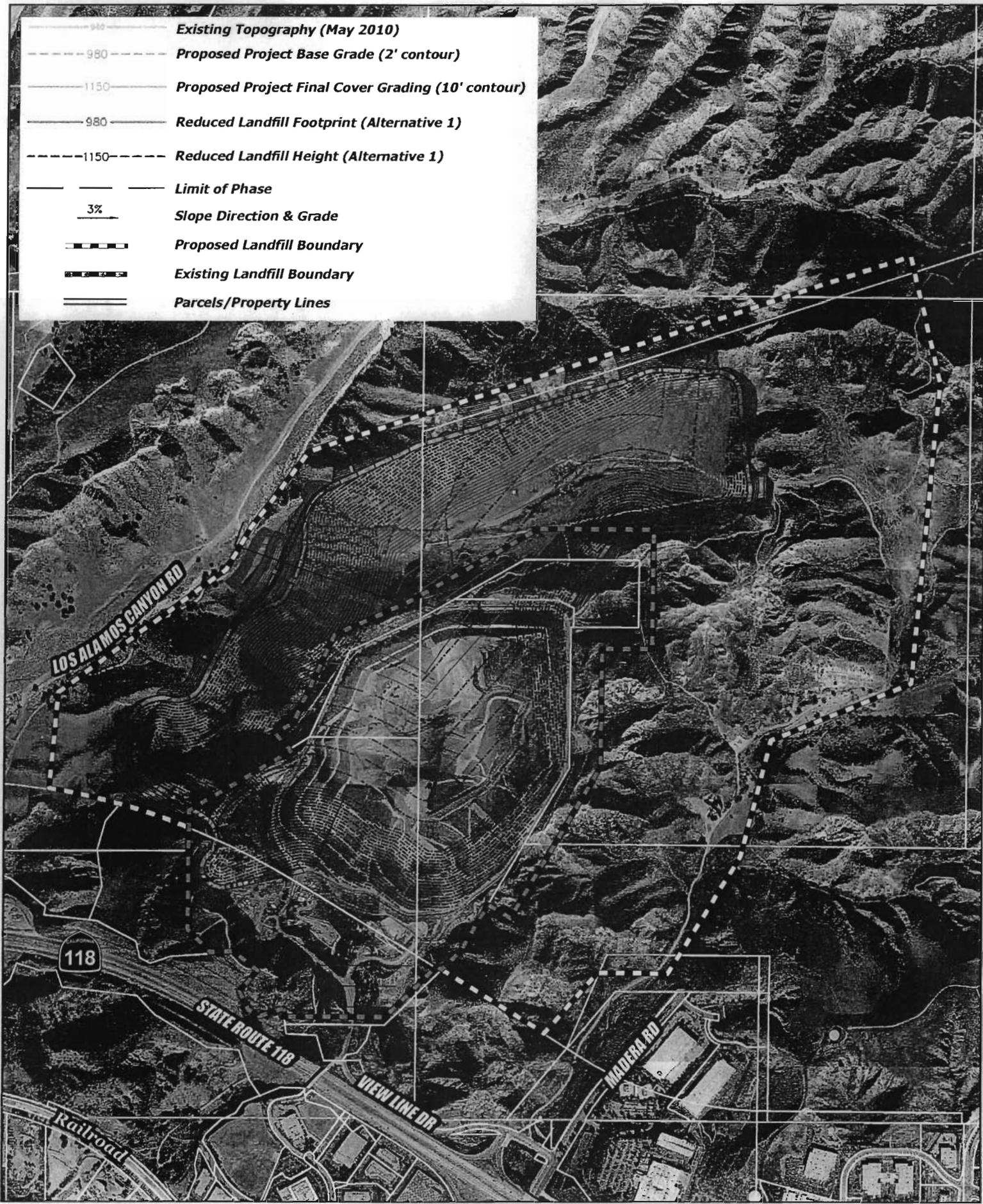
Notes: 1. From existing SWFP.

2. Capacity derived utilizing 1,600 pounds per cubic yard (0.8 tons per cubic yard) density.

3. Combined disposal of MSW and recyclables would not exceed 9,250 tpd.

4. Includes relocation of GI Waste Hauling Facility to SVLRC from off-site.

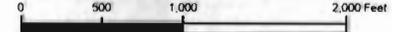
-  Existing Topography (May 2010)
-  Proposed Project Base Grade (2' contour)
-  Proposed Project Final Cover Grading (10' contour)
-  Reduced Landfill Footprint (Alternative 1)
-  Reduced Landfill Height (Alternative 1)
-  Limit of Phase
-  Slope Direction & Grade
-  Proposed Landfill Boundary
-  Existing Landfill Boundary
-  Parcels/Property Lines



Ventura County
 Resource Management Agency
 Information Systems Department
 Map created on 01/26/2011
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 Source: Pictometry, December 2009

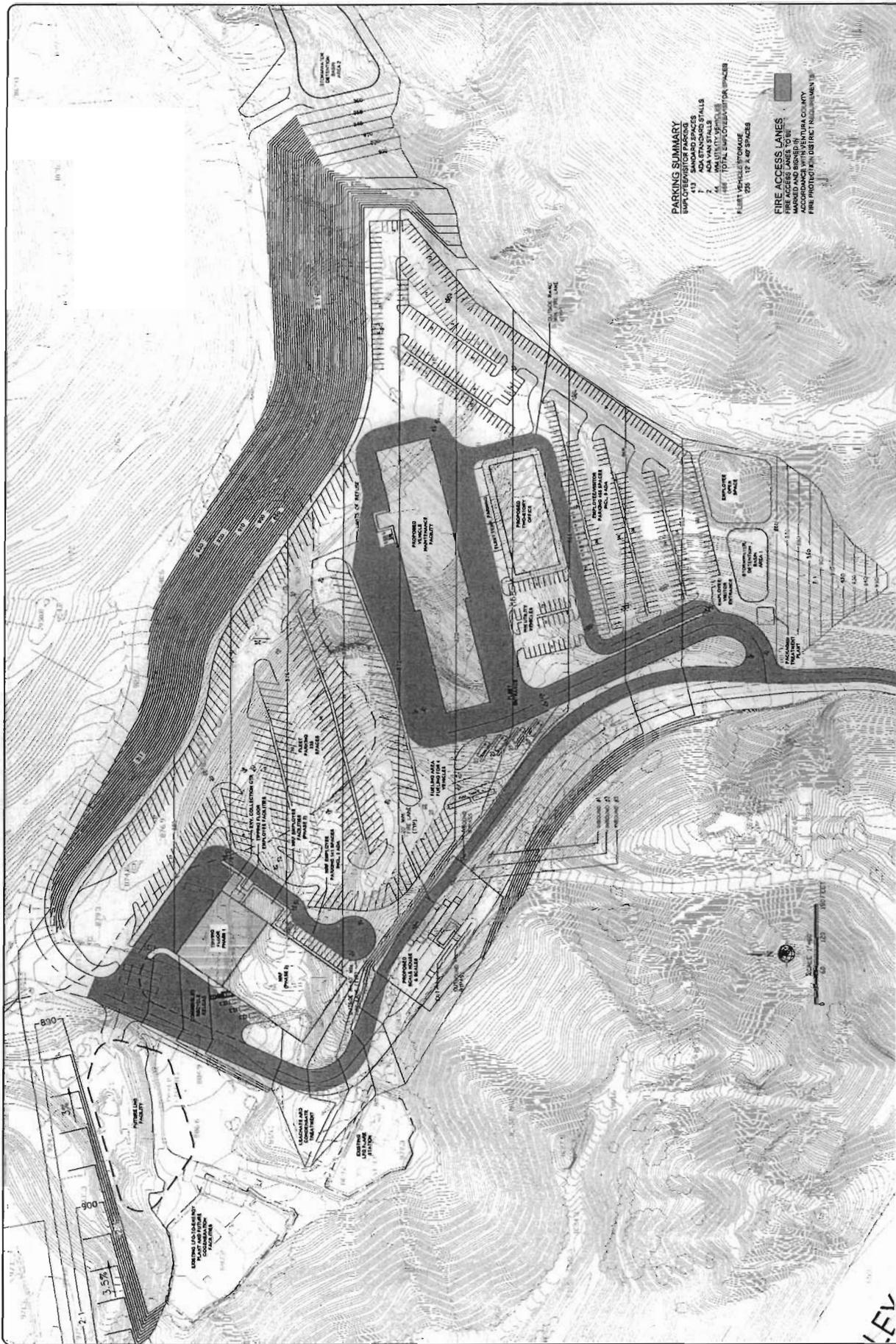


LU07-0048 Simi Landfill Reduced Landfill Footprint and Height (Alternative 1)



Disclaimer: this map was created by the Ventura County Resource Management Agency, Mapping Services - GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein.





PARKING SUMMARY
 EMPLOYEE/VISITOR PARKING
 413 STANDARD SPACES
 7 ADA VAN SPACES
 7 MULTIPLE USE SPACES
 44 TOTAL EMPLOYEE/VISITOR SPACES
 228 TOTAL SPACES

FIRE ACCESS JAMES
 FIRE ACCESS JAMES TO BE PROVIDED IN ACCORDANCE WITH VENTURA COUNTY FIRE PROTECTION DISTRICT REQUIREMENTS

DRAWING NO. **A1.1**
 PROJECT NO. 07-070

**WASTE MANAGEMENT
 SIMI VALLEY, CALIFORNIA
 SIMI VALLEY OPERATIONS CENTER
 SITE PLAN**



DATE	BY	DESCRIPTION
08/11/11	JL	ISSUE FOR PERMIT
08/11/11	JL	ISSUE FOR PERMIT
08/11/11	JL	ISSUE FOR PERMIT
08/11/11	JL	ISSUE FOR PERMIT

CONDITIONAL USE PERMIT SUBMITTAL - NOT FOR CONSTRUCTION



Figure 2.4-1. Proposed and Existing Site Boundaries and Proposed Site Layout



City of Moorpark

COMMUNITY DEVELOPMENT DEPARTMENT: PLANNING – BUILDING AND SAFETY – CODE COMPLIANCE

799 Moorpark Avenue, Moorpark, California 93021 (805) 517-6200 fax (805) 532-2540

December 28, 2009

Ventura County Resource Management Agency, Planning Division
Attn.: Ms. Becky Linder
800 South Victoria Avenue, L#1740
Ventura, CA 93003-1740

RE: **Draft Environmental Impact Report**
Major Modification Application Case No. LU07-0048
Simi Valley Landfill and Recycling Center Expansion

Dear Ms. Linder,

Thank you for the opportunity to review the Draft Environmental Impact Report (EIR) for the proposed expansion of the Simi Valley Landfill and Recycling Center. The Community Development Department of the City of Moorpark has the following comments on this Draft EIR that we would like to see addressed in the Final EIR. CM-1

1. Chapter 3.6 – Visual Resources/Glare

This chapter includes visual simulations from several viewpoints that help the reader to understand the significance of the visual impact of the landfill expansion. Although the EIR rightfully concludes that visual impacts would be significant even after mitigation, a map showing the areas from which the landfill expansion would be visible (i.e. near views, middle view, distant views) would be helpful to understand the full scale of the visual impact. Mitigation should include contour grading techniques along with the landscaping to make the fill slope appear more natural. This chapter should also clarify that the North Park Village Planned Residential Development from which views were analyzed was voted down by the Moorpark electorate before the Notice of Preparation was circulated, and no other development proposal is being considered for this site at this time.

2. Chapter 3.11 – Traffic and Circulation CM-2

In two prior letters to County staff (November 6, 2007 and January 18, 2008), Moorpark Community Development Department staff requested an analysis of truck traffic through Moorpark. The traffic analysis in the Draft EIR did not address this issue. Instead, it focused on traffic impacts at intersections in close proximity to the landfill. With the upcoming closing of Toland Landfill, an expanded Simi Valley Landfill would likely be handling municipal waste from the entire county. Waste haulers from the west county would likely be using the SR-118 (Los Angeles Avenue) to access the landfill as it would be the most direct route. This State highway through Moorpark's commercial corridor is already heavily impacted with heavy truck traffic, which, during a typical midday make up 20-25 percent of all vehicles. Understanding the number of

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JANICE S. PARVIN
Mayor

ROSEANN MIKOS
Mayor Pro Tem

KEITH F. MILLHOUSE
Councilmember

DAVID POLLOCK
Councilmember

MARK VAN DAM
Councilmember

CC ATTACHMENT 4

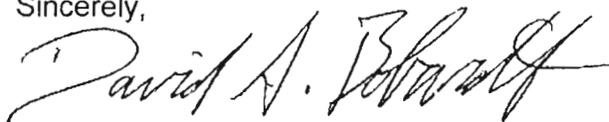
Ms. Becky Linder
December 28, 2009
Page 2

CM-2

↑
additional waste haulers on Los Angeles Avenue is important not only to the traffic analysis, but to the air quality analysis as well, particularly for odorous emissions and cumulative emissions from diesel trucks. The Draft EIR (Section 3.2) only addresses odorous emissions at the landfill itself, not along waste hauling routes, which would change as a result of the landfill expansion.

Please let me know if you have any questions on these comments. Comments on the proposal itself will be provided after review of the Final EIR.

Sincerely,



David A. Bobardt
Planning Director

CC: Honorable Mayor and City Council
Honorable Planning Commission
Steven Kueny, City Manager
Jennifer Mellon, Senior Management Analyst
Chron
File

City of Moorpark, December 28, 2009

- CM-1.** The comment requests a map showing areas from which the landfill could be visible. Figure 3.6-1 provides graphic showing the viewpoint locations which provide an indication of locations from which the landfill can be seen. While this figure does not provide full geographic coverage of visible locations, combined with the photographs it does give a reasonable representation of the overall visibility of the landfill from the area. With regard to contour grading, it is not part of the project proposal and, while it might reduce somewhat the visual effect of the closed landfill, it would not substantially mitigate the visual effects.
- CM-2.** The comment complains that the traffic analysis did not address truck traffic through Moorpark despite requests to do so. As noted in the comment, the analysis focused attention on those intersections closest to the project that would be most heavily impacted by project traffic. Given the diverse routes that trash trucks are likely to use to access neighborhoods and deliver waste to the landfill, estimates to allocate truck trips to intersections very far from the landfill would be speculative. The City of Moorpark is sufficiently distant that confidence in the estimated allocation of truck trips would be very low. In addition, the number of truck trips in the City is not expected to increase by a large amount from current levels and trash trucks represent a small fraction of total truck traffic. Therefore, it would be speculative to attempt to assess truck trips that far from the landfill.

2 Project Description

1 The proposed project (Permit Case No. LU07-0048; Major Modification No. 8 to CUP-3142) is an expansion
 2 of the existing SVLRC. The SVLRC's CUP boundary is proposed to be expanded to encompass 887 acres
 3 within which the waste disposal area would be expanded north and west from its current permitted location to
 4 encompass 186 acres of additional waste disposal area and to increase the total capacity of the landfill from
 5 43.5 to 123.1 million cubic yards. The amount of MSW that could be received per day is proposed to increase
 6 from 3,000 tons to 6,000 tons and the amount of recycling to be reduced from 6,250 tpd to 3,250 tpd. The
 7 total daily tonnage (i.e., combined MSW and recyclables) permitted for the facility would not change.
 8 Additionally, several existing ancillary facilities (defined for the purpose of this project as facilities ancillary
 9 to the active landfill such as the waste receiving and recycling facilities) and support facilities (defined for the
 10 purpose of this project as facilities that support the landfill operation such as administrative offices and
 11 maintenance facilities) would be expanded and new facilities constructed within the landfill CUP boundary
 12 including: office building; heavy equipment and vehicle maintenance facility; waste hauling yard; material
 13 recovery facility/recyclable transfer facility (MRF/RTF); public household hazardous waste collection facility
 14 (SVECC); new entrance road, scales, and scale house; expanded construction and demolition (C&D) debris
 15 recycling processing area; expanded green waste processing facility; expanded landfill gas-to-energy
 16 (LFGTE) facility; and landfill gas-to-liquefied natural gas (LFGTLNG) facility. The proposed project would
 17 require a major modification to the existing SVLRC CUP (CUP-3142-7) issued by the County of Ventura.

18 2.1 Project Location

19 The SVLRC is located in an unincorporated area of southeast Ventura County within the United States
 20 Geological Survey (USGS) 7.5 minute Simi Valley West topographic quadrangle (Figure 2.1-1). The site is
 21 north of the State Route (SR)-118 and west of the Madera Road overcrossing. The site entrance is
 22 approximately 2,800 feet west of Madera Road. The facility address is 2801 Madera Road, Simi Valley,
 23 California 93065.

24 The proposed 887-acre CUP boundary would encompass all or portions of 11 parcels (nine current and two
 25 additional parcels) situated on two lots with a combined size of approximately 1,487.47 acres. The Assessor's
 26 Parcel Numbers (APNs) are noted in Table 2.1-1. Figure 2.1-2 shows the parcels and associated acres within
 27 the existing CUP boundary. The General Plan Land Use Designations are "Open Space" and "Open Space-
 28 Urban Reserve". The property is zoned as "OS-160 acres" (Open Space, 160 acres minimum lot size) and
 29 "AE-40 acres" (Agricultural Exclusive, 40 acres minimum lot size).

Table 2.1-1. Existing and Proposed CUP Expansion Parcels

<i>Assessors Parcel Number</i>	<i>Acres Within Existing CUP Boundary</i>	<i>Acres Within Proposed CUP Boundary</i>
615-0-160-01	0.0	2.7
615-0-150-32	9.4	163.0
615-0-160-13	32.0	403.4
615-0-160-46	17.9	16.4
615-0-150-29	91.8	91.8
615-0-150-33	19.0	19.0
615-0-150-24	58.7	58.7
615-0-150-25	60.9	60.9
615-0-160-44	4.1	60.7
615-0-160-28	0.0	8.6
615-0-150-30	1.4	1.4
TOTAL	295.2	887.1

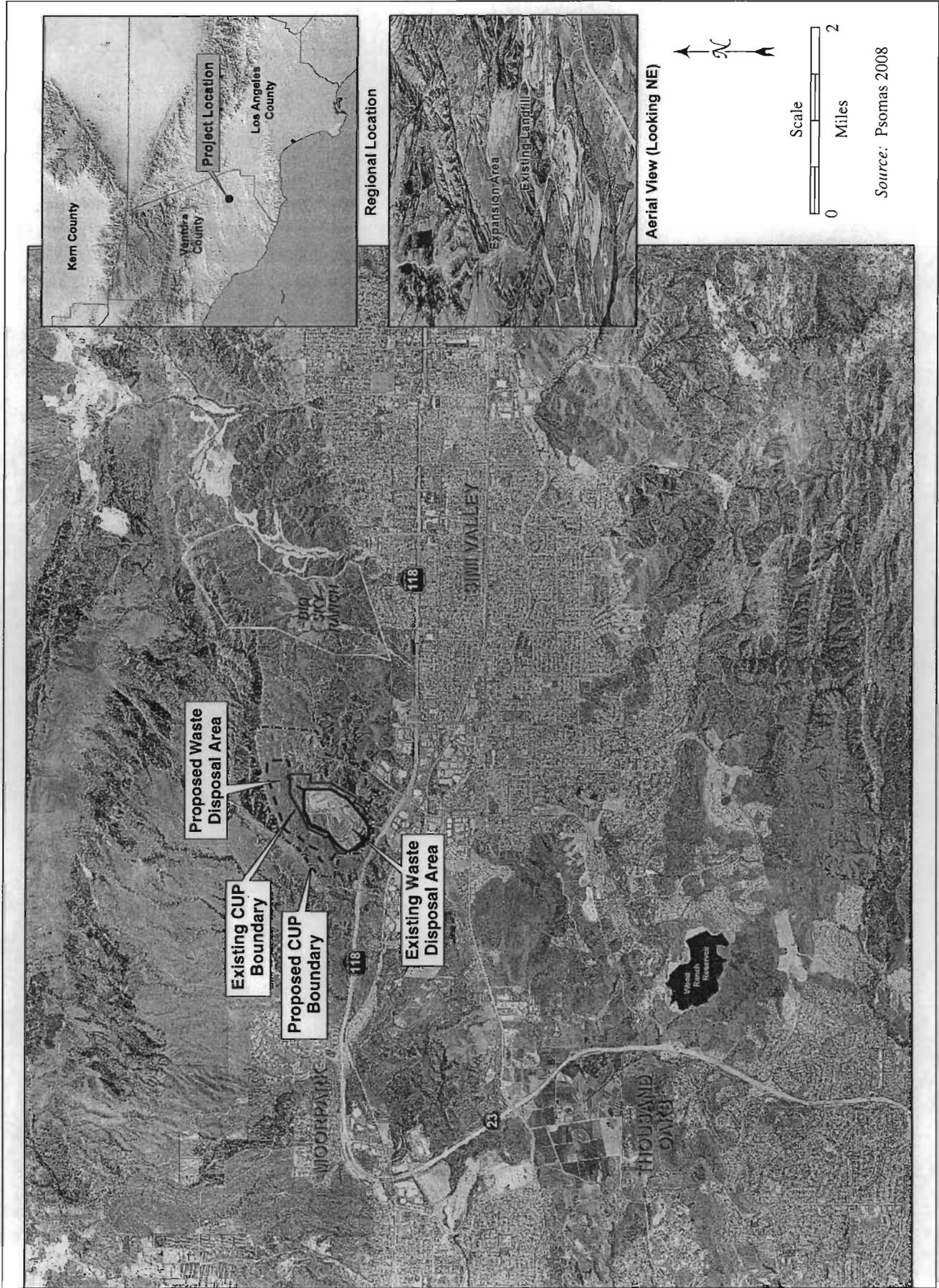
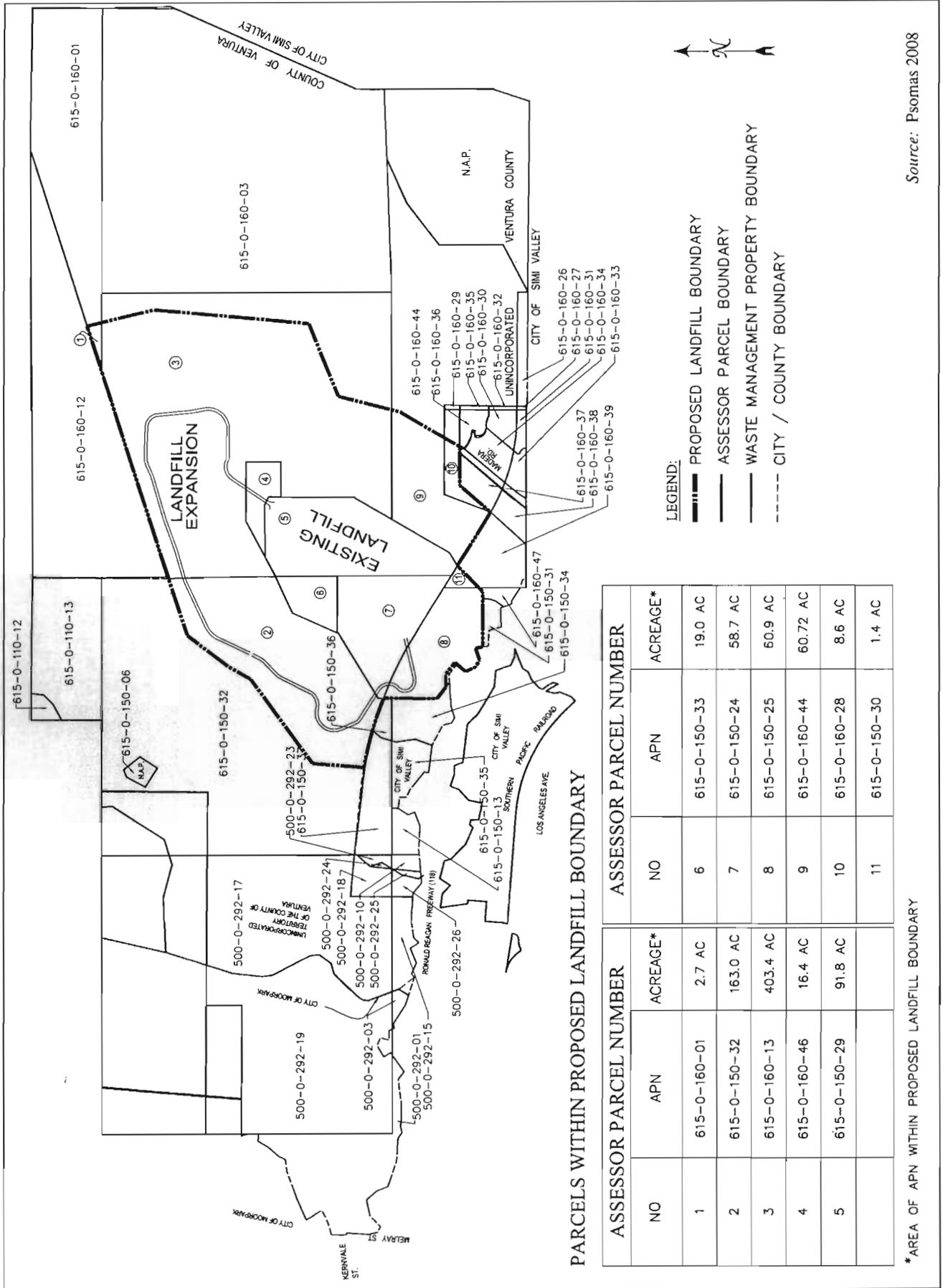


Figure 2.1-1. Project Location



PARCELS WITHIN PROPOSED LANDFILL BOUNDARY

ASSESSOR PARCEL NUMBER		ASSESSOR PARCEL NUMBER	
NO	APN	NO	APN
1	615-0-160-01	6	615-0-150-33
2	615-0-150-32	7	615-0-150-24
3	615-0-160-13	8	615-0-150-25
4	615-0-160-46	9	615-0-160-44
5	615-0-150-29	10	615-0-160-28
		11	615-0-150-30

- LEGEND:**
- +—+—+— PROPOSED LANDFILL BOUNDARY
 - ASSESSOR PARCEL BOUNDARY
 - WASTE MANAGEMENT PROPERTY BOUNDARY
 - - - - - CITY / COUNTY BOUNDARY

* AREA OF APN WITHIN PROPOSED LANDFILL BOUNDARY

Source: Psomas 2008

Figure 2.1-2. Parcel Map

1 The existing SVLRC (i.e., area within the existing CUP boundary) is bound, generally, by Alamos Canyon to
2 the west, Brea Canyon to the east, an unnamed tributary drainage to Alamos Canyon to the north, and SR-118
3 to the south (Figure 2.1-1). Land immediately to the east, north and west of the site is undeveloped and
4 currently zoned open space as designated by Ventura County. SR-118 runs in an east/west direction directly
5 south of the site. There is an area of light industrial and business parks to the south-southeast of the SVLRC.
6 The nearest business is 700 feet from the southern CUP boundary and the nearest residence is approximately
7 one mile from the southeast CUP boundary.

8 **2.2 Site History**

9 **2.2.1 Ownership and Permitting History**

10 In May 1970, the Simi Valley Landfill opened under the ownership of Moreland Investment Company. The
11 site was operated by the Ventura County Public Works Agency (VCPWA) under CUP 3142 initially issued
12 by the County of Ventura Planning Division for a period of five years. This CUP, as periodically revised, is
13 currently in effect for the site. The site also operated under WDRs (Order No. 70-36) issued by the
14 LARWQCB. Order No. 70-36 prescribed WDRs for disposal of non-hazardous wastes (formerly referred to
15 as Group 2 and Group 3 wastes, now referred to as MSW and inert materials, respectively). Order No. 70-36
16 also authorized disposal of hazardous materials (formerly Group 1 wastes, now hazardous wastes and
17 designated wastes) in an approximately 75-acre area near the north end of the site.

18 In July 1972, VCPWA transferred its landfill operations to the Ventura Regional County Sanitation District
19 (later renamed Ventura Regional Sanitation District [VRSD]), which assumed operation of all publicly
20 operated sanitary landfill facilities in Ventura County. The Ventura County Planning Commission issued a
21 modified CUP to VRSD on June 5, 1975 for continued use of the Simi Valley Sanitary Landfill until the
22 designated fill elevations (which ranged from 925 to 1,020 feet) were attained. The modified CUP extended
23 the projected site life of the landfill by approximately 13 years to 1988.

24 In 1980, the State Water Resources Control Board (SWRCB) amended the regulations for land disposal of
25 non-sewerable and hazardous wastes by setting additional standards and guidelines for classification of waste
26 disposal sites. Also in 1980, federal regulations for landfill design and operation were released pursuant to the
27 1976 Resource Conservation and Recovery Act (RCRA). As a result, geologic and hydrogeologic
28 investigations were conducted in 1980, and an inventory of wastes disposed at the site was compiled in terms
29 of types of wastes, types of disposal, and disposal locations. Based on the resulting information, on November
30 13, 1980, Moreland Investment Company (owner of the site) requested an immediate suspension of the
31 disposal of hazardous wastes at the site. After consultation with the Regional Board Executive Officer, VRSD
32 suspended receipt of hazardous wastes, effective November 18, 1980.

33 On January 8, 1983, the Simi Valley Landfill was acquired by Chemical Waste Management, Inc., a wholly
34 owned subsidiary of Waste Management, Inc. (WMI). Waste Management of North America, Inc., another
35 wholly owned WMI subsidiary, is WMI's operating group and includes several divisions nationwide. One of
36 these divisions is WMC. Because the SVLRC accepted only non-hazardous waste, WMI transferred
37 ownership of the landfill from their hazardous waste subsidiary, Chemical Waste Management, Inc., to their
38 solid waste subsidiary, WMC.

39 In May 1983, the LARWQCB adopted Order No. 83-026 prescribing revised WDRs for the landfill and
40 prohibiting disposal of liquids and hazardous wastes. On October 21, 1983, the site obtained a SWFP (No. 56-
41 AA-0007) as a MSW disposal site. The permit allowed overfill of the hazardous waste area (i.e., the former
42 Class I area) with designated wastes and MSW up to the 980-foot elevation contour.

1 In 1989, the current owner (WMC) was granted a major modification of the CUP to expand the site's CUP
2 boundaries to 271.6 acres, expand the footprint of the refuse column to 135.2 acres, and expand the site capacity
3 to 23.7 million cubic yards. These new limits were approved with a site closure date of 2004.

4 On June 14, 1989, the Ventura County Planning Director approved minor Modification No. 1 (CUP-3142-1)
5 to incorporate various accessory structures not authorized under the original CUP entitlement. On June 15,
6 1989, the Planning Commission approved Major Modification No. 2 for various uses and operations
7 described in Condition No. 4 of the CUP, including excavation of cover material, acceptance and disposal of
8 sewage sludge, completion of cut slopes, construction of major landfill access roads, and construction of a
9 new entrance facility complex.

10 On February 26, 1990, the LARWQCB adopted Order No. 90-034, prescribing WDRs for disposal of inert
11 (e.g., clean soils, petroleum-contaminated soils, and concrete) and non-hazardous solid wastes, including
12 dewatered sewage sludge or water treatment sludge. Pursuant to Order No. 90-034, a clay cap was constructed
13 during 1990-91 over all parts of the former Class I area that had received waste.

14 On November 20, 1990, the Planning Director approved Minor Modification No. 3 for the addition and
15 operation of a Resource Recovery Area located within the existing permit boundary. This involved provision
16 of a separate tipping area for concrete/asphalt, wood/green waste, white goods (e.g., refrigerators and stoves),
17 scrap metal, and tires for the purpose of diverting these materials from the landfill for recycling.

18 On September 16, 1993, Minor Modification No. 4 was approved by the Planning Director to change the
19 language of various conditions.

20 In May 1995, Major Modification No. 5 was submitted requesting a permit for a co-composting facility. The
21 proposed modification was later withdrawn by WMC.

22 In December 1995, the CIWMB issued modification of SWFP 56-AA-0007, limiting disposal to 3,000 tpd of
23 municipal solid waste and 3,600 tons per month of acceptable sludges from water and wastewater treatment
24 plants. No limits were placed on acceptance of recyclable materials (Ventura County EHD 1995).

25 On June 29, 2000, the LARWQCB adopted Order No. 00-092, prescribing WDRs for acceptable and
26 unacceptable materials and other requirements for disposal site operations, including the requirements for
27 Monitoring and Reporting Program No. 5643 (LARWQCB 2000).

28 On November 26, 2002, the Ventura County Board of Supervisors approved Major Modification No. 6 for an
29 expansion of the landfill and a time extension to CUP 3142. This included expanding the CUP boundary by
30 25.85 acres, expanding the landfill capacity by 19.8 million cubic yards, expanding the landfill footprint by
31 50.41 acres, and extending the site life of the landfill by 30 years from 2004 to 2034.

32 On August 10, 2003, Minor Modification No. 7 for the addition of a LFGTE facility was approved by the
33 Planning Director.

34 A 2007 addendum to the 2002 Final Supplemental EIR for Major Modification No. 6 of CUP-3142 allowed
35 for Construction and Demolition (C&D) sorting and recycling with the option of grinding (i.e. further
36 processing), the residual to be used for ADC at the Simi Valley Landfill and Recycling Center (SVLRC). A
37 revised Joint Technical Document (JTD) was reviewed by Ventura County Environmental Health Department
38 (EHD) for this additional process and on October 9, 2007 the JTD was accepted and filed with the EHD. EHD
39 submitted the JTD package to the California Integrated Waste Management Board (CIWMB) (now known as
40 the Department of Resources, Recycling, and Recovery, or CalRecycle) on October 9, 2007.
41 CIWMB responded back to EHD in a letter dated October 17, 2007 that the JTD application and amendment
42 was received.

1 In addition to the CUP modifications, to date the County Planning Division has approved 25 Permit
2 Adjustments (PAJs). Some of the recent PAJs include:

- 3 • February 1995. PAJ 19: Expansion of greenwaste asphalt pad.
- 4 • July 1995. PAJ 20: Instituted Sunday closures (except third Sunday of each month).
- 5 • July 1995. PAJ 21: Revised Phase 1 north landscape plan.
- 6 • July 1995. PAJ 23: Revised wind monitoring program.
- 7 • October 1995. PAJ 22: Constructed new internal haul road.
- 8 • February 1996. PAJ 24: Installed above ground gas collection system.
- 9 • October 1996. PAJ 25: Installed revegetation/riparian offset areas for detention/sedimentation basin.
- 10 • August 2000. PAJ 27. Installed Reclaimed Water and Odor Control Systems.
- 11 • November 2000. PAJ 28. Revisions to CUP Conditions.
- 12 • January 2001. PAJ 29. Installation of Gas Flare No. 2.

13 **2.2.2 Historic Hazardous Waste Disposal**

14 As described above, while operated by the VRSD, the Simi Valley Landfill accepted hazardous wastes from
15 1971 until mid-1982 in an approximately 75-acre area near the north end of the site. In practice, only about 25
16 acres was available for disposal since the designated area included slopes and inaccessible ridge tops. Within
17 the former Class I area, approximately nine acres received only hazardous wastes and liquids and 16 acres
18 received both hazardous wastes and municipal refuse.

19 Specific sections of the former Class I area were set aside for the disposal of different waste types. A 100-foot
20 by 100-foot grid system was laid over the Class I area by VRSD to record the location of hazardous wastes
21 disposed within the landfill. Each grid, or cell, was numbered and their locations were marked with stakes on
22 the landfill surface. This system was in use by 1973. Disposal locations for the approximately 1,000 tons of
23 hazardous wastes received in 1971 and 1972 prior to the adoption of this system were not recorded on the
24 load slips (SCS Engineers 1980).

25 From 1971 until 1982, the landfill received approximately 29,000 tons of solid, liquid, and containerized
26 hazardous wastes (LARWQCB 2000). The types of wastes handled included alcohols, solvents, asbestos,
27 caustics, ethylene dichloride, fireworks, grease/oil, drilling muds, contaminated paper and rags, pesticides and
28 pesticide containers, petrochemicals, resins, polychlorinated biphenyls (PCBs), miscellaneous chemicals,
29 hospital wastes, cyanides, industrial and plating sludges, tank bottom sediments, and others.

30 On March 22, 1982, the LARWQCB issued an administrative order to the VRSD prohibiting additional
31 disposal of hazardous wastes and liquid wastes and limiting disposal to MSW. On October 21, 1983, the site
32 obtained a SWFP as an MSW disposal site. The permit allowed overfill of the former Class I area with
33 designated wastes and MSW up to the 980-foot elevation contour.

34 At the onset of this disposal activity in 1971, it was generally not required by permit nor was it within the
35 state of the art to place a liner or leachate collector below the waste. Such was the case at the Simi Valley
36 Landfill, where it has been reported that neither a liner nor a leachate collector were installed beneath the
37 Class I area (Converse Ward Davis Dixon 1980).

38 In 1986, a leachate barrier/collection system was installed at the southerly toe of the landfill in the canyon
39 base to collect alluvial flow potentially impacted by the older unlined areas of the landfill. The system

1 consists of the following elements: 1) a subsurface compacted clay barrier keyed into competent bedrock
 2 extending across the canyon mouth immediately downslope of the landfill toe; 2) a leachate collection
 3 drainage layer, subdrain, and sump installed on the landfill side of the barrier; and 3) a pump, discharge
 4 piping, and storage tank to remove and store leachate collected at the toe barrier. The system collects
 5 approximately 1,000 to 4,500 gallons of leachate per day, which is treated and used for dust control.

6 In 1990, pursuant to LARWQCB Order Number 90-034, a clay cap was constructed over all parts of the
 7 former Class I area that had received waste. A one-foot thick clay cap with a hydraulic conductivity of 1×10^{-6}
 8 centimeters per second (cm/sec) was placed over previously placed cover material throughout the area. A
 9 thicker cap was placed in the northern-most part of the former Class I area, consisting of 4 to 5 feet of
 10 material with a permeability of 1×10^{-6} cm/sec or less¹ which was the regulatory standard at the time. An area
 11 of 1.5 acres within the designated Class I disposal area that had not received any waste was lined with a two-
 12 foot thick clay liner with a hydraulic conductivity of 1×10^{-6} cm/sec prior to the placement of Class III waste
 13 in that location. Prior to the placement of Class III waste over the former Class I area, the clay cap over the
 14 former Class I area was covered with an additional clay liner material and drainage system to collect and
 15 remove leachate from under Class III waste placed above the former Class I disposal area. Leachate from
 16 these areas drains to a perforated pipe which drains into an approximately four acre area (Cell A). Cell A is
 17 lined with a 60-mil high-density polyethylene (HDPE) geomembrane over a one-foot thick- composite (clay
 18 and geosynthetic) clay base liner material with a permeability of 1×10^{-6} cm/sec. Additionally, Cell A
 19 contains a leachate collection and removal system. This provides for leachate collection from MSW placed
 20 above the former Class I area (LARWQCB 2000).

21 **2.3 Existing Landfill Design and Operation**

22 The SVLRC is an existing permitted Class III, non-hazardous MSW landfill owned and operated by WMC.
 23 The boundary of the SVLRC, as defined by the CUP-3142-7 issued by the County of Ventura, encompasses
 24 297 acres of which 185 acres are used for waste disposal and 112 acres are allocated for buffer area (Figure
 25 2.3-1).

26 SVLRC is currently permitted to accept a combined permitted limit of 9,250 tpd which includes a maximum
 27 of 3,000 tpd of disposal material and 6,250 tpd of recyclable material. Recycling operations include tipping
 28 areas for materials such as green waste, asphalt/concrete, white goods (e.g., refrigerators and stoves), tires,
 29 and scrap metal.

30 The existing facilities at the site include an operation and maintenance facility with fuel stations; a scale house
 31 and scales; a landfill gas (LFG) flare station; a LFGTE facility; three portable office structures; and a
 32 condensate knockout and leachate treatment facility. The site generally operates 7 AM to 4 PM, 312 days per
 33 year, but is permitted to operate from 6 AM to 8 PM, 365 days per year. Under the terms of the current CUP-
 34 3142-7, the facility is authorized to operate to a fill elevation of 1,118 feet above mean sea level (msl) and to
 35 continue to receive waste until the designated fill elevations have been reached or until June 2034, whichever
 36 comes first.

¹ On June 17, 1993, the SWRCB adopted Resolution No. 93-62, directing each RWQCB to revise the WDRs of each MSW landfill in its respective region to comply with the federal MSW regulations in 40 Code of Federal Regulations [CFR] Part 258 that are more stringent than California State regulations. To comply with the Resolution, the LARWQCB adopted Order No. 93-062 on September 27, 1993 (LARWQCB 1993).

