

R E P O R T

**GREGORY CANYON LANDFILL JOINT
TECHNICAL DOCUMENT AND SOLID
WASTE FACILITY PERMIT
APPLICATION REVIEW –
TITLE 27 COMPLIANCE**

Prepared for

County of San Diego
Department of Environmental Health
Local Enforcement Agency
5500 Overland Ave, Suite 110 MS O560
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URS Project No. 27650080.01000

December 20, 2010

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December 20, 2010

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Subject: Gregory Canyon Landfill Joint Technical Document and Solid Waste
Facility Permit Application Review – Agreement # 536046
URS Project/Reference No. 27650080

Dear Mr. Henderson:

URS Corporation Americas (URS) is pleased to provide this report for the above referenced project. The scope of work in Agreement # 536046 includes the following items:

- a. Compare Permit