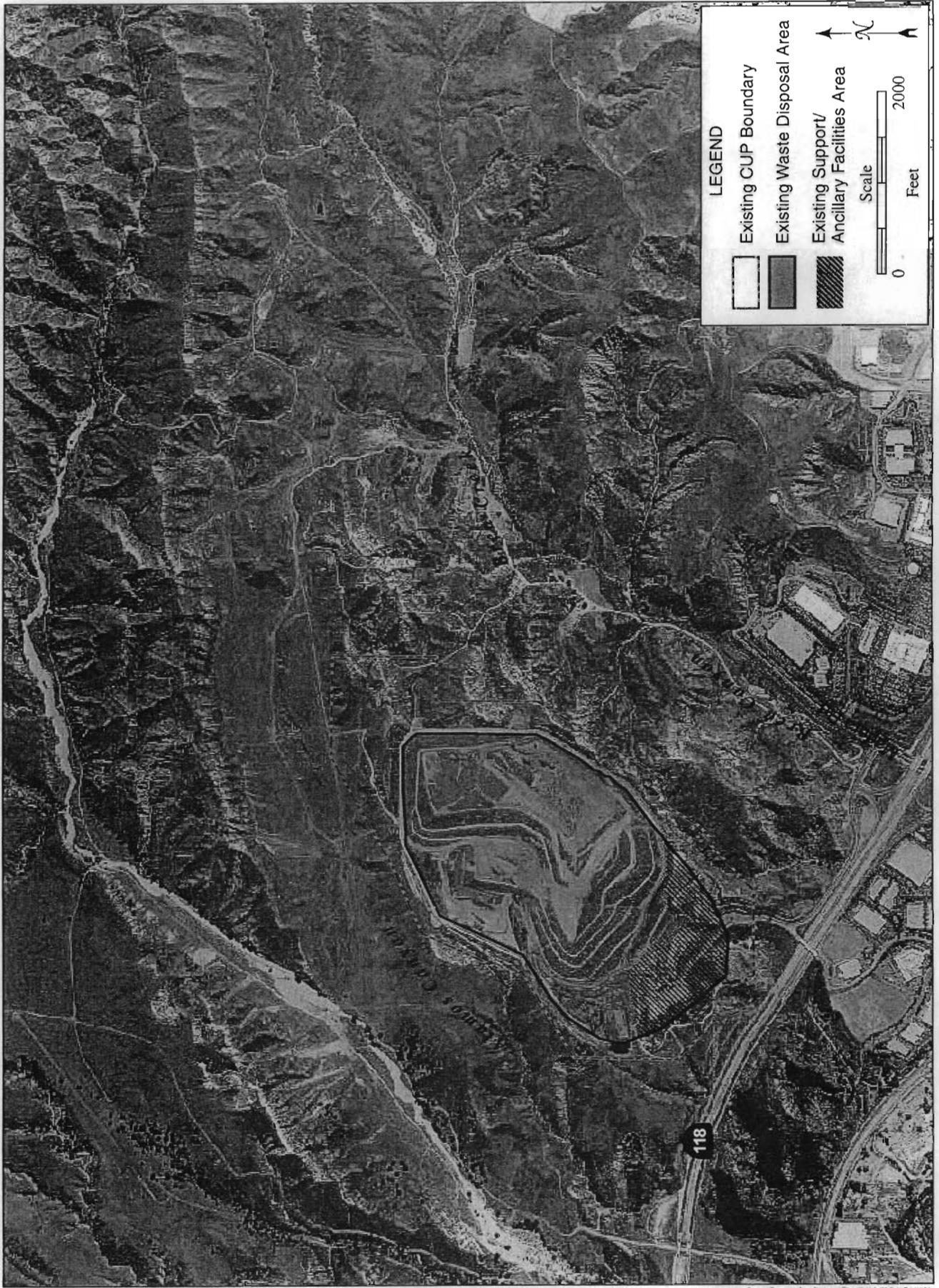


Figure 2.3-1. Site Boundaries

2.3.1 Phased Fill Plan

The waste disposal area at SVLRC is constructed by sequentially excavating areas called cells. A liner system is installed in each new cell to separate waste from the underlying native soil. The liner system, discussed in detail in Section 2.3.4.1, is comprised of seven layers. Waste is accumulated on top of the liner and then compacted with heavy equipment. At the end of each day, bulldozers spread a cover layer of compacted soils or alternative daily cover (ADC) over that day's waste. As the active cell nears capacity, a new cell is excavated and lined. Once the existing cell reaches capacity it is capped with intermediate cover (Section 2.3.2) and the new cell begins receiving waste. The process continues until the permitted disposal area is filled to capacity at which point the entire waste disposal area is brought to final grade and covered with final cover (Sections 2.3.12.1 and 2.3.12.2).

As currently permitted, the waste disposal area within SVLRC would be filled in four phases, starting at the north end of the site and finishing at the south end. Each phase would consist of filling excavated cells and excavating and lining subsequent cells as follows:

- *Phase 1:* Fill Cells B1 and B2 and excavate and line Cell B3;
- *Phase 2:* Complete fill, achieve final grade, and landscape Cells B1 through B3. Excavate and line Cell D;
- *Phase 3:* Fill and achieve final grade for Cell D. Excavate and line Cell C; and
- *Phase 4:* Fill and achieve final grade for Cell C.

At present, Cells A through B have been completed. Cell D has been excavated, lined, and is being filled. Cell C will be excavated and lined once Cell D nears capacity.

2.3.2 Daily and Intermediate Cover

Regulations specify that the active face of the landfill (i.e., the working surface of a landfill upon which solid wastes are deposited during the landfill operation) be covered at the end of each working day with at least six inches of compacted soil (daily cover) or equivalent (i.e., ADC). In addition, if a face is to be left for more than 180 days, a layer of intermediate cover at least 12 inches deep, or equivalent, must be placed over the area. At the SVLRC, the active face receives a daily cover of compacted soil or an approved ADC. Various types of ADC materials are approved for use at SVLRC, including geosynthetic tarps, processed green waste, ground C&D, and treated auto shredder waste. Use of approved ADC materials minimizes the amount of soil consumed for daily cover. Daily placement of soil cover or ADC is applied to control vectors (rodents, birds, insects, etc.), prevent nuisance conditions (odors and blowing waste materials), and prevent landfill fires.

When no additional waste is scheduled to be placed on an advancing lift within 180 days or some other period prescribed in the WDRs issued by the LARWQCB, the top and side slopes of the lift receive an intermediate cover of 12 inches of compacted soil. The primary goal of the intermediate cover is soil stabilization and visual buffering. In accordance with CUP 3142-7 Condition 102, non-native, non-invasive species (such as barley) can be used for short-term erosion control on temporarily exposed slopes.

2.3.3 Drainage and Erosion Control

Runoff (rainwater from the landfill surface to surrounding areas) and run-on (rainwater flow to the landfill surface or toe from the surrounding areas) is controlled by various design features. Run-on from areas upgradient of landfilled waste is diverted from the landfill via a perimeter concrete-lined ditch. The perimeter collection system drains to collection points near the landfill toe. Surface runoff from completed landfill surfaces is captured on benches along the face of the landfill and diverted to various collection pipes located

1 below the toe of the site. These collection points in turn discharge into the perimeter collection system on the
2 southern perimeter of the landfill proper. From this collection system, surface water flows through a 78-inch
3 corrugated metal pipe (CMP) under the access roadway. From there, the water is directed under SR-118 in an
4 84-inch CMP and into the Arroyo Simi. Three other small flow discharge points are located in the northeast,
5 southeast, and west portions of the landfill. Drainage to these discharge points accumulates within the CUP
6 boundary, but outside the waste footprint. Permanent landfill drainage facilities are designed to carry 100-year
7 storm runoff volumes as required by Title 27 California Code of Regulations (27 CCR) §20365.

8 A detention/sedimentation basin is located on the property north of SR-118 and south of the SVLRC entrance
9 road. The detention/sedimentation basin was designed to accommodate surface water flows from the facility
10 and allow sediments to settle out prior to off-site discharge. The detention/sedimentation basin is maintained
11 for adequate desilting capacity. During landfill operations, temporary berms and V ditches are placed near
12 active refuse fill areas to control surface water runoff. The temporary berms and V ditches direct surface
13 water around exposed refuse and prevent it from ponding on the refuse fill. Surface water runoff is carried
14 over temporary refuse fill slopes via oversized drains comprised of metal flumes, corrugated metal pipe, ABS
15 plastic pipe, or plastic-lined trenches. Best Management Practices (BMPs) based on the "California
16 Stormwater Best Management Practice Handbook" (March 1993) are followed to control temporary drainage.
17 The BMPs used on an as-needed basis include, but are not limited to the following: earth dikes, straw bale
18 dikes, silt fences, temporary swales and culverts, sediment traps and basins, sand bag barriers, riprap drainage
19 swales, and fabric erosion stops.

20 As the phased fill sequence progresses, the landfill surface is contoured to drain runoff to perimeter ditches in
21 order to minimize ponding on the landfill. Permanent drainage structures include, but are not limited to:
22 diversion berms, grass/concrete waterways, concrete perimeter channel, lined waterways and outlets, rock
23 outlet protection, subsurface drains/culverts, permanent detention/sedimentation basin, vegetation
24 management practices, paved parking area, and landscaping. All petroleum tanks that have potential to impact
25 stormwater are inside bermed areas. The bermed areas are designed to contain all of the liquid volume of the
26 largest tank, plus rainfall for a 10-year, 24-hour storm.

27 Vegetation management is used to minimize erosion when possible. As discussed in Section 2.3.2, interim
28 slopes that will not be disturbed for extended periods are planted with temporary non-invasive cover crops such
29 as barley or other suitable species. In accordance with standards and local practices, grass and native shrubbery
30 is planted and maintained to protect finished slopes and the final landfill cover from erosion and soil loss.

31 **2.3.4 Leachate Control Provisions**

32 The term "leachate" refers to liquids that collect within the landfill. Leachate results from precipitation
33 entering the landfill and from moisture that exists in the waste when it is disposed. Liquid within the waste
34 mass comes into contact with a wide variety of waste materials, some of which may dissolve or diffuse into
35 the liquid as it percolates through the waste. Some of these materials may be toxic or otherwise potentially
36 hazardous even though they are usually present in small concentrations. Leachate escaping from the base of
37 the landfill could eventually contact groundwater and potentially cause contamination. Therefore, leachate
38 control is an essential operating requirement.

39 The composition of leachate varies from landfill to landfill depending on various factors including: local
40 precipitation; age of landfill; types of wastes accepted; degree of decomposition that has occurred; and
41 physical modification of the waste (e.g., shredding). State regulations (27 CCR §20330) require that landfills
42 control leachate migration. Generally, this is accomplished by installing a leachate barrier/collection system.
43 This typically involves a barrier liner system under a leachate collection system. A liner system is generally
44 made from low-permeability soils (e.g., clays) or synthetic materials (e.g., plastic geomembranes). Leachate
45 collection systems are installed above the liner and typically consist of a porous layer of gravel within which a
46 piping system sloped to drain to a central collection point is installed. From the collection point, the leachate

1 is typically withdrawn and treated or otherwise used. Subsequent to treatment, leachate may be sent off-site
2 for disposal at a wastewater treatment plant, used on-site for dust control, or applied back to the landfill.

3 At the SVLRC, leachate is recirculated back to the active landfill areas that are over an engineered HDPE
4 liner. Recirculating leachate maintains a higher moisture content in the waste layers which promotes more
5 rapid decomposition and increases landfill gas generation. The additional gas generated is captured for use in
6 the existing LFGTE generators which provide virtually all of the electric power the facility requires.

7 **2.3.4.1 Landfill Liner**

8 In accordance with 27 CCR §20330, a new landfill unit must have a liner designed and constructed to contain
9 landfill gas, waste, and leachate. The regulations specify a minimum liner design (prescriptive liner) for a Class
10 III landfill consisting of a composite liner with a lower component of compacted soil and an upper component of
11 a synthetic flexible membrane. (Exceptions are allowed for steep side slopes and for alternative designs
12 approved by the LARWQCB.) The lower compacted soil liner component must be at least two feet thick and
13 have a hydraulic conductivity of no more than 1×10^{-7} cm/sec (0.1 foot per year). The upper synthetic flexible
14 membrane component must be at least 40-mils (1/1,000 inch) thick (or at least 60-mils thick if it consists of
15 HDPE and installed in direct and uniform contact with the underlying compacted soil component).

16 Until December 2009, the LARWQCB had approved the use of both prescriptive and alternative liner designs
17 for use at SVLRC. The floor (bottom) and side slope liners allowed are described as follows:

- 18 • Floor Liner (prescriptive). The prescriptive floor liner system consists of (from the bottom up) a 24-
19 inch compacted clay liner, a 60-mil HDPE liner, a geotextile, a 12-inch leachate collection and
20 removal system (LCRS) drainage layer, a geotextile, and a 24-inch protective soil layer.
- 21 • Floor Liner (alternate). The alternative liner design consists of a geosynthetic clay liner (GCL) and
22 80-mil HDPE liner. The rest of the liner system (e.g. leachate collection layer) is the same as the
23 prescriptive design.
- 24 • Side Slope Liner (prescriptive). The proposed side slope liner system consists of (from the bottom
25 up) a GCL, a 60-mil HDPE liner, a geotextile, and a 24-inch protective soil layer.
- 26 • Side Slope Liner (alternate). The alternative side slope liner design consists of an 80-mil HDPE liner.

27 In many cases, GCLs have become an accepted alternative to the 24-inch compacted clay liner. GCLs
28 generally provide lower hydraulic conductivity than compacted clay liners and are less susceptible to
29 desiccation cracking than compacted clay. GCLs are comprised of a granular sodium bentonite (clay) layer
30 encapsulated between two woven or non-woven geotextiles depending on needed strength. The geotextiles are
31 bonded by either glue or a process called needle punching. In the field, GCL is placed dehydrated (moisture
32 content of approximately 20 percent) and covered with the HDPE layer the same day the GCL is deployed.
33 The bentonite swells as it hydrates (absorbs moisture) from the underlying soils. The confining pressure
34 created by the HDPE layer causes the GCL to create a barrier with very low hydraulic conductivity.
35 Typically, GCLs have a permeability less than 1×10^{-9} cm/sec and are equal to 2.8 feet of compacted clay with
36 permeability 1×10^{-7} cm/sec.

37 However, the LARWQCB recently concluded that GCL “would not afford the same protections to groundwater as
38 the prescriptive liner system” (two feet of clay overlaid by HDPE) due to “recently observed deficiencies on GCL
39 at several landfills ... and the concerns that certain mechanical and chemical properties of GCL may not be as
40 reliable as a compacted clay liner” (LARWQCB 2009). Therefore, unless the LARWQCB approves an alternative,
41 a prescriptive liner would be necessary in future expansions of the existing landfill. Note that the alternate side
42 slope liner continues to be approved. The currently approved liner design is depicted in Figure 2.3-2.

1 As noted in Section 2.2.2, portions of the landfill that operated prior to the promulgation of regulations
2 specifying liner designs were unlined. In 1990-91, pursuant to LARWQCB Order No. 90-034, a clay cap was
3 constructed over all parts of the former Class I area that had received waste. MSW may be placed over this
4 area, but only in areas under which a compliant liner system has been installed to ensure that leachate is
5 confined within the landfill.

6 **2.3.4.2 Leachate Barrier/Collection and Removal System**

7 Leachate is collected in two ways at SVLRC, through a toe barrier system and the LCRS. Leachate collected
8 from the toe barrier system is treated and used as dust control while leachate collected from the LCRS is re-
9 circulated into the landfill. Each of these systems is described in detail below.

10 **2.3.4.2.1 Toe Barrier System**

11 In 1986, a leachate barrier/collection system was installed at the southerly toe of the landfill in the canyon
12 base to intercept and extract leachate from the canyon alluvium underlying the landfill, thereby preventing
13 potential off-site migration of leachate. The canyon alluvium is considered to be the primary groundwater
14 migration pathway for constituents should a release occur from the landfill. The system consists of the
15 following elements:

- 16 • A 12-foot thick, subsurface compacted clay barrier keyed a minimum of five feet into bedrock
17 extended across the canyon mouth immediately downslope of the landfill toe;
- 18 • A leachate collection drainage layer, subdrain, and sump installed on the landfill side of the barrier;
19 and
- 20 • A pump, discharge piping, and storage tank to remove and store leachate for disposal or treatment for
21 dust control through an activated carbon system.

22 Leachate that flows down-canyon in the alluvium beneath the landfill is intercepted by a 12-inch layer of
23 drain rock placed on the up-canyon side of the barrier. Filter fabric placed beneath and on top of the drainage
24 blanket prevents fine clay and silt particles from filtering into and plugging the drain rock. Fluids intercepted
25 by the drainage blanket are conveyed to a leachate collection trench that contains a four-inch perforated
26 polyvinyl chloride (PVC) pipe, surrounded with drain rock and encapsulated with filter fabric. The leachate
27 collection drain carries leachate to a six-foot-diameter precast manhole constructed with a concrete base
28 poured in place. The manhole has a storage capacity of 1,200 gallons below the leachate collection trench
29 discharge flow line.

30 A 12-foot-thick subsurface compacted clay liner, which is keyed at least five feet into the competent bedrock,
31 provides a barrier to down-canyon migration of leachate. A submersible pump is positioned in the manhole
32 with electrical controls set to activate or shut down the pump in accordance with the fluid elevation in the
33 manhole. The pump discharges through a force main to a 500-gallon storage tank positioned adjacent to the
34 manhole. From this tank, the liquids are treated through a series of granulated carbon filters (three units) into
35 two, 5,000-gallon holding tanks. Sampling ports are located at the entrance to the first filter, between each
36 filter, and at the exit location of the third filter. These ports are used to monitor the treated liquid contaminant
37 levels and to evaluate whether organic compounds have broken through the carbon filters. The treated liquid
38 is pumped from the larger tank into a water truck for use as dust control. Use of the treated leachate for dust
39 suppression is authorized by the site's WDR Order No. 00-092. Prior to use, the liquid must meet all
40 conditions of Provision F of the WDR, which references Maximum Contaminant Levels (22 CCR §64435 and
41 64473).

1 **2.3.4.2.2 Leachate Collection and Removal System**

2 In 2002, an expansion of SVLRC was approved under CUP-3142 Modification Number 6. The design of this
 3 expansion area included a LCRS that would collect leachate in accordance with prescriptive and alternative
 4 designs allowed under 27 CCR §20330 (Figures 2.3-2).

5 The prescriptive LCRS is placed over the bottom liner. The design consists of the following elements from
 6 bottom to top:

- 7 • A geotextile (filter fabric) placed over the liner;
- 8 • A 12-inch drainage layer of permeable material having a (high) hydraulic conductivity of 1×10^{-2}
 9 cm/sec, or greater;
- 10 • A geotextile fabric placed over the drainage layer, designed to prevent overlying material from
 11 entering the drainage layer voids; and
- 12 • A 12-inch layer of soil to separate and protect the drainage layer from displacement by the waste fill;
 13 waste is placed over the protective soil.

14 A system of perforated PVC or HDPE pipe is installed within the drainage layer to expedite the collection of
 15 leachate that drains from the landfill. Leachate collection sumps are underlain by a composite liner consisting
 16 of 60-mil HDPE over a 24-inch clay layer (hydraulic conductivity of 1×10^{-7} cm/sec, or less). This composite
 17 liner system provides extra containment protection in areas where leachate would pond. Positioned within and
 18 on the perimeter of the landfill, each sump is equipped with a riser pipe extending from the sump to the
 19 ground surface. The riser pipes are installed in shallow, lined trenches excavated into the perimeter 2:1 slope
 20 or placed directly on the lined 2:1 slope.

21 Leachate collected from the sumps is re-circulated into the landfill at designated liquid injection points (LIPs).
 22 These LIPs are located over lined portions of the landfill with a LCRS. Recirculation of leachate for current
 23 landfill operations was approved by the LARWQCB in a letter dated December 21, 2001.

24 **2.3.5 Waste Delivery and Processing**

25 The different types of waste, methods of delivery, processing, and disposal and or reuse of MSW and
 26 recyclable materials are discussed below. Table 2.3-1 provides an overview of the tpd of MSW and
 27 recyclables received at SVLRC. In each case the waste received is weighed and specific information about its
 28 origin documented at the weigh station. In some cases the trucks bringing material in are reloaded and sent
 29 outbound with material. For example, some transfer trucks leave the landfill empty after disposing of their
 30 waste and then go to the off-site GI Rubbish hauling yard and pick up recyclables. Additionally, some of the
 31 trucks picking up processed green waste or commodities from C&D from SVLRC may have brought trash or
 32 C&D to SVLRC as an inbound load. However, this only applies to a small percentage of the material
 33 currently removed from the site.

Table 2.3-1. Average Tons per Day of MSW and Recyclables Received at SVLRC

<i>Waste Type</i>	<i>Tons per Day (tpd)</i>	<i>Percent of Total</i>
Municipal Solid Waste	2,521	70.19
Recyclables	1,070	29.81
C&D debris	213	5.94
Greenwaste	233	6.47
Treated Auto Shredder Waste	551	15.35
Inert (concrete, soil, etc.)	73	2.04
Total	3,592	100.00

Source: Derived from WMC 2008a

FIGURES REPLACED

(Revised liner consists of 2 feet of clay under HDPE base liner – see new Figure 3.3.2)

2.3.5.1 Municipal Solid Waste

Municipal solid waste is received at SVLRC via four methods: packer trucks, roll-off bins and Instabins (three, four, 10, 25, and 40 yard containers), transfer trucks (20 ton loads), and individual residential or commercial vehicles (passenger cars/trucks). The majority of the MSW is received in packer trucks, which collect from residential, institutional, and commercial generators. Packer trucks hold eight to 10 tons of waste.

Transfer stations are a consolidation point for multiple origins of waste. Typically, the transfer stations receive material, sort out the recyclables, and send the residual MSW to SVLRC in a transfer truck.

Each load of waste is weighed and specific information about its origin is documented at the weigh station. The waste is then placed into the active disposal area where heavy equipment crushes and compacts the wastes into the disposal cell (Section 2.3.1). This process forms a tightly-packed layer of waste. At the end of each day, a cover layer of compacted soils, tarps, or ADC is placed over that day's waste. The daily covering keeps the waste in place and discourages scavengers. Currently, SVLRC receives approximately 2,521 tpd of MSW on average (Table 2.3-1).

2.3.5.2 Recyclable Material

The SVLRC engages in recycling operations that include C&D debris, green wastes, treated auto shredder waste, tires, white goods (e.g., refrigerators and stoves), and scrap metal. These recycling areas include separate tipping areas for each recycled commodity. Currently, SVLRC receives approximately 1,070 tpd of recyclable materials (Table 2.3-1).

2.3.5.2.1 C&D Debris

The existing C&D recycling facility accepts co-mingled C&D waste. Items accepted include non-hazardous materials such as cardboard, drywall, flooring, roofing materials, tile and windows, dirt, concrete, asphalt and wood/green waste. Bulk loads are weighted, and origin information is documented upon entry to the landfill. Any trash mixed in with the loads is removed, loaded into trucks, weighed, and disposed of in the landfill. Any wood mixed in with the loads is removed, loaded into trucks, weighed, and sent off-site with the green waste discussed in Section 2.3.5.2.2. The remaining C&D material is then processed on-site. Processed C&D material is sent off-site and/or reused on-site as ADC, which is weighed and accounted for as cover in the landfill.

2.3.5.2.2 Green Waste

Green waste accepted at SVLRC includes clean wood, dimensional lumber (no painted or treated wood), tree trimmings, grass, and other plant matter. These materials are weighed, and origin information documented upon entry to the landfill. Trucks unload the material in the green waste area. Any trash mixed in with the loads is removed, loaded into trucks, weighed, and disposed of in the landfill. The remaining green waste is processed in a tub grinder. A portion of the processed green waste is used on-site as mulch and/or as ADC. The green waste used as ADC is weighed and accounted for as cover in the landfill. The remaining green waste is transported off-site to local farms and composting facilities or to the Central Valley where it is used as fuel.

1 **2.3.5.2.3 Treated Auto Shredder Waste**

2 SVLRC accepts treated auto shredder waste which is stockpiled within the active waste disposal area and
3 used as ADC. Treated auto shredder waste is the waste produced at metal shredding facilities large enough to
4 shred an automobile. Treated auto shredder waste consists of glass, fiber, rubber, automobile fluids, dirt, and
5 plastics. These materials are treated to nonhazardous levels using metal fixation treatment technologies prior
6 to delivery to the landfill.

7 **2.3.5.2.4 Tires**

8 SVLRC typically receives approximately two to three tires per day from local residents. Approximately four
9 roll-off bins per year of tires are sent off-site to Los Angeles County for recycling and/or disposal. Per CUP-
10 3142 condition 64, tires may be stored onsite for up to 120 days. All tires stored for periods exceeding 30
11 days must be stored in covered trailers near the active disposal area. All tires stored for 30 days or less are
12 stored in open roll-off bins. No more than 499 tires are stored at the facility at a given time.

13 **2.3.5.2.5 White Goods/Scrap Metal**

14 SVLRC typically receives approximately five to seven appliances per week from local residents, all are
15 recycled offsite. A small number of loads of white goods (approximately 12 loads per year) are sent to Los
16 Angeles for recycling.

17 **2.3.5.2.6 Inert Material**

18 SVLRC received approximately 73 tpd of “inerts” (e.g., clean dirt and clean asphalt/concrete) (Table 2.3-1).
19 The clean dirt can be used as daily cover. In addition, the clean dirt and clean asphalt/concrete are reused to
20 build roads within SVLRC.

21 **2.3.6 Utilities**

22 **2.3.6.1 Water Supply**

23 The SVLRC is served by Ventura County Waterworks District No. 8 (which is managed by the City of Simi
24 Valley). District No. 8 is a member of the Calleguas Municipal Water Distric (CMWD). The main source of
25 water for District No. 8 is supplied by CMWD from the Metropolitan Water District of Southern California
26 (MWD) and the State Water Project (City of Simi Valley 2008). The CMWD is considered a permanent
27 source of water by the County of Ventura (Ventura County 2006).

28 In current operations, approximately 16.3 million gallons of potable water and 11 million gallons of reclaimed
29 water are supplied to SVLRC by CMWD annually. The amount can vary considerably from year to year.
30 Approximately 4 million gallons of potable water is supplied to the off-site GI Rubbish hauling facility
31 annually by CMWD. While this is currently an off-site use, the GI Rubbish operation is proposed to be moved
32 to the SVLRC site as part of the proposed project and this water use would be discontinued at the current GI
33 Rubbish location.

34 **2.3.6.2 Domestic Wastewater**

35 The SVLRC is not currently connected to a public sewer system. Outdoor portable toilets, which are cleaned
36 out weekly by a sanitary services vendor, are provided for public use. Employees use sanitary facilities in the
37 maintenance building, scale house, and office trailer. An employee shower is also available in the
38 maintenance building. Domestic wastewater generated by the employee sanitary facilities is disposed via an
39 individual sewage disposal system (septic tank) located behind the maintenance facility. The system is

operated in compliance with applicable sections of the Ventura County Building Code as enforced by the EHD. In addition, there is a permitted leach field located north of the gas flare station.

2.3.6.3 Electricity and Natural Gas

SVLRC has no natural gas line connections. The SVLRC currently generates a portion of its own electricity using an on-site LFGTE facility. Southern California Edison (SCE) provides additional electricity when needed via an overhead 16-kilovolt (kV) transmission line to power distribution panels located in the existing maintenance facilities. The facility is part of the SVLRC landfill gas control system and includes two pre-packaged 1.35-megawatt (MW) electrical generation systems. The LFGTE facility maintains the SVLRC on-site load requirement and excess electricity is delivered to SCE when available. Currently, the landfill produces LFG in excess of what can be processed in the existing LFGTE system. This excess landfill gas is incinerated in an on-site flare. In 2009, the facility generated 12.6 million kilowatt hours (kWh) of electricity and consumed 2.6 million kWh.

2.3.6.3.1 Landfill Gas to Energy Operation

Landfill gas is a by-product of the decomposition processes that occur following burial of organic waste materials. LFG typically contains 30 to 60 percent methane (by volume), up to 45 percent carbon dioxide, and trace amounts of other organic compounds. Rather than allow landfill gas to migrate to the atmosphere, a LFG recovery system is installed in the landfill. In addition to minimizing atmospheric release, collection and utilization of LFG also has the added benefits of limiting subsurface LFG migration from the landfill to off-site areas and being a fuel source for the LFGTE operation.

Construction of a LFG recovery collection system was initiated in 1988 and has been expanded periodically as the waste fill was placed and disposed. The system consists of a network of vertical gas extraction wells, horizontal extraction trenches, collection header pipes, and two flare stations. Gas collected in both the vertical wells and horizontal trenches is extracted using two blowers, one primary and one back up. The LFG is transported to the recovery facility via a common collection header pipe. Moisture accumulating in the header pipe (condensate) is collected at the low point of the collection header piping system and is disposed of through a condensate collection and disposal system in accordance with provisions contained in the WDRs. The gas-recovery equipment was permitted, installed, and operated in accordance with applicable air pollution and noise control requirements. Prior to installation of the LFGTE units, all of the LFG collected in the LFG recovery collection system was burned in the two flares.

In 2004 the existing LFGTE facility was constructed at SVLRC. The LFGTE facility uses the energy of LFG that is otherwise lost through flaring to generate electricity and, thereby, reduce reliance on external electricity suppliers as well as to produce excess electricity that can be sold to electricity suppliers for off-site use. LFG in excess of the generating capacity of the LFGTE facility is diverted through the two flares.

Incoming gas from the LFG recovery collection system passes through the gas treatment unit to remove practically all moisture and create as dry a fuel as possible. Condensate (liquid that drops out of the gas stream) is collected and conveyed to the condensate collection and disposal system that supports the flare station. This system includes a 1,000 gallon three-phase separator tank, a 1,500 gallon hydrocarbon condensate storage tank, and a 10,000 gallon wastewater storage tank. The treated LFG fuels an internal combustion engine that drives a generator, producing electricity. Electricity (at 4,160 kV) is routed through a switchgear that either: 1) directs it to support on-site loads (stepped down to 480 volt to power blowers, absorption chillers, nearby offices, and other on-site uses); or 2) directs it through a step-up transformer to a power distribution line to a connection with the electrical utility grid.

The LFGTE facility operates 24 hours a day, seven days a week, 52 weeks a year. Each LFGTE generator is removed from service for approximately six to eight hours per year for maintenance. The generators and

1 ancillary equipment is contained within an approximately 90 feet wide by 175 feet long six-foot-high chain
2 link fence with gates to allow personnel and equipment access for maintenance.

3 **2.3.7 Environmental Control Measures**

4 The SVLRC is required to comply with a variety of plans and programs to reduce the impacts of operation on
5 both the work area and surrounding area as conditions of CUP-3142-7. Programs include, but are not limited
6 to a: groundwater and leachate monitoring program; gas emissions control and monitoring program; wind
7 monitoring program; noise abatement plan; visual impact mitigation program; fire protection program;
8 seismic design; clay and cover availability study; site sign program; noise abatement plan; hazardous waste
9 exclusion program; radioactive waste exclusion program; emergency procedures program; on-site drainage
10 control plan; and stockpile plans. Several of these programs are outlined below.

11 As a part of the routine daily activities, the site supervisor periodically inspects the facility to ensure the
12 operation is in compliance with applicable regulations, especially 27 CCR §20005-20890, and standard
13 operating policies.

14 **2.3.7.1 Odors**

15 An Odor Control Plan for the SVLRC was approved in May 2003. The Plan contains a description of
16 landfilling procedures used to minimize odor generation, such as daily covering of refuse with ADC, as
17 approved by the EHD and the Planning Division, minimizing the area of the active face, and collection and
18 flaring of landfill gas. The Plan also identifies steps to be taken to mitigate odors in the event of a complaint.

19 In 2000, WMC installed an odor control system in an area along the east CUP boundary perimeter where the
20 topography includes two low points (saddles) in the ridgeline confining the landfill. The odor control system
21 consists of a series of flexible hose lines equipped with fogging/misting nozzles deployed on utility poles up
22 to 30 feet above ground. An odor control product mixed with water is emitted from the nozzles when
23 warranted by landfill operations and wind conditions. The Material Safety Data Sheet (MSDS) for this
24 product is provided in Appendix A.

25 **2.3.7.2 Litter**

26 Litter is controlled by compacting and covering the waste daily. Additional preventative measures to
27 minimize litter include the following:

- 28 • Temporary and permanent fencing to trap windblown materials;
- 29 • Periodic inspection and cleanup of the site and surrounding area to ensure the ongoing cleanup
30 program is effective in collecting any litter that may have escaped; and
- 31 • Portable windscreens near the active face during windy weather.

32 **2.3.7.3 Dust**

33 A Dust Suppression Plan (DSP) was approved by the Planning Division in 2003. The Plan contains a
34 description of procedures used to minimize dust generation including:

- 35 • All unpaved areas would be watered (or treated with environmentally safe dust control agents) as
36 often as necessary to minimize the amount of fugitive dust that blows off-site.

- 1 • All inactive areas, including all intermediate slopes, would be covered with processed green waste, or
2 hydroseed, or both, or treated with environmentally safe dust suppressing agents, to minimize dust
3 and erosion.
- 4 • All but essential site activities and operations would cease during high wind events (i.e., wind speed
5 sufficient to cause fugitive dust to impact adjacent properties).
- 6 • Vehicle speed on all unpaved areas would be limited to no more than 15 miles per hour.

7 Currently, a water truck is used within the SVLRC to wet down internal roads, including temporary
8 unsurfaced disposal cell access routes. This would be continued under the proposed project. Water trucks are
9 filled at one of three existing fill pipes. Two of these fill pipes are connected to the potable water supply
10 system and one fill pipe is connected to the reclaimed wastewater delivery system operated by the City of
11 Simi Valley. SVLRC also uses treated leachate for dust suppression in accordance with State requirements.
12 Leachate is presently collected at the base of SVLRC at an annualized daily average of approximately 2,222
13 gallons per day (Psomas 2007a, b).

14 **2.3.7.4 Vectors**

15 Vector control is undertaken to prevent propagation, harborage, or attraction of vectors such as flies, rats,
16 field rodents, mosquitoes, wasps, cockroaches, and birds. A vector control program is currently in place as
17 required by the landfill's existing SWFP. This is accomplished by a combination of methods including
18 placement of daily cover (i.e., compacted soil) and/or ADC (i.e., geosynthetic tarps, processed green waste,
19 ground C&D, and treated auto shredder waste) over the active landfill face at the end of each day. In addition,
20 periodic inspections are conducted to determine levels of various vectors. Uncovered waste can be an
21 attraction for birds, such as crows and gulls. This can become a nuisance because large birds such as these can
22 carry off waste then drop it, causing a litter problem. In addition, nuisance birds are controlled by a variety of
23 noise-making devices and other harassment methods including falcons and owls whose presence discourages
24 other birds.

25 **2.3.7.5 Visual**

26 A Visual Impact Mitigation Program (VIMP) was approved by the Planning Division in May 2003. The Plan
27 provides a description of how the landfill operations will be effectively screened from the view as seen from
28 SR-118 and surrounding properties. Additionally, it outlines measures to mitigate visual impacts of the refuse
29 column including landscaping on specified refuse column elements throughout the site and the rounding of
30 slopes on the refuse column at changes in slope angles.

31 **2.3.8 Administrative Record Keeping**

32 Current record keeping procedures are expected to continue throughout the life of the proposed landfill
33 expansion. Detailed records of vehicles accessing the site are maintained and made available for inspection by
34 the Ventura County Resource Management Agency (VCRMA) upon request. This daily log for all incoming
35 vehicles includes the following information: number and type of vehicles; time and date vehicle arrived at
36 facility; load ticket number; load weight; minimum fee vehicles; and vehicles refused entry with loads
37 containing hazardous materials.

38 A report of disposal site records is submitted monthly to the VCRMA in accordance with the requirements of
39 27 CCR §20510. This report, which contains information on waste types and volumes received, is used to
40 forecast the rate of site filling.

41 Similarly, a report containing information on quarterly waste volumes received and results of groundwater
42 quality testing is submitted regularly to the LARWQCB.

1 **2.3.9 Staff Training Program**

2 Employee-training is required for the personnel involved in the Hazardous Waste Exclusion Program. The
3 training program includes information on the identification, safety measures, and reporting procedures for
4 hazardous material. Retraining occurs on a schedule approved by the Ventura County Planning Director for
5 all new and existing landfill employees.

6 **2.3.10 Site Security**

7 To prevent unauthorized entry, site control personnel screen customers as they arrive at the site. Only those
8 individuals with legitimate business at the facility are allowed entry. Verbal instructions from the site control
9 personnel, coupled with a series of signs, direct customers to the appropriate disposal area.

10 The site perimeter is fenced in its entirety except where natural barriers preclude access. Gates are provided
11 where necessary. In addition, video cameras monitor the scale, office, and maintenance areas 24 hours per day.

12 **2.3.11 Environmental Monitoring**

13 The SVLRC is subject to various state and local regulations pertaining to environmental monitoring at the
14 site. Specific monitoring requirements include water quality, landfill gas migration, and air quality.

15 **2.3.12 Site Closure**

16 The final closure of the SVLRC would be conducted in accordance with federal and state regulatory
17 requirements and in accordance with the facility's Closure and Post-Closure Maintenance Plan.

18 **2.3.12.1 Final Grade**

19 The top surface of the SVLRC would have a minimum grade of three percent to provide positive drainage of
20 surface water runoff. The SVLRC final cover side slopes would be constructed at inclinations of no greater
21 than 3:1 (horizontal: vertical) and would incorporate 15-foot wide benches every 50 vertical feet. The
22 maximum final cover elevation is proposed to be 1,118 feet above msl.

23 Surface water control features in the form of lined and unlined drainage diversion ditches (V-ditches) would
24 be installed along the benches to intercept surface runoff from native and developed landfill slopes. The
25 diversion ditch would convey surface water runoff to designated low points along each bench where
26 downchute inlet structures would be located. Drainage would be directed from the downchutes to the
27 permanent perimeter channels for conveyance around the landfill footprint to one of the
28 detention/sedimentation basins. The V-ditches could be unlined or lined with erosion control fabric or
29 concrete.

30 **2.3.12.2 Final Cover**

31 Once the SVLRC reaches final grade, as described in Section 2.3.12.1, a final cover system would be installed
32 in accordance with 27 CCR §21090. The prescriptive standards (minimum requirements) for the final cover
33 are as follows:

- 34 • Soil Foundation Layer: Two feet of appropriate materials compacted to the maximum density
35 obtainable at optimum moisture content in accordance with accepted civil engineering practice.
- 36 • Low-Hydraulic-Conductivity Layer: One foot of soil containing no waste or leachate, which is
37 placed on top of the foundation layer and compacted to attain an hydraulic conductivity of either

1 1x10⁻⁶ cm/sec (i.e., one foot per year) or less, or equal to the hydraulic conductivity of any bottom
2 liner system or underlying natural geologic materials, whichever is less permeable.

- 3 • Erosion-Resistant Layer: A vegetative layer consisting of one foot of soil capable of sustaining
4 native, or other suitable, plant growth.

5 State regulations allow engineered alternatives to the Title 27 prescriptive final cover provided that it is
6 consistent with the performance goal of the prescriptive standard and affords equivalent protection against water
7 quality impairment. For the SVLRC, an alternative evapotranspirative final cover has been approved by the
8 LARWQCB under 27 CCR §21090. An evapotranspirative cover (also called a monolithic or an alternative
9 earthen cover) is one in which the cover soil is of sufficient thickness that the annual evaporation of naturally
10 occurring moisture from the cover layer is at least equal to the annual percolation of rainfall through the cover
11 soil. In this way, evapotranspiration (the combination of evaporation from the soil surface and transpiration of
12 moisture to the air by plants growing on the surface) balances rainfall and water does not enter the waste mass
13 beneath the cover. The alternative final cover details are depicted conceptually in Figure 2.3-3.

14 The evapotranspirative final cover would consist (from the waste layer up to the surface) of four to five feet of
15 soil vegetated with native plants. The design of the evapotranspirative cover involves a soil layer sufficiently
16 deep that the percolation of rainwater through the layer would be less than the annual evapotranspiration loss
17 of water to the atmosphere, thereby preventing water from entering the waste mass. An additional one foot of
18 topsoil may be added in certain locations to provide more suitable conditions for plant growth.

19 As outlined in the landfill's Closure and Post-Closure Maintenance Plan, the final cover must be planted with
20 drought tolerant native vegetation that sustain native wildlife habitats. However, the cover soil layer does not
21 provide adequate soil depth to establish large shrubs and trees. Thus, vegetation would consist predominantly
22 of shallow rooting plants. Deep rooted plants would only be used on the 2:1 fill slopes. Vegetation would be
23 irrigated with a permanent, low-precipitation rate irrigation system during the establishment period (i.e., up to
24 five years after installation). The south- and west-facing slopes may require supplemental irrigation during the
25 summer months because of greater sun exposure.

26 **2.3.12.3 Post-Closure Maintenance and Monitoring**

27 WMC has an existing Closure and Post-Closure Maintenance Plan to ensure protection of the surrounding
28 environment during the closure period (a minimum of 30 years after the last wastes have been deposited). The
29 Closure Post-Closure Maintenance Plan is part of the landfill's Joint Technical Document (JTD) prepared in
30 accordance with 27 CCR in support of obtaining a SFWP from the CIWMB and a WDR from the
31 LARWQCB (GeoSyntec Consultants 2002). In general, the inspection program consists of routinely checking
32 for the following:

- 33 • Evidence of ponded water at any point on the disposal site;
- 34 • Evidence of erosion and day-lighted (exposed) waste;
- 35 • Evidence of leachate or water entering or leaving the disposal site;
- 36 • Evidence of the site facilities needing maintenance, including drainage structures and final cover; and
- 37 • Corrections of deficiencies found during inspections will be made promptly, in accordance with
38 applicable regulations.

39 Water quality monitoring during the post-closure period would be continued in accordance with the
40 provisions of 27 CCR §20380(d), as formulated by the LARWQCB in the WDRs. Likewise, air quality and
41 subsurface LFG migration monitoring would be performed according to the mandates of the Ventura County
42 Air Pollution Control District (VCAPCD) and EHD, respectively.

1 The front face of the landfill would be landscaped in progressive stages with native vegetation, thus blending
 2 with the surrounding countryside. The top of the landfill would be seeded in accordance with the requirements
 3 of the updated Closure and Post-Closure Maintenance Plan (as part of the JTD) to be submitted to the LEA,
 4 the Ventura County EHD. The revegetation requirements must be consistent with CUP-3142-7 Condition 43
 5 (VIMP) subject to review and approval by the Planning Director.

6 The closed landfill site will provide 235 acres of open space. WMC would consider various open space uses
 7 in coordination with the County, the City of Simi Valley, and other local and regional agencies as appropriate,
 8 but retains the right to specify the prospective ultimate use of the site, subject to appropriate entitlements.

9 **2.3.12.4 Closure and Post-Closure Fund**

10 WMC is required (by Condition 24 of CUP-3142-47) to ~~establish and fund a and site closure letter of credit,~~
 11 ~~pursuant to Ventura County Ordinance No. 3783~~ provide the State of California with a site closure surety
 12 ~~bond;~~ to ensure that funds are available to perform landfill closure and post-closure maintenance. WMC
 13 established a ~~line of credit surety bond~~ reviewed and monitored by the Ventura County ~~Integrated Waste~~
 14 ~~Management Division~~ Planning Division.

15 **2.3.12.5 Post-Closure Use of the Site**

16 After closure, the areas of the SVLRC that contained waste would become vegetated, non-irrigated open
 17 space. The site would be revegetated with native drought-tolerant vegetation to stabilize final cover, prevent
 18 erosion, and protect public health and safety. The vegetation would be consistent with the evapotranspirative
 19 final cover and would blend in with the surrounding landscape. Site structures such as the existing office
 20 building, maintenance building, fueling facility, flare station, and parking lot would remain in place following
 21 closure to help assist with post-closure maintenance activities.

22 As required by 27 CCR §21190(c), all proposed post-closure land uses of SVLRC, other than non-irrigated
 23 open space, shall be submitted to the LEA, LARWQCB, VCAPCD, and local land use agency for review. The
 24 LEA must review and approve proposed post-closure land uses if the proposed use involves structures within
 25 1,000 feet of the waste disposal area, structures on top of waste, modification of the low permeability layer, or
 26 irrigation over waste.

27 **2.4 Proposed Project – SVLRC Expansion Project**

28 The purpose of the proposed project is to provide waste disposal capacity within Ventura County to meet the
 29 County's current and projected waste diversion and disposal needs consistent with the goals and policies of
 30 the Ventura County General Plan, Ventura County Integrated Waste Management Plan, the requirements of
 31 Assembly Bill (AB) 939, and other California waste management laws and regulations. The specific
 32 objectives of the proposed project include the following:

- 33 • Provide solid waste transformation and disposal facilities consistent with the Ventura County General
 34 Plan and support programs facilitating compliance with diversion requirements of Assembly Bill
 35 (AB) 939 [General Plan and AB 939].
- 36 • Ensure continuous solid waste disposal capacity for solid wastes generated within the County that
 37 cannot be reduce, recycled, or composted to meet the County's current and projected waste disposal
 38 needs [General Plan Goal 4.4.1-1, Countywide Siting Element of the CIWMP].
- 39 • Provide a waste disposal and diversion operation that is designed and conducted in a manner that
 40 complies with local, state, and federal regulations and plans; protects the natural environment;
 41 ensures protection of the public's health, safety and welfare; and is compatible with the surrounding
 42 land uses [General Plan Goal 4.4.1-2 and 4.4.2-5].

2 Project Description

- 1 • Minimize incompatibilities between industrial and residential land uses.
- 2 • Minimize adverse impacts on environmental resources.

3 The proposed project is to expand the SVLRC and is comprised of five main components: 1) expanding the
 4 physical limits of the landfill (CUP boundary, landfill footprint, and elevation); 2) extending the operating
 5 limits and life of the site (increasing the waste disposal capacity); 3) constructing a support/ancillary facility
 6 area; 4) expanding existing and constructing new recycling and resource recovery facilities; and 5) expanding
 7 existing and constructing new energy conversion facilities. Each of these project components is discussed in
 8 detail in Section 2.4.1.1 through Section 2.4.1.5, respectively.

9 The locations of the proposed CUP and waste footprint boundaries, in relation to the existing boundaries and
 10 the layout of the proposed facilities, are provided on Figure 2.4-1. Table 2.4-1 provides an overview of the
 11 amount and types of materials proposed to be received. The five project components are discussed in the
 12 following sections.

Table 2.4-1. Comparison of Existing and Proposed Landfill Expansion Project

Project Feature	Existing	Proposed
Total CUP Area - including easements (acres)	297	887
Waste Disposal Footprint (acres)	185	371
Landfill Volume (cubic yards)	43.5 million	123.1 million
Waste Capacity (tons)	29.6 million ¹	98.5 million ²
Permitted Daily Disposal (tons)	3,000	6,000 ³
Permitted Daily Recyclables (tons)	6,250	3,250 ³
Total Permitted Daily Volume (tons Disposal & Recyclables)	9,250	9,250 ³
Site Closure Date per existing CUP	2034	Not Applicable
Est. Closure Date @3,000 tpd Disposal Tonnage	2024	Not Applicable
Est. Site Closure Date @6,000 tpd	Not Applicable	2051
Elevation Limit	1,118	1,270 +/- 5ft
Hours of Operation	6:00AM- 8:00PM	6:00AM – 8:00PM
LFG to Energy Generators	2	5
LFG to LNG Facility	0	1
Numbers of Employees	25	400 (incl. GI Rubbish)
Square Footage of Building Improvements	20,000	127,000 (w/consolidated offices & maint. shop)
Permitted Maximum Daily Vehicle Trips (Roundtrip)	822	1,297 ⁴
<i>Source: Psomas 2007a</i>		
<i>Notes:</i>		
1. From existing SWFP.		
2. Capacity derived utilizing 1,600 pounds per cubic yard (0.8 tons per cubic yard) density.		
3. Combined disposal of MSW and recyclables would not exceed 9,250 tpd.		
4. Includes relocation of GI Waste Hauling Facility to SVLRC from off-site.		

13 **2.4.1 Expansion Plan Components**

14 **2.4.1.1 Expansion of the CUP Boundary and Waste Disposal Footprint**

15 The SVLRC Expansion Project would enlarge the current CUP boundary by approximately 590 acres to a
 16 total of 887 acres (Figure 2.4-1). This expansion would include increasing the existing disposal footprint from
 17 185 acres to 371 acres for a net increase of 186 acres. The buffer area around the disposal footprint would be
 18 expanded from 112 acres to 516 acres, for a net increase of 404 acres (Table 2.4-2). The buffer area
 19 surrounding the disposal footprint would primarily consist of open space area, but may also include access
 20 roads, material and equipment storage yards, mitigation areas, recycling facilities and equipment, and
 21 drainage structures.

22

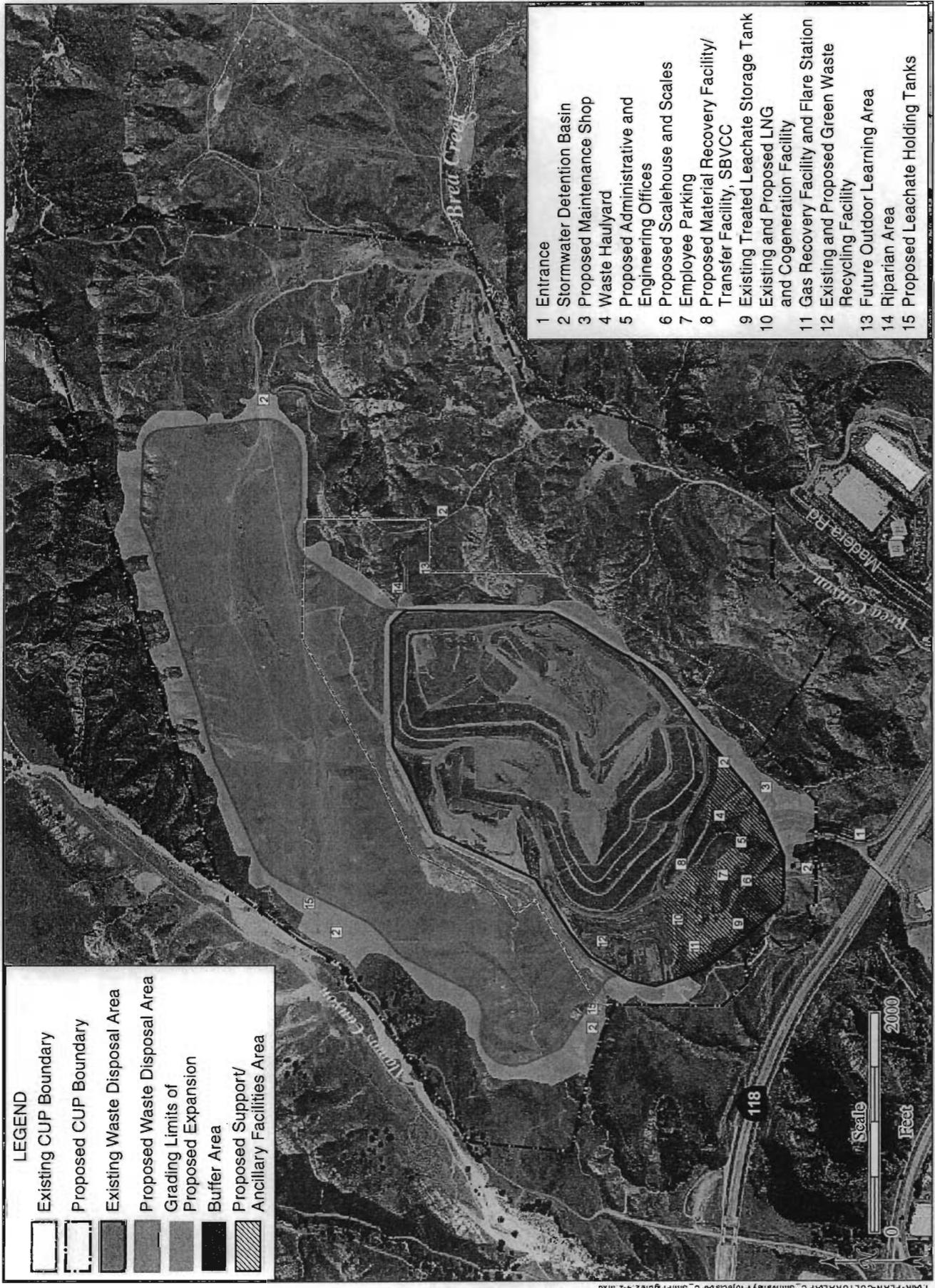


Figure 2.4-1. Proposed and Existing Site Boundaries and Proposed Site Layout

Table 2.4-2 Current and Proposed Physical Limits of the SVLRC

<i>Physical Limits of the Landfill</i>	<i>Existing</i>	<i>Proposed</i>	<i>Net Increase</i>
Waste Disposal Footprint (acres)	185	371	186
Buffer Area (acres)	112	516	404
Total CUP Area (acres)	297	887	590

Under the proposed project the permitted fill elevation would increase from 1,118 feet above msl to approximately 1,270 feet above msl, for a net increase of 152 feet.

The expanded area of the landfill would be completed in four phases as shown in Figure 2.4-2. Phase I would include additional fill on the existing landfill area. Phase I would be filled towards the north end of the site and finished at the south/southeast end. Phases II through IV would include filling the remaining area within the expanded waste disposal footprint. Phase II would consist of four cells while Phases III and IV would each consist of three cells.

The proposed increase in elevation would be applied gradually as each phase of the landfill is developed. The project would leave the existing natural ridgelines intact from most viewpoints and blend the proposed elevation of the landfill with the adjacent hilltops and ridges, which vary from approximately 1,000 to 1,350 feet above msl.

2.4.1.2 Extension of the Operational Limits and Site Life

2.4.1.2.1 Increased Waste Disposal Capacity

The proposed project would result in an increased waste disposal capacity for the SVLRC. A summary of the currently permitted capacity, the proposed increased capacity, and the proposed final total capacity that would result from the proposed project is presented in Table 2.4-3. As shown in the table, the proposed fill plan would increase the capacity of SVLRC from its currently permitted 43.5 million cubic yards (cy) of air space and 34.8 million tons of waste, to 123.1 million cy of airspace (an increase of 79.6 million cy) and 98.5 million tons of waste (an increase of 63.7 million tons).

The proposed project would result in a change in the allocation of material accepted at SVLRC. Currently, SVLRC is permitted to accept a combined limit of 9,250 tpd which includes a maximum of 3,000 tpd of disposal material and 6,250 tpd of recyclable material. The proposed change would allow for an increase in the facility’s receipts of waste for disposal, thereby increasing the number of deliveries that would occur per day. Assuming the additional disposal tonnage is delivered exclusively by transfer trucks averaging 20 tons apiece, there would be an increase of 150 deliveries per day if the full 6,000 tpd of disposal tonnage is received.

Table. 2.4-3. SVLRC Waste Disposal Capacity Summary

<i>Scenario</i>	<i>Total Airspace (million cubic yards)</i>	<i>Estimated Waste Capacity (million tons)¹</i>
Existing Condition		
Current (Used to Date)	23.0 ²	18.4
Remaining Under Current Permit	20.5 ³	16.4
Currently Permitted Totals	43.5⁴	34.8
Proposed Project		
Increase Due to Proposed Project	79.6	63.7
Proposed Permitted Totals	123.1	98.5
Sources: Psomas 2007a; Derived from Final Cover Grading Plan, Figure 3.1 of Appendix B (WMC 2007b) and RWQCB Quarterly Report (WMC 2008)		
Notes:		
1. Conversion of cubic yards of air space to tons of waste capacity is based on the assumption that waste has a density of 1,600 pounds per cubic yard (0.8 tons per cubic yard) at placement on the active working face.		
2. For purposes of this table, the current (used to date) airspace is as of December 31, 2007.		
3. Remaining airspace under current SWFP is as of December 31, 2007 as reported by WMC in the Waste Disposal Report for 1 st Quarter 2008.		
4. Currently permitted total airspace is based on the on the airspace permitted by the existing SWFP.		

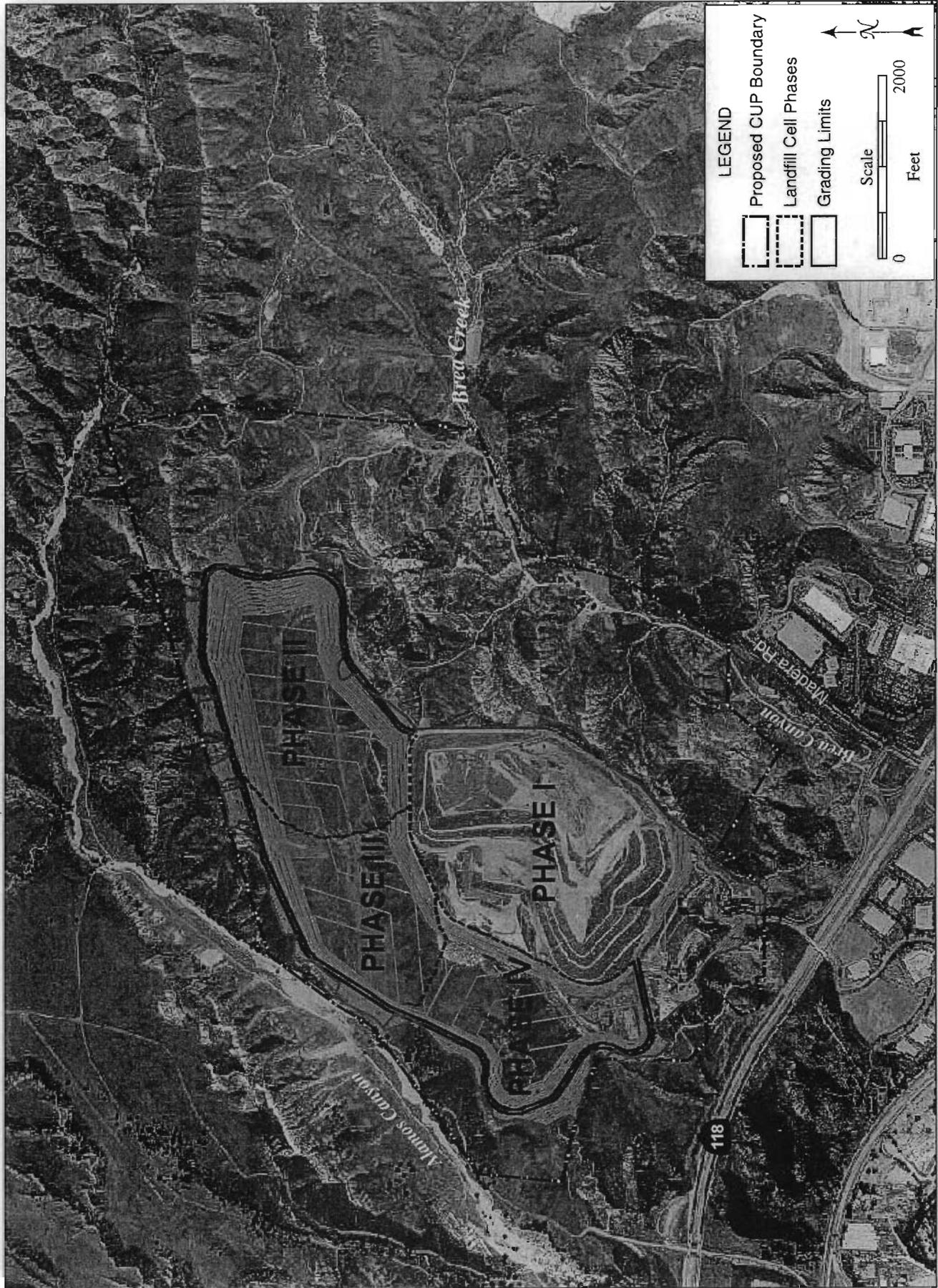


Figure 2.4-2. Phased Development of Waste Footprint within Proposed SVLRC Expansion Project

2 Project Description

1 The SVLRC has not generally received as much MSW and recyclable material as it is permitted to receive.
 2 SVLRC currently received an average of 2,521 tpd of disposable material and 1,070 tpd of recyclable material
 3 (Table 2.3-4). These numbers are considered the baseline conditions for the purpose of estimating changes
 4 that would occur with implementation of the project.

5 A summary of the currently permitted and baseline daily waste disposal and recyclables limits and the
 6 proposed changes to the permitted limits that would result from the proposed project is presented in Table
 7 2.4-4.

Table. 2.4-4. Summary of Current and Proposed Permit Limits for Materials Received at SVLRC

	<i>Currently Permitted (Tons per Day)</i>	<i>Baseline Conditions (Tons Per Day)</i>	<i>Proposed Permitted' (Tons per Day)</i>
Disposal	3,000	2,521	6,000
Recyclables	6,250	1,070	3,250
C&D	-	213	500
Greenwaste	-	233	500
Clean Dirt		73	-
Auto Shredder Waste		551	-
SVECC	-	-	0.1
MRF/RTF	-	-	500
Total Volume (Disposal & Recyclables)	9,250	3,444	9,250
<i>Source: Derived from WMC 2008a</i>			
<i>Notes:</i>			
1. Combined receipt of disposal and recyclable materials would not exceed 9,250 tpd.			

8 Table 2.4-5 provides an overview of the estimated baseline, currently permitted, and proposed site closure
 9 dates (end year) for the SVLRC. Under the terms of the existing CUP-3142-7, SVLRC is permitted to operate
 10 until 2034 or until the facility’s waste capacity of 43.5 million cubic yards of total airspace, as permitted
 11 under the facility’s SWFP, has been reached, whichever occurs first. Of that permitted airspace, 20.5 million
 12 cubic yards (16.4 million tons) was available when the application for modification of the existing CUP-3142
 13 was submitted in 2007 (Waste Management of California (WMC) 2007a).

14 Current average daily receipts (baseline), based on the first quarter of 2008, are 2,521 tons per day. At that
 15 rate under the existing permit, the facility would reach its currently permitted capacity in 2027. If receipts
 16 were consistently at the fully permitted 3,000 tons per day under the existing permit, the facility would reach
 17 its permitted capacity in 2024, consistent with the estimate provided in the CUP modification application. The
 18 proposed project is now expected to commence in 2011. From 2007 to 2011, receipts have been limited to no
 19 more than 3,000 tons per day. After 2011, permitted receipts would rise to 6,000 tons per day, as indicated for
 20 the proposed project in Table 2.4-5. Under that assumption, the facility would reach its permitted capacity in
 21 2053. This is two years later than stated in the application which can be attributed to the difference between
 22 the originally estimated start date (2009) and the current estimate (2011). Note that it is very unlikely that the
 23 facility will begin to receive 6,000 tons per day of waste immediately upon issuance of the CUP modification,
 24 especially since it does not typically receive the full permitted 3,000 tons per day currently. Therefore, the
 25 actual landfill life under the above assumptions would likely be somewhat longer..

Table 2.4-5 Estimated Operating Life Under Current and Proposed Operations

<i>Description</i>	<i>Comment</i>	<i>Available Capacity (million tons)</i>	<i>Rate (tpd)</i>	<i>mm Tons per Year¹</i>	<i>Start Year²</i>	<i>Years of Operation³</i>	<i>End Year⁴</i>
Currently Permitted Operations							
Current Baseline ⁵	Current average daily receipts	16.4	2,521	0.79	2007	20.9	2027
Permitted Receipts ⁶	Maximum Permitted daily receipts	16.4	3,000	0.94	2007	17.5	2024
Proposed Operations							
During Permitting ⁷	Prior to new permit issuance	83.0	3,000	0.94	2007	4.0	2011
Start up 2011	After permit issuance	79.3 ⁸	6,000	1.87	2011	42.3	2053 ⁹
<i>Notes:</i>							
1. At 312 days per year							
2. Year in which receipts commence at the receiving rate – the starting year (2007) is the year proposed in the CUP modification application for consistency with the application materials							
3. Years for which receipts would occur at the receiving rate							
4. Last year of available capacity at receiving rate and available capacity							
5. Assumes receipts continue at current average daily rate (2,521 tpd)							
6. Assumes receipts at the fully permitted daily rate (3,000 tpd)							
7. Years during which receipts would be limited by the current permit to 3,000 tpd							
8. Available capacity after four years of receipts at 3,000 tons per day							
9. Note that the original CUP modification application computed the end year as 2051. However, that was based on the assumption that the full 6,000 tons per day would be received from 2009, which did not occur.							

1 2.4.1.3 Support/Ancillary Facilities Area

2 The SVLRC Expansion Project includes the construction and use of several ancillary and support facilities
3 including: a MRF/RTF; a public household hazardous waste collection facility (i.e., the Simi Valley
4 Environmental Collection Center [SVECC]); a waste hauling yard; office facilities; a heavy equipment and
5 vehicle maintenance facility; and new scales and a scalehouse. These facilities would be located on approximately
6 30 acres (designated as the support/ancillary facilities area) within the existing CUP boundary (Figure 2.4-1 and
7 Figure 2.4-3). The buildings associated with these facilities would be constructed to meet at a minimum of the
8 Silver Level under the Leadership in Energy and Environmental Design (LEED®) Green Building Rating
9 System, developed by the U.S. Green Building Council. Since the proposed project does not include future post-
10 closure uses of the site, it is assumed that, with the exception of support facilities for closure and post-closure
11 maintenance, these facilities would be removed upon cessation of the landfill and/or transfer operations. These
12 facilities would be constructed on an area of the site that is currently permitted to receive waste.

13 2.4.1.3.1 Material Recovery Facility (MRF)/Recyclables Transfer Facility (RTF)

14 The facilities area would include a MRF/RTF to enhance recycling capabilities for the community. The
15 MRF/RTF would be located on approximately two acres and would be comprised of a 50,000 square foot, 35
16 foot tall building for recycling activities (Figure 2.4-5 and Table 2.4-6). The facility would accommodate the
17 front-end processing of up to 500 tpd of source separated recyclables and/or the transfer of recyclables to off-
18 site locations for further processing. Build-out of the facility to the maximum capacity of 500 tpd would be
19 completed in phases based on the volume of recyclable materials received. The facility would be a partially
20 enclosed structure with concrete tipping floor for initial receipt of recyclable material. Light and heavy
21 equipment including loaders, grapples, and sweepers would be used within the MRF/RTF. Processing of
22 recyclables may include hand and/or mechanized sorting (using conveyor-sort lines, trammels, screens,
23 bailers, etc.) and shipping of processed material for off-site advanced processing/sale. Some pre-sorted
24 recyclables could be immediately reloaded into transfer vehicles without on-site processing, for marketing at
25 off-site facilities. The MRF/RTF would be permitted to operate 365 days per year between 6 AM to 8 PM, but
26 would generally operate from 7 AM to 4 PM 312 days per year.

Table 2.4-6 Dimensions of MRF/RTF

Site Acreage	2
Square footage of building	50,000
Height/Number of Floors	35 feet/ 1 floor
Purpose	Front end processing of up to 500 tpd of source separated recyclables and/or transfer of recyclables to off-site locations for further processing.
Estimated TPD	500

1 **2.4.1.3.2 Waste Hauling Yard Relocation**

2 The GI Rubbish refuse hauling operation currently located at 195 West Los Angeles Avenue in Simi Valley
 3 1.5 miles from the landfill would be relocated to the SVLRC. Operation of the waste hauling yard
 4 involve 250 refuse vehicles as well as support vehicles and equipment. Relocation of the waste hauling yard
 5 would entail construction of new facilities to be shared by hauling and landfill operations including a main
 6 office facility and employee parking (Section 2.4.1.3.3) and vehicle maintenance facility (Section 2.4.1.3.4).
 7 These facilities would be located on approximately 15 acres within the proposed 30-acre support/ancillary
 8 facilities area (Figure 2.4-3 and Table 2.4-7).

Table 2.4-7. Waste Hauling Yard

Site Acreage	15
Square footage of building	Share office building and heavy equipment and vehicle maintenance facility.
Height/Number of Floors	See description of Office Building (Section 2.4.3.3) and Heavy Equipment and Vehicle Maintenance Area (Section 2.4.3.4) for details.
Purpose	Operation of waste hauling yard.

9 **2.4.1.3.3 Office Building**

10 The SVLRC Expansion Project includes the construction of an approximately 25,000 square foot, 32 foot tall,
 11 two story, main office building located within the proposed 30-acre facilities area (Figure 2.4-3, Figure 2.4-6,
 12 and Table 2.4-8). The main office would accommodate up to approximately 150 staff for the landfill,
 13 MRF/RTF, and GI Rubbish. This office building would include staff/management offices, a conference room,
 14 a dispatch location, a driver locker/bathroom/shower facility, a customer service area, a break
 15 room/lunchroom, and a visitor/environmental education center. The environmental education center would be
 16 used for tours and site visits to educate visitors about the landfill, hauling operations, recycling, and
 17 renewable energy.

Table 2.4-8. Dimensions of Office Building

Square footage of building	25,000
Height/number of floors	32 feet/2 floors
Purpose	Accommodate up to 150 staff for the SVLRC, the MRF/RTF, and GI Rubbish.

18 **2.4.1.3.4 Heavy Equipment and Vehicle Maintenance Facility**

19 A heavy equipment and vehicle maintenance facility would be constructed within the proposed 30-acre
 20 support/ancillary facilities area (Figure 2.4-3). The heavy equipment and vehicle maintenance building would
 21 be approximately 30,000 square feet and 39 feet tall and would consist of enclosed bays, a parts/supplies
 22 room, maintenance offices, employee restrooms, and a break room (Figure 2.4-7 and Table 2.4-9). This
 23 facility would be used for routine maintenance and repair of the hauling vehicle fleet and heavy equipment
 24 associated with operation of the MRF/RTF and the landfill. The heavy equipment and vehicle maintenance
 25 facility area would be equipped with a vehicle and equipment wash rack, a paint booth for containers and
 26 vehicles, and fueling facilities.

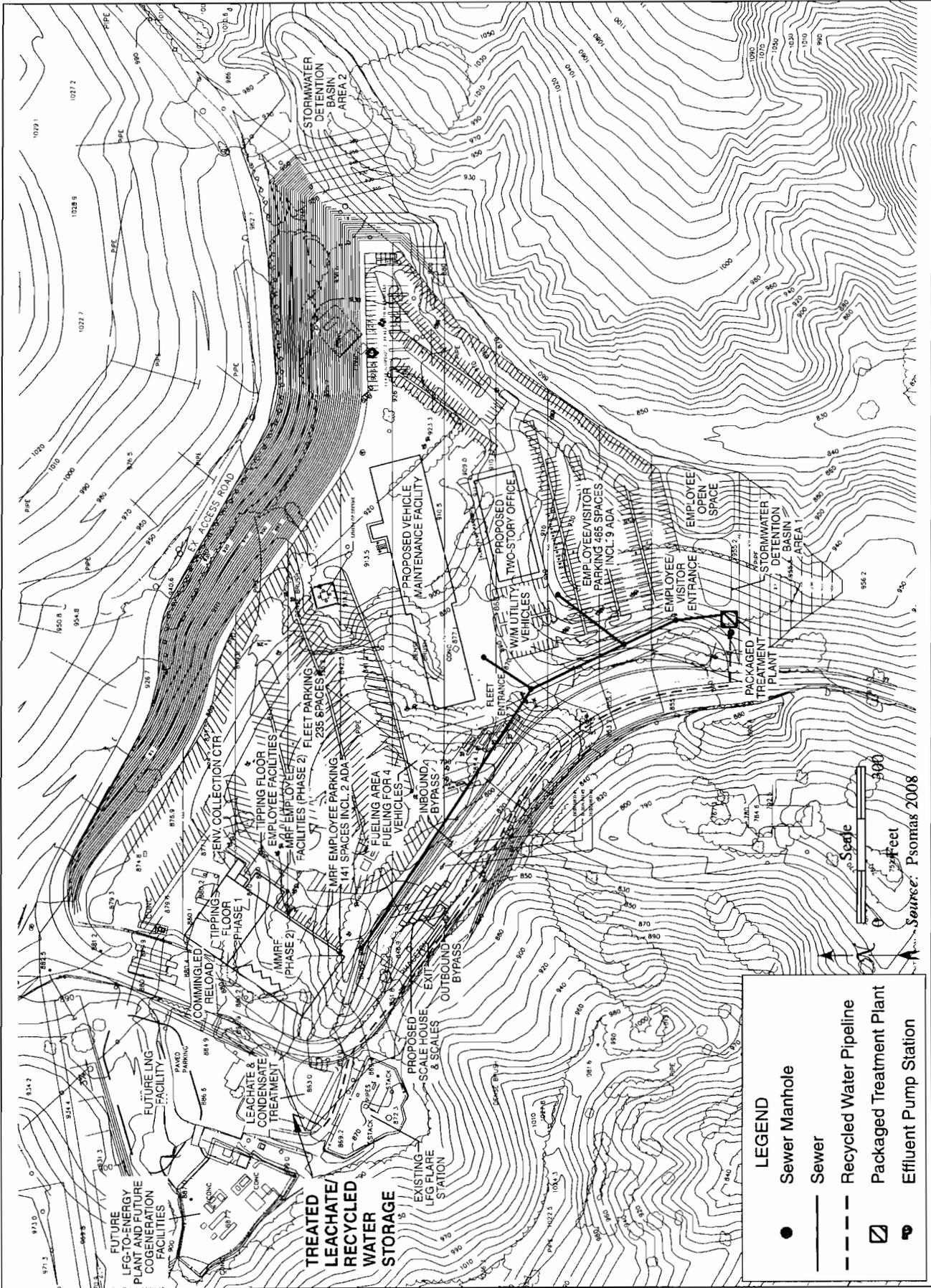


Figure 2.4-3. Site Plan for the Proposed Support/Auxiliary Facilities Area

Table 2.4-9. Dimensions of the Heavy Equipment and Vehicle Maintenance Facility

Square footage of building	30,000
Height/number of floors	39/2 floors
Purpose	Routine maintenance and repair of the hauling vehicle fleet and heavy equipment associated with operations of the MRF/RTF and the landfill.

1 **2.4.1.3.5 New Entrance Road, Scales, and Scalehouse**

2 The existing entrance road would be expanded to accommodate three in-bound queue lanes and one bypass
 3 lane within the gates of the SVLRC (Figure 2.4-3). Three in-bound scales and one out bound scale would be
 4 constructed as well as a new scale house facility (Figure 2.4-8).

5 **2.4.1.3.6 Simi Valley Environmental Collection Center (SVECC)**

6 The SVECC facility would provide a location for residents to drop off their household paints, solvents,
 7 antifreeze, flammables, and electronic waste. An approximately 750 square foot building adjacent to the
 8 MRF/RTF will house the SVECC and contain 2-4 skid-mounted units specified for storage of materials
 9 collected from the public (Figure 2.4-3 and 2.4-5). The SVECC would be operated by personnel licensed to
 10 properly handle the discarded wastes and insure proper transport to off-site permitted facilities for recycling
 11 or disposal of all materials. The operating schedule for this facility is to be determined pending cooperative
 12 agreements and funding from involved State and local agencies supporting the SVECC.

13 **2.4.1.4 Recycling and Resource Recovery Facilities**

14 **2.4.1.4.1 Construction and Demolition (C&D) Debris Recycling**

15 The proposed project would include processing of up to 500 tpd for C&D debris recycling. This area would
 16 migrate within the waste disposal footprint depending on operational considerations as each phase of the
 17 landfill is developed. Vehicles containing construction and demolition materials as defined by Title 14, CCR,
 18 §17381(e) would be routed to the C&D debris sorting operation. Recyclable material would be removed by
 19 hand or machine for further processing on- or off-site. Residual material meeting the definition of C&D ADC
 20 would be ground for use on the active face. Dust control measures would be implemented to manage fugitive
 21 dust. Refuse removed from the C&D loads would be disposed of within the landfill working face. Permitted
 22 hours of operation would be 6 AM to 8 PM, daily, but the facility would generally operate from 7 AM to 4 PM
 23 312 days per year.

24 **2.4.1.4.2 Expanded Green Waste Processing Facility**

25 The SVLRC Expansion Project would include a 10-acre green waste processing facility (Figure 2.4-3). This
 26 facility would receive up to 500 tpd of green material. Most of the processed materials would be removed off-
 27 site after chipping. The material that remains on-site would be used for mulch (erosion control) and/or ADC.
 28 Dust control would be applied during green waste processing to control fugitive dust. Permitted hours of
 29 operation would be 6 AM to 8 PM, daily, but the facility would generally operate from 7 AM to 4 PM. 312 days
 30 per year.

31 **2.4.1.5 Energy Conversion Facilities**

32 **2.4.1.5.1 Expanded Landfill Gas-to-Energy (LFGTE) Operations**

33 The proposed project includes the installation of up to three additional LFGTE generation systems similar to
 34 those currently located at the SVLRC (Figure 2.4-1 and Figure 2.4-3). These systems would use excess
 35 landfill gas generated by expanded operations that would otherwise be lost through flaring to generate

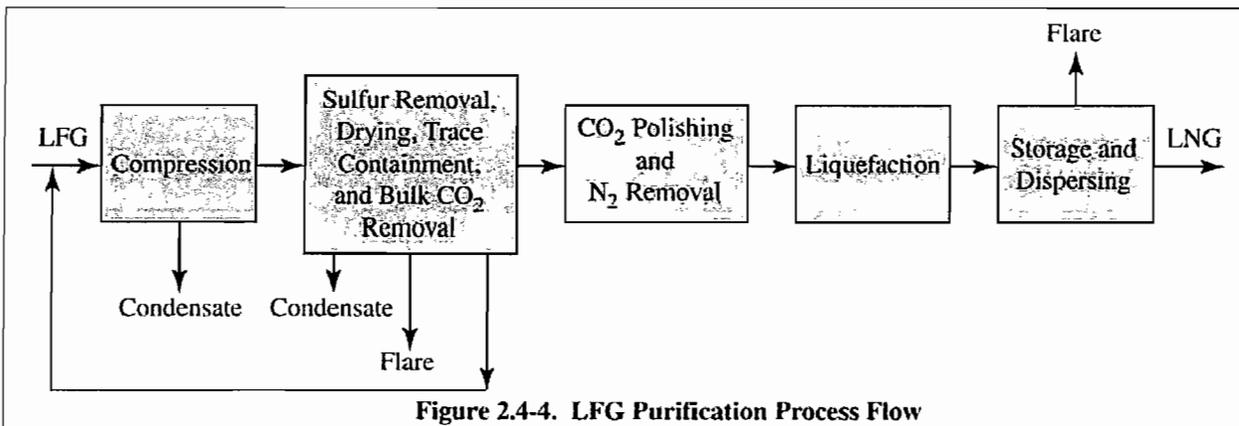
1 additional electricity. Electricity generated from these additional systems would be used internally to power
 2 new and expanded buildings and facilities with the excess sold to the local utility grid and/or to support a
 3 LFGTLNG facility at the SVLRC (Section 2.4.1.5.2). The expanded LFGTE systems would be located
 4 adjacent to the existing LFGTE operation and flare station in the southwest portion of the landfill CUP
 5 boundary (Figure 2.4-3).

6 The electrical generation systems would operate continuously 24 hours a day, seven days a week with the
 7 exception of maintenance activities. Annual maintenance, including cleaning burner tips and flame arrestors,
 8 as well as inspecting the refractory and calibrations, would require the flares to be down for a total of six to
 9 eight hours throughout the year. The flares (and engines) would also be taken offline periodically
 10 (approximately one to 1.5-percent of the time annually).

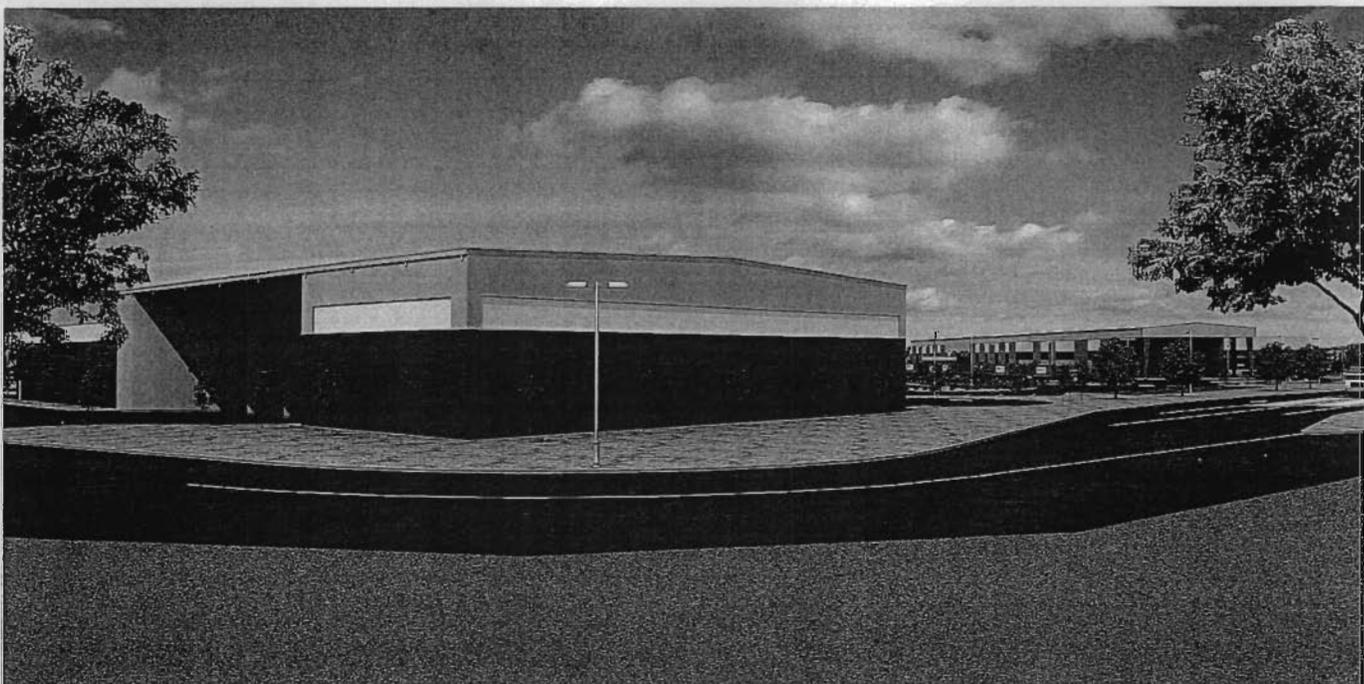
11 2.4.1.5.2 Landfill Gas to Liquefied Natural Gas (LFGTLNG) Facility

12 The SVLRC Expansion Project includes the construction and operation of a LFGTLNG facility located just
 13 north of the existing LFG flare station (Figure 2.4-3). This facility would treat landfill gas to remove impurities,
 14 condense the gas to liquid phase by chilling, separate out the natural gas component, and store the gas in
 15 cryogenic tanks for use as a transportation fuel to power heavy-duty landfill vehicles including sanitation trucks.
 16 Figure The LFGTLNG facility would produce up to 18,000 gallons of LNG per day. The process is discussed
 17 below.

18 Figure 2.4-4 provides a diagram of how LFG is processed to produce energy as well as the relationship
 19 between the LFGTE equipment to the flare and to the proposed LFGTLNG facility.



20 Landfill gas typically contains 30 to 60 percent methane (by volume), up to 45 percent carbon dioxide as well
 21 as nitrogen, oxygen, water vapor, hydrogen sulfides and minor amounts of sulfur and hydrocarbon
 22 compounds. Gas compression and cooling processes would be employed to liquefy and separate most of the
 23 carbon dioxide gas from the methane gas. The proposed system would use a multiple bed pressure swing
 24 adsorption (PSA) system to remove hydrogen sulfide and other impurities from the methane after the
 25 compression step. Following contaminant removal, the process would consist of CO₂ polishing and removal
 26 of nitrogen (N₂) and then liquefaction. For use as fuel, LNG generally contains a minimum of 95 percent
 27 methane and with not more than 0.5 percent carbon dioxide. Liquid carbon dioxide separated from the LFG
 28 may be further purified to provide a high grade, commercially marketable product (dry ice), which would be
 29 exported off-site. No more than approximately six truckloads per day would export these by-products off-site.



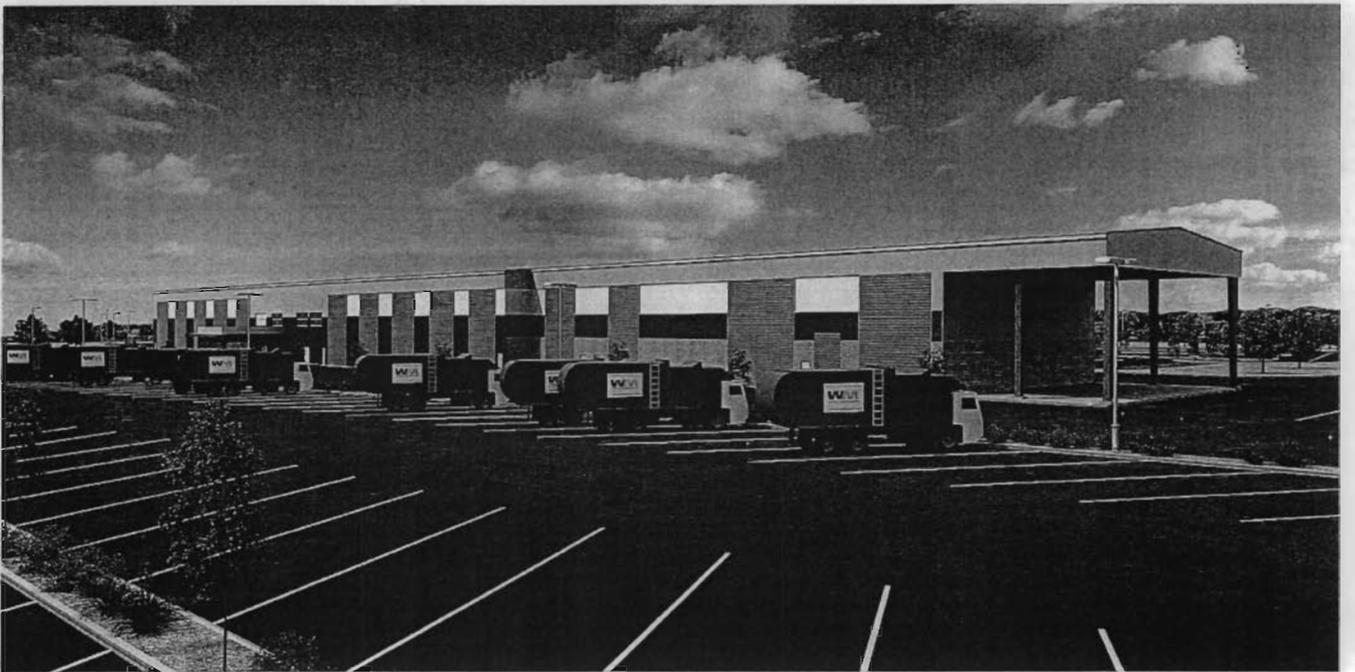
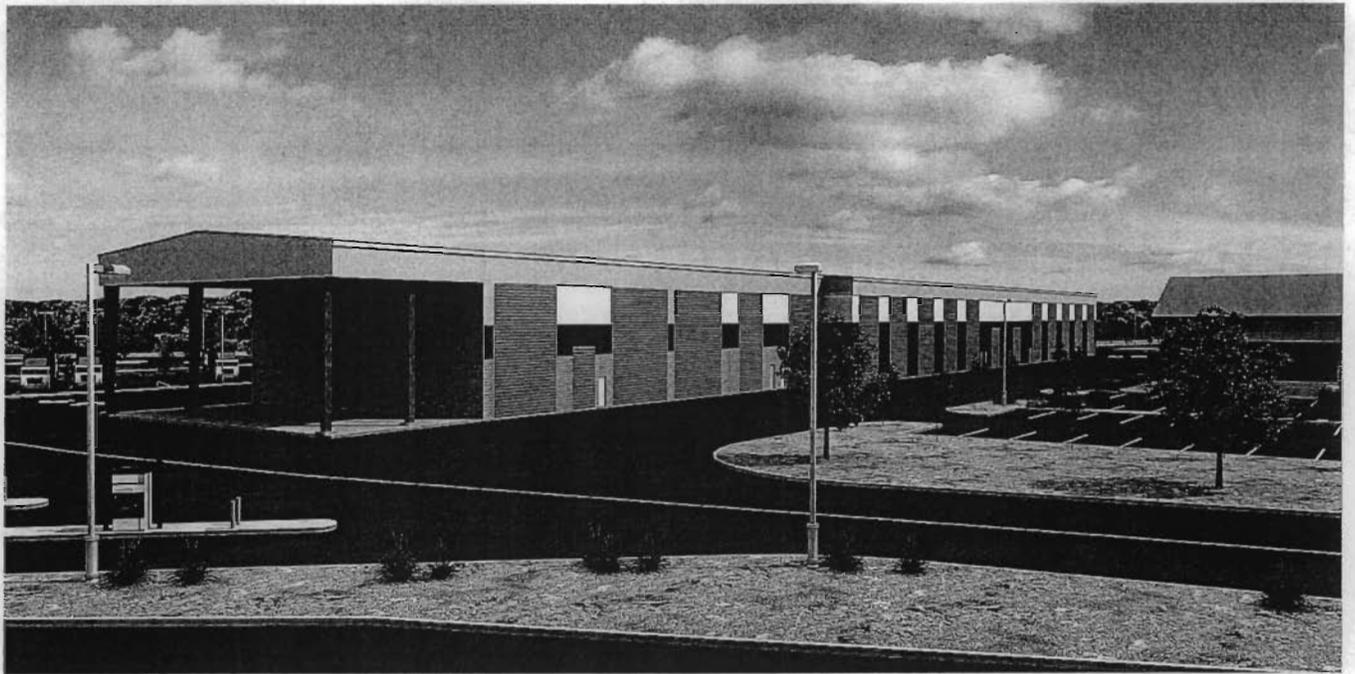
Source: Psomas 2008

Figure 2.4-5. Rendering of the Material Recovery Facility/Recyclables Transfer Facility



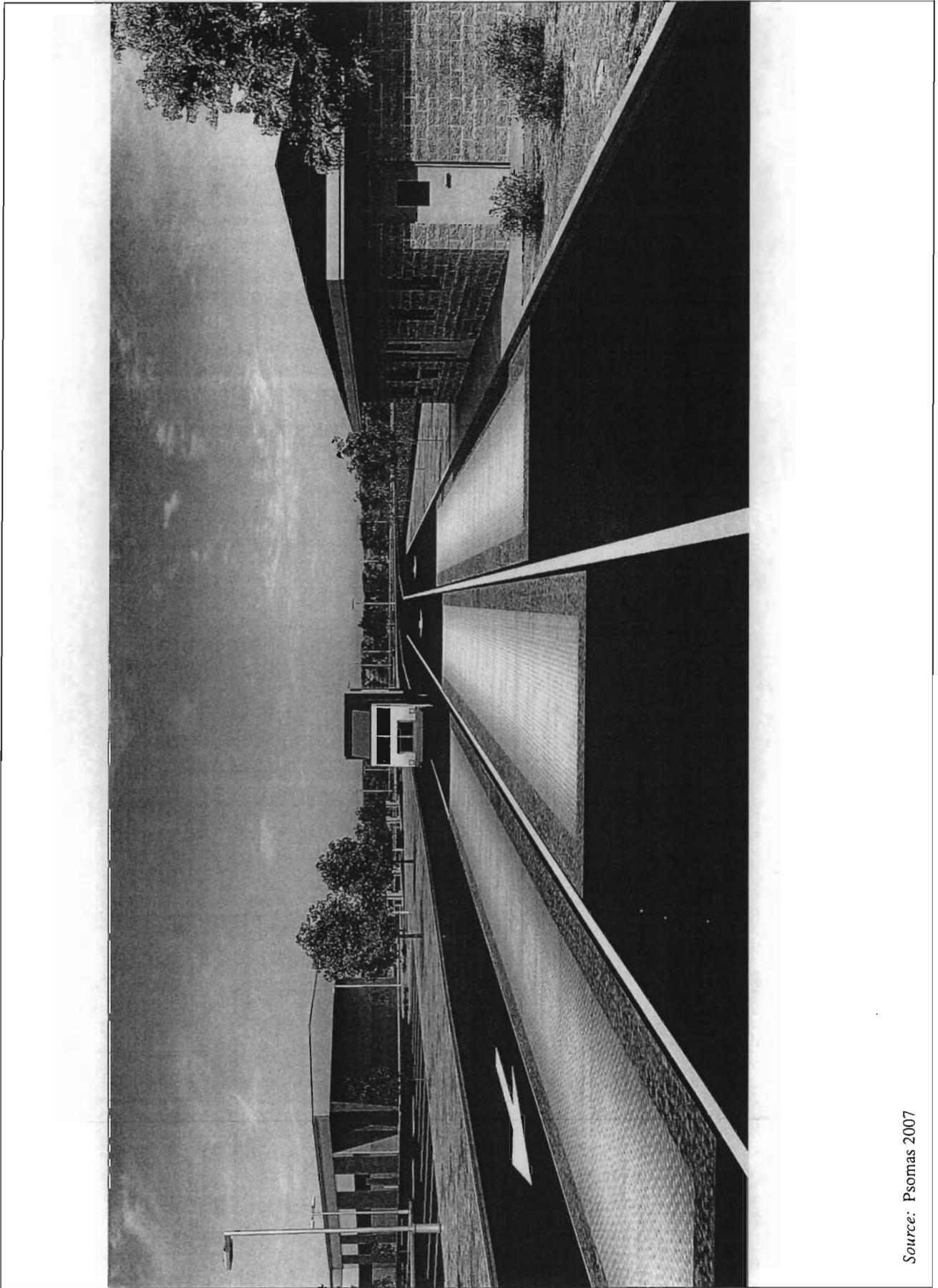
Source: Psomas 2007

Figure 2.4-6. Rendering of Proposed Office Building/Recycling and Resource Recovery Facilities



Source: Psomas 2007

Figure 2.4-7. Rendering of Heavy Equipment and Vehicle Maintenance Facility



Source: Psomas 2007

Figure 2.4-8. Rendering of New Entrance Road, Scales, and Scalehouse

1 LNG would be produced by cooling and condensing the methane gas to approximately -260 degrees
2 Fahrenheit (° F) by exchanging heat with a cryogenic gas. The cryogenic cooling effect would liquefy more
3 than 80 percent of the compressed methane gas. The uncondensed methane contaminated with oxygen and
4 nitrogen gases would be removed. The final LNG product would be stored in four 15,000 gallon cryogenic
5 tanks.

6 An LNG fueling station would be installed at SVLRC to fuel the existing fleet of disposal trucks using LNG.
7 The remainder of the LNG produced would be exported by tanker truck (typically 10,000 gallon capacity
8 trucks) for use off-site. It is anticipated that no more than two truckloads would be exported daily.

9 The LNG production plant is designed to operate 24 hours per day, seven days per week, 52 weeks per year.
10 The LFGTLNG facility would be equipped with advanced data monitoring, tracking, and recording hardware
11 and software.

12 **2.4.2 Project Design Features**

13 Design parameters described in this section are based on existing designs for the currently permitted operation
14 and conceptual plans for the proposed expansion. Final plans for all aspects of the expansion would be
15 prepared in accordance with applicable permit processes.

16 **2.4.2.1 Cover Slopes**

17 Fill conditions at SVLRC are dynamic. However, the excavation of native soil would not exceed a 1.5:1
18 (horizontal to vertical) gradient. The base of cell excavations at the perimeter of the landfill footprint would
19 be sloped to ensure proper drainage of surface waters.

20 State Regulations require that once each phase of a landfill reaches final grade it must receive final cover. As
21 required by 27 CCR §21090, final cover slopes shall not be steeper than a horizontal to vertical ratio of
22 1.75:1, and shall have a minimum of one 15-foot-wide bench for every 50 feet of vertical height to minimize
23 erosion potential. As currently proposed, the steepest parts of the final cover slope would be 3:1 with 15-foot-
24 wide benches for every 50 feet of vertical height.

25 **2.4.2.2 Stockpiling of Soil for Cover Material**

26 The landfill phases and construction sequence have been designed to balance soil excavation and cover soil
27 use to reduce double handling of soil material. Surplus excavated soils would be stockpiled on or near the
28 active landfill face for later use as cover. In addition, a varying amount of cover material would be surplus dirt
29 delivered to the landfill by contractors from local construction projects. With these available sources of soil,
30 no need is anticipated for additional soil to be imported from outside the site.

31 To comply with the requirements for a prescriptive liner, soils suitable for compacting to a permeability of
32 less than 1×10^{-7} cm/sec would need to be excavated and stockpiled separately. A report by Geosyntec
33 [Geosyntec 2010] to assess the clay resources on site concluded that “adequate soil resources exist within the
34 expansion area to use as low permeability (clay) liner material...” provided that it is selectively graded,
35 screened, and/or processed or admixed with bentonite or another suitable material. The report concludes that
36 about 2.5 percent of the planned excavation volume would need to be suitable material to provide a sufficient
37 quantity for a prescriptive liner. A minor number of truckloads may be required to deliver bentonite or
38 another material to augment native soils to meet the permeability standards. The exact number of trips is not
39 known, but expected to average less than one trip per day.

FIGURE REPLACED(see renumbered Figure 2.4-4)**2.4.2.3 Daily and Intermediate Cover**

Daily and intermediate cover would remain consistent with existing operations at SVLRC, as discussed in Section 2.3.2. At the close of each day, the working face would receive a daily cover of a minimum of six inches of compacted soil or an approved ADC. When no additional waste is scheduled to be placed on an advancing lift within 180 days or some other period prescribed by the LARWQCB, the top and side slopes of the lift would receive an intermediate cover of 12 inches of compacted soil.

2.4.2.4 Drainage and Erosion Control

Drainage facilities and erosion control would be implemented consistent with existing operations. No areas outside the proposed CUP boundary would drain onto the site. Run-on from CUP areas upgradient of the landfilled wastes would be diverted from the landfill via the existing perimeter concrete-lined trapezoidal ditch that would be extended to include the proposed expansion area.

Surface runoff from completed landfill surfaces would be controlled through the use of stormwater channels and detention/sedimentation basins. Six stormwater detention/sedimentation basins (Figure 2.4-1) would be constructed throughout the SVLRC to handle increased runoff. As required by 27 CCR §20365, the stormwater detention/sedimentation basins would be designed to carry runoff volume generated by a 100-year, 24-hour event. A drainage study would be required for the detailed design of the detention/sedimentation basins. The detention/sedimentation basins would be required to meet the standards of the Watershed Protection District, which is that there must be no increase in peak runoff rate in any storm frequency. The basins must be designed in accordance with the Ventura County Watershed Protection District Hydrology Manual.

Stormwater would be carried through a combination of ditches, sediment traps, and slope benches along the face of the landfill to various collection pipes, which in turn would discharge into the perimeter collection system. As discussed in Section 2.3.3, during landfill operations, temporary berms and V ditches would be placed near active refuse fill areas to control surface water runoff. The temporary berms and V ditches would direct surface water around exposed refuse and prevent it from ponding on the refuse fill. Surface water runoff would be carried over temporary refuse fill slopes via oversized drains comprised of metal flumes, corrugated metal pipe, ABS plastic pipe, or plastic-lined trenches. As the phased fill sequence plan progresses, the landfill surface would be contoured to drain runoff to perimeter ditches and minimize ponding on the landfill. The final surface of the landfill would be blanketed with a soil cover system to further minimize stormwater infiltration. Permanent drainage practices would include, but are not limited to: diversion berms; grass/concrete waterways; concrete perimeter channel; lined waterways and outlets; rock outlet protection; subsurface drains/culverts; vegetation management practices; paved parking area; and landscaping.

Vegetation management practices would be used to minimize erosion when possible. As discussed in Section 2.3.2, intermediate cover would be placed on temporary slopes that would not be disturbed for extended periods.

2.4.2.5 Leachate Control Provisions**2.4.2.5.1 Landfill Liner**

New landfill areas must be equipped with liners. Waste disposal areas within the expansion would be designed and constructed in accordance with 27 CCR §20330.

The proposed floor (bottom) and side slope liners for the proposed new excavation areas would be as follows:

- 1 • Figure Floor Liner (prescriptive). The prescriptive floor liner system consists of (from the bottom up)
2 a 24-inch compacted clay liner, a 60-mil HDPE liner, a geotextile, a 12-inch leachate collection and
3 removal system (LCRS) drainage layer, a geotextile, and a 24-inch protective soil layer (Figure 2.3-
4 2).
- 5 • Side Slope Liner. The proposed side slope liner system, an alternative design approved by the
6 LARWQCB, consists of (from the bottom up) a GCL, an 80-mil HDPE liner, a geotextile, and a 24-
7 inch protective soil layer (Figure 2.3-2). This alternative design has demonstrated equivalency under
8 27 CCR §20080(c) and has been approved by the LARWQCB for use within the existing portions of
9 the SVLRC.

10 2.4.2.5.2 Leachate Collection and Removal

11 New landfill areas must be equipped with a LCRS installed over a base liner. The LCRS design would be
12 consistent with the alternative LCRS design already approved for use at SVLRC. The LCRS consists of the
13 following elements (from bottom to top):

- 14 • Geotextile: A geotextile (filter fabric) placed over the liner;
- 15 • Drainage Layer: A 12-inch drainage layer of permeable material having a hydraulic conductivity of 1
16 $\times 10^{-2}$ cm/sec, or greater (usually sorted coarse gravel);
- 17 • Geotextile: A geotextile fabric placed over the drainage layer, designed to prevent overlying material
18 from entering the drainage layer voids; and
- 19 • Operations Layer: A minimum 24-inch layer of soil to separate and protect the drainage layer from
20 displacement by the waste fill; waste would be placed over the protective soil.

21 A system of perforated PVC or HDPE pipe would be installed within the drainage layer to facilitate the
22 collection and discharge to sumps of any leachate that drains from the landfill. The sumps would be underlain
23 by a liner as described in Section 2.4.2.5.1. Positioned on the perimeter of the landfill, each sump would be
24 equipped with a riser pipe extending from the sump to the ground surface. The riser pipes would be installed
25 in shallow, lined trenches excavated into the perimeter at a 2:1 slope or placed directly on the lined 2:1 slope.
26 Final sump design parameters would be approved by the LARWQCB.

27 Leachate would be managed in accordance with current methodologies employed at SVLRC. Leachate
28 collected from the sumps would be re-circulated into the landfill at designated LIPs. Subsurface liquids
29 collected from the toe barrier system would be treated using granular activated carbon adsorbing filters prior
30 to use for dust suppression purposes. Two 5,000-gallon leachate holding tanks, in addition to the existing
31 tanks, would be constructed over the life of the project (one associated with Phase II and the other with Phase
32 III). The tanks would be located in the southern and western portions of the expansion area as shown on
33 Figure 2.4-3. The existing WDR would be revised or a new WDR obtained to allow for the use of the treated
34 leachate for dust suppression within the expansion areas. Prior to use, the liquid would meet all conditions of
35 Provision F of the WDR, which references Maximum Contaminant Levels (22 CCR §64435 and §64473).

36 2.4.2.6 Utilities

37 2.4.2.6.1 Water Supply

38 The proposed project is estimated to require an annual water supply of 174 acre feet (AF) (Psomas 2007a)
39 that would be provided by Ventura County Waterworks District No. 8. On-site and off-site water distribution
40 facilities would be upgraded to provide required fire flow at a maximum velocity of eight cubic feet per
41 second. The proposed on-site water facilities are illustrated on Figure 2.4-9 and off-site facilities on Figure
42 2.4-10. The off-site facilities would connect to an existing 16-inch pipeline near the SVLRC. Approximately
43 3,000 linear feet of 12-inch pipeline would be installed along View Line Drive. The proposed pipeline would

1 cross Brea Canyon, a Ventura County Watershed Protection District and potential California Department of
2 Fish and Game (CDFG) and United States Army Corps of Engineers (USACE) jurisdictional channel, and a
3 permit may be required from the these agencies as well as the LARWQCB for the construction of the
4 improvements.

5 2.4.2.6.2 Domestic Wastewater

6 As part of the proposed SVLRC Expansion Project the existing septic system would be removed and an on-
7 site, self-contained packaged wastewater treatment plant is proposed within the ancillary/support facilities
8 area (Figure 2.4-3). Processing of wastewater at the treatment plant would include: physical separation
9 (primary treatment); biological (secondary treatment); and coagulation, filtration, and disinfection (tertiary
10 treatment). The facility would be permitted by the LARWQCB and would meet the operation and
11 maintenance guidelines required by the California Department of Public Health.

12 Package-type wastewater treatment equipment would be contained in a common rectangle metal tank. Other
13 mechanical and electrical equipment would be located outside the equipment vessel. The plant would be
14 housed either in a building or installed underground. It would be located near the stormwater
15 detention/sedimentation basin or in the employee/visitor parking lot to allow gravity flow from the proposed
16 building facilities to the treatment plant (Figure 2.4-11). Such a wastewater treatment plant is designed to be
17 fully automated, but would be maintained by qualified personnel who would perform required periodic
18 inspection, provide preventative maintenance, and maintain operating records of the plant.

19 The treated effluent from the wastewater treatment plant would be pumped to the leachate storage tanks where
20 it would commingle with treated leachate. The treated effluent would be used for irrigation and/or dust
21 control. There would be no leach field or off-site discharge of domestic waste.

22 2.4.2.6.3 Electricity and Natural Gas

23 SVLRC has no natural gas line connections. Under the proposed project SVLRC would receive natural gas
24 from the LFGTLNG facility. Electricity would continue to be provided either from SCE and/or by the existing
25 and expanded LFGTE facilities as described in Section 2.3.6.3.

26 2.4.3 Construction

27 Construction of the SVLRC Expansion Project would involve two types of construction and occur in four
28 phases. The initial construction activities would include the construction of facilities in the 30-acre
29 support/ancillary facilities area (including the MRF/RTF, SVECC, waste hauling yard, office facilities, heavy
30 equipment and vehicle maintenance facility, and new scales and scalehouse). Construction would also include
31 expansion of the existing LFGTE facility and construction of a LFGTLNG facility. The LFGTE units and
32 LFGTLNG plant would be constructed on an as needed basis at a later time. The C&D debris recycling
33 activities and green waste processing operations would occur on the landfill footprint in an area not receiving
34 waste and would migrate from place to place within the landfill as portions are filled to capacity. Construction
35 of additional waste depository space within the landfill proper would also occur within Phase I. Subsequent
36 construction activities would involve the sequential excavation of Phases II through IV of the waste footprint
37 and would include clearing, compacting, and preparing the phase(s) for landfilling.

38 2.4.3.1 Construction Schedule

39 The approximately 30-acre support/ancillary facilities area would be completed within approximately 18
40 months of project approval (Table 2.4-10).

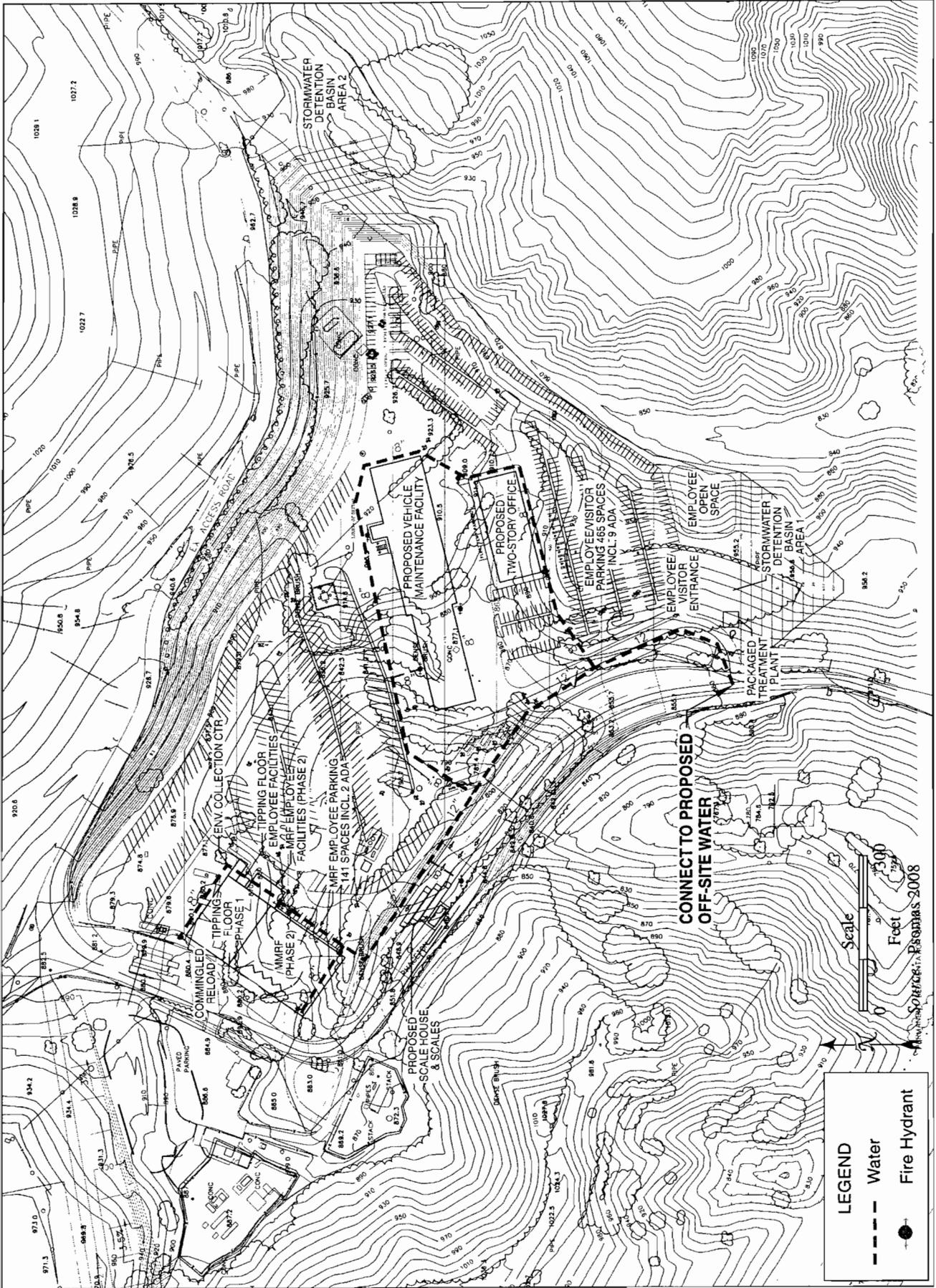


Figure 2.4-9. Proposed On-Site Water System

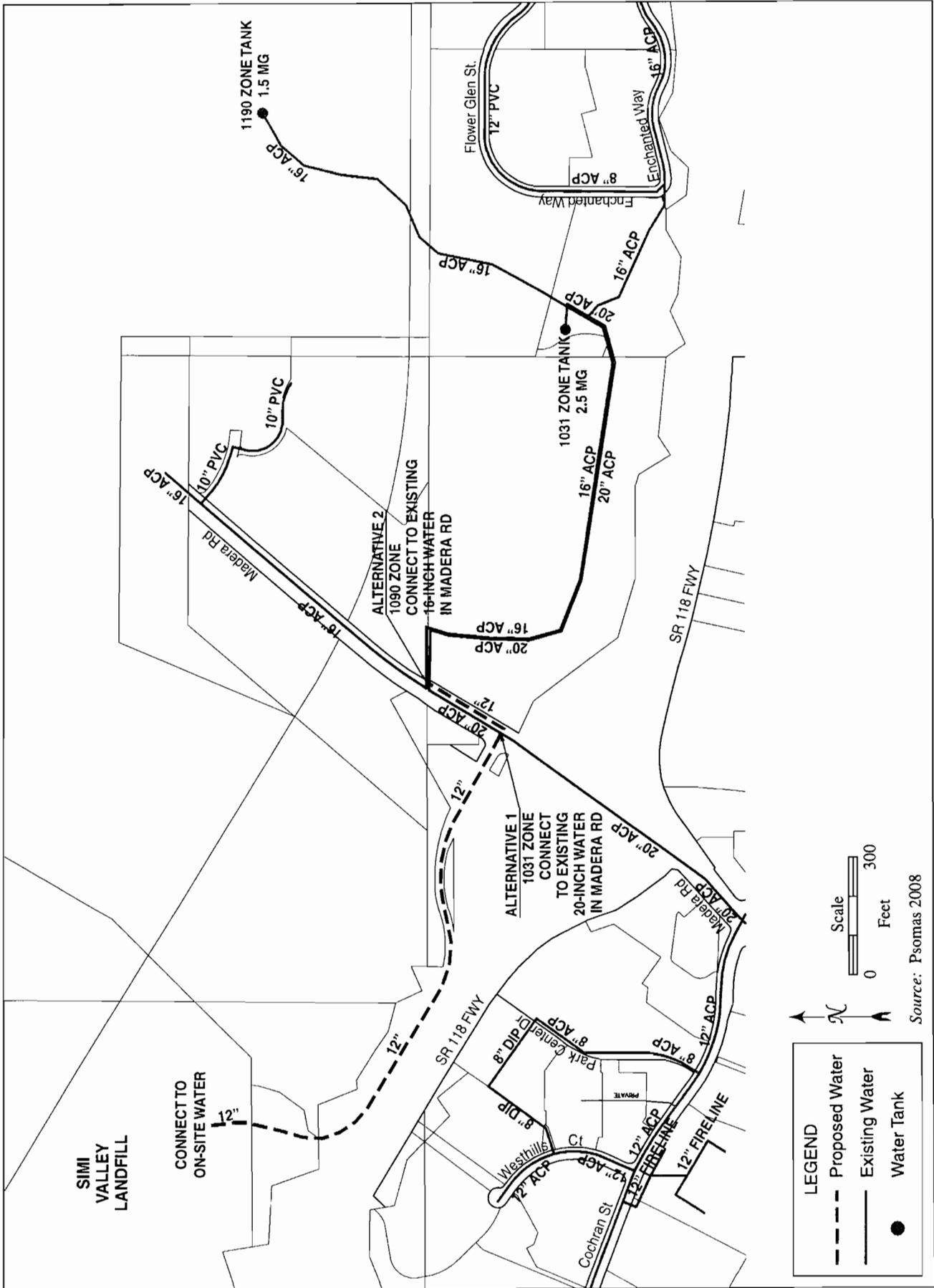


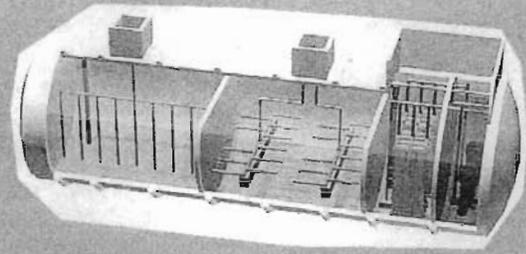
Figure 2.4-10. Proposed Off-Site Water System

ZENON MEMBRANE TECHNOLOGY

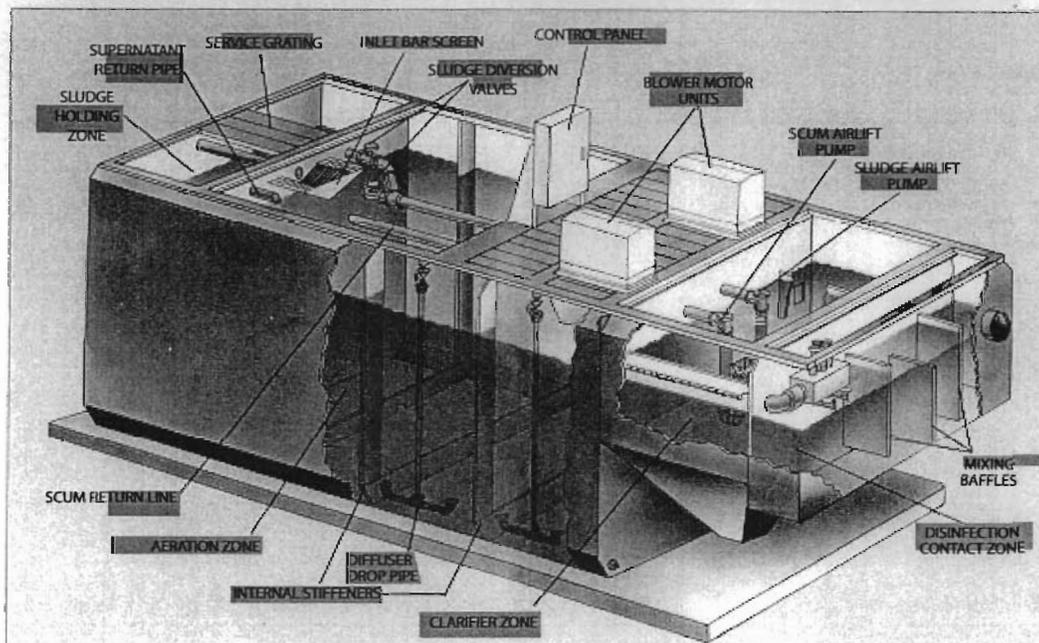
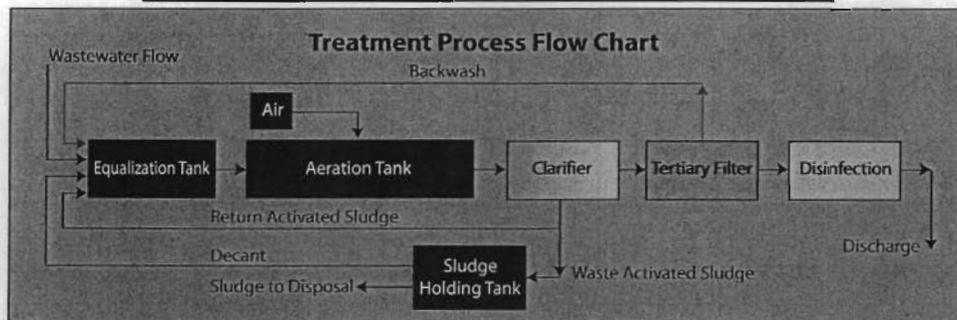
Z-MOD™-S

5,000 to 100,000 gpd*

- Fully integrated system with biological processes, membranes, and ancillary equipment in a single tank
- A complete “plug-and-play” design
- Maximum capacity for a buried tank is 40,000 gpd
- Can be buried or installed above ground
- Compact design minimized construction costs and plant footprint
- Highly automated PLC-controlled operation and cleaning



POLLUTION CONTROL SYSTEMS, INC.



Source: Psomas 2008

Figure 2.4-11. On-Site Packaged Wastewater Treatment Plant

- 1 Phase I of the waste footprint would include additional filling of the existing landfill area. Construction of
 2 Phase II would begin as Phase I approaches its design capacity, which has been estimated to take
 3 approximately seven to eight years. The construction of each subsequent phase would begin as the previous
 4 phase reaches capacity (estimated to take between 12 to 14 years).

Table 2.4-10 Construction Schedule

<i>Construction Activity</i>	<i>Estimated Duration (months)</i>	<i>Estimated Timeline</i>
Support/Ancillary Facilities Area	18	January 2012 – June 2013
Earthmoving	6	January 2012 – June 2012
Structural Excavation/Backfill	2	July – August 2012
Sitework	5	June – October 2012
Utilities	3	June – September 2012
Concrete	4	September – December 2012
Buildings	4	January – April 2013
Finishes	4	April – June 2013
Mechanical, Electrical, and Plant	4	March – June 2013
Phase I Waste Disposal Area	2 ¹	2012
Phase II Waste Disposal Area	8 ²	~2016 - 2030 ^b
Phase III Waste Disposal Area	6 ³	~2028 - 2044 ^b
Phase IV Waste Disposal Area	6 ⁴	~2040 - 2051 ^b

Notes:

1. Assumes that one cell would be constructed during Phase I.
2. Assumes that four cells would be constructed during Phase II; each cell requiring 60 days for construction.
3. Assumes that three cells would be constructed during Phase III; each cell requiring 60 days for construction.
4. Assumes that three cells would be constructed during Phase IV; each cell requiring 60 days for construction.
5. Assumes that Phase I would reach capacity in seven to eight years
6. Assumes that Phases II through IV would reach capacity in approximately 12 to 14 years.

5 **2.4.3.2 Construction Workforce**

- 6 During peak construction, the construction workforce would include approximately 45 personnel for the 30-
 7 acre support/ancillary facilities area. The waste disposal areas would be constructed in four consecutive
 8 phases with each phase divided into cells. Phase I would be comprised of one cell and would require 29
 9 personnel including 18 equipment operators, nine construction personnel, and two managers. Phase II would
 10 be comprised of four cells and would require 116 construction personnel. Phases III and IV would each
 11 contain three cells and require 87 personnel.

12 **2.4.3.3 Construction Equipment**

- 13 Table 2.4-11 identifies the equipment anticipated for construction activities. Equipment would be delivered to
 14 and removed from the site for each construction period. A majority of the heavy construction equipment and
 15 material would be delivered to the construction site from local contractors' yards on lowboy trucks or trailers
 16 using modern trucks that would be required by WM to be Tier 3 compliant (i.e. to use ultra-low-sulfur fuel).
 17 Most construction equipment would require either gasoline or diesel fuel.

Table 2.4-11. Construction Equipment and Estimated Daily Hours of Use

Equipment Type	Number	Engine Type	Horsepower	Associated Construction Activity
Support/Ancillary Facilities Area				
631 Scrapers	6	Diesel	500	Earthmoving
D-10 Dozer	6	Diesel	700	Earthmoving
D-6 dozer	1	Diesel	140	Earthmoving
Motor Graders	2	Diesel	180	Earthmoving
Compactors	2	Diesel	300	Earthmoving
Water Trucks	1	Diesel	200	Earthmoving
Water Wagon	2	Diesel	330	Earthmoving; structural excavation/backfill; sitework; site utilities; concrete; metal buildings; finishes
Excavator	2	Diesel	168	Structural excavation/backfill; sitework; site utilities
Support/Ancillary Facilities Area				
End-dump Trucks (10 cubic yards)	3	Diesel	370	Structural excavation/backfill; sitework; site utilities
Compactors	2	Diesel	100	Structural excavation/backfill; sitework; site utilities
Concrete Pump	1	Diesel	350	concrete
Concrete Paving Machine	1	Diesel	100	Finishes; MEP
Asphalt paving Machine	1	Diesel	75	Concrete
Concrete Truck Delivery	9	Diesel	350	Finishes; MEP
Asphalt Truck Delivery	5	Diesel	350	Concrete
Cranes	2	Diesel	335	Metal buildings; finishes
Personnel Lifts	4	Diesel	30	Metal buildings; finishes
Boom Truck	2	Diesel	215	Site work; site utilities; metal buildings; finishes, MEP
Flat Bed Trucks	5	Diesel	200	Earthmoving; structural excavation/backfill; site work; site utilities; concrete; metal buildings
Waste Disposal Area Cell¹				
Scraper Fleet	9	Diesel	500	Cell excavation
Dozers	4	Diesel	700	Cell excavation
Motograders	2	Diesel	180	Cell excavation
Water trucks	2	Diesel	200	Cell excavation
Compactor	1	Diesel	300	Cell excavation
<i>Source:</i> WMC 2008				
<i>Note:</i>				
1. No cells would be constructed as part of Phase I. Phase II would require construction of four cells. Phase III and Phase IV would each require three cells. Each cell would require approximately 60 days for construction.				

1 **2.4.3.4 Construction Traffic**

2 A majority of the heavy construction equipment and material would be delivered to SVLRC from local
 3 contractors' yards on lowboy trucks or trailers. Mobile cranes and dump trucks would be driven in as well.
 4 Wastes generated from construction would either be hauled within the landfill for disposal or recycling or off-
 5 site to local recycling centers. Table 2.4-12 provides an overview of the construction-related vehicle
 6 roundtrips anticipated as part of the proposed project.

Table 2.4-12. Construction-Related Total Vehicle Round Trips

	Construction of Support/ Ancillary Facilities	Landfill Phase I	Landfill Phase II	Landfill Phase III	Landfill Phase IV	Total
Equipment Delivery	57	0	72	54	54	237
Material Delivery	400	0	300	300	300	1,300
Construction Related Debris ¹	100	0	100	100	100	400
<i>Source:</i> WMC 2008						
<i>Note:</i>						
1. These trips are assumed to occur within the landfill.						

2.4.4 Operation Description

Landfill operations include waste receipt and or disposal, waste hauling within the landfill footprint, application of daily and intermediate cover, and site grading and maintenance. As the landfill expands, additional excavation would begin to occur in new phases, and other heavy equipment operations would occur on the surface of areas surrounding the refuse columns.

2.4.4.1 Waste Quantities and Truck Traffic

Currently, the SVLRC is permitted for a maximum limit of 822 vehicles per day. Future truck traffic associated with landfill receipts was estimated based on actual trucks recorded at the landfill in the first quarter of 2008 (January through March). Actual total truck trips for the quarter were allocated to an average day by observing that Saturdays typically received 60 percent of the average volume on weekdays. The one Sunday a month the facility is open to the public was ignored as being unrepresentative of actual truck trip generation since virtually all Sunday trips are much smaller household loads and do not occur during weekday traffic periods.

Based on the average tons per day received during the first quarter of 2008 and the numbers of trucks associated with each type of waste (municipal solid waste, construction and demolition debris, clean dirt, greenwaste, and auto shredder waste representing alternative daily cover) and total tonnage by type, an average truck load was calculated for each waste type for wastes from within Ventura County and wastes from outside the County. The average tons per load differ for waste originating in Ventura County versus waste from outside the County with the average load associated with in-county waste being smaller than those from out-of-county. This can readily be explained by the fact that in-county hauls involve more smaller waste packer trucks delivering waste directly to the landfill whereas out-of-county hauls involve a larger fraction of transfer trucks which have roughly twice or more the capacity of the smaller packer trucks.

Using California Department of Finance (CDF) population projections for Ventura County, actual average daily receipts for the first quarter 2008 were projected forward to future years. Based on CDF data, Ventura County waste receipts in all waste types were inflated at a growth rate of 1.7 percent per year to the year 2020 and by 1.05 percent per year thereafter based on a projected flattening of the population growth curve in the CDF projections. In the first quarter of 2008, average Ventura County waste represented 1,276 tons per day out of average total receipts of 3,681 tons per day. For future years, the projected Ventura County waste tonnage was deducted from the proposed project's assumed 9,250 tpd permitted level (6,000 tpd of MSW and 3,250 tpd of recyclable or beneficially used materials) to determine the tonnages received from out-of-county sources. Assuming that the maximum tons per day would be received in the future, the balance of the available receipts that would not be used by the projected Ventura County tonnages was allocated to all other sources. Total truck trips were then calculated based on the average tonnage per truck, by waste type and source location (i.e. in-county vs. out-of-county), received in the first quarter of 2008.

Average daily truck trips for the first quarter of 2008 were 501 vehicles per day. Based on the above projection methodology, future daily trips related solely to landfill operations (that is, not to commuter trips) were calculated to be 1,128 trips per day in 2020 and 1,173 trips per day in 2050. This is larger than the 892 vehicles per day projected in Waste Management's application for modification of the existing CUP-3142 for the proposed project and, therefore, considerably more conservative. The reason for the difference appears to be that the projections in the application assumed a higher tonnage per truck for future truck trips than the above methodology used. However, for the purposes of estimating potential future impacts, the more conservative methodology described above which results in a larger number of truck trips is considered appropriate for a reasonable worst case analysis and is therefore the basis for the following analyses.

Table 2.4-13. Simi Valley Landfill and Recycling Center Permitted, Baseline and Proposed Vehicle Trips

<i>Land Use</i>	<i>TPD or Employees</i>	<i>Maximum Daily Round Trips</i>
Vehicle Trips Based on Currently Permitted Daily Tonnage		
Waste Material	3,000	425
Recyclable Material	6,250	375
Employees	22	22
Total:		822¹
Baseline Vehicle Trips²		
Waste Material	2,584	311
Recyclable Material	1,097	190
Employees	22	22
Total:		523
Estimated Peak Daily Vehicle Trips Based on the Proposed Project Description for 2020		
Waste Material	6,000	672
Recyclable Material	3,250	456
Employees	400	405
Total:		1,533
Net Vehicle Trip Increase from Currently Permitted Vehicle Round Trips:		+711
Net Vehicle Trip Increase from Baseline Vehicle Round Trips:		+1,010
<i>Source:</i> Derived from WMC 2008a		
<i>Notes:</i>		
1. Current permit limit for vehicles under CUP-3142-7.		
2. Baseline based on data from the 1 st Quarter 2008, scaled to annual operations, and divided by actual days of operation.		

1 2.4.4.2 Hours of Operation

2 The expanded SVLRC would continue to comply with the currently permitted hours of operation: 6 AM and 8
3 PM, seven days per week, 365 days per year. However, SVLRC is typically closed on New Year's Day, Easter
4 Sunday, Memorial Day, July 4, Labor Day, Thanksgiving, and Christmas. The hauling vehicle fleet would be
5 permitted to operate between the hours of 4 AM and 8 PM, seven days per week, 365 days per year with the
6 exception of the holidays listed above. However, current operations occur six days a week plus one Sunday
7 per month effectively totaling 312 days per year. Other activities such as LFG and leachate
8 collection/disposal, equipment and vehicle maintenance, MRF/RTF operations, and compliance tasks would
9 normally occur over a 24 hour period except for periodic maintenance and other downtime.

10 2.4.4.3 Landfill Personnel

11 The proposed project would result in an overall increase of 150 employees. Currently, SVLRC and GI Rubbish
12 employ 250 personnel of which 25 are located at SVLRC and 225 (135 drivers and 90 customer service, shop,
13 support, and management personnel) are located off-site at the existing GI Rubbish hauling facility. Under the
14 proposed project the existing hauling facility would be relocated to the SVLRC and the hauling facility
15 personnel would increase to 350 (225 drivers and 125 customer service/billing staff, shop, support, and
16 management personnel) over the life of the project. Additionally, the landfill personnel would increase to 50
17 personnel. Table 2.4-15⁴ provides an overview of the changes in personnel under the proposed project.

Table 2.4-14. Current and Proposed Landfill Personnel

	<i>Current Employees</i>	<i>Proposed Employees</i>	<i>Total Net Increase of Employees</i>
Landfill Personnel	25	50	+25
Hauling Facility - Drivers	135 ¹	225 ²	+90
Hauling Facility- Office Personnel	90 ¹	125 ²	+35
Total	250	400	150

Notes:

1. The hauling facility is currently located off-site of the SVLRC. Thus, associated personnel are not currently located at the SVLRC.
2. The hauling facility is proposed to be relocated to the SVLRC. Thus, associated personnel would be relocated to the SVLRC.

1 **2.4.4.4 Waste Delivery and Processing**

2 Municipal solid waste and recyclables from the local community would be delivered to SVLRC in packer
3 trucks for disposal in the landfill and for processing in the MRF/RTF. Each truck would be weighed and
4 information about its origin documented at the weigh station. The GI Rubbish fleet of packer trucks would be
5 sent out multiple times per day, but would remain at the SVLRC in the proposed waste hauling yard at the end
6 of each day. GI Rubbish packer trucks would also be maintained at the proposed Heavy Equipment and
7 Vehicle Maintenance Facility within the SVLRC.

8 SVLRC would continue to receive transfer trucks, trucks carrying recyclables, and trucks carrying roll-off
9 bins. Each truck would be weighed and information about its origin documented at the weigh station. The
10 trucks would dispose of their contents at the tipping areas based on the type of commodity they are carrying.
11 To the maximum extent possible, trucks bringing material in would be reloaded and sent outbound with
12 material from the MRF/RTF and resource recovery facility areas. The trucks would be weighed upon leaving
13 the facility.

14 **2.4.5 Site Closure**

15 The SVLRC expansion area would be closed once the landfill reaches capacity or the facility's permitted
16 closure date is reached, whichever occurs first. An updated closure plan would be prepared to take into
17 account the revised fill plan, the increased waste disposal capacity, and the extended site life. The closure plan
18 would be submitted to the EHD, the LEA for solid waste disposal facilities in Ventura County, along with the
19 application for revision of the SWFP.

20 **2.4.5.1 Final Cover**

21 The SVLRC would be filled sequentially in four phases. Once the landfill reaches capacity it would be
22 brought to final grade and the final alternative evapotranspirative cover currently approved under the
23 SVLRC's Closure/Post-Closure Maintenance Plan would be installed (Geosyntec 2002).

24 **2.4.5.2 Post-Closure Maintenance and Monitoring**

25 WMC has an existing Post-Closure Maintenance and Monitoring Agreement to ensure protection of the
26 surrounding environment during the closure period (a minimum of 30 years after the last wastes have been
27 deposited). This agreement would be extended to include the proposed project area.

28 **2.4.5.3 Closure and Post-Closure Fund**

29 In order to ensure that funds are available to perform landfill closure and post-closure maintenance, WMC is
30 required (by Condition 24 of CUP-3142-4) to establish ~~and fund a site closure trust fund and a line of credit~~
31 to ensure site closure letter of credit, pursuant to Ventura County Ordinance No. 3783. WMC has established
32 a line of credit reviewed and monitored by the LEA annually.

33 **2.4.5.4 Post-Closure Use of the Site**

34 As required by 27 CCR §21190(c), all proposed post-closure land uses, other than non-irrigated open space,
35 shall be submitted to the LEA, LARWQCB, VCAPCD, and local land use agency for review. The LEA must
36 review and approve proposed post-closure land uses if the proposed use involves structures within 1,000 feet of
37 the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste.

1 **2.5 Measures to Minimize Environmental Impacts**

2 The measures presented in Table 2.5-1 are included as part of CUP-3142-7 for the existing SVLRC. Only
 3 those measures from CUP-3142-7 that address environmental impact minimization are listed in Table 2.5-1.
 4 Note also that CUP-3142-7 contains some duplicate or near-duplicate measures from prior permit
 5 modifications. Only the most recently imposed conditions are retained if they are essentially the same as
 6 previously imposed conditions. Administrative measures from CUP-3142-7 are not included in the table.
 7 Therefore, the numbers are not sequential. These measures are also applicable to the proposed expanded
 8 landfill operations. Because WMC is already complying with these measures, the environmental impact
 9 assessments in this EIR assume that they would be implemented by WMC for the proposed new project, as
 10 well. This has the effect of reducing the number of impacts identified herein that would require mitigation.
 11 Each measure in Table 2.5-1, or a modification thereof at the County’s discretion, would be included in the
 12 Mitigation Monitoring and Reporting Program to ensure that these measures, as well as newly required
 13 mitigation measures based on the current project proposal, are fully implemented if the project is approved.

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
1	<p>Previous Conditions Superseded: The conditions that follow shall supersede all previous conditions pertaining to CUP-3142, commencing on the date that Zoning Clearance for Use inauguration of the Landfill Gas-To-Energy Facility is issued pursuant to Condition No. 2 for Major Modification No. 7 to CUP-3142. The conditions for Modification 7 are a blend of conditions previously approved by the Board of Supervisors on November 26, 2002 for CUP-3142-6 and ones that replace or are revised or new additional conditions for Mod. 7.</p>
5	<p>Commencement and Time Limits of Uses (Revised): Rights allowed by this permit modification No.7 shall be deemed commenced with the issuance of the Zoning Clearance for Use Inauguration of The Landfill Gas-To-Energy Facility. Acceptance of wastes, as defined by Condition 4, Item (a), shall continued to be permitted until: a. The designated fill elevations in Attachment "A" have been reached; or b. Thirty (30) years from June 27, 2004 (the 1989 approved permit ending date), whichever comes first. c. Modification No. 7 is granted until final expiration of June 27, 2034 or until the landfill no longer produces methane gas for beneficial use for co-generation of electricity. Permit Modification No. 7 shall automatically expire if any of the following circumstances occur: (1) A Zoning Clearance for Construction of CUP-3142 Modification No. 7 has not been issued within six (6) months of permit approval. The Planning Director may grant a six (6) month extension during the initial year period based on a written request by the applicant. (2) If the use for which it was granted is discontinued for a period of 365 days or more. All other site maintenance activities, post-closure activities, and their attendant structures, may continue for thirty (30) -years after the site is deemed "closed" by the Planning Director. "Closure" shall mean that all closure requirements of the Local Enforcement Agency, Regional Water Quality Control Board, and these conditions have been met (see Condition 24). The Planning Director may extend the acceptance of refuse for up to eighteen (18) months beyond the thirty (30) year limit described above in order to prepare the site for closure, to comply with environmental protection requirements, or to further the public health, safety or welfare.</p>
6	<p>CUP Permit Expiration/Renewal: If the designated fill elevations have not been exceeded but the 30-year refuse acceptance time limit in Condition 5 is due to expire, the permittee may file a modification to extend this thirty (30) year time limit. During processing of this extension request, the permittee may continue landfilling activities until this modification request is acted on and appeals heard, provided: a. The designated fill contours are not exceeded; and b. A "complete" application and fee, as determined by the Planning Director, has been submitted and accepted at least 12 months prior to the expiration of the thirty (30) -year landfill time limit of June 27, 2034, <u>providing that full compliance with all conditions has been accomplished and the use authorized by this permit will remain compatible to the properties in the general area.</u> c. Failure of the County to notify the permittee of the above dates shall not constitute grounds for continuance of this Permit after expiration.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
14	<p>Master Development Plan (Revised): The permittee shall continue to abide by and implement the Master Development Plan (MDP) as submitted by Waste Management of California, Inc May of 2003 and approved by the Planning Division under Modification No. 6. The purpose of the MDP is to provide a detailed description of the project as approved, including construction features, ancillary facilities, and various operational plans and programs necessary to operate the facility in an environmentally safe and nuisance free manner and mitigate any significant avoidable environmental impacts identified in the Final Supplemental EIR. The MDP shall be consistent with the project as approved in this permit, the SWFP, the WDRs, and the County Contract required pursuant to Ventura County Ordinance No. 4155.</p> <p>Denial or the imposition of conditions of approval must be based on one or more of the following findings: A. The MDP as submitted is inconsistent with the above mentioned permit and approvals; or B. The MDP does not provide for an environmentally safe and nuisance free operation; or C. The MDP does not feasibly mitigate or avoid the potentially significant environmental impacts identified in the FSEIR.</p> <p>At a minimum, the following plans and operational programs shall be included in the MDP:</p> <ol style="list-style-type: none"> a. Plan sheets, cross-sections and details depicting typical engineering features of the landfill including the liner and leachate collection and treatment systems, gas control systems, surface water control structures, construction phasing, soil stockpile areas and final cover as approved by the Regional Water Quality Control Board and/or the Local Enforcement Agency. b. Plan sheets showing other on-site ancillary facilities such as entrance facilities, maintenance facilities, roads, water supply and waste disposal facilities and site access control. c. Plan sheets showing off-site improvements necessary to the landfill operation, such as transportation, drainage, water supply, etc. d. An updated water supply plan describing the improvements to be made to assure adequate potable and non-potable water for landfill operations, dust control, fire protection, landscaping, human consumption and hygiene. e. An updated on-site drainage plan meeting the requirements of the Ventura County Public Works Agency and the Environmental Health Division. (See Conditions 56 and 57). f. An updated off-site drainage plan meeting the requirements of the Ventura County Watershed Protection District. (See Condition 58) g. An updated erosion control plan to minimize erosion and sediment transport associated with excavation and filling operations. h. An updated visual impact mitigation program designed to minimize the visual impacts of the site and its operations on surrounding property owners and to travelers on Route 118. (See Condition 43) i. An updated fire protection program describing measures to be taken to prevent and fight fires as approved by the Fire Department. (see Conditions 47, 48 and 72-89) j. An updated litter and illegal dumping control program. (See Condition 45) k. An updated hazardous waste exclusion program designed to minimize or prevent the illegal disposal of hazardous wastes at the site. (See Condition 54) l. An updated radioactive waste exclusion program designed to minimize or prevent the illegal disposal of radioactive wastes at the site. (See Condition 55) m. An updated groundwater and leachate monitoring program which at a minimum meets the requirements of CCR Title 27, Chapter 3, Subchapter 15 and Condition 37. (See Condition 37). n. An updated gas emissions control and monitoring programs designed to monitor and mitigate the impacts of off-site migration of gas emissions from the landfill and its associated facilities. (see Condition 38). o. An updated wind monitoring program to monitor and record wind speed and direction. (See Condition 42). p. An updated odor control plan to prevent odors from drifting off-site. (See Condition 42). q. An updated clay and cover availability study to help assure the on-site availability of an adequate quantity and quality of suitable materials for use in the liner, cap and as cover. (See Condition 51) r. An updated site sign plan that establishes the type and location of signs for the landfill. (See Condition 52). s. An updated noise abatement plan to minimize on-site and off-site impacts from noise. (See Condition 53). t. An updated emergency procedures program to assure that plans are in place and personnel are trained to respond to on-site emergencies. (See Condition 56). u. An updated dust suppression program. (See Condition 44). v. An updated paleontological mitigation program. (See Condition 50). w. An updated seismic design report documenting that the landfill elements have been designed to withstand the maximum probable earthquake. (See Condition 49).

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
15	<p>Annual Status Report: By September 1st of each year beginning in 2003, or other date as approved by the Planning Director, the permittee shall submit for review and approval to the Planning Director a report in written and graphic form describing the status of activities at the site. The report shall include, but not be limited to, the following activities/events, which occurred over the previous year or are expected to occur in the forthcoming year, unless otherwise specified by the Planning Director:</p> <ol style="list-style-type: none"> A summary of special occurrences that took place at the site, including but not limited to, those events listed in California Code of Regulations, Title 27, Section 20510(c). At a minimum, this summary shall include discovery of hazardous wastes, accidents, complaints, and natural disasters. Detailed Special Occurrence Logs shall be kept on-site and available for agency inspection and shall include the nature of the occurrence, the action taken by landfill personnel, the results of the occurrence, if any, and future corrective/preventative measures. A description of the hazardous waste inspection program for the previous year. Complete documentation of all such inspections shall be kept on-site and available for agency inspection and shall contain the information listed in Condition 55, Item (b). A log of the vehicles turned away at the scales. Said log shall include the date of each event, which the vehicle was turned away, the vehicle license number, the owner of the vehicle, and the driver's name. Total number of vehicles, which brought waste to the landfill within the last year. Total tonnage or cubic yards of material deposited at the site. Type and numbers of equipment in use or located at the site. Logs for new water, leachate, and gas wells. Number of employees regularly working at the site. Identification of condition or other permit violations or deficiencies noted by various regulatory authorities and how they have been, are being, or will be, remedied. A facilities map showing all existing and planned (over the next year) buildings, roads, pipelines, pumping/processing facilities, etc. A current topographic map showing fill, excavation and natural contours within the permit limits. This should include an estimate of remaining site life and capacity at the site. Clay/cover availability report with projections of clay use and daily cover needs for the next year and the resulting change in supply. Landscaping plan showing existing and planned (over the next year) plantings, irrigation systems, etc. A reference master chart or report showing schedules and results of preparation operation, monitoring, and reporting in all major phases of the facilities, with an emphasis on the activities for the upcoming year.
23	<p>Permitted Traffic Volume: The amount of traffic generated by the landfill operations approved under Major Modification No. 6 is limited to a maximum of 822 round trips per day, except for the "free days" as directed by the Agreement for the Operation and Closure of the Simi Valley Landfill pursuant to County Ordinance 4760.</p>
31	<p>Compliance with County Ordinance No. 4155 (Revised): The permittee shall at all times comply with the requirements of Ventura County Ordinance 4155 regarding the operation of solid waste disposal and processing facilities as determined by the Environmental and Energy Resources Department (EERD now Integrated Waste Management Department [IWMD]).</p>
33	<p>Days of Operation: The landfill shall be open for receipt of refuse for at least six hours of every day of the year, except that the landfill may close for the following days: New Year's, Easter Sunday, Memorial Day, July 4, Labor Day, Thanksgiving, and Christmas except as amended by Permit Adjustment No. 20 – <u>Sunday Closures</u>, which allows the landfill to close every Sunday, except the third Sunday of each month. Any modifications to this schedule shall be proposed by the permittee and approved in writing by the Planning Director prior to any change occurring, except as otherwise provided as part of the Emergency Procedures Plan. (See Condition 56).</p>
34	<p>Hours of Operation: Operations at the landfill shall only occur between 6:00 AM and 8:00 PM. For this condition, "operations" shall include but not be limited to: waste receipt and/or disposal, waste handling and/or cover operations, site grading and/or excavation, or any other heavy equipment operations on the surface or areas surrounding the refuse column. Any operations at the landfill site as defined above may occur outside the above hours only upon written approval by the Planning Director. Other activities such as gas and leachate collection/disposal, equipment maintenance, etc., shall not be limited by this condition, but may be regulated by other conditions or permits. In the event that other permits required by the project impose other restrictions on the types of operations or the hours of operations, the more restrictive requirements shall take precedence. In the event the landfill is closed unexpectedly for any reason, the permittee shall notify commercial haulers to the landfill by telephone of said closure as soon after site closure as possible.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
37	<p>Groundwater and Leachate Monitoring Program (Revised): The permittee shall abide by and adhere to the updated/expanded Groundwater and Leachate Monitoring Program (GWLMP) as approved by the LARWQCB and kept on file by the Planning Division, which incorporates the project as approved under Modification No. 6. The purpose of the GWLMP shall be to:</p> <ol style="list-style-type: none"> Monitor groundwater and leachate quality and movement within the permit boundaries and, if necessary, outside the permit boundaries. Conduct special studies to explain unexpected results of routine monitoring and/or fill in gaps in the existing geology/hydrology/groundwater database, if necessary to adequately characterize the site or monitor impacts of leachate on groundwater quality. <p>The GWLMP shall include all routine monitoring required in the WDR as issued and periodically updated by the Regional Water Quality Control Board as well as any additional monitoring required by the Planning Director. This monitoring program shall monitor groundwater and leachate quality and movement within the permit boundaries and, if necessary, outside the permit boundaries.</p> <p>The GWLMP shall include sampling locations, frequency, chemical parameters, and sampling and quality assurance/quality control (QA/QC) procedures. Sampling and analytical procedures shall be designed and implemented to assure that results obtained are representative of actual water quality conditions at the sampling location.</p> <p>The GWLMP shall include protocols for determining under what circumstances additional verification monitoring or remedial action investigations are warranted. Such additional monitoring or actions may include resampling, revision of sampling or analytical procedures, revised QA/QC, or use of additional wells or laboratories.</p> <p>The GWLMP shall include "points of compliance" wells immediately adjacent to the refuse column on fee property owned by the permittee. Said "points of compliance" wells shall mean wells at which State groundwater standards must be met.</p> <p>The GWLMP shall require at least quarterly reporting of analytical results and an annual summary report. Deadlines for report submittal shall be the same as those required in the WDRs.</p> <p>The GWLMP shall contain a provision that within any 12-month period the Planning Director may conduct tests of up to four samples drawn from groundwater or leachate monitoring wells. Said tests shall be conducted by a consultant and laboratory selected by the Planning Director and paid for by the permittee. The specific tests to be conducted shall be determined by the Planning Director.</p>
38	<p>Gas Emissions Control and Monitoring Program (Revised): The permittee shall abide by and adhere to the updated/expanded VCAPCD Gas Emissions Program as submitted by Waste Management, Inc. dated April 2003, which incorporates the project as approved under Modification No. 6. The purpose of the gas emissions program shall be to reduce landfill gas emissions to, or close to, the minimum total emissions reasonably possible as determined by the Planning Director in consultation with the VCAPCD and the permittee. Total emissions shall include emissions from any gas recovery system as well as fugitive emissions from the landfill.</p> <p>The gas program shall consist of a collection system and a low emissions flare as the primary gas consumption technology, or other system(s) with comparable emissions rates. Consistent with reasonable safety considerations, the total system shall be designed and operated so as to collect and consume the maximum amounts of gas generated at any one time within the viable limits of technology then available as determined by the Planning Director. (Planning, VCAPCD)</p>
39	<p>Air Pollution Control District Condition Compliance: The landfill operator shall comply with conditions established by the Ventura County Air Pollution Control District in its Authority to Construct and Permit to Operate entitlements. (VCAPCD)</p>
40	<p>Compliance With County Ordinance 4258 (Revised): The permittee shall at all times comply with the requirements of Ventura County Ordinance Number 4258 regarding the operation of solid waste disposal facilities, commencing with Section 4700 et al 4730 of Article 1 of Chapter 7 of Division 4 of the Ventura County Ordinance Code. (EHD)</p>
41	<p>Odor Control Plan (Revised): The permittee shall abide by and adhere to the updated/expanded Odor Control Plan as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6. The purpose of said plan shall be to prevent odors associated with the landfill from drifting off-site in concentrations such that they lead to odor complaints from adjacent areas.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
42	<p>Wind Monitoring Program: The VCAPCD’s Surface Weather Monitoring System at the Atmospheric Profiler Station located at the landfill will provide ongoing surface meteorological data, wind speed and direction, temperature, and humidity (precipitation measurements may be added as well) to the operator of the landfill as a reciprocal service for the VCAPCD project being located at the landfill. Upon revocation or termination of VCAPCD’s weather station at the landfill, the operator of the landfill shall resume the responsibility of running the wind monitoring program under this condition. Said Program shall run for as long as landfilling occurs.</p>
43	<p>Visual Impact Mitigation Program (Revised): The permittee shall abide by and adhere to the updated/expanded Visual Impact Mitigation Plan (VIMP) as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No.6. The VIMP shall have as its purpose to effectively screen the landfill operations from the view as seen from Route 118 and the surrounding properties, as well as to mitigate the visual impacts of the refuse column. This program shall be consistent with the requirements of other appropriate permits and/or regulatory agencies. The mitigation of the visual impacts of the refuse column shall consider landscaping on specified refuse column elements throughout the site, and the rounding of slopes on the refuse column at changes in slope angles and consistent with Biology impacts described under Mitigation Bio-2 – Revegetation Plan. Landscaping plans of the updated VIMP shall be completed at two levels of detail as follows: I. Master Concept Plan: The permittee shall abide by and adhere to the updated/expanded) Master Concept Plan (MCP) as submitted by Waste Management, Inc. dated April 2003 and approved by the Planning Division, which lays out in general terms the types of plant species, design techniques (i.e., clusters of variable height species planted across straight lines in the refuse column, etc.) and other considerations to be used with the updated Specific Landscape Plans (SLP) (Section II below). The MCP should provide typical examples of how the design techniques will be applied, as well as generalized maps of the landfill showing the areas to be covered by specific design techniques as well as the individual SLPs. At a minimum, the updated MCP shall include: a. The mitigation features included in Final SEIR Section 3.8.4 (Visual Mitigation Measures). b. A phasing schedule for the updated Specific Landscape Plans (Section II below). This phasing shall include the early planting of fast growing screening vegetation in the areas within the permit boundaries which are not planned for refuse fill or as excavation areas for cover material, and which would screen the landfill from surrounding visually sensitive areas. The Planning Director, in consultation with the City of Simi Valley, shall specify which visually sensitive areas will require screening. Such areas may include, but are not limited to, the six "visual access locations" shown on Page 3.8-5 of the Final SEIR. c. An evaluation of what specific species of trees and shrubs can grow on top and/or on the slopes of a landfill column, using only the minimum State requirements for final cover material and thickness consistent with the requirements of planting for Mitigation under Bio-2 – Revegetation Plan. This evaluation shall discuss and incorporate any regulatory constraints (i.e., limitations on irrigation, etc.), which other agencies may place on landscaping planted on the refuse column. d. Identification of refuse column areas, landscape designs, and planting schedule for portions of the refuse which will not be disturbed for at least 180 consecutive days. Areas to be shown include slopes that have reached their final grades (except perhaps for final cover), even if the top of the slope is still to be raised with refuse fill. The landscaping shall be reasonably considerate of ongoing landfill operations. e. Policies that those areas which will not be disturbed for at least 180 consecutive days, but which are not at their final contours (except perhaps for final cover) shall be planted with temporary landscaping, such as a wildflower and/or grass hydroseed mix, on a planting schedule as approved by the Planning Director. f. Policies that those areas, including slopes, which are at their final contours (except perhaps for final cover) at least one year prior to site closure, shall have final cover and permanent, approved landscaping installed within 180 days of cessation of filling activities in that immediate area. g. A statement that said the updated MCP shall comply with the Ventura County Guide to Landscape Plans, as may be updated from time to time, except for those portions of the Guide waived, in writing, by the Planning Director. Grounds for waiver are limited to those areas of the Guide which would conflict with: 1) the provisions or closure requirements of this or other permits issued for the landfill; and/or 2) any other policy or technical requirements which may make the Guide requirements incompatible with a landfill. h. A refuse fill phasing schedule which specifies: 1) filling the north area of the landfill as soon as possible, consistent with the provisions of this and/or other permits; and 2) when filling the northwest corner, first create a berm of refuse and/or fill to shield any occupied development from Area E (see FSEIR page 3.8-5) from the view of the remainder of the fill activities. The purpose of this requirement is to mitigate the nuisance impacts (visual, noise, odor, etc.) of the landfill operation on potential land uses in Area E.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
	<p>i. A policy and implementation schedule demonstrating that only non-potable water shall be used for landscaping and other non-potable uses (i.e., equipment wash down, etc.). This policy may be modified or waived by the Planning Director upon his written finding that non-potable water is not appropriate on economic or technical grounds.</p> <p>II. Specific Landscape Plans</p> <p>a. Updated Specific Landscape Plans (SLP) shall be developed which specify, at the level of detail required by the Ventura County Guide to Landscape Plans, the planting details for specific areas within the permit boundary.</p> <p>b. Within 120 days of approval of the MDP, SLPs shall be done for the following areas: 1) areas around the periphery which will not be covered with refuse, or graded for cover; 2) areas which have received their final amounts of refuse, but which may or may not have received final cover.</p> <p>Continued landscape maintenance consistent with approved SLPs shall be subject to periodic inspection by the Planning Director. The permittee shall be required to remedy any defects within a reasonable time period as specified in writing by the Planning Director.</p> <p>Additional policies of the VIMP shall state that buildings, outside storage areas, and operation yards shall be screened from any public street by walls, fences, earth mounds, or landscaping.</p> <p>All buildings and other structures shall be painted or surfaced as appropriate for the site, subject to approval by the Planning Director. Said approval shall be through issuance of a Zoning Clearance prior to issuance of building or other permits for the new entrance facilities. See also Condition 46 for Fire Department requirements regarding landscaping.</p>
44	<p>Dust Suppression (Revised):</p> <p>The permittee shall abide by and adhere to the updated/expanded Dust Suppression Plan (DSP) as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6. Said program shall include vegetative ground cover for all areas of the landfill covered with an intermediate cover layer and shall include the following:</p> <ol style="list-style-type: none"> 1. All unpaved areas will be watered (or treated with environmentally safe dust control agents) as often as necessary to minimize the amount of fugitive dust that blows off-site. 2. All inactive areas, including all intermediate slopes, will be covered with processed green waste, or hydroseed, or both, or treated with environmentally safe dust agents, to minimize dust and erosion. 3. All but essential site activities and operations shall cease during high wind events. 4. Vehicle speed on all unpaved areas shall be limited to no more than 15 miles per hour.
45	<p>Litter/Illegal Dumping Control Program:</p> <p>At least twice every day the landfill is open to receive refuse, the permittee shall inspect for, and clean up, all litter and illegal dumping which occurs in, or adjacent to, the landfill access road and Madera Road. Said litter/illegal dumping program shall be limited to a distance .75 miles from the landfill access road to the east bound Madera Road off-ramp, starting from the point where the access road crosses the permit boundary. The permittee shall clean up all wind-blown litter outside the permit boundary as determined to be necessary by the Planning Director. In order to comply with this paragraph, the permittee shall make all reasonable efforts to obtain permission from the affected property owners to gain access to their property for purposes of litter clean up. This paragraph does not apply to any properties to which the permittee is unable to gain such access. The permittee shall continue to implement a Covered Vehicle Program, which shall impose a fee or other requirement on every vehicle billed to a commercial account entering the landfill, which does not cover open loads of refuse. In the event that a fee or other charges is assessed, the disposition of the received funds shall be subject to the approval of the EERD (now IWMD).</p> <p>The permittee shall continue the existing approved Covered Vehicle Program as follows:</p> <p>Covered Vehicle Program:</p> <ol style="list-style-type: none"> 1. Upon the third occurrence, for a particular person or business, of an untarped load coming to the site, the load shall be turned away. 2. At the discretion of the landfill, uncovered loads not subject to this program will include loads which contain material too heavy to blow out of a vehicle during conditions which affect the vehicle on the day it comes to the landfill (i.e., concrete, asphalt, heavy furniture, appliances, material, which is appropriately bagged or in closed containers and not laying loose in the open vehicle, etc.). Anything obviously loose such as, but not limited to miscellaneous trash or green waste shall be affected by the Covered Vehicle Program. 3. The landfill shall maintain a record of loads turned away in the "Loads Turned Away" log book which is located in the scalehouse. This log shall include the following information: date, customer name, vehicle type, vehicle license plate number, and type of material. This log will be available for the LEA and Planning Division review during normal business hours. 4. A notice for tarping shall be posted along the right of the haul road leading to the scalehouse (before the turnout where the port-o-let is presently located) to make customers aware of the requirement to cover open refuse loads.

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
	The landfill shall include notice of this program in their annual newspaper advertisement, which runs between September and October each year. A copy is sent to the Planning Division. (Also see CUP Condition 52. - Site Sign Program)
46	<p><u>Fire Protection Program (Revised):</u> The permittee shall abide by and adhere to the updated/expanded Fire Protection Program as submitted by Waste Management, Inc. dated May 2003 and approved by the Fire Department, which incorporates the project as approved under Modification No. 6. The Fire Protection Program shall describe measures to be taken to prevent and fight fires. At a minimum, said fire protection plan shall include the following specific policies and designs:</p> <ol style="list-style-type: none"> The landfill shall be maintained with a clearance of flammable material for a minimum distance of 150 feet from the periphery of any exposed flammable solid waste. Any structure, building or part of any structure or building located within 150 feet of the periphery of any exposed flammable solid waste shall also be maintained with a clearance of flammable material for a minimum of 150 feet from the periphery of the structure or building. The eight-foot-wide firebreak around the CUP boundary shall be regraded at least annually. Sound and living trees may be left standing within the areas required to be cleared of flammable material, provided the following requirements are met: <ol style="list-style-type: none"> Wildfire cannot travel into the canopy of any tree left standing. Any tree left standing does not pose a fire safety threat or prevent fire equipment access to and near the exposed flammable solid waste. All dead limbs and all limbs within 10 feet of the ground are removed from any trees left standing. Selected and isolated shrubs may remain within the areas required to be cleared of flammable material if all dead material is removed and each shrub is trimmed up so that fire cannot travel through the shrub canopy or pose a fire safety threat. Fire extinguishers shall be installed in accordance with the National Fire Protection Association Pamphlet #10. Time timing of installation and location of the extinguishers shall be subject to the review of the Fire Chief. Uniform Fire Code Permits shall be obtained for fuel storage and any other process as may require such permits. All internal combustion engines used in the operation of the dumpsite shall be equipped with approved spark arrestors. Said fire protection plan shall also evaluate the need to implement the recommendations in FSEIR Sections 3.7.2, 3.7.3 and 3.7.4 Impact Analysis, Cumulative Impacts, Mitigation Measures. That smoking by permittee's employees or the public shall be prohibited within the permit boundaries except in designated areas as approved in writing by the Fire Department and the Planning Director. That prior to issuance of a Building Permit for any combustible construction the permittee shall: <ol style="list-style-type: none"> Obtain from the water purveyor proof of its ability to supply 500 gallons per minute for two (2) hours; Install one or more approved fire hydrants in locations approved by the Fire Department.
47	<p><u>Smoking Prohibited:</u> Smoking by permittee's employees or the public shall be prohibited within the permit boundaries except in designated areas as approved in writing by the Fire Department and the Planning Director. Smoking is prohibited within the refuse footprint, on-site structures, and enclosed cab industrial vehicles. (Planning, Fire Department)</p>
48	<p><u>Adequate Fire Flow:</u> The minimum fire flow required shall be determined as specified by the current adopted edition of the Uniform Fire Code Appendix III-A and adopted Amendments. Given the present plans and information, the required fire flow is approximately 2,000 gallons per minute at 20 pounds per square inch for a minimum 2 hour duration. The applicant shall verify that the water purveyor can provide the required volume and duration at the project prior to obtaining a building permit. (Fire Department)</p>
49	<p><u>Seismic Design (Revised):</u> The permittee shall abide by and adhere to the updated seismic design study as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates which incorporates the project as approved under Modification No. 6. The study shall demonstrate that the landfill refuse column, its drainage features, and operating components and appurtenances (permanent stockpiles, new buildings, etc.) will withstand a Maximum Probable Earthquake (design earthquake). Design plans shall include a static and dynamic stability analysis.</p>
50	<p><u>Paleontological Mitigation Program (Revised):</u> The permittee shall abide by and adhere to the updated/expanded Paleontological Mitigation Program as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
53	<p><u>Noise Abatement Plan (Revised):</u> The permittee shall abide by and adhere to the updated/expanded) Noise Abatement Plan as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6. Said plan shall include:</p> <ol style="list-style-type: none"> <u>Landfill Facility Design</u> - Design and operate the landfill facility so as not to exceed County of Ventura or City of Simi Valley noise standards. <u>Landfill Vehicles</u> - Provide landfill equipment with noise suppressing equipment to minimize noise generation to the extent necessary to comply with the criteria as set above. <u>Worker Protection</u> - Workers at the site shall be required to wear protective equipment that reduces their noise exposure to levels within OSHA standards. <u>Gas Flare Muffling</u> - Any on-site flares shall be contained in noise-reducing housing which meets the standards established in Item (a) above. <u>Off-Site Noise Monitoring</u> - The permittee shall conduct off-site noise monitoring as requested by the Planning Director. <p>Said plan shall be consistent with the stricter requirements of either; (1) the County of Ventura, or (2) the City of Simi Valley.</p>
54	<p><u>Hazardous Waste Exclusion Program (Revised):</u> The permittee shall abide by and adhere to the updated/expanded) Hazardous Waste Exclusion Program as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6. At a minimum, said hazardous waste exclusion program shall consist of the following:</p> <ol style="list-style-type: none"> At least one full time employee specifically trained in hazardous materials identification. Said employee shall be responsible for inspection of incoming refuse loads for hazardous wastes. Said employee shall be located at the refuse working face and shall inspect all loads as they are delivered. If hazardous wastes are found, they are to be removed and disposed in accordance with State regulations. When average daily refuse tonnages are less than 2,000 tons per day, the hazardous waste trained employee shall randomly select at least five trucks per week for detailed inspection of the contents for hazardous material. When the average daily tonnage exceeds 2,000 tons per day, then ten trucks per week shall be randomly inspected. Logs of these inspections shall be made available as requested by the Planning Director, which show the time and date of each inspection, the license number and company name of the truck inspected, and the results of each inspection. A procedure shall be developed of record keeping, warnings, and notification of appropriate agencies and/or prohibition of access to the landfill for hauling companies or individuals, which bring in hazardous wastes to the site. At least twice a year the permittee shall send to all commercial accounts at the landfill a description of the landfill hazardous waste monitoring program as well as a description of the penalties, if any, associated with the program. The formal employee-training program shall include information on the identification, safety measures, and reporting procedures for hazardous material. This information should be re-emphasized on a schedule approved by the Planning Director for all new and existing landfill employees.
55	<p><u>Radioactive Waste Exclusion Program (Revised):</u> The permittee shall abide by and adhere to the (updated/expanded) Radioactive Waste Exclusion Program as submitted by Waste Management, Inc. dated May 2003 and approved by the Planning Division, which incorporates the project as approved under Modification No. 6. Said program shall have as its purpose the prevention of significant quantities of radioactive materials from being buried at the landfill, as well as the identification of the people and/or companies attempting to enter the landfill with such material.</p>
56	<p><u>Emergency Procedures Program (Revised):</u> The permittee shall abide by and adhere to the (updated/expanded) Emergency Procedures Program as submitted by Waste Management, Inc. dated April 2003 and approved by the Environmental Health Department of the County of Ventura, Resource Management Agency, which incorporates the project as approved under Modification No. 6. At a minimum, said Emergency Procedures Program shall evaluate the need to include those measures specified in FSEIR Sections 3.7.2, 3.7.3 and 3.7.4 (Public Safety Mitigation Measures). (Environmental Health, Fire)</p>
57	<p><u>On-Site Drainage Plan (Revised):</u> The permittee shall abide by and adhere to the (updated/expanded) On-site Drainage Plan as submitted by Waste Management, Inc. dated April 2003 and approved by the Environmental Health Department of the County of Ventura, Resource Management Agency, which incorporates the project as approved under Modification No. 6. The plan is to be submitted no later than June 30 of each year. The plan shall include, but need not be limited to:</p> <ol style="list-style-type: none"> Map of site (of appropriate scale). Water run-on control systems.

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description										
	3. Water run-off control systems. 4. Locations and sizes of berms, detention/sedimentation basins, ditches, lined and unlined channels, culverts, sediment barriers, and control fences. 5. Section drawings of typical berms, ditches, channels, etc. 6. Direction of water sheet flow. 7. Designated location of wet weather area and wet weather cover stockpile. (Environmental Health)										
58	Public Works Drainage Program: Within 120 days of issuance of Zoning Clearance No. 1, the permittee shall submit for review and approval to the VCPWA an updated or expanded landfill drainage program to incorporate the project as approved under Modification No. 6. At a minimum, said drainage program shall include: a) existing and projected peak runoff calculations as may be required by the PWA; and b) the design, timing of installation, and maintenance of all the facilities as shown on the plan. Said program shall address the need for, and feasibility of, potential facilities including those listed in FSEIR Section 3.4.4 (Drainage Mitigation Measures) and other facilities as may be specified by the VCPWA. In said drainage plan the overall design of streets, storm drainage and other works shall not allow inundation of building pads and shall provide freedom from flood damage to structures in a 100-year storm. In addition, interim drainage facilities (pending completion of downstream facilities) shall result in no increase in peak runoff from a 10-year storm. (Public Works)										
59	Internal Access Roads: All access roads to the refuse working face shall: a. Provide safe and continuous access to the working face. b. Provide a minimum of 30 feet of graded width. c. Provide dust control as specified in these conditions. d. Support all refuse and emergency vehicles. The permanent peripheral access road system shall be at least 24 feet wide, paved with asphalt, and contain at least four foot shoulders. Both the access roads and the peripheral road shall have the following characteristics: a. Shall have not less than 13' 6" of vertical clearance. b. Shall have not less than 10' of horizontal clearance from each edge of the road travelway. c. Shall not exceed a 10 percent grade. d. Shall have a minimum centerline turning radius of 30 feet. The specific design parameters, materials, and cross-sections of the roads shall be approved by the Planning Director and the Public Works Agency prior to construction of the roads. (Planning, Public Works)										
60	Stockpile Plans: Upon approval by the Planning Director, temporary stockpiles can be placed above final refuse fill contours provided that the temporary stockpiles do not exceed the highest permitted fill elevation by more than ten feet. Stockpiles in excess of 50,000 cubic yards shall require a stockpile plan, which would take into consideration drainage, erosion, and visual impacts and shall be approved by the Planning Director. The Planning Director shall review and approve the locations, contours, and timing of soil or clay stockpiles over 50,000 cubic yards prior to their construction.										
61	Cultural Resources: In the event that human remains or other cultural resources are found, all work in the immediate vicinity shall cease and the Planning Director shall be notified.										
63	Limitations on Specific Materials to be Received and Stockpiled at the RRA: All incoming and outgoing green waste stored at the Resource Recovery Area (RRA) shall be chipped and stored on the 200 by 250 foot asphalt pad shown in Exhibit "A-1" dated January 24, 1995. This exhibit supersedes all previous maps of the RRA. All drainage from the RRA area, including the asphalt pad, shall drain into the existing detention/sedimentation basin shown on Exhibit "A-1". The total amount of materials to be received and stockpiled at the RRA at any one time shall be limited to the following: <table border="0" data-bbox="310 1591 1453 1759"> <thead> <tr> <th data-bbox="310 1591 893 1619"><i>Material</i></th> <th data-bbox="893 1591 1453 1619"><i>Quantity</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="310 1619 893 1646">a. Concrete/asphalt</td> <td data-bbox="893 1619 1453 1646">40,000 cu. yd.</td> </tr> <tr> <td data-bbox="310 1646 893 1703">b. Wood waste/green waste and shredded wood</td> <td data-bbox="893 1646 1453 1703">50,000 sq. ft.</td> </tr> <tr> <td data-bbox="310 1703 893 1730">c. White goods, scrap metal (see Condition 80)</td> <td data-bbox="893 1703 1453 1730"></td> </tr> <tr> <td data-bbox="310 1730 893 1759">d. Tires (see Condition 80)</td> <td data-bbox="893 1730 1453 1759"></td> </tr> </tbody> </table> Pursuant to the above Permit Adjustment No. 19, the above changes apply to Condition 63.	<i>Material</i>	<i>Quantity</i>	a. Concrete/asphalt	40,000 cu. yd.	b. Wood waste/green waste and shredded wood	50,000 sq. ft.	c. White goods, scrap metal (see Condition 80)		d. Tires (see Condition 80)	
<i>Material</i>	<i>Quantity</i>										
a. Concrete/asphalt	40,000 cu. yd.										
b. Wood waste/green waste and shredded wood	50,000 sq. ft.										
c. White goods, scrap metal (see Condition 80)											
d. Tires (see Condition 80)											
65	Nuisance Prohibited (Revised): No noise, dust or odors from the operations approved by Modification No. 6 shall escape beyond the boundaries of CUP-3142 such that they cause a nuisance to nearby land uses. Compliance with this condition shall be determined by the Planning Director. Any such compliance determination shall in no way affect any similar compliance determinations made by other agencies or divisions, including the VCAPCD and/or the LEA.										

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
67	<p>Compliance with Facility Permit: The design and operation of the resource recovery area program shall be in compliance with the Solid Waste Facility Permit as issued by the Local Enforcement Agency (LEA). (EHD)</p>
68	<p>Required Reports Required reports, which are deemed necessary to comply with County ordinance, the California Integrated Waste Management Act, or any applicable laws and regulations, or subsequent laws, and regulations, shall be electronically submitted to the Ventura County Integrated Waste Management Division (IWMD) unless another form of submission is requested. Required reports shall be delivered to the IWMD according to the following schedule:</p> <ol style="list-style-type: none"> 1. Monthly reports are due within 15 days of the close of the previous month. 2. Quarterly reports are due no more than 45 days after the close of the previous quarter. 3. Annual reports are due by February 1st of each calendar year.
69	<p>Requirements to Obtain VCAPCD Permits (Revised): The permittee shall obtain APCD permits, including Authority to Construct permits, Permits to Operate, and Part 70 Permits, for facility equipment as necessary. Required permits shall be obtained prior to the installation or operation of the subject equipment. (VCAPCD)</p>
70	<p>VCAPCD Rules and Regulations (Revised): The permittee shall comply with any and all applicable Rules and Regulations of the VCAPCD. Such rules shall include, but not be limited to, Solid Waste Disposal Sites; Rule 74.17.1 – Municipal Solid Waste Landfills; Rule 33- Part 70 Permits; Rule 50 – Opacity; and Rule 51 – Nuisance.</p>
71	<p>Stormwater Pollution Prevention Plan/Notice of Intent (Revised): The permittee shall abide by and adhere to the Notice of Intent (NOI) and the required Stormwater Pollution Prevention Plan (SWPPP) as submitted by Waste Management, Inc. dated June 2002, to the Ventura County Watershed Protection District, Water Quality Section and the Planning Division for review, which incorporates. The Standard Industrial Classification (SIC) of the subject business is required to file under the SWRCB Water Quality Order No 97-03-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CA000001. (Public Works Agency, Watershed Protection District)</p>
94	<p>MITIGATION MEASURE AQ-2 DIESEL RETROFIT: All existing diesel-fueled engines and vehicles used at the landfill shall be evaluated, and wherever feasible, retrofitted with state-of-the-art catalyzed diesel particulate filters. Vehicles and engines so retrofitted shall be required to use very low-sulfur fuel to prevent fouling of the catalyst and clogging of the filters. (Note: “Feasible” means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors” [California Code of Regulations §15364]. As lead agency, the VCAPCD would be responsible for determining the feasibility of this mitigation measure.)</p>
97	<p>MITIGATION MEASURE PH-1 REMEDIATION OF SOIL CONTAMINATION: In the event that contaminated soil or underground piping or other oil field infrastructure is uncovered during grading or excavation, all work must cease until appropriate site assessment and remediation efforts are completed. Typically, soil contamination associated with a former producing oil field is assessed and remediated by completing the following, which would reduce potentially significant impacts associated with on-site oilfield waste to less than significant:</p> <ol style="list-style-type: none"> a. Conduct a modified Phase I environmental site assessment (ESA), which would consist of a historical review of oil field operations on the site to determine the locations of former potential sumps, tanks, pipelines, and processing equipment; b. Conduct a Phase II ESA, which would consist of subsurface sampling in areas of potential contamination, as identified in the Phase I ESA; and c. Excavate the contaminated soil in applicable areas identified in the Phase II ESA, and dispose the soil at a facility permitted for disposal of such waste. Alternatively, the contaminated soil may be remediated in-situ (i.e., in-place) through various methods. d. Implement the following actions to protect the abandoned oil well in the northeast corner of the site: e. Accurately locate the abandoned oil well through surveying, and post a well marker visible to equipment operators. <p>Complete grading and excavations in the vicinity of the abandoned oil well in accordance with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Construction Project Site Review and Well Abandonment Procedures, which includes providing future access to the well for possible reabandonment activities. In accordance with these procedures, the DOGGR would decide whether the well requires additional abandonment work.</p>

Table 2.5-1 Measures to Minimize Environmental Effects

Condition Number	Description
102	<p>MITIGATION MEASURE BIO-2 REVEGETATION PLAN: A Revegetation Plan shall be developed and implemented to address losses of native habitats through revegetation efforts that emphasize native species. The plan, which shall be subject to review and approval by the Ventura County Planning Division prior to its implementation, shall include the following:</p> <ul style="list-style-type: none"> • The plan shall address seeding and planting of intermediate slopes, permanent slopes, and closed portions of the landfill. Intermediate slopes may be seeded or planted with non-native, non-invasive species. Permanent slopes and closed portions of the landfill shall be seeded and planted with native species with the goal of recreating viable native habitats over time. • Native plants and seed stock shall be locally collected (from the Simi Valley area) to maintain the genetic integrity of the local flora. An attempt shall be made to restore some of the existing native plant diversity by specifically including some of the less common native species (such as Catalina mariposa lily) currently found on the site. • Non-native, non-invasive species may be used for short-term erosion control (such as barley on temporarily denuded slopes) or for long-term visual mitigation as specified in the Visual Impact Mitigation Program (CUP Condition 51). Where invasive species have been used in the past, they will be maintained. If planted invasive species die or are removed, replacement plantings will be of non-invasive species. The plan shall address maintenance and reduction of non-native invasive plant species. The non-native plants/escaped exotics listed in the Ventura County Landscape Design Criteria (Ventura County RMA 1992) shall be targeted as undesirable plants. The goal is not to achieve complete eradication, but rather to reduce the likelihood that non-native invasive species will escape into adjacent areas and to reduce their presence at the landfill site.
115	<p>Compliance with Simi Valley Landfill Gas Royalties Agreement (EERD [now IWMD]) At all times the permittee shall comply with provisions set forth in the Simi Valley Landfill Gas Royalties Agreement as approved by the Board of Supervisors on June 17, 2003, and may be amended from time to time. Any non-compliance of the Simi Valley Landfill Gas Royalties Agreement shall be deemed to be a violation of the Conditional Use Permit.</p>
116	<p>Access Road Width--An on-site access road width of 25 feet and off-street parking shall be provided.</p>
117	<p>Turnarounds--Approved turnaround areas for fire apparatus shall be provided when dead-end Fire Department access roads / driveways exceed 150 feet. Turnaround areas shall not exceed a five percent cross slope in any direction and shall be located within 150 feet on the end of the access road / driveway.</p>
118	<p>Hydrant Location Markers--Prior to occupancy of any structure, blue reflective hydrant location markers shall be placed on the access roads in accordance with Fire District standards. If the final asphalt cap is not in place at time of occupancy, hydrant location markers shall still be installed and shall be replaced when the final asphalt cap is completed.</p>
119	<p>Hazard Abatement--All grass or brush exposing any structure(s) to fire hazards shall be cleared for a distance of 100 feet prior to construction of any structure and shall be maintained in accordance with VCFPD Ordinance.</p>
120	<p>Spark Arrester--Spark arresters shall be installed and maintained on all internal combustion engines.</p>
121	<p>Prior to installation, an Authority to Construct must be issued by the VCAPCD. Additionally, prior to operation, a temporary Permit to Operate must be issued by VCAPCD. Demonstration of compliance with the following VCAPCD rules shall be required during the Authority to Construct and Permit to Operate application process: Rule 26 (New Source Review), Rule 74.9 (Stationary Internal Combustion Engines), 74.17.1 (Municipal Solid Waste Landfills) and Rule 51 (Nuisance).</p>
122	<p>The applicant shall submit an application to VCAPCD to modify their Part 70 permit to include the landfill gas to energy facility (See VCAPCD Rule 33 for details).</p>

1 2.6 Intended Uses

2 The EIR and other studies related to the proposed project will provide information necessary for the County
3 of Ventura to consider approval of the project. In accordance with CEQA, the purpose of this EIR is to inform
4 the County, which is serving as lead agency, of the potentially significant environmental impacts resulting
5 from implementation of the proposed project, alternatives to the project, and mitigation measures that may
6 reduce or avoid any identified significant environmental effects. This EIR would also be used as an
7 informational document by public agencies in connection with any approval or permit necessary for the
8 construction or operation of the project.

1 The following are the lead and responsible agencies that are expected to exercise decisionmaking authority
 2 over the project and the necessary and the discretionary permit(s), or other approvals, required for the
 3 proposed project.

- 4 • **Ventura County**— Ventura County Planning Division Lead is the lead agency, and has principal
 5 responsibility for approving the proposed project and for implementation of CEQA. It is responsible
 6 for reviewing CUP major modification applications and proposals to modify the existing facility
 7 pursuant to such conditional permit to implement County policies.
 - 8 ○ Conditional Use Permit (CUP-3142-7) establishes conditions that govern all aspects of the use of
 9 the site. CUP-3142-7 Condition No. 19 requires the Planning Director to conduct a condition
 10 compliance review approximately every 5 years. In order to expand the landfill operations and
 11 extend the duration of operations, a major modification of the existing CUP-3142-7 is required.
 12 Compliance with CUP-3142-7 dictates that operations at the SVLRC must comply with all
 13 regulatory standards for waste handling and disposal.
 - 14 ○ Ventura County Environmental Health Division (EHD)—EHD acts as the Local Enforcement
 15 Agency (LEA) on behalf of the Cal Recycle (formerly CIWMB). As the LEA, the EHD issues
 16 the Solid Waste Facility Permit (SWFP). The proposed project would require approval of a
 17 revision to the existing Solid Waste Facility Permit from EHD.
 - 18 ▪ The SVLRC operates under SWFP 56-AA-0007, issued on May 16, 2003, by the California
 19 Integrated Waste Management Board (CIWMB). In Ventura County, the Resource
 20 Management Agency’s Environmental Health Division (EHD) acts as the Local Enforcement
 21 Agency (LEA) on behalf of Cal Recycle (formerly CIWMB). As the LEA, the EHD issues
 22 the SWFP. A revised SWFP will be necessary for the proposed SVLRC expansion project.
 23 In order to receive a revised SWFP, the landfill operator must submit an application to the
 24 EHD.
 - 25 ○ Additionally, approvals may be required from Ventura County Building and Safety,
 26 Environmental Health, and Fire Department.
- 27 • **CalRecycle**—The proposed project would require approval of a revision to the existing Solid Waste
 28 Facility Permit from Cal Recycle, which assumed the duties of the California Integrated Waste
 29 Management (CIWMB), when that agency was eliminated.
- 30 • **California Department of Fish and Game**—The proposed project would require approval of a
 31 Streambed Alteration Agreement and possibly an incidental take permit.
- 32 • **Los Angeles Regional Water Quality Control Board (LARWQCB)**—The SVLRC operates under
 33 WDR Order No. R4-2003-0152 issued by the LARWQCB on December 4, 2003. The proposed
 34 project would require approval of a revision to the existing Waste Discharge Requirement (WDR) or
 35 a new WDR from LARWQCB. WDR Order No. R4-2003-0152 supersedes and rescinds all previous
 36 requirements and orders adopted by the Board for this facility. The main intent of this permit is to: 1)
 37 preserve the quality of receiving waters suitable for domestic and irrigation uses; 2) prevent creation
 38 of a nuisance as a result of the disposal of wastes at this site; and 3) implement monitoring and
 39 reporting programs. WDRs contain lists of acceptable restricted materials that can be disposed at the
 40 facility, groundwater monitoring and protection methods, and site closure requirements.
- 41 • **Ventura County Watershed Protection District (VCWPD)**—The proposed project would require a
 42 VCWPD Watercourse Permit because a portion of the project would impact a VCWPD red-line
 43 stream that is not in a VCWPD right-of-way or facility.
- 44 • **Ventura County Air Pollution Control District (VCAPCD)**—The SVLRC operates under
 45 Operating Permit issued by the VCAPCD dated June 7, 2007. The proposed project would require
 46 approval of a modification to the existing Operating Permit from VCAPCD. In addition, the project

- 1 would require approval of an application for an Authority to Construct and Operating Permit for the
2 new portions of the facility.
- 3 • **City of Simi Valley**—The proposed project may require an amendment to the City of Simi Valley
4 General Plan to remove the unbuilt Alamos Canyon Road from the Plan’s Circulation Element.
 - 5 • **United States Army Corps of Engineers (USACE)**—The proposed project may require an approval
6 from the USACE if jurisdictional wetlands are found on site and if those wetlands will be subject to
7 fill.
 - 8 • **United States Fish and Wildlife Service (FWS)**—The proposed project may require that the
9 USACE consult with the FWS pursuant to section 7 of the Endangered Species Act if protected
10 species are found to be on site and if those species may be affected by the project.

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
Air Quality						
<p>AQ-1: The construction contractor shall implement the following measures to mitigate ozone precursor emissions from on-site off-road construction equipment:</p> <ol style="list-style-type: none"> All construction equipment shall meet the EPA Tier 3 nonroad equivalent standards. The construction contractor shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. Minimize equipment idling time. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. Encourage the use of alternatively fueled construction equipment, such as CNG, LNG, or electricity. All nonroad diesel-powered equipment used for facility construction shall meet U.S. Environmental Protection Agency Tier 4 emission standards as applicable to their power rating. 	Ventura County Planning and APCD	Upon delivery of construction equipment	Verify EPA Tier 3 or 4 certification	Compliance with Tier 3 or 4 emissions		
<p>AQ-2: Additional Fugitive Dust Controls for Construction.</p> <p>The calculation of unmitigated fugitive dust emissions from proposed construction activities is based upon compliance with VCAPCD Rule 55, Fugitive Dust, which is assumed to produce a 50 percent reduction in PM₁₀ emissions from uncontrolled levels. This would occur with the use of rigorous watering of the site and other control measures, such as a limitation of vehicle speeds to</p>	Ventura County Planning and APCD	Periodic inspections during construction of facilities and landfill cells (once during construction of a new cell and quarterly for	Applicant shall maintain a log of all dust control measure implementation including date, conditions, and steps taken to comply which shall	Demonstration compliance with measures via quarterly dust control measure implementation log.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Compliance Verification		
				Standard of Success	Initial	Date
<p>15 mph on-site.</p> <p>The proposed construction contractor shall develop and implement dust control methods to achieve a 90 percent reduction of fugitive dust emissions from uncontrolled levels. Additional control measures to reduce fugitive dust may include, but are not limited to, the following:</p> <ol style="list-style-type: none"> 1. Designate personnel to monitor the dust control program and order increased watering, as necessary, to ensure a 90 percent control level. Their duties shall include holiday and weekend periods when work may not be in progress. 2. Apply approved non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas or replace groundcover in disturbed areas. 3. Provide temporary wind fencing around sites being graded or worked. 4. Cover truck loads that haul dirt, sand, or gravel or maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code. 5. Ensure dust is not tracked onto paved roads in compliance with APCD Rule 55. 6. Suspend all soil disturbance activities when winds exceed 25 mph as instantaneous gusts or when visible dust plumes emanate from the site and stabilize all disturbed areas. 7. Sweep all streets at least once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water). 8. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces. 9. Pave road and road shoulders. 		facilities construction)	be provided quarterly to the APCD. Verify implementation of measures by APCD based on applicant's quarterly compliance logs.			

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>AQ-3: To reduce peak daily emissions of ROC and NOx from project operations, the landfill operator shall implement the following measures to mitigate ozone precursor emissions from on-site off-road mobile equipment:</p> <ol style="list-style-type: none"> Beginning in 2009, convert all equipment to engines with EPA nonroad Tier 3 standards. The landfill operator shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. Minimize equipment idling time. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. Encourage the use of alternatively fueled equipment, such as CNG, LNG, or electricity. All nonroad diesel-powered equipment used for facility operation shall meet U.S. Environmental Protection Agency Tier 4 emission standards as applicable to their power rating. 	Ventura County Planning and APCD	Upon delivery of construction equipment	Verify EPA Tier 3 or 4 certification	Compliance with Tier 3 or 4 emissions and written verification provided to County of Tier 3 or 4 compliance or equipment conversion or exemption		
<p>AQ-4: Simi Valley Landfill Emissions Reduction Program Agreement.</p> <p>In instances, when air quality impacts from mobile sources due to project operations cannot be mitigated to insignificant levels with the available air pollution control measures recommended for the project, the VCAPCD, in its Air Quality Assessment Guidelines, recommends implementing an Emissions Reduction Program to ensure additional mitigation of air quality impacts by requiring the project proponent to contribute funds for programs that reduce air pollutant emissions from non-project sources. However, while several municipal jurisdictions in the county have enacted air emissions mitigation programs in the form of Transportation Demand Management (TDM) programs, Ventura County has not established a</p>	Ventura County Planning and APCD	Prior to issuance of the Conditional Use Permit	Execution of a binding agreement between the applicant and County to ensure payment of fees and the allocation of funds to appropriate emission reduction programs	Compliance with agreement		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>Government Code section 66000 et seq. fee rule or made a Board of Supervisors commitment to adopt such a fee rule to assess, collect, and spend such fees on mitigation programs.</p> <p>Therefore, to accomplish the purposes of an Emissions Reduction Program, some other legally enforceable, feasible mechanism to achieve the same result is required. In this instance, a legally enforceable agreement between the County of Ventura, VCAPCD, and the applicant (WMI) could be executed such that funding would be provided by the applicant via the agreement to the VCAPCD for the purpose of funding emission reduction programs in Ventura County, based on estimated mobile source emissions from operations in excess of standards.</p> <p>Such an agreement would, at a minimum, have the following features:</p> <ul style="list-style-type: none"> • A binding agreement would be executed by the County of Ventura, the VCAPCD, and the applicant wherein the applicant commits: <ul style="list-style-type: none"> ○ To the payment of fees, calculated based on the amount of project operational emissions from mobile sources in excess of standards, into a fund administered by the VCAPCD. Fees would be determined based on the project's mobile source emissions in excess of standards and the cost-effectiveness of projects funded by the VCAPCD's Carl Moyer Memorial Air Quality Standards Attainment Program. ○ Pay the assessed fees over a time period mutually agreeable to all parties. • The VCAPCD would be entitled to recover all cost of administering the expenditure of the funds so collected. • The fees would be used by the VCAPCD to fund emission reduction projects in Ventura County. Projects that could be funded include, but would not necessarily be limited to, project 						

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>types eligible for funding under the VCAPCD's emission reduction incentive programs such as:</p> <ul style="list-style-type: none"> o The Carl Moyer Memorial Air Quality Standards Attainment Program, o Clean Air Fund, o The Lower Emissions School Bus Program, and o The Lawn Mower Trade-In Program. <p>Emission reduction programs such as the one described above facilitate reductions in emissions by reducing individual vehicle emissions (buses, trucks, etc.) and emissions from other devices and equipment powered by internal combustion engines through the use of more efficient engines, less polluting fuels, or electric or hybrid power sources. It is uncertain the extent to which the Simi Valley Landfill and Recycling Center Emissions Reduction Program would offset overall project-related vehicular emissions and it is not possible to calculate what those reductions might be because the specific emission mitigation projects are unknown at this time. However, implementing an Emissions Reduction Program Agreement for the proposed Simi Valley Landfill expansion project is considered an effective emission reduction measure.</p>						
<p>AQ-5: The calculation of unmitigated fugitive dust emissions from proposed construction and operational activities is based upon compliance with VCAPCD Rule 55, Fugitive Dust, which is assumed to produce a 50 to 75 percent reduction in PM₁₀ emissions from uncontrolled levels, depending on the source type. This would occur with the use of rigorous watering of the site and other control measures, such as a limitation of vehicle speeds to 15 mph on-site.</p> <p>The project landfill operator shall develop and</p>	<p>Ventura County Planning and APCD</p>	<p>Inspections during cell grading and once during construction operations</p>	<p>Verify implementation of mitigation measures</p>	<p>Compliance with Tier 3 or 4 emissions and written verification provided to County of Tier 3 or 4 compliance or equipment</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>implement dust control methods to achieve a 90 percent reduction of fugitive dust emissions from uncontrolled levels. Additional control measures to reduce fugitive dust shall include, but are not limited to, the following:</p> <ol style="list-style-type: none"> 1. Designate personnel to monitor the dust control program and order increased watering, as necessary, to ensure a 90 percent control level. Their duties shall include holiday and weekend periods when work may not be in progress. 2. Apply approved non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction and operational areas or replace groundcover in disturbed areas. 3. Provide temporary wind fencing around sites being graded or worked. 4. Cover truck loads that haul dirt, sand, or gravel or maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code. 5. Ensure dust is not tracked onto paved roads in compliance with APCD Rule 55. 6. Suspend all soil disturbance activities when winds exceed 25 mph as instantaneous gusts or when visible dust plumes emanate from the site and stabilize all disturbed areas. 7. Sweep all streets at least once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water). 8. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces. 9. Pave road and road shoulders. <p>AQ-6: Odor Control Plan. The landfill operator shall implement the currently approved 2003 Odor Control Plan during proposed operations at the SVLRC. This plan shall be updated, as deemed</p>				conversion or exemption		
	Ventura County Planning and APCD	Periodic inspections during operations	Verify implementation of measures	Compliance with measures		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification		
					Initial	Date	Comments
necessary to comply with current regulations, by the APCD and Planning Division.							
AQ-7. Additional Alternative Fuels Collection Trucks. The landfill operator shall operate a collection truck fleet that is powered by at least 50 percent alternative fuels. The definition of alternative fuels includes LNG, LPG, compressed natural gas (CNG), or electric power. The landfill operator shall achieve this level of operation by January 1, 2020.	Ventura County Planning and APCD	Periodic inspections during operations Applicant to maintain refueling log of fuel used for every vehicle refueling	Verify implementation of measures	Compliance with measures and maintenance of refueling log			
AQ-8. Use Biodiesel Blends in Diesel-Powered Off-Road Equipment and Collection Trucks. The applicant shall maximize the use of biodiesel in off-road equipment and diesel-powered collection trucks. The CO2e emission factor for 100 percent biodiesel is about 7 percent lower than ultra-low sulfur diesel (ULSD). The most readily available form of biodiesel is a blend of 20/80 percent biodiesel/ULSD by weight (B20), the use of which would result in an approximately 2 percent reduction in GHG emissions relative to ULSD. Use of fuel with a higher biodiesel/ULSD ratio would result in higher GHG reductions. However, higher bio-diesel percentages than B20 may result in reduced power and/or require engine modifications.	Ventura County Planning and APCD	Periodic inspections during operations Applicant to maintain refueling log of fuel used for every vehicle refueling	Verify implementation of measures and review refueling log for biodiesel	Compliance with measures and maintenance of refueling log			
Water Resources							
WR-1: Compliance with Surface Quality Urban Impact Mitigation Plan (SQUIMP): Intent: In order to mitigate for the impacts to the surface water and stormwater resources, the proposed project shall meet all project design requirements of the provisions as contained in Part 4.C., "Programs for Planning and Land Development" of the July 2000	Applicant to promptly transmit monitoring results to VC Watershed Protection District following required	Prior to Phase I operations and following every toe barrier sampling analysis as soon as results are	Verify compliance with water quality objectives. Watershed Protection District -	If objectives are met, no action. If not, order cessation of use of toe barrier liquids for dust			

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>Regional Water Quality Control Board (Order No. 00-018) Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit CAS004002.</p> <p>Description of Requirement: The proposed development meets at least one of the Municipal NPDES Permit applicability criteria for new development or redevelopment projects (Part 4.C.) and therefore the applicant shall submit a complete Surface Quality Urban Impact Mitigation Plan (SQUIMP) in accordance with provisions of the 2000 Municipal NPDES Permit and the 2002 Ventura Countywide Stormwater Program "Technical Guidance Manual for Stormwater Quality Control Measures" (TGM)</p> <p>Documentation: The applicant shall submit the following items to the Watershed Protection District - Surface Water Quality Section for review and approval:</p> <ul style="list-style-type: none"> a) A complete SQUIMP Worksheet form available at (http://ventura.org/rma/planning/Permits/discretionary.html) b) A site plan prepared and stamped by a California licensed civil engineer or land surveyor that accurately delineates the location of the proposed development, existing and proposed impervious surfaces, storm drain system elements, general drainage pattern, and proposed site-specific SQUIMP Best Management Practices (BMPs) strategies. c) Drainage Study or Hydrology Report prepared and stamped by a California licensed civil engineer including applicable calculations of stormwater quality design flow and volume to meet 2002 TGM requirements and standards. d) A written Operations and Maintenance Manual detailing how the proposed and installed BMPs devices will be maintained in accordance with the Appendix D of the 2002 TGM. 	<p>low barrier liquids sampling. VC Watershed Protection District to review results upon receipt.</p>	<p>available.</p> <ul style="list-style-type: none"> • Items (a to c) shall be submitted to the Watershed Protection District -Surface Water Quality Section for review and approval prior to issuance of Zoning Construction. • Items (d and e) shall be submitted to the Watershed Protection District -Surface Water Quality Section Prior to Zoning Clearance for Use Inauguration. 	<p>Surface Water Quality Section staff will review the submitted materials for consistency with the Municipal NPDES Permit and 2002 TGM.</p>	<p>control. Develop alternative procedure.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>e) The applicant shall provide the Watershed Protection District - Surface Water Quality Section with a copy of recorded County's "Covenant for Maintenance of Stormwater Treatment Device" (form is available at http://ventura.org/irma/planning/Permits/discretionary.html), which requires all property owners and their successors in interest to assume all BMPs duties and responsibilities including, but not limited to, maintenance of all BMPs and all equipment which is required for operation of BMPs. Contained within the Covenant and Deed Restriction must be a description of the BMPs that are being provided as part of the project, a description of the maintenance requirements and how the necessary maintenance shall be performed.</p> <p>Timing:</p> <ul style="list-style-type: none"> The above-listed items (a to c) shall be submitted to the Watershed Protection District -Surface Water Quality Section for review and approval prior to issuance of Zoning Clearance for Construction. The above-listed items (d and e) shall be submitted to the Watershed Protection District -Surface Water Quality Section Prior to Zoning Clearance for Use Inauguration. <p>Mitigation Monitoring & Reporting Program: Watershed Protection District -Surface Water Quality Section staff will review the submitted materials for consistency with the Municipal NPDES Permit and 2002 TGM.</p> <p>WR-2a: General Industrial Stormwater Permit No. CAS000001 Requirements Intent: In order to mitigate for the impacts to the stormwater resources, the applicable project shall maintain compliance with all water quality provisions in accordance with NPDES General</p>	Applicant to promptly transmit results of required stormwater runoff sampling to VC Watershed	First rainfall event during Phase I operations and following every stormwater runoff sampling analysis	Verify compliance with water quality objectives. The applicant shall prepare and submit	If objectives are met, no action. If not, order cessation of use of toe barrier liquids for dust		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>Industrial Stormwater Permit No. CAS000001, Waste Discharge Requirements for Discharges of Stormwater Runoff Associates with Industrial Activities.</p> <p>Description of Requirement: For the proposed project, the applicant shall ensure coverage and compliance with the State Water Resources Control Board NPDES General Industrial Stormwater Permit No. CAS000001.</p> <p>Documentation: The applicant shall prepare and submit the following items to the Watershed Protection District – Surface Water Quality Section for review upon request:</p> <p>a) Copy of a current Notice of Intent (NOI) in accordance with the State Water Resources Control Board requirements under the NPDES Stormwater Permit No. CAS000001;</p> <p>b) Site-specific Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit No. CAS000001;</p> <p>c) Annual Report including sampling results in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit (No. CAS000001)</p> <p>Timing:</p> <ul style="list-style-type: none"> The above listed items shall be submitted to the Watershed Protection District – Surface Water Quality Section for review 	<p>Protection District upon completion. VC Watershed Protection District to review results upon receipt.</p>	<p>as soon as results are available.</p> <ul style="list-style-type: none"> The listed items shall be submitted to the Watershed Protection District – Surface Water Quality Section for review Prior to Zoning Clearance for Use Inauguration or upon request. 	<p>the following items to the Watershed Protection District – Surface Water Quality Section for review upon request:</p> <p>a) Copy of a current Notice of Intent (NOI) in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit No. CAS000001;</p> <p>b) Site-specific Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit No. CAS000001.</p>	<p>control. Develop alternative BMPs.</p> <p>Watershed Protection District – Surface Water Quality Section staff will review the submitted materials to verify that the facility is currently covered under the NPDES General Industrial Stormwater Permit No. CAS000001.</p> <p>PWA staff will review the submitted materials for consistency with the NPDES Permits. Up-to-</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>Prior to Zoning Clearance for Use Inauguration or upon request.</p> <p>Mitigation Monitoring & Reporting Program: Watershed Protection District – Surface Water Quality Section staff will review the submitted materials to verify that the facility is currently covered under the NPDES General Industrial Stormwater Permit No. CAS000001.</p> <p>WR-2b: NPDES Municipal Stormwater Compliance with Construction Activities</p> <p>Intent: In order to mitigate for the impacts to the stormwater resources during construction activities, the applicable project shall maintain compliance with all water quality provisions in accordance with the Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit CAS004002.</p> <p>Description of Requirement: The applicant shall ensure compliance and the implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) as applicable in accordance with Subpart 4.F “Development Construction Program” of the Municipal Stormwater NPDES Permit CAS004002.</p> <p>Documentation: The applicant shall prepare and submit the following items to the County’s Building and Safety Division for review:</p> <p>a) A complete worksheet for “Best</p>			<p>Stormwater Permit No. CAS000001; c) Annual Report including sampling results in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit (No. CAS000001</p>	<p>date and site-specific SWPPP certified as local SWPPP shall be kept on-site for periodic review by PWA – Development and Inspection Services.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>Management Practices for Construction Activities as applicable to the proposed project. The form is available at:</p> <p>b) http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/engineeringservices/dis/toc</p> <p>Timing: Prior to Issuance of Building Permit, the above-listed items shall be submitted to the County's Building and Safety Division.</p> <p>Mitigation Monitoring & Reporting Program: PWA staff will review the submitted materials for consistency with the NPDES Permits. Up-to-date and site-specific SWPPP certified as local SWPPP shall be kept on-site for periodic review by PWA – Development and Inspection Services.</p>						
<p>WR-3: Detention/Sedimentation Basin Armoring. The proposed detention/sedimentation basin shall be armored sufficiently to withstand erosive flow associated with a 100-year storm event along Alamos Canyon Creek. Basin armoring shall include rock rip-rap, precast concrete block, or roller compacted concrete.</p>	VC Watershed Protection District, U.S. Army Corps of Engineers, and California Department of Fish and Game	Upon completion of construction and prior to operation of Phase III.	Evaluate effectiveness of erosion control measures and compliance with design criteria.	Compliance with design criteria.		
<p>WR-4: Downstream Erosion Control Measures and/or Redesign of Detention/Sedimentation Basin. The applicant shall coordinate with the VCWPD, Advanced Planning Section, Floodplain Management Division, in developing erosion control features within Alamos Canyon Creek, downstream of the proposed detention/sedimentation basin in the northwest</p>	VC Watershed Protection District, U.S. Army Corps of Engineers, and California Department of Fish and Game	Upon completion of construction and prior to operation of Phase III.	Evaluate effectiveness of erosion control measures and compliance with design criteria.	Compliance with design criteria.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>portion of Phase III, at the confluence of Alamos Canyon Creek and the tributary creek to the northeast, to address increased stormwater runoff flow velocities adjacent to the proposed basin. Alternatively, the detention/sedimentation basin shall be redesigned such that it does not encroach on the designated floodplain.</p>						
Biological Resources						
<p>BIO-1: Pre-construction botanical surveys shall be conducted by a qualified, USFWS and CDFG-approved biologist for the Braunton's milk vetch, San Fernando Valley spineflower, Lyon's pentachaeta, and other listed species during the appropriate flowering period prior to start of vegetation clearing and grading activities within suitable habitat for these species. The applicant shall notify USFWS for species listed under the federal Endangered Species Act (ESA) and CDFG for species listed under the California Endangered Species Act (CESA) within 24 hours of locating any individuals of listed species. In the event of positive survey results, the project applicant will consult with the USFWS for species listed under the ESA to determine whether formal Section 7 consultation is required and CDFG to obtain an incidental take permit for species listed under the CESA. Compensatory mitigation for the loss of any listed plant species shall be at least on a 1:1 ratio as described in BIO-10.</p>	<p>Ventura County Planning</p>	<p>Prior to construction</p>	<p>Applicant to contract for surveys as specified in mitigation measure</p>	<p>If species are observed, appropriate notifications and mitigation shall be implemented.</p>		
<p>BIO-2: Prior to removal of coastal scrub habitat or habitat designated as critical habitat by the USFWS for coastal California gnatcatcher (CAGN), a qualified, USFWS-approved biologist shall conduct</p>	<p>Ventura County Planning</p>	<p>As specified in mitigation measure</p>	<p>Applicant to contract for surveys as specified in mitigation measure</p>	<p>If species are observed, appropriate notifications</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>protocol surveys for CAGN and provide the results to the County of Ventura, USFWS, and CDFG. The applicant shall notify USFWS at least 7 days prior to initiation of surveys and within 24 hours of locating any CAGN individuals. In the event of positive survey results, the project applicant will consult with the USFWS to determine whether formal Section 7 consultation is required or whether a Section 10 permit must be obtained. In addition, should this species be found on-site, a qualified, USFWS-approved biologist shall do the following:</p> <ol style="list-style-type: none"> a. Perform additional surveys once a week during project construction during the breeding season of CAGN. These additional surveys may be suspended as approved by the USFWS. The applicant shall notify the USFWS at least 7 days prior to the initiation of surveys, and within 24 hours of locating any CAGN individuals. b. Postpone work if a CAGN nest is found within 500 feet of project construction activities. A qualified, USFWS-approved biologist shall coordinate with USFWS to devise an optimal strategy of postponing work only in areas where continued construction activities may pose an adverse impact to the CAGN, thereby allowing work to continue beyond the appropriate buffer determined for the documented CAGN nests. <p>Removal of designated critical habitat for the coastal California gnatcatcher within the project site shall be compensated through preservation of existing intact suitable habitat or improvement and preservation of disturbed habitat either on- or off-site and approved</p>				and mitigation shall be implemented.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>by USFWS and the County. Compensation shall be at a minimum of a 1:1 ratio for critical habitat lost due to construction of the project. Off-site compensation shall be conducted within the critical habitat Unit 13 (Unit 13: Western Los Angeles and Ventura Counties) as designated by the USFWS. Preservation of critical habitat shall be ensured through recordation of a biological restrictive covenant with the County of Ventura.</p>						
<p>BIO-3: Removal of vegetation, grading, and/or other land disturbance activities shall be conducted outside the bird breeding and nesting season (February 1 through August 31) in order to avoid destruction of bird nests or eggs.</p> <p>If land disturbance activities cannot be completed outside the February 1 through August 31 breeding season, a breeding and nesting bird survey shall be conducted by a qualified biologist with a CDFG Scientific Collecting Permit within 7 days prior to the land disturbance activity. The nesting bird survey shall cover the construction footprint and a buffer of 500 feet from the construction footprint. If active nests are found, land disturbance activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting, as determined by the biologist. If the construction area is larger than the buffered nesting bird area(s), then land disturbance activities can commence outside the restricted area(s). If land disturbance activities are delayed after the survey has been conducted, then an additional nesting bird survey</p>	<p>Ventura County Planning</p>	<p>Prior to construction</p>	<p>Applicant to contract for surveys as specified in mitigation measure. County to verify implementation of appropriate measures identified in BIO-3.</p>	<p>If species are observed, appropriate notifications and mitigation shall be implemented.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>must be conducted such that no more than 7 days have elapsed between the last survey and the commencement of land disturbance activities.</p> <p>Prior to the issuance of a zoning clearance for development, the applicant shall provide a signed contract with one of the Planning Division's approved biological consultants that guarantees that a nesting bird survey will be conducted 7 days prior to any land disturbing activities.</p>						
<p>BIO-4: The project applicant shall prepare and implement a Wetlands Mitigation Plan acceptable to the County of Ventura prior to initiation of vegetation clearing and grading activity within 100 feet of the known seeps. Appropriate mitigation includes enhancing, expanding, or restoring existing wetlands, or creating/establishment of new wetlands in the proposed project vicinity. The Wetlands Mitigation Plan shall include the following components at a minimum:</p> <ol style="list-style-type: none"> 1. A minimum mitigation ratio of 3:1 for acres of wetlands lost versus acres mitigated as a result of the Plan. 2. Location(s) of mitigation on suitable portions of the project site or other property that can be protected in perpetuity from future development. 3. Timing which shall be initiated prior to acceptance of waste within the proposed expansion area. 4. Detailed information on the vegetation, quality, soils, and hydrology of the mitigation site prior to implementation 5. The mitigation shall have a goal of no net loss of wetlands. 6. Methods for restoration, creation, or 	<p>Ventura County Planning and California Department of Fish and Game</p>	<p>Prior to grading in vicinity of seeps.</p>	<p>Applicant to contract for surveys as specified in mitigation measure. County and DFG to verify implementation of appropriate measures identified in BIO-4.</p>	<p>Compliance with appropriate measures identified in BIO-4.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>enhancement (as applicable).</p> <p>7. Baseline information (i.e., a description of the ecological characteristics of the proposed mitigation site) shall be obtained as a basis for measuring mitigation performance. Baseline information may include: descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other characteristics appropriate to the type of resource proposed as compensation.</p> <p>8. Monitoring, maintenance, and reporting for a minimum monitoring period, which shall not be less than 5 years.</p> <p>9. Performance criteria that are based on replacement of the characteristics and functions of the wetlands being impacted must be approved by the County and any other appropriate regulatory agency. Performance criteria shall at a minimum include the following parameters: percent vegetative cover, plant diversity, percent non-native plant species, target functions and values, and target hydrological regime.</p> <p>10. The Plan shall include an adaptive management strategy to address unforeseen changes in site conditions or other components of the mitigation project, including the party or parties responsible for implementing adaptive management measures.</p> <p>Procedures to ensure protection of the mitigation sites in perpetuity, either through the recordation of a conservation easement, a biological restrictive covenant, or other agreement approved by the County and other relevant regulatory agencies.</p>						

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
BIO-5: The permittee shall implement vector control methods to deter refuse scavenging species such as gulls and crows from the waste disposal area. In the vicinity of Alamos Canyon, vector control methods (such as noisemakers and propane cannons, distress call, and use of falcons and dogs) that could result in the avoidance of wildlife use of Alamos Canyon as a corridor shall be avoided.	Ventura County Planning	During periodic County inspections	Periodically observe vector control efforts.	Continued compliance with vector control requirements and minimal vector issues.		
BIO-6: To ensure the continued availability of the Alamos Canyon Wildlife Corridor ("the Corridor") for the benefit of native plants and wildlife, the permittee shall enhance and manage habitat in and adjacent to the Alamos Canyon wildlife corridor, including the riparian zone and adjacent upland habitats. The area to be preserved shall include the Alamos Canyon Corridor within the following boundaries: the SR-118 freeway on the south end, the latitude of the northernmost portion of the buffer area associated with the proposed landfill expansion on the north end, the project CUP boundary on the east side, and the rim of Alamos Canyon on the west side. In order to ensure that the Corridor enhancements remain in perpetuity, a biological restrictive covenant shall be recorded with the County of Ventura that encompasses the Corridor area to be enhanced/preserved. Enhancement shall be as described in Mitigation Measure BIO-7.	Ventura County Planning	Prior to expansion that would encroach on Alamos Canyon.	Recordation of bon fide dedication document/deed of trust or restrictive covenant.	Proof of dedication.		
BIO-7: As part of a Habitat Restoration and Management Plan, the permittee shall design and implement a plan acceptable to the County of Ventura for habitat enhancements along the channel in Alamos Canyon in order to improve	Ventura County Planning	Prior to expansion that would encroach upon Alamos Canyon.	Review and approve plan.	Compliance with plan.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>overstory cover for migrating animals and to increase potential habitat for species that rely on riparian corridors. The plan must provide for planting and maintenance of sycamore and coast live oak trees in and adjacent to Alamos Canyon in areas void of trees. By focusing especially on areas of the canyon near the landfill and areas having direct line of sight to the landfill, the plan will create a pattern of more continuous tree cover. A minimum of 30 sycamores and 30 coast live oaks shall be established within the area identified above (see also Figure 3.4-3). In addition, planting of vegetation or other work within or adjacent to the channel above falls under the regulatory and permitting authority of the Ventura County Watershed Protection District per Ordinance FC-18 as amended. As such, habitat enhancement plans for Alamos Canyon shall be reviewed and approved by the Watershed Protection District.</p>						
<p>BIO-8: As part of a Habitat Restoration and Management Plan, the permittee shall design a plan for and implement at least 2 of the following improvements or enhancements to the Alamos Canyon crossings (i.e., Alamos Canyon East and West culverts and Alamos Canyon Road undercrossing) as shown on Figure 3.4-3: Alamos Canyon West Corridor:</p> <ul style="list-style-type: none"> Enhance and maintain riparian vegetation near culverts. <p>Alamos Canyon Road Undercrossing:</p> <ul style="list-style-type: none"> Increase the vegetative cover along Alamos Canyon Road. 	<p>Ventura County Planning and California Department of Fish and Game</p>	<p>Prior to expansion that would encroach upon Alamos Canyon.</p>	<p>Review and approve plan. Review monitoring reports.</p>	<p>Verification of improved migratory activity.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<ul style="list-style-type: none"> Replace the paved road with a decomposed granite surface if it is still used for maintenance, otherwise remove the road surface and base entirely and replace it with native vegetation. Remove the barbed wire fencing along the road. <p>Alamos Canyon East Corridor:</p> <ul style="list-style-type: none"> Increase vegetation cover along the drainage. <p>Measures Applicable to the three Alamos Canyon Corridors:</p> <ul style="list-style-type: none"> Installation of fencing by the project applicant to funnel wildlife into the Alamos Canyon undercrossings, <p>The permittee shall coordinate with Caltrans to ensure that the improvements selected will not conflict with any planned Caltrans projects. Prior to initiation of project construction activities, the permittee shall provide the plan for these improvements to the County and Caltrans for approval.</p> <p>Planting of vegetation or other work within or adjacent to Los Alamos Canyon channel falls under the regulatory and permitting authority of the Ventura County Watershed Protection District per Ordinance FC-18 as amended. As such, habitat enhancement plans for Alamos Canyon shall be reviewed and approved by the Watershed Protection District prior to implementation.</p>	Ventura County Planning	During periodic County inspections	Periodically observe noise and night lighting control	Continued compliance with noise and		
<p>BIO-9: The conditions applicable to minimizing off-site noise and vibration, nighttime lighting, control of wind-blown refuse, and control of nuisance</p>						

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>species of birds (crows, ravens, gulls) and mammals (non-native rodents) in CUP-3142-7 shall be applied to the expansion project including:</p> <ul style="list-style-type: none"> Night lighting for the proposed project shall be in accordance with CUP-3142-7 Condition 34 limiting hours of operation to 6 AM to 8 PM and CUP-3142-7 Condition 105 requiring shielding to ensure that when night lighting is used, natural areas are not lighted. These measures shall be updated as necessary and applied to the proposed project. A revised dust suppression plan shall be implemented as required under CUP-3142-7 Condition 44. Litter shall be controlled through the use of portable wind fences to confine waste to the area of the working face and to ensure that adjacent habitats are maintained free of litter. Existing litter control measures (CUP-3142-7 Condition 45) shall be applied to the proposed project. 			efforts.	night lighting, dust suppression measures, and litter control requirements.		
<p>BIO-10: As part of a Habitat Restoration and Management Plan, the permittee shall develop and implement a Sensitive Plant Species Restoration Plan acceptable to the Ventura County Planning Division for Plummer's and Catalina mariposa lily, and any federal or state listed plant species found during pre-construction surveys prior to onset of grading in the expansion area. The goal of the Plan shall be the replacement of these sensitive and/or listed plants on a 1:1 ratio. The Plan shall include:</p> <ul style="list-style-type: none"> An up to date review of research on the reproductive success of each species and the success of previous attempts at salvage and transplanting; Methodology and timing for salvaging seed and plants (corms) from areas to be impacted and procedures for transplanting and/or 	Ventura County Planning	Prior to expansion that would encroach upon mariposa lily habitat.	Review and approve plan.	Compliance with plan.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<ul style="list-style-type: none"> propagation; Identification of suitable (approved) locations for transplants and the means to protect the locations from future development; Maintenance, monitoring, and replacement program to document the success of the transplantation; and, The number of individuals to be transplanted/propagated in order to meet the goal of the 1:1 replacement ratio. 						
<p>BIO-11: Pre-construction spring botanical surveys shall be conducted by a qualified, County-approved biologist for listed and locally important plant species with the potential to occur within the project site prior to the start of vegetation clearing and grading. To the extent feasible, grading limits shall be adjusted to exclude documented occurrences of listed and locally important plant species, including Plummer's mariposa lily and Catalina mariposa lily. Because of the concentration of occurrences of Plummer's mariposa lily along the northwestern grading limits of the property (Figure 3.4-4), relatively slight adjustments in the grading limit could enable large numbers of individuals (up to 520 individuals in 13 occurrences) of this species to be avoided. The occurrences of Plummer's and Catalina mariposa lily and any other listed or locally important plant species located within the buffer zone shall be protected by identification of the area on a map and by placing construction fencing along the limits of grading where appropriate to prevent inadvertent loss or damage as a result of construction or other project-related or property management activities. During years of unfavorable conditions for mariposa lilies, the distributional</p>	Ventura County Planning	Prior to expansion that would encroach upon mariposa lily habitat.	Review and approve surveys prior to issuance of grading permits.	Completion of required botanical surveys as required and observed avoidance of areas containing sensitive species identified therein.		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>data from 2005 shall be used to adjust grading limits, because the numbers and local distribution of mariposa lilies may vary considerably from year to year in response to environmental conditions, and conditions in 2005 were relatively favorable for identifying the distribution of the mariposa lilies.</p>						
<p>BIO-12: A preconstruction survey shall be conducted by a qualified, County-approved biologist for locally important wildlife species no sooner than 14 days prior to the start of vegetation removal and grading. Prior to vegetation removal, the biologist shall ensure that potential natal badger dens are avoided and that less mobile species, such as coast horned lizard, will be relocated to suitable habitat outside of the construction area. A qualified, County-approved biologist shall be on-site to monitor vegetation removal and topsoil salvaging and stockpiling to minimize injury or mortality to locally important wildlife species.</p> <p>CDFG shall be contacted immediately if burrowing owls or burrowing owl sign are observed. No disturbance shall occur within 50 meters (approx. 160 feet) of occupied burrows during the non-breeding season of September 1 through January 31. No disturbance shall occur within 75 meters (approx. 250 feet) of occupied burrows during the nesting season, February 1 through August 31, unless CDFG verifies that the birds have not begun egg-laying and incubation or that the juveniles from those burrows are foraging independently and capable of independent survival at an earlier date.</p> <p>When destruction of occupied burrows is</p>	<p>Ventura County Planning and California Department of Fish and Game</p>	<p>As specified in BIO-12.</p>	<p>Review and approve surveys prior to issuance of grading permits.</p>	<p>Completion of preconstruction surveys as required and observed implementation of necessary avoidance or relocation measures.</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification		
					Initial	Date	Comments
<p>unavoidable, the owls shall be passively relocated to alternate burrows, only during the non-breeding season. Occupied burrows during the breeding season shall be avoided. Passive relocation will involve enhancing existing unoccupied burrows or creating artificial burrows in a ratio of 1:1 in adjacent, protected, suitable habitat that is contiguous with the foraging habitat of the affected owls and at least 50 meters from the impacted area. The relocated owls shall be monitored for 90 days following relocation, and a report on the status of the relocated owls shall be submitted to the County and CDFG. If the monitoring results show the relocation effort to be unsuccessful, the County and CDFG will require contingency measures, which may include preservation of existing off-site burrowing owl habitat, in accordance with the off-site mitigation recommendations of the California Burrowing Owl Consortium.</p>							
<p>BIO-13: As part of a Habitat Restoration and Management Plan, the applicant shall develop a plan to revegetate all lands temporarily disturbed by grading as well as intermediate, permanent slopes and closed portions of the landfill as indicated below. Revegetation efforts shall emphasize native plant species and provision of quality habitat for locally important wildlife species and other native wildlife. The plan shall be subject to review and approval by Ventura County prior to the initiation of ground disturbance. The plan shall include the following:</p> <ul style="list-style-type: none"> • Provisions for salvaging and stockpiling topsoil 	<p>Ventura County Planning and California Department of Fish and Game</p>	<p>Prior to expansion that would encroach upon sensitive species.</p>	<p>Review and approve plan. Review monitoring reports.</p>	<p>Meeting performance criteria defined in BIO-13 and accepted by Ventura County.</p>			

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>and seed bank for use in revegetation.</p> <ul style="list-style-type: none"> Procedures to stabilize soil and revegetate areas disturbed by site preparation or other grading outside the overall waste boundary with native species from seed or cuttings collected in the immediate project area creating habitat conditions compatible with adjoining habitat not disturbed by the project. Specifications that native plants and seed stock used in revegetation shall be locally collected or propagated from locally collected seed or cuttings (from the Simi Valley area) to maintain the genetic integrity of the local flora. An attempt shall be made to restore some of the existing native plant diversity by specifically including some of the less common native species currently found on the site. Specifications for seed mix, seed application, seeding methods, timing of monitoring and reporting and performance criteria. Provision that non-native, non-invasive species may be used for short-term erosion control (such as barley on temporarily denuded slopes). Where invasive species have persisted after having been used in the past, they shall be removed. Procedures for maintenance and reduction of non-native invasive plant species on the proposed SVLRC landfill site and adjacent property owned by the applicant. The invasive non-native plants/escaped non-natives listed in the following sources shall be targeted as undesirable plants: Cal-IPC Inventory (http://www.cal-ipc.org) 						

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification		
					Initial	Date	Comments
<p>ipc.org/ip/invento_ry/index.php); CDFA list of Noxious Weeds (http://www.cdffa.ca.gov/PHPPS/IPC/weedinfo/winfo_list-pestrating.htm); and the Ventura County Landscape Design Criteria (Ventura County RMA 1992). The goal is to reduce their presence at the landfill site and achieve complete eradication, where feasible, and to minimize the likelihood that non-native invasive species would escape into adjacent areas.</p>							
<p>BIO-14: The loss of habitat for locally important wildlife species, including sage scrub, chamise chaparral, grassland, and oak woodland as documented in Table 3.4-4 of the EIR, shall be mitigated through preservation of existing intact plant communities or restoration and preservation of disturbed plant communities at a 1:1 ratio in the project vicinity. This measure can be coordinated with Mitigation Measure BIO-6. If disturbed plant communities are selected to meet this measure, a site-specific habitat restoration and enhancement plan including details of restoration measures appropriate to the site and performance criteria shall be developed by the applicant and approved by the County of Ventura prior to initiation of ground disturbance. Restoration measures could include control of invasive non-native species, increasing the prevalence of wildlife species by planting or use of other management techniques, revegetation of barren surfaces resulting from previous human activities or control of erosion related to human activities (e.g., originating from concentrated runoff from unpaved roads).</p>	<p>Ventura County Planning and California Department of Fish and Game</p>	<p>Prior to expansion that would encroach upon sensitive species.</p>	<p>Review and approve plan. Review monitoring reports.</p>	<p>Meeting performance criteria developed by the applicant and approved by Ventura County.</p>			

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<ul style="list-style-type: none"> There shall be no light source in excess of 150 watts that directly illuminates adjacent properties; Outdoor lighting shall not result in the indirect illumination of adjacent properties in excess of 0.5 foot candles; For pedestrian lighting systems, there shall be no point of overlap between light patterns greater than seven feet; and There shall be no lighting within the project site that is greater than seven foot-candles. <p>The locations of all exterior lighting fixtures, an arrow showing the direction of light being cast by each fixture, and the height of the fixtures shall be depicted on the Lighting Plan to be reviewed by the Resource Management Agency, Planning Division, prior to issuance of a Zoning Clearance. All lighting shall be shielded, shall be directed downwards, and shall avoid being directed towards facilities with reflective services that could produce glare off-site. The Lighting Plan shall be consistent with any mitigation measures that are developed to avoid or reduce impacts to wildlife movement, and shall not result in the illumination of sensitive habitat.</p> <p>VIS-3: Prior to the issuance of a Use Inauguration Zoning Clearance for grading activities within the proposed landfill expansion area, the permittee shall submit a lighting plan to the Resource Management Agency, Planning Division for temporary lighting that will be used to facilitate start-up/shutdown operations. The lighting plan shall comply with the following requirements:</p> <ul style="list-style-type: none"> There shall be no light source in excess of 150 watts that directly illuminates adjacent properties; Outdoor lighting shall not result in the indirect illumination of adjacent properties in excess of 	Ventura County Planning Division	Prior to zoning clearance for construction	Review and approve plans	Guidelines All landscaping plans shall comply with Ventura County Guidelines		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>0.5 foot candles; and</p> <ul style="list-style-type: none"> There shall be no lighting within the project site that is greater than seven foot-candles. All lighting shall be shielded, shall be directed downwards, and shall avoid being directed towards equipment with reflective services that could produce glare off-site. The lighting plan shall specify the number, type, intensity, and duration of use of all lighting that will be used for start-up/shutdown operations. 						
Geological and Seismic Hazards, Mineral Resources, and Paleontological Resources						
<p>GEO-1: Paleontological Mitigation Program. An updated/expanded Paleontological Mitigation Program shall be submitted by Waste Management, Inc. to the County Planning Division for review and approval.</p>	Ventura County Planning Division	Prior to issuance of zoning clearance	Applicant will hire an approved consultant to prepare the plan. Monitoring during construction	Compliance with plan		
Cultural Resources						
<p>CUL-1: Construction and operation of the proposed project shall avoid Wharton Ranch. If avoidance is not possible, Phase II testing and evaluation of potential archaeological deposits within the Wharton Ranch areas shall be conducted prior to any surface disturbance in the vicinity of the ranch. Provisions must also be made for consultation with the County for approval of reporting of the findings of the Phase II testing, and, if need be, follow-on Phase III data recovery. Provision must also be made for curation of artifacts collected.</p>	Ventura County Planning Division	Prior to construction in proximity to Wharton Ranch. Monitors to be present during any surface grading.	County to hire Cultural Resources Consultant to Monitor excavation activity at expense of permittee	Avoidance of Wharton Ranch. If avoidance is not feasible, County approval of reporting for Phase II testing and any follow-on Phase III data recovery.		
<p>CUL-2: Due to the poor visibility over much of the survey area and the lack of final construction plans such as depth of excavation and extent of maintenance activities, a full time archeological monitor shall be on-site during all brush clearance</p>	Ventura County Planning	Prior to cell construction. Monitors to be present during any	County to hire Cultural Resources Consultant to Monitor excavation	Potentially significant archaeological materials are		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
<p>and disturbance of the first one foot of soil in areas that have not previously been disturbed. In the event that potentially significant archaeological materials are encountered during project-related ground disturbance, all work must be halted within the vicinity of the discovery until an assessment of the significance by a qualified archaeologist is completed. If significant resources are determined to be present, sufficient time must be allotted for implementation of avoidance measures or appropriate mitigations measures such as Phase II testing and/or Phase III Data Recovery of significant archaeological deposits. Treatment plans must be developed in consultation with the County and local Native Americans. Provisions must also be made for reporting of the findings of any testing/data recovery effort and curation of any significant artifact collections made.</p> <p>CUL-3: Health and Safety Code 7050.5, CEQA 15064.5(e) and Public Resources Code 5097.98 mandate the process to be followed in the unlikely event of an unanticipated discovery of any human remains in a location other than a dedicated cemetery. If human remains are found at the proposed project site, the following measures shall be implemented per the California Office of Historic Preservation Technical Assistance Bulletin 10 (46) such that:</p> <ul style="list-style-type: none"> • Ground disturbing activities in the vicinity are immediately halted or redirected, • A temporary exclusion zone is established, • The coroner is notified within two working days, <p>If Native American remains are suspected, appropriate notifications shall be made and a plan implemented regarding the treatment of human remains.</p>	<p>Ventura County Planning</p>	<p>surface grading.</p>	<p>activity at expense of permittee</p> <p>County to hire Cultural Resources Consultant to Monitor excavation activity at expense of permittee</p>	<p>either: not encountered; avoided; or appropriate mitigation measures are implemented.</p> <p>Record, recover, if feasible, or preserve in place in accordance with CUL-3</p>		

Simi Valley Landfill and Recycling Center FEIR Mitigation Monitoring Program

Mitigation Measure	Monitoring Responsibility	Timing & Frequency	Monitoring Work Program	Standard of Success	Compliance Verification	
					Initial	Date
Hazards						
<p>HAZ-1: Compliance with DOGGR Standards. Grading associated with landfill expansion shall include the following requirement:</p> <ul style="list-style-type: none"> All on-site oil wells shall be abandoned pursuant to current abandonment/re-abandonment requirements, and all grading shall be completed, in accordance with DOGGR Construction Project Site Review and Well Abandonment Procedures, as well as site-specific instructions from the DOGGR. 	DOGGR	Prior to cell construction	Applicant-hired and County-approved geologist to verify that abandonment occurred pursuant to DOGGR regulations.	Compliance with DOGGR regulations. Re-abandonment of wells that do not comply.		
<p>HAZ-2: Locate and Mark Abandoned Wells. On-site abandoned wells shall be accurately located through surveying and marked with a post visible to equipment operators.</p>	Ventura County Planning and DOGGR	Prior to cell construction	Applicant-hired and County-approved geologist to identify well locations.	Verify all identified well locations have been marked.		
<p>HAZ-3: Grading/Excavation Monitor. A qualified environmental engineer or environmental geologist shall be present during grading/excavations in the vicinity of on-site oil wells, to direct proper excavation and characterization of potentially contaminated materials. The qualified environmental engineer shall observe excavations for potential signs of contaminated soil, such as discoloration, unusual odors, and/or positive readings with a photo-ionization detector (PID) or organic vapor analyzer (OVA). The environmental engineer or environmental geologist shall be 40-hour OSHA trained with respect to handling of hazardous substances.</p> <p>Contaminated soil shall be excavated and disposed off-site at a facility permitted for disposal of such waste. Alternatively, the contaminated soil may be remediated in-situ (i.e., in-place) by bioremediation or other methods acceptable to Ventura County.</p>	Ventura County Planning	On-going during excavation	Applicant-hired and County-approved environmental engineer or geologist to observe grading operations.	Avoid wells. Repair any damaged wells.		

ERRATA – 2

Subsequent to printing the Simi Valley Landfill and Recycling Center Expansion Project Final EIR, several additional corrections to text have been identified. Please replace text as follows to reflect the correct wording.

- Make the following correction to Text on lines 12 through 31 on page 3.1-22:

Parks and Recreation

Policy 4.10.2-1: The County shall maintain and enforce the local parkland dedication requirements (Quimby Ordinance), to acquire and develop neighborhood and community recreation facilities. Parkland dedication shall be based on a standard of five acres of local parkland per thousand population, including neighborhood and community parks.

Comment: ~~Inconsistent. Although the~~ The Quimby Ordinance does not apply to a landfill project and; the county lacks the authority to compel the applicant would pay in lieu fees for parks and trails development as described in Mitigation Measures REC 1 through REC 3 in order offset increased recreational demands created by employee households.

Policy 4.10.2-3: Developers shall be encouraged to make unused open space available for recreation.

Comment: ~~Inconsistent. As discussed in Section 3.14.2.3.4, Mitigation Measure REC 1 requires that~~ The county lacks the authority to compel the applicant to dedicate public easements for the planned Alamos Canyon Trail. Similarly, Mitigation Measure REC 2 requires that the applicant offer to dedicate in fee the 20-acre community park site identified in the escrow agreement between the applicant and Rancho Simi Recreation and Parks District (RSRPD). Implementation of Mitigation Measures REC 1 and REC 2 would ensure that open space would be available for recreation, thereby ensuring consistency with this policy.

Policy 4.10.2-4: The County shall require reservation of land for public purchase, pursuant to the County Subdivision Ordinance, where requested by a recreation agency.

Comment: ~~Inconsistent. As discussed in above and in Section 3.14.2.3.4, Mitigation Measures REC 1 and REC 2 would~~ The County lacks the authority to ensure that land would be reserved as requested by the RSRPD, thereby ensuring consistency with this policy.

- Make the following corrections to Table 3.2-17 on pages 3.2-43 for AQ-1 and 3.2-44 for AQ-3:

Table 3.2-17. Mitigation for Air Quality Impacts

<i>Mitigation Measure (As written)</i>	<i>Mitigation Measure (As corrected)</i>
<p>AQ-1: The construction contractor shall implement the following measures to mitigate ozone precursor emissions from on-site off-road construction equipment:</p> <ol style="list-style-type: none"> 1. All construction equipment shall meet the EPA Tier 3 nonroad equivalent standards. The construction contractor shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. 2. Minimize equipment idling time. 3. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 4. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 5. Encourage the use of alternatively fueled construction equipment, such as CNG, LNG, or electricity. 	<p>AQ-1: The construction contractor shall implement the following measures to mitigate ozone precursor emissions from on-site off-road construction equipment:</p> <ol style="list-style-type: none"> 1. All construction equipment shall meet the EPA Tier 3 nonroad equivalent standards. The construction contractor shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. 2. Minimize equipment idling time. 3. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 4. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 5. Encourage the use of alternatively fueled construction equipment, such as CNG, LNG, or electricity. 6. <u>All nonroad diesel-powered equipment used for facility construction shall meet U.S. Environmental Protection Agency Tier 4 emission standards as applicable to their power rating.</u>
<p>AQ-3: To reduce peak daily emissions of ROC and NOx from project operations, the landfill operator shall implement the following measures to mitigate ozone precursor emissions from on-site off-road mobile equipment:</p> <ol style="list-style-type: none"> 1. Beginning in 2009, convert all equipment to engines with EPA nonroad Tier 3 standards. The landfill operator shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. 2. Minimize equipment idling time. 3. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 4. Encourage the use of alternatively fueled equipment, such as CNG, LNG, or electricity. 	<p>AQ-3: To reduce peak daily emissions of ROC and NOx from project operations, the landfill operator shall implement the following measures to mitigate ozone precursor emissions from on-site off-road mobile equipment:</p> <ol style="list-style-type: none"> 1. Beginning in 2009, convert all equipment to engines with EPA nonroad Tier 3 standards. The landfill operator shall be exempt from this requirement if he provides proof that a given piece of equipment is unavailable within California that meets Tier 3 standards. 2. Minimize equipment idling time. 3. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 4. Encourage the use of alternatively fueled equipment, such as CNG, LNG, or electricity. 5. <u>All nonroad diesel-powered equipment used for facility operation shall meet U.S. Environmental Protection Agency Tier 4 emission standards as applicable to their power rating.</u>

Please also note that the text of AQ-1 on page 3.2-24 and of AQ-3 on page 3.2-29 should be also corrected as indicated above. In addition, comparable corrections should be made to AQ-1 in Table ESR.7-1 on page ES-78 and to AQ-3 in Table ESR.7-1 on page ES-79.

- Correct Mitigation Measures WR-1 and WR-2 on page 3.3-28 according to direction received from the Watershed Protection District as follows:

Mitigation for Water Quality Impacts

<i>Mitigation Measure (As written)</i>	<i>Mitigation Measure (As corrected)</i>
<p>WR-1: Toe Barrier Liquid Analysis by VCWPD. Toe barrier liquids sampling results shall be reviewed by the Ventura County Watershed Protection District, Water & Environmental Resources Division, Water Quality Section, for conformance with Basin Plan surface water quality objectives, including associated TMDLs, prior to use in dust control. In the event that sampling results are in excess of these water quality objectives, use of toe barrier liquids for dust control shall cease pending enhanced remedial actions and additional sampling demonstrating that the toe barrier liquids are within acceptable limits.</p>	<p>WR-1: Compliance with Surface Quality Urban Impact Mitigation Plan (SQUIMP):</p> <p>Intent: In order to mitigate for the impacts to the surface water and stormwater resources, the proposed project shall meet all project design requirements of the provisions as contained in Part 4.C., “Programs for Planning and Land Development” of the July 2000 Regional Water Quality Control Board (Order No. 00-018) Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit CAS004002.</p> <p>Description of Requirement: The proposed development meets at least one of the Municipal NPDES Permit applicability criteria for new development or redevelopment projects (Part 4.C.) and therefore the applicant shall submit a complete Surface Quality Urban Impact Mitigation Plan (SQUIMP) in accordance with provisions of the 2000 Municipal NPDES Permit and the 2002 Ventura Countywide Stormwater Program “Technical Guidance Manual for Stormwater Quality Control Measures” (TGM)</p> <p>Documentation: The applicant shall submit the following items to the Watershed Protection District - Surface Water Quality Section for review and approval:</p> <ul style="list-style-type: none"> a) A complete SQUIMP Worksheet form available at (http://ventura.org/rma/planning/Permits/discretionary.html) b) A site plan prepared and stamped by a California licensed civil engineer or land surveyor that accurately delineates the location of the proposed development, existing and proposed impervious surfaces, storm drain system elements, general drainage pattern, and proposed site-specific SQUIMP Best Management Practices (BMPs) strategies. c) Drainage Study or Hydrology Report prepared and stamped by a California licensed civil engineer including applicable calculations of stormwater quality design flow and volume to meet 2002 TGM requirements and standards. d) A written Operations and Maintenance Manual detailing how the proposed and installed BMPs devices will be maintained in accordance with the Appendix D of the 2002 TGM. e) The applicant shall provide the Watershed Protection District - Surface Water Quality Section with a copy of recorded County’s “Covenant for Maintenance of Stormwater Treatment Device” (form is available at http://ventura.org/rma/planning/Permits/discretionary.html), which requires all property owners and their successors in interest to assume all BMPs duties and responsibilities including, but not

Mitigation for Water Quality Impacts

<i>Mitigation Measure (As written)</i>	<i>Mitigation Measure (As corrected)</i>
	<p>limited to, maintenance of all BMPs and all equipment which is required for operation of BMPs. Contained within the Covenant and Deed Restriction must be a description of the BMPs that are being provided as part of the project, a description of the maintenance requirements and how the necessary maintenance shall be performed.</p> <p>Timing:</p> <ul style="list-style-type: none"> • The above-listed items (a to c) shall be submitted to the Watershed Protection District -Surface Water Quality Section for review and approval prior to issuance of Zoning Clearance for Construction. • The above-listed items (d and e) shall be submitted to the Watershed Protection District -Surface Water Quality Section Prior to Zoning Clearance for Use Inauguration. <p>Mitigation Monitoring & Reporting Program: Watershed Protection District -Surface Water Quality Section staff will review the submitted materials for consistency with the Municipal NPDES Permit and 2002 TGM.</p>
<p>WR-2: Stormwater Runoff Analysis by VCWPD. Stormwater runoff sampling results shall be reviewed by the Ventura County Watershed Protection District, Water & Environmental Resources Division, Water Quality Section, for conformance with Basin Plan surface water quality objectives, including associated TMDLs. In the event that sampling results are in excess of these water quality objectives, on-site Best Management Practices (BMPs) shall be adjusted and enhanced until additional sampling demonstrates that stormwater runoff is within acceptable limits. BMPs that shall be adjusted and enhanced to increase surface water quality shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> • Runoff shall be directed by berms and ditches away from the active landfill face to the on-site drainage system. • Runoff from within the active face, during rain events (i.e., not runoff associated with dust control), shall be detained in temporary basins, sampled, and analyzed prior to discharge into the on-site drainage system, to verify that runoff complies with Basin Plan surface water quality objectives, including associated TMDLs. • A sump, including a water quality filter, shall be provided to collect surface runoff at the household hazardous waste collection facility. The water quality shall be sampled and analyzed bi-monthly, during the rainy season (i.e., November 15 to April 15) to verify that runoff complies with Basin Plan surface water quality objectives, including associated TMDLs. 	<p>WR-2a: General Industrial Stormwater Permit No. CAS000001 Requirements</p> <p>Intent: In order to mitigate for the impacts to the stormwater resources, the applicable project shall maintain compliance with all water quality provisions in accordance with NPDES General Industrial Stormwater Permit No. CAS000001, Waste Discharge Requirements for Discharges of Stormwater Runoff Associates with Industrial Activities.</p> <p>Description of Requirement: For the proposed project, the applicant shall ensure coverage and compliance with the State Water Resources Control Board NPDES General Industrial Stormwater Permit No. CAS000001.</p> <p>Documentation: The applicant shall prepare and submit the following items to the Watershed Protection District – Surface Water Quality Section for review upon request:</p> <ol style="list-style-type: none"> a) Copy of a current Notice of Intent (NOI) in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit No. CAS000001; b) Site-specific Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit No. CAS000001; c) Annual Report including sampling results in accordance with the State Water Resources Control Board requirements under the NPDES General Industrial Stormwater Permit (No. CAS000001 <p>Timing:</p> <ul style="list-style-type: none"> • The above listed items shall be submitted to the

Mitigation for Water Quality Impacts

<i>Mitigation Measure (As written)</i>	<i>Mitigation Measure (As corrected)</i>
	<p>Watershed Protection District – Surface Water Quality Section for review Prior to Zoning Clearance for Use Inauguration or upon request.</p> <p>Mitigation Monitoring & Reporting Program: Watershed Protection District – Surface Water Quality Section staff will review the submitted materials to verify that the facility is currently covered under the NPDES General Industrial Stormwater Permit No. CAS000001.</p> <p>WR-2b: NPEDES Municipal Stormwater Compliance with Construction Activities</p> <p>Intent: In order to mitigate for the impacts to the stormwater resources during construction activities, the applicable project shall maintain compliance with all water quality provisions in accordance with the Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit CAS004002.</p> <p>Description of Requirement: The applicant shall ensure compliance and the implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) as applicable in accordance with Subpart 4.F “Development Construction Program” of the Municipal Stormwater NPDES Permit CAS004002.</p> <p>Documentation: The applicant shall prepare and submit the following items to the County’s Building and Safety Division for review:</p> <ul style="list-style-type: none"> a) A complete worksheet for "Best Management Practices for Construction Activities as applicable to the proposed project. The form is available at: b) http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/engineeringservices/dis/toc <p>Timing: Prior to Issuance of Building Permit, the above-listed items shall be submitted to the County’s Building and Safety Division.</p> <p>Mitigation Monitoring & Reporting Program: PWA staff will review the submitted materials for consistency with the NPDES Permits. Up-to-date and site-specific SWPPP certified as local SWPPP shall be kept on-site for periodic review by PWA – Development and Inspection Services.</p>

Please also note that the text of WR-1 on Table 3.3-1 (page 3.3-33) and of WR-2 on Table 3.3-1 (page 3.3-34) should be also corrected as indicated above. In addition, comparable corrections should be made to WR-1 and WR-2 in Table ESR.7-1 on page ES-39.

- Correct Table 3.11-9 on page 3.11-20 as follows:

Table 3.11-9. Landfill Existing Trip Generation (PCE)

	<i>AM Peak Hour</i>			<i>AMPM Peak Hour</i>		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
Autos	30	24	54	5	13	18
Trucks	88	74	162	6	24	30
Total	118	98	216	11	37	48

Appendix K
Waste Capacity Study

Executive Summary

Introduction

In conjunction with the EIR on the Simi Valley Landfill and Recycling Center (SVLRC) expansion, SAIC was tasked to prepare a capacity study to assess the future landfill capacity in Ventura County as it would be affected by the increase of permitted daily capacity at the SVLRC from 3,000 tons per day to 6,000 tons per day of waste disposal and the enlargement of waste disposal area. The proposed project would expand the waste capacity of the SVLRC to 98.5 million tons, an increase of 63.7 million tons above currently permitted levels. Recent receipts have been on the order of 2,500 tons per day, about 500 tons per day less than the 3,000 tons per day daily permit limit.

In addition to serving Ventura County, the landfill currently accepts waste from outside Ventura County. Approximately 36 percent of waste accepted in the first quarter of 2008 originated outside the County, a fraction that is considered representative of recent operations. Population growth throughout the region, as well as the closure of other landfills in the region, will likely increase demand for available SVLRC capacity in the future. This Capacity Study addresses the potential future outcomes that could reasonably be expected from possible approaches to managing waste disposal in Ventura County.

Summary of Issues

There are a number of key issues that bear on estimating future landfill capacity and disposal demand. These include the expected availability of landfill capacity to accept future disposal demand, the expected growth in disposal needs, the distribution of sources of waste and available disposal sites, as well as policy actions that could be taken to affect future disposal activity.

Landfill Capacity

Title 14, CCR §118755 requires county governments to adopt a Countywide Siting Element (CSE) as part of their Countywide Integrated Waste Management Plan (CIWMP). The CSE must demonstrate that there is a countywide minimum of 15 years of combined permitted disposal capacity through existing or planned solid waste disposal and transformation facilities or through additional strategies. Therefore, it is in the interest of each County to evaluate and ensure adequate capacity for the waste generated within its borders. The Ventura County Countywide Siting Element (CSE) is one component of the County Integrated Waste Management Report. The Siting Element was originally approved by the State in June 2001 and was most recently updated and approved by CalRecycle on August 17, 2010.

Landfill Closures

Many landfills in southern California are scheduled to close between now and 2040. This is because existing sites are filling up and new sites have not been permitted to date. CalRecycle maintains a database of landfill sites and their expected closure dates. While it is unknown how much waste might come to the SVLRC upon closure of other facilities, the CalRecycle (formerly California Integrated Waste Management Board or CIWMB) data are used in this study to identify when landfills in southern California are scheduled to close and to estimate the potential for additional waste to come to the SVLRC when these facilities close. The study accounts for landfill closures in estimating future demand for disposal capacity. (See Table 3).

Future Disposal Demand Growth

Absolute disposal demand has increased over time, but at a slower rate than population growth. Economic activity also affects disposal with the recent economic slow-down causing a decrease in waste disposal as households and businesses limit new purchases and new construction. Future upturns in the economy are

likely to result in increasing waste disposal as construction and purchasing returns to more typical levels. For the purposes of this study, a county-specific growth factor of 0.9 times the population growth forecast by the California Department of Finance is used. This results in an absolute growth in waste disposal, but at a lower rate than population growth. Using this assumption, per capita waste disposal gradually declines over time as has been consistent with experience over the last twenty years.

Sources of Waste

The SVLRC currently receives waste from many counties in California. To some extent, this is an artifact of the way the movement of waste is accounted for in California. Because much of the waste comes through transfer stations where waste from multiple sources is typically sorted to remove recyclables and other valuable components, the remaining non-recyclable waste is consolidated into loads delivered to one or another landfill facility. Thus, waste arriving at the SVLRC can appear to be coming from distant locations, such as San Bernardino County, because some of the original waste arriving at the transfer facility originated there. However, while some of the waste in a given load may actually have originated that far away, the actual sources of waste in any given load are uncertain. The statistics do not mean that a single truckload actually came from a distant source solely for the purpose of disposing of waste at the SVLRC. The documented sources of waste coming to the SVLRC (using the standard waste accounting methodology) in the first quarter of 2008 provide the baseline data for projecting future sources and quantities.

Policy Options

A number of alternatives have been suggested to provide Ventura County with some ability to constrain waste coming from outside the county to in-county landfills. Two local options have been proposed. One would involve defining a “wasteshed boundary” and disposal of waste originating outside the boundary would be prohibited. The other is a fee on “out of area waste” that would increase the cost of disposing of out-of-county waste at a landfill in Ventura County. For reasons explained in the study, a wasteshed boundary was determined to be infeasible because it would involve a government entity (the County) imposing a constraint on a commercial entity which could involve constitutional restraint of trade issues. This approach is not analyzed in this study. However, several “out of area” fee levels were analyzed to assess the effect they might have on lessening the flow of waste into the county.

Price Elasticity

The change in demand resulting for the out-of-area fee is computed based on estimates of the price elasticity of demand related to the landfill fees. The price elasticity of demand is the ratio between the percent change in disposal quantity demanded and percent change in total disposal cost (tipping cost plus other fees). An elasticity of 1 indicates that an increase in cost of 10%, for example, would involve a decrease in demand of 10%. However, this simple relationship rarely exists in the real world. In the case of landfill demand, elasticity is limited by the unavailability of alternatives. Consumer price elasticity for solid waste has been determined to be low with estimates in the .40 to .10 range. An elasticity of .10 would result in minimal changes in response to increases in the fee and is not presented here (e.g. a 50 percent increase in cost – say from \$40 to \$60 per ton – would reduce out of area receipts by 5 percent). The analysis assumes a .40 elasticity to examine the greatest possible effect of an out of area fee (e.g. a 50 percent increase in cost – say from \$40 to \$60 per ton – would reduce out of area receipts by 20 percent).

Summary of Analyses

This capacity analysis is based on a spreadsheet model designed to help assess probable impacts on SVLRC’s capacity and the overall landfill capacity in Ventura County assuming either a continuation of the current permitted operations or landfill expansion and an increase in receiving limits as proposed. The model extrapolates future waste disposal rates based on a factor (0.9) of population growth forecast by the

California Department of Finance projecting the current distribution of sources that deliver waste to the facility (first quarter 2008 baseline data) into the future using growth rates for Ventura and other counties. It is important to recognize that projections far into future years are subject to a great deal of uncertainty. Therefore, this study and its conclusions should not be taken to be predictions of future situations that are certain to actually occur. What is important is that each of the cases analyzed was subject to the same assumptions except for the parameters being tested. Therefore, it is the differences between the cases that are instructive, not the specific projections of closure dates or waste capacity limits.

The model permits the evaluation of multiple cases (many more than reported here) and can be run with low, medium, and high assumptions for the growth of disposal demand and various out of area fee levels, as well as several different assumptions related to what amount of waste would be diverted to the SVLRC when other landfills in the region close. The following summarize the key findings of the capacity study based on the medium (most probable) case analyses.

Summary of Conclusions

Base Case with Transfers from Landfill Closures

In the Base Case, all waste origins as received in and documented in the first quarter 2008 data are assumed to continue as deliveries to SVLRC in the same proportions and inflated by appropriate county-specific growth factors. Materials from other landfill closures are assumed to be delivered to SVLRC upon their closure if capacity exists at SVLRC. Under these assumptions, the SVLRC would reach daily capacity in 2013 and closure in 2024 before the scheduled closure of the Toland Road Landfill in 2027 (see Table ES-1). Therefore, under this scenario (daily limit of 3,000 tons per day and no additional permitted capacity), wastes that might have been delivered to SVLRC when the Toland Road Landfill closes would need to be diverted to another location.

Project Case with Transfers from Landfill Closures

The Project Case also assumes the closure of the identified landfills (see Table 3). Materials from these other landfills are assumed to be delivered to SVLRC upon their closure if capacity exists at SVLRC. Table ES-1 shows the daily capacity limit of 6,000 tpd would be reached in 2037 and the landfill would close in 2053. This is consistent with the EIR which used a different calculation method.

Project Case with Out of Area Fee Sensitivity Analysis

Sensitivity analyses were conducted under the Project Case to assess the potential impact of three out of area fee levels: \$10, \$20, and \$40 per ton. The fees were assumed to be applied to all trucks and vehicles from out of Ventura County and only to waste. Transfers from closing landfills were subject to the same elasticity calculations as projected out of area waste deliveries. That is, the expected transfer tonnages identified above in Table 3 were added to the wastes projected using the population-based factor before the application of the elasticity calculation. Therefore, at higher assumed fees, all out of area waste, both projected based on population and estimated from closed landfills, was reduced according to the elasticity factor of 0.40. The factor was not applied to the Toland Road Landfill because it is an in-county landfill. The fees were not applied to Alternative Daily Cover, which comes from both Orange and Los Angeles Counties but is essential to project operations. The analyses assessed the potential change in receipts for a price elasticity of 0.4.

Table ES-1. Summary of Findings for All Cases

Case	Remaining Capacity in 2025	Daily Capacity reached (year)	Estimated Closure Date (year)
Current Receiving Rate of 2,500 tpd increasing to 3,000 tpd plus anticipated landfill closures	0 mm tons	2013 (3,000 tpd)	2024
Project Case with receipts from closing landfills - No Fee	57.1 mm tons	2037	2053
Project Case with receipts from closing landfills - \$10.00 Fee	58.0 mm tons	2037	2054
Project Case with receipts from closing landfills - \$20.00 Fee	58.9 mm tons	2042	2055
Project Case with receipts from closing landfills - \$40.00 Fee	60.8 mm tons	Not reached	2058

At \$10.00 per ton, the model did not show a very substantial reduction in out of area receipts compared to the No Fee case. However, at \$20.00 per ton, receipts were depressed somewhat such that the daily capacity would take about five more years to achieve and the estimated closure would be extended out by two years. At \$40.00 per ton, receipts were depressed considerably. Daily capacity would not be achieved for the life of the project and closure would be extended by about five years to 2058. Note that \$40.00 per ton is almost a doubling of the current tipping fees for out of area waste, raising the total cost for out of area waste to over \$80.00 per ton.

A fee at the \$40 per ton level would likely generate substantial revenues for the County (over \$26,000,000 per year in 2050 using 2008 dollars). The political feasibility of doing so, as well as a reasonable use for the funds, would need to be considered carefully. Note also that, at the \$20 and \$40 out of area fee levels, surcharge revenues would be somewhat lower than without the out of area fee because overall receipts are depressed by the out of area fees (see Table 11). However, total receipts would still be considerable. The effect of a substantial out of area fee would be manifest as a modest annual reduction in the SVLRC's receipts of disposal wastes from out of area sources and, therefore, of total wastes received. It would be expected to extend the life of the facility by several years, depending on the fee level.

Capacity Analysis

Introduction

In conjunction with the EIR on the Simi Valley Landfill and Recycling Center (SVLRC) expansion, SAIC was tasked to prepare a capacity study to assess the future landfill capacity in Ventura County as it would be affected by the expansion of permitted capacity at the SVLRC from 3,000 tons per day to 6,000 tons per day of waste disposal and the enlargement of waste disposal capacity. The proposed project would expand the waste capacity of the SVLRC to 98.5 million tons, an increase of 63.7 million tons above currently permitted levels. Recent receipts have been on the order of 2,500 tons per day, about 500 tons per day less than the 3,000 tons per day daily permit limit.

In addition to serving Ventura County, the landfill currently accepts waste from outside Ventura County. Approximately 36 percent of waste accepted in the first quarter of 2008 originated outside the County, a fraction that is believed to be representative of recent operations. Population growth throughout the region, as well as the closure of other landfills in the region, will likely increase demand for available SVLRC capacity in the future. This Capacity Study addresses the potential future outcomes that could reasonably be expected from possible approaches to managing waste disposal in Ventura County.

The following sections address, in turn, the following:

- Issues related to the analyses
- Background information relating to sources of information and assumptions
- Description of the modeling methodology
- Analyses of the results for three scenarios:
 - Base Case (existing permitted facility and future anticipated growth)
 - Project Case (proposed permitted facility and future anticipated growth)
 - Project Case with Out of Area Fee (project case with three different out of area fee levels of \$10, \$20, and \$40 per ton)

Issues

A number of key issues bear on estimating future landfill capacity and disposal demand. These include the expected availability of landfill capacity to accept future disposal demand, the expected growth in disposal needs, the distribution of sources of waste and available disposal sites, as well as policy actions that could be taken to affect future disposal activity.

Landfill Capacity

Title 14, CCR §118755 requires county governments to adopt a Countywide Siting Element (CSE) as part of their Countywide Integrated Waste Management Plan (CIWMP). The CSE must demonstrate that there is a countywide minimum of 15 years of combined permitted disposal capacity through existing or planned solid waste disposal and transformation facilities or through additional strategies. Therefore, it is in the interest of each County to evaluate and ensure adequate capacity for the waste generated within its

borders. The Ventura County Countywide Siting Element (CSE) is one component of the County Integrated Waste Management Report. The Siting Element was originally approved by the State in June 2001 and was most recently updated and approved by CalRecycle on August 17, 2010.

Many landfills in southern California are scheduled to close between now and 2040. This is because existing sites are filling up and new sites have not been permitted to date. CalRecycle maintains a database of landfill sites and their expected closure dates. While it is unknown how much waste might come to the SVLRC upon closure of other facilities, the CalRecycle (formerly California Integrated Waste Management Board or CIWMB) data are used in this study to identify when landfills in southern California are scheduled to close and to estimate the potential for additional waste to come to the SVLRC when these facilities close. The study accounts for landfill closures in estimating future demand for disposal capacity.

Future Disposal Demand Growth

Absolute disposal demand has increased over time, but at a slower rate than population growth. Economic activity also affects disposal with the recent economic slow-down causing a decrease in waste disposal as households and businesses limit new purchases and new construction. Future upturns in the economy are likely to result in increasing waste disposal as construction and purchasing returns to more typical levels. For the purposes of this study, a county-specific growth factor of 0.9 times the population growth forecast by the California Department of Finance is used. This results in an absolute growth in waste disposal, but at a lower rate than population growth. Using this assumption, per capita waste disposal gradually declines over time as has been consistent with experience over the last twenty years or so.

Sources of Waste

The SVLRC currently receives waste from many counties in California. To some extent, this is an artifact of the way the movement of waste is accounted for in California. Because much of the waste comes through transfer stations where waste from multiple sources is typically sorted to remove recyclables and other valuable components, the remaining non-recyclable waste is consolidated into loads delivered to one or another landfill facility. Thus, waste arriving at the SVLRC can appear to be coming from distant locations, such as San Bernardino County, because some of the original waste arriving at the transfer facility originated there. However, while some of the waste in a given load may actually have originated that far away, the actual sources of waste in any given load are uncertain. The documented sources of waste coming to the SVLRC (using the standard waste accounting methodology) in the first quarter of 2008 provide the baseline data for projecting future sources and quantities.

Policy Options

A number of alternatives have been suggested to provide Ventura County with some ability to constrain waste coming from outside the county to in-county landfills. Two local options have been proposed. One would involve defining a “wasteshed boundary” and disposal of waste originating outside the boundary would be prohibited. The other is a fee on “out of area waste” that would increase the cost of disposing of out-of-county waste at a landfill in Ventura County. For reasons explained in the study, a wasteshed boundary was determined to be infeasible because it would involve a government entity (the County) imposing a constraint on a commercial entity which could involve constitutional restraint of trade issues. This approach is not analyzed in this study. However, several “out of area” fee levels were analyzed to assess the effect they might have on lessening the flow of waste into the county.

Wasteshed Boundary Issue

For some publically operated landfills, a geographic area is defined within which waste may be accepted at a landfill. Waste from outside the area is refused. This “Wasteshed Boundary” serves to limit the geographic area from which waste can be accepted, thereby placing a limit on the amount of waste likely

to come to the landfill in any given time period and, secondarily, prolonging the potential life of the landfill by limiting the rate at which it can be filled by out-of-area waste. The effect of a wasteshed boundary depends, to some extent, on the sources and potential volumes of waste from outside the boundary that might be delivered to the landfill in the absence of the restriction. In areas, such as eastern Ventura County, with a large waste generating population nearby, there is reason to believe that imposing a wasteshed boundary would prolong the life of a landfill while at the same time curtailing the economic rewards of operating the facility. While the capacity study model was used to evaluate one wasteshed boundary scenario (restricting waste received to only Ventura County origins based on reported waste origins for the facility), that scenario was deemed too speculative to provide useful information and, therefore, is not reported here. In addition, establishing a wasteshed boundary for an operating privately owned facility presents a number of other feasibility constraints discussed in the following paragraphs.

At least two U.S. Supreme Court cases present substantial impediments to imposing a wasteshed boundary on the SVLRC. As a privately operated facility, the landfill is a commercial venture and subject to the commerce clause of the U.S. Constitution. Were Ventura County to impose a blanket wasteshed boundary for receipts at the SVLRC, it may be considered an unconstitutional restraint of interstate commerce under the reasoning employed in the following two U.S. Supreme Court cases. In *Fort Gratiot Landfill, Inc. v. Michigan Department of Natural Resources, et al.* (1977), the State of Michigan imposed a law prohibiting private landfill operators from accepting solid waste that originates outside the county in which their facilities are located unless authorized by a local solid waste management plan. The landfill operator challenged the law and the Supreme Court held that the law violated the commerce clause and that the state had failed to prove that the import restrictions served a valid health and safety purpose that could not adequately be served by another means. In another case, *City of Philadelphia et al. v. State of New Jersey et al.* (1978), the Supreme Court held that a law prohibiting the importation of most solid or liquid waste from outside the state also violated the commerce clause. The Court reasoned that, if one political entity were permitted to prohibit the importation of waste from another political entity, then every such entity could close their borders to any other. The Court was unwilling to sanction “the efforts of one State to isolate itself in the stream of interstate commerce from a problem shared by all.” In both cases, the Court took note that the laws applied to private landfill operators.

It may be possible to avoid a Commerce Clause challenge to a wasteshed boundary if an exception is provided for out-of-state waste. In this instance, a provision would be included in the governing regulation or permit that all waste from out-of-state shall be accepted on the same terms as in-wasteshed waste if presented for disposal. This would, for example, permit waste from Naval operations in Port Hueneme that occasionally comes from Antarctic research stations to be accepted without limit (a relatively rare occurrence in any event). Such an exception would be designed specifically to preclude a Commerce Clause challenge.

Another issue relating to a wasteshed boundary is how waste is accounted for in California. This issue is important because, although waste origins and destinations are reported for all jurisdictions, the method of tracking the waste is an accounting exercise rather than a mechanism for tracking the actual origin and destination of any particular ton of waste. Some trash trucks deliver waste directly to a landfill and the source and destination of waste in this case is unambiguous. However, when a transfer station is involved, waste from different trucks and different sources may be combined. At the transfer station, waste may be sorted, often having the recyclable material removed, and then consolidated into larger truckloads for delivery to the landfill. Each load of waste delivered to a transfer station becomes part of a load of waste leaving the facility for a disposal site. The outgoing transfer truckloads therefore become commingled with waste from multiple origins. While reported inbound and outbound transfer station solid waste tonnages balance overall, the actual origin of the waste within any given truck is lost.

This factor confounds the ability of a facility to identify the true source of waste being presented for disposal. To adequately enforce a watershed boundary and preclude wastes from outside that geographic area from being received, it is essential to be able to distinguish the source of the waste in any given load presented for disposal. Loads with any out-of-area waste would need to be turned away at the facility entrance station. While this might appear straight forward, it is not. Much of the waste destined for the Simi Valley Landfill and Recycling Center comes from transfer stations and many, if not most, transfer stations receive wastes from multiple jurisdictions and geographic areas. In addition, many also remove all recyclable materials and send just the non-recyclable residual to a landfill. This residual is only a fraction of the total waste material originally received. To make shipment of the non-recyclable wastes to a landfill reasonably economic, waste loads are consolidated and residuals may be combined with wastes from other sources. Operationally, it is difficult, if not impossible, to consolidate the residual non-recyclable waste based on its origin. This would require allocating sorting space solely to individual jurisdictions that are either inside or outside the watershed boundary, a practice that may not be compatible with the existing available sorting space at many transfer stations. Therefore, there are substantial operational impediments to imposing a watershed boundary on existing operations.

In addition, there is no certain mechanism to determine the origin of waste. As such, haulers may be tempted to be less than truthful about the origin of the waste in any given load, especially if there is no practical way to verify the origin of a load at the time waste is received. The difficulty of verifying the origins of waste adds another layer of complexity and uncertainty to imposing a watershed boundary that requires screening the incoming waste stream at a landfill. While origins may be able to be controlled somewhat via contracts with hauling companies, many haulers and individuals will not be subject to a binding or enforceable agreement.

Finally, the SVLRC has existing and long-standing commercial contracts or agreements with numerous waste haulers and transfer stations, as well as other Waste Management companies, both within and outside Ventura County or any reasonably definable watershed boundary. Imposing a watershed boundary outside of which no waste could be delivered to the SVLRC would very likely void or otherwise interfere with many of those commercial relationships as well adding to the costs of sorting and processing wastes and separating recyclables. On the other hand, if all existing contracts and agreements with Waste Management Inc. for waste deliveries to the SVLRC were honored in order to avoid undue interference with existing commercial relationships, it is very likely that the imposition of a watershed boundary would be largely ineffective in terms of limiting waste receipts. Honoring the many existing commercial agreements from outside a defined boundary would effectively nullify, or at least substantially dilute, the intended effect (to reduce waste receipts from outside Ventura County).

In summary, implementing a watershed boundary is therefore not without numerous potential practical, political, and economic difficulties. Based on the court cases and other issues discussed above, as well as the potential for political conflict and economic constraints, a watershed boundary imposed on the SVLRC by Ventura County is considered infeasible and scenarios based on a watershed boundary were not analyzed using the model.

Background

Waste generation is a function of population, employment, business activity, and consumer spending. More people, plus an increase in better paying jobs, leads to growth in the purchase of goods and, ultimately, waste generation (via disposal of packaging materials, no longer wanted consumer goods, demolition and construction debris, etc.). On the other hand, unfavorable economic conditions tend to reduce the demand for solid waste disposal capacity. Recent declines in landfill receipts are consistent with the current economic downturn.

Current Ventura County Waste Generation

Figure 1 presents total waste generation within Ventura County from 2000 to 2007. In Ventura County, total waste requiring disposal peaked in 2005. Subsequently disposal has been decreasing as the economy, along with housing construction, has slowed. Landfill-bound disposal continued to decrease in 2008 with the first quarter report indicating that about 188,000 tons of municipal solid waste were accepted at the landfill in the first quarter of the year, somewhat lower than the 2007 quarterly totals shown in Figure 1.

Not all waste generated within Ventura County is necessarily destined for disposal within the county. About 7 percent of the disposal waste originating in Ventura County is disposed in Los Angeles County with small portions (less than one percent) going to Kern, Kings, Orange and Santa Barbara counties. This waste typically passes through a transfer station where incoming wastes are commingled and sent to various locations subsequent to sorting at the transfer station.

There are currently two active landfills in Ventura County, the Simi Valley Landfill and Recycling Center and the Toland Road Landfill. The Toland Road Landfill, which is publically operated, is currently scheduled to close by May 2027. Under its conditional use permit limits, the Toland Landfill may accept waste only from the residents of the Santa Clara Valley and commercial loads that have been processed through a Ventura County transfer station or materials recycling facility (see Table 1 and Figure 2).

Figure 1. Total Waste Generated in Venture County by Quarter, 2000 to 2007

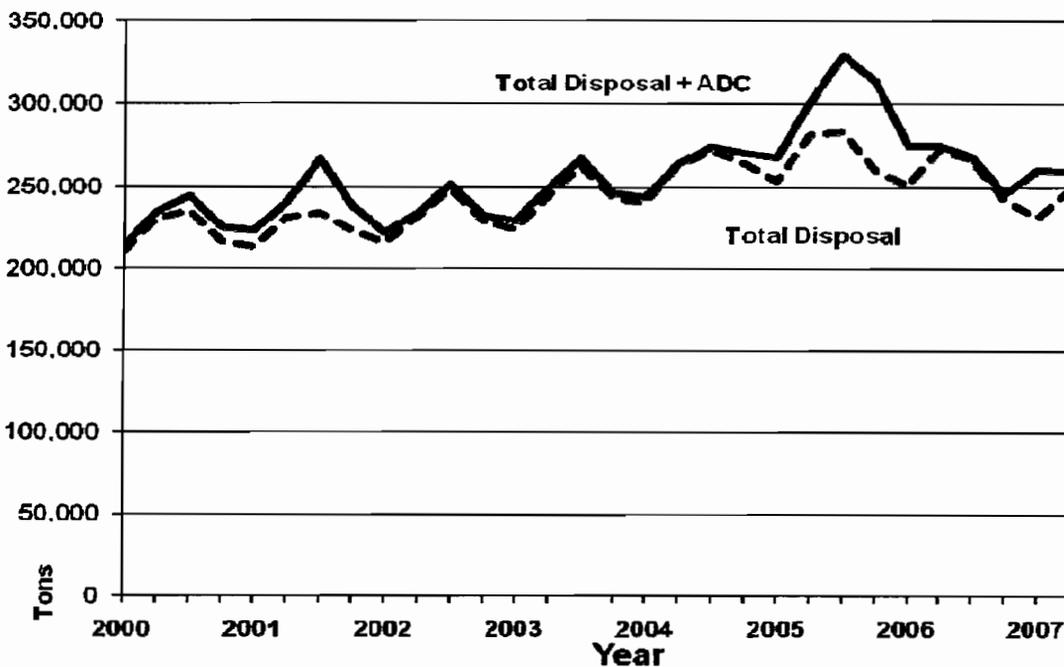
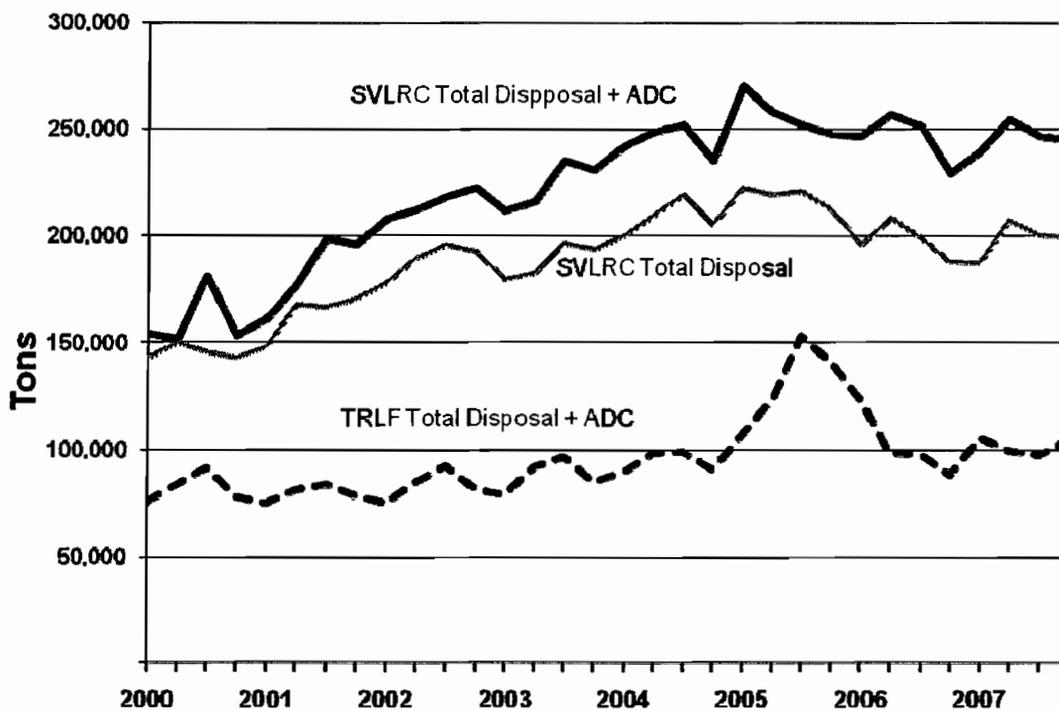


Table 1. Simi Valley and Toland Road Landfill Disposal and ADC, 2000 to 2007 (tons)

	2000	2001	2002	2003	2004	2005	2006	2007
Simi Valley Landfill and Recycling Center								
Disposal	581,777	653,186	757,079	752,794	834,438	875,581	792,252	794,589
ADC	60,118	80,215	104,987	142,044	144,017	153,080	192,270	211,388
Toland Road Landfill								
Disposal	329,890	319,644	335,389	354,361	379,733	405,067	378,174	357,407
ADC						120,588	31,609	51,042
Total	971,785	1,053,045	1,197,455	1,249,199	1,358,188	1,554,316	1,394,306	1,414,426

Figure 2. Simi Valley Landfill and Recycle Center (SVLRC) and Toland Road Landfill (TRLF) Total Disposal and ADC, 1995 to 2007 by Quarters



Simi Valley Landfill and Recycling Center Baseline

A majority of materials accepted at SVLRC originate in Ventura County. Some 64 percent of the materials accepted in the first quarter of 2008 were from Ventura County with slightly over 31 percent originating in Los Angeles County, the next largest source (see Table 2).

Table 2. Source of Disposal at Simi Valley Landfill, 1st Qtr, 2008

Origin Of Materials	Tons Accepted	Disposed Or Transformed	ADC + Beneficial Use	Disposed As Percent Of Total Accepted	Disposed As Percent Of Total Disposed Originating In County
Fresno*	13	13	0	100.0%	0.01%
International*	94	94	0	100.0%	0.05%
Kern*	46	46	0	100.0%	0.02%
Los Angeles	90,411	59,531	30,880	65.8%	31.57%
Orange	19,127	3,156	15,971	16.5%	1.67%
Riverside	411	407	3	99.2%	0.22%
San Bernardino	2,147	2,147	1	100.0%	1.14%
San Diego*	17	17	0	100.0%	0.01%
Santa Barbara	2,207	2,203	4	99.8%	1.17%
Tulare*	157	157	0	100.0%	0.08%
Ventura	154,207	120,807	33,275	78.3%	64.06%
* less than 0.1%	268,837	188,577	80,134		100.0%

Landfill Closures

A key factor likely to increase demand for landfill services at SVLRC is the closures of other permitted landfills in the region. Other landfills in the region will eventually reach their capacity limit. When other facilities close, it is likely some solid waste previously delivered to these closed landfills would be diverted to SVLRC for disposal. While the jurisdictions they serve will no doubt take steps consistent with California law to develop alternative programs and landfill resources, some of the disposal waste is likely to be delivered to SVLRC. It should be understood that there is no generally accepted methodology for determining how much of the disposal destined for one facility is likely to be sent to another upon that facility’s closure. The estimates used in the analyses are necessarily tentative and range from 2 percent to ten percent. Nevertheless, it is believed that these are not unreasonable and, when considered in aggregate, represent a rational expectation for the amount of waste that may be diverted to the SVLRC when other landfills in the region close. Table 3 presents the projected landfill closures reported on the CalRecycle website (<http://www.calrecycle.ca.gov/SWFacilities/Directory/>).

Table 3. Projected Landfill Closures

Landfill	County	Reported tons per day	Expected Closure Year	Potential % to SVLRC	Potential tons per day to SVLRC
Lancaster	Los Angeles	1,337	2012	2%	27
Olinda Alpha	Orange	6,008	2013	2%	120
Puente Hills	Los Angeles	12,041	2013	5%	602
Chiquita Canyon	Los Angeles	4,946	2019	10%	494
Scholl Canyon	Los Angeles	1,283	2019	10%	128
Tajiquas	Santa Barbara	702	2020	5%	35
Frank R. Bowerman	Orange	6,602	2022	2%	132
Toland Road	Ventura	1,141	2027	100%	1141
Calabasas Sanitary	Los Angeles	1,483	2028	10%	148
Sunshine Canyon	Los Angeles	3,740	2037	10%	374

Note that not all the closures identified above would necessarily come to the SVLRC in the percentages assumed. Also, the potential transfers are based on a “no fee” situation. When transfers from closing landfills are analyzed below with fees, these percentages would be lower due to the depressing effect of the fee on out of area waste receipts. Some may be diverted to SVLRC at either higher or lower percentages depending on the economics at the time of closure. Nor would closures necessarily happen in

the years currently predicted since the current slow economy may extend closure dates due to slower than expected receipts. Nevertheless, the above estimates are believed to be reasonable and useful for the purposes of assessing possible future outcomes.

Modeling

The modeling effort had a number of difficulties to address. In particular, estimates of jurisdictional disposal needs are difficult. Waste generation is correlated with population changes, construction activities, employment, and consumption as evidenced by the reduction in waste delivered to landfills during the current economic slowdown. Public awareness of waste disposal constraints is also expected to lead to some reduction in per capita disposal rates, although the magnitude of the effect is difficult to estimate. Potential future changes in state law may mandate higher levels of recycling and waste reduction which can be expected to stimulate even greater public awareness. At the same time, alternative solid waste disposal sites provide disposal companies a choice of potential destinations for materials; many factors come into play in the decision process. Some solid waste disposal facilities may reach their daily capacity limits early in the day, thereby either requiring the diversion of waste to another site or deferring delivery to another day. Operating costs aside, transfer trucks may then need to go to more distant locations for various reasons, including avoidance of early daily closures or on-going commercial relationships.

Modeling such variation is a complex process. Ideally, the analysis would be regional in scope incorporating factors that would impact disposal decisions at each potential source including alternative landfill limits and remaining capacity. Within the limits of this study, the Ventura County Simi Valley Landfill Capacity Model, is a simulation model that permits testing of alternative assumptions about changes in disposal tonnages and the sources of the waste at SVLRC. The model does not seek to define all potential variables, but does provide for the selection of a reasonable range of possible assumptions and outcomes for testing.

The Basic Model

The model, developed in a spreadsheet format, incorporates municipal solid waste (MSW) and alternative daily cover (ADC), both of which would consume available capacity. The model provides the ability to identify jurisdictions within Ventura County, Santa Barbara County, and other counties from which SVLRC currently receives waste material. The model also allows the selection of which jurisdictions are considered to be within the SVLRC's watershed or subject to a fee and allows addressing the individual waste streams separately should different out-of-area fees or an outright prohibition be considered based on type of waste. While this capability exists in the model, a watershed boundary is not presented because the legal, economic, and political constraints make it infeasible to implement as discussed previously.

The model permits testing the implications of alternative disposal requirements either at the jurisdictional level or for more generalized analysis at the county level for Ventura and Santa Barbara counties. The other counties from which SVLRC currently receives waste are treated as a group under the category of Other Counties.

Waste streams that may be diverted from future anticipated landfill closures are also incorporated into the simulations. The impact of the year of closing and proportion of current fill rates to be diverted to SVLRC may be tested.

Growth Estimates

For the purposes of the model development, detailed disposal data for SVLRC for the first quarter of 2008 provided by Waste Management was used to establish the baseline estimates. The data identifies tonnages of disposal material, ADC and beneficial reuse material from locations by county. The data is

categorized into four major sources - Ventura County, Santa Barbara County, Other Counties, and landfill closures.

The analysis applies a medium growth forecast for each source category incorporating different growth rates by specific time periods (California Department of Finance growth rates tend to be lower in more distant future years than in near term years). The calculated growth in the waste delivered to SVLRC is based on the population forecasts prepared by the California Department of Finance (CDF) and is shown on Table 4. (<http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>) For the purposes of this study, a county-specific growth factor of 0.9 times the population growth forecast by the California Department of Finance is used. This results in an absolute growth in waste disposal, but at a lower rate than population growth. Using this assumption, per capita waste disposal gradually declines over time as has been consistent with experience over the last twenty years or so.

Table 4. Annual CDF Population Growth Rate, 2009 to 2050

County	2009 – 2010	2011-2015	2016-2020	2021-2050
Ventura	1.07	1.13	1.11	0.81
Santa Barbara	0.88	0.56	0.56	0.49
Los Angeles	0.60	0.61	0.68	0.49
Orange	1.19	0.88	0.86	0.40
San Bernardino	1.93	1.78	1.66	1.12

Source: California Department of Finance

With the economy currently in a recession, the assumption is made that for the years 2009 and 2010, there would be no growth in the amount of waste generated. The growth rate assumes that the waste generated would grow at 90 percent of the population growth rate allowing for a continued decline in per capita waste generation as shown in Table 5.

Table 5. Generated Waste Growth Rates

	2009-2010	2011-2015	2016-2020	2021-2075
Ventura County				
Disposal Growth	0.00%	1.02%	1.00%	0.73%
Santa Barbara County				
Disposal Growth	0.00%	0.50%	0.50%	0.44%
Other Counties				
Disposal Growth	0.00%	0.61%	0.66%	0.44%

Price Elasticity

The change in demand resulting for the out-of-area fee is computed based on estimates of the price elasticity of demand related to the landfill fees. The price elasticity of demand is the ratio between the percent change in disposal quantity demanded and percent change in total disposal cost (tipping cost plus other fees). An elasticity of 1 indicates that an increase in cost of 10%, for example, would involve a decrease in demand of 10%. However, this simple relationship rarely exists in the real world. It is heavily influenced by the availability of alternatives with comparable value. In the case of landfill demand, elasticity is limited by the unavailability of alternatives. The change in demand resulting from the out-of-area fee is computed in the model based on the estimated price elasticity of the landfill fees.

Consumer price elasticity for solid waste has been determined to be low with estimates in the .40 to .10 range. Higher costs for waste disposal can lead to more recycling rather than disposal. While consumer demand for waste disposal may be low, the demand for specific landfill services would depend on landfill fees and charges as well as other factors such as distance, travel times, operating costs, daily capacity limits and other factors. Of particular importance are availability and location, daily capacity limits and fees of disposal alternative. Estimates of the cross elasticity of demand (i.e. the change in quantity of

disposal services at landfill A as a result of the change in price at landfill B) are unknown with respect to SVLRC. An elasticity of .10 would result in minimal changes in response to increases in the fee and is not presented here (e.g. a 50 percent increase in cost – say from \$40 to \$60 per ton – would reduce out of area receipts by 5 percent). The analysis assumes a .40 elasticity to examine the greatest possible effect of an out of area fee (e.g. a 50 percent increase in cost from \$40 to \$60 per ton would reduce out of area receipts by 20 percent).

Analyses

The capacity analysis examines alternative assumptions that likely would affect the remaining life of SVLRC under two basic cases. The first case is analyzed under the current permits. The second case is under the proposed permit conditions including the expansion of total landfill capacity as well as the increase in the amount of permitted daily disposal material that can be accepted at the landfill.

The analysis below considers the landfill from two perspectives. The first considers how the growth in the disposal of waste affects the years of capacity that remain. The second looks at a shorter planning horizon, estimating the years of capacity that would remain in the year 2025.

Base Case with Transfers from Landfill Closures

In the Base Case, all waste origins as received in and documented in the first quarter 2008 data are assumed to continue as deliveries to SVLRC in the same proportions and inflated by the appropriate growth factors described above. Materials from other landfill closures are assumed to be delivered to SVLRC upon their closure if capacity exists at SVLRC. Under these assumptions (see Table 6), the SVLC would reach daily capacity in 2013 and closure in 2024 before the scheduled closure of the Toland Road Landfill in 2027. Therefore, under this scenario (daily limit of 3,000 tons per day and no additional permitted capacity) when the Toland Road Landfill closes, wastes that had been delivered there would need to be diverted to a location other than the SVLRC. Table 9 at the end of this report provides the detailed calculations for future years to 2050.

Table 6. Base Case Summary

Base Case with Transfers from Other Landfill Closures Project Receipts at Actual or Permitted Levels			
Condition	Remaining Capacity in 2025	Daily Capacity (3,000 tpd) reached (year)	Estimated Closure Date (year)
Current Receiving Rate of 2,500 tpd increasing to 3,000 tpd plus anticipated landfill closures	0 mm tons	2013	2024

Project Case with Transfers from Landfill Closures

The Proposed Project Case assumes the closure of the landfills identified in Table 3 on schedule. Materials from other landfill closures are assumed to be delivered to SVLRC upon their closure if capacity exists at SVLRC. Table 7 shows the daily capacity limit of 6,000 tpd would be reached in 2037 and the landfill would close in 2053. This is consistent with the EIR which used a different calculation method. Table 10 at the end of this report provides the detailed calculations for future years to 2050.

Table 7. Project Case Summary

Base Case with and without Transfers from Other Landfill Closures Project Receipts at Permitted Levels			
Condition	Remaining Capacity in 2025	Daily Capacity (3,000 tpd) reached (year)	Estimated Closure Date (year)
Receiving Rate of 6,000 tons per day with transfers from closing landfills (EIR scenario)	57.1 mm tons	2037	2053

Project Case with Transfers and Out of Area Fee Sensitivity Analysis

The Proposed Project Base Case was projected forward for three different potential out of area fee levels: \$10, \$20, and \$40 per ton. The fees were assumed to be applied to all trucks and vehicles from out of Ventura County and only to waste. Transfers from closing landfills were subject to the same elasticity calculations as projected out of area waste deliveries. That is, the expected transfer tonnages identified above in Table 3 were added to the wastes projected using the population-based factor before the application of the elasticity calculation. Therefore, at higher assumed fees, all waste, both projected based on population growth and estimated from closed landfills, was reduced according to the elasticity factor of 0.40. The fees were not applied to Alternative Daily Cover, which comes from both Orange and Los Angeles Counties but is essential to project operations. Table 11 at the end of this report provides the detailed calculations for future years to 2050.

Table 8. Project Case with Out of Area Fee Summary

Project Case with Out of Area Fees			
Out of Area Fee Level (dollars per ton of waste)	Remaining Capacity in 2025	Daily Capacity (6,000 tpd) reached (year)	Estimate Closure Date (year)
No Fee	57.1 mm tons	2037	2053
\$10.00 Fee	58.0 mm tons	2037	2054
\$20.00 Fee	58.9 mm tons	2042	2055
\$40.00 Fee	60.8 mm tons	Never	2058

At \$10.00 per ton, the model did not show a very substantial reduction in out of area receipts compared to the No Fee case. However, at \$20.00 per ton, receipts were depressed somewhat such that the daily capacity would take about five more years to achieve and the estimated closure would be extended out by two years. At \$40.00 per ton, receipts were depressed considerably. Daily capacity would not be achieved for the life of the project and closure would be extended by about five years to 2058. Note that \$40.00 per ton is almost a doubling of the current tipping fees for out of area waste, raising the total cost for out of area waste to over \$80.00 per ton.

A fee at the \$40 per ton level would likely generate substantial revenues for the County (over \$26,000,000 per year in 2050 using 2008 dollars). The political feasibility of doing so, as well as a reasonable use for the funds, would need to be considered carefully. Note also that, at the \$20 and \$40 out of area fee levels, surcharge revenues would be somewhat lower than without the out of area fee because overall receipts are depressed by the out of area fees (see Table 11). However, total receipts would still be considerable. The effect of a substantial out of area fee would be manifest as a modest annual reduction in

the SVLRC's receipts of disposal wastes from out of area sources and, therefore, of total wastes received. It would be expected to extend the life of the facility by several years, depending on the fee level.

Future Projections

The following pages present the data generated by the capacity analyses for the Base Case and Project Case by year under the assumption of medium growth and a price elasticity of 0.4. The following tables provide the detailed data to the year 2050 for each case studied:

- Table 9. Base Case Detailed Projections
- Table 10. Project Case with Transfers from Landfill Closures Detailed Projections
- Table 11. Project Case with Out-of-Area Fees Detailed Projections

References

Miranda, Lynn M., et Al. 1996. *Unit Pricing Programs for Residential Municipal Solid Waste: An Assessment of the Literature*. U.S. EPA Cooperative Agreement #CR822-917-010. March.

Table 9. Base Case Detailed Projections

Projections	2009	2010	2011	2012	2013	2014	2015	2020	2025	2030	2040	2045	2050
Scenarios													
No Out of Area Fee													
Disposal (tons X 1,000)	760	760	767	782	936	936	936	936	-	-	-	-	-
ADC (tons X 1,000)	202	202	203	204	189	189	189	156	-	-	-	-	-
Total (tons X 1,000)	962	962	970	987	1,125	1,125	1,125	1,092	-	-	-	-	-
Remaining Capacity	15,438	14,477	13,507	12,520	11,395	10,270	9,146	3,588	-	-	-	-	-

Table 10. Project Case with Transfers from Landfill Closures Detailed Projections

Projections	2009	2010	2011	2012	2013	2014	2015	2020	2025	2030	2040	2045	2050
Scenarios													
No Out of Area Fee													
Disposal (tonsX1,000)	760	760	767	782	1,019	1,027	1,035	1,297	1,378	1,813	1,872	1,872	1,872
ADC (tonsX1,000)	202	202	203	204	206	207	208	216	221	227	217	217	216
Total (tonsX1,000)	962	962	970	987	1,224	1,234	1,244	1,513	1,600	2,040	2,089	2,089	2,088
Remaining Capacity	78,338	77,377	76,407	75,420	74,196	72,962	71,718	64,923	57,055	47,351	26,527	16,082	5,638

Table 11. Project Case with Out-of-Area Fees Detailed Projections

Scenarios	2009	2010	2011	2012	2013	2014	2015	2020	2025	2030	2040	2045	2050
No Out of Area Fee													
Disposal (Tons)	760	760	767	782	1,019	1,027	1,035	1,297	1,378	1,813	1,872	1,872	1,872
ADC (Tons)	202	202	203	204	206	207	208	216	221	227	217	217	216
Total (Tons)	962	962	970	987	1,224	1,234	1,244	1,513	1,600	2,040	2,089	2,089	2,088
Remaining Capacity	78,338	77,377	76,407	75,420	74,196	72,962	71,718	64,923	57,055	47,351	26,527	16,082	5,638
Revenues x \$1,000	\$3,026	\$3,026	\$3,052	\$3,097	\$3,664	\$3,693	\$3,722	\$4,390	\$4,617	\$5,680	\$5,799	\$5,809	\$5,820
Surcharge x \$1,000	\$3,026	\$3,026	\$3,052	\$3,097	\$3,664	\$3,693	\$3,722	\$4,390	\$4,617	\$5,680	\$5,799	\$5,809	\$5,820
Out of Area x \$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Out of Area Fee - \$10.00													
Disposal (Tons) - \$10.00	734	734	741	755	969	977	985	1,225	1,301	1,734	1,872	1,872	1,872
ADC (Tons) - \$0.00	202	202	203	204	206	207	208	216	221	227	217	217	216
Total (Tons)	935	935	944	959	1,175	1,185	1,194	1,441	1,522	1,960	2,089	2,089	2,088
Remaining Capacity	78,365	77,429	76,485	75,526	74,351	73,166	71,972	65,471	57,985	48,675	28,336	17,891	7,447
Total Revenues x \$1,000	\$4,993	\$5,469	\$5,518	\$5,652	\$8,262	\$8,318	\$8,375	\$11,130	\$11,899	\$13,123	\$14,624	\$14,594	\$14,564
Surcharge x \$1,000	\$2,488	\$2,964	\$2,990	\$3,033	\$3,548	\$3,576	\$3,604	\$4,220	\$4,433	\$5,492	\$5,799	\$5,809	\$5,820
Out of Area x \$1,000	\$2,505	\$2,505	\$2,528	\$2,620	\$4,714	\$4,742	\$4,771	\$6,910	\$7,466	\$7,631	\$8,825	\$8,785	\$8,744
Out of Area Fee - \$20.00													
Disposal (Tons) - \$20.00	708	708	715	728	920	928	936	1,153	1,223	1,654	1,856	1,872	1,872
ADC (Tons) - \$0.00	202	202	203	204	206	207	208	216	221	227	238	217	216
Total (Tons)	909	909	918	932	1,126	1,135	1,144	1,369	1,444	1,881	2,093	2,089	2,088
Remaining Capacity	78,391	77,481	76,564	75,632	74,506	73,371	72,226	66,019	58,915	49,999	30,195	19,735	9,292
Total Revenues x \$1,000	\$6,914	\$6,914	\$6,977	\$7,179	\$11,391	\$11,466	\$11,542	\$15,919	\$17,103	\$18,440	\$21,777	\$21,844	\$21,776
Surcharge x \$1,000	\$2,426	\$2,426	\$2,449	\$2,486	\$2,946	\$2,970	\$2,995	\$3,540	\$3,727	\$4,769	\$5,295	\$5,297	\$5,309
Out of Area x \$1,000	\$4,487	\$4,487	\$4,529	\$4,693	\$8,444	\$8,496	\$8,548	\$12,379	\$13,375	\$13,671	\$16,482	\$16,547	\$16,467
Out of Area Fee - \$40.00													
Disposal (Tons) - \$40.00	655	655	662	673	822	829	836	1,009	1,067	1,495	1,664	1,710	1,757
ADC (Tons) - \$0.00	202	202	203	204	206	207	208	216	221	227	238	244	250
Total (Tons)	857	857	865	877	1,028	1,036	1,045	1,225	1,288	1,722	1,902	1,953	2,007
Remaining Capacity	78,443	77,586	76,721	75,844	74,816	73,780	72,735	67,115	60,774	52,648	34,576	24,914	14,988
Total Revenues x \$1,000	\$9,188	\$9,188	\$9,273	\$9,558	\$15,671	\$15,773	\$15,875	\$22,194	\$23,882	\$25,369	\$30,132	\$30,825	\$31,535
Surcharge x \$1,000	\$2,303	\$2,303	\$2,324	\$2,357	\$2,714	\$2,737	\$2,760	\$3,200	\$3,360	\$4,394	\$4,842	\$4,977	\$5,116
Out of Area x \$1,000	\$6,885	\$6,885	\$6,948	\$7,201	\$12,957	\$13,036	\$13,115	\$18,994	\$20,522	\$20,976	\$25,289	\$25,848	\$26,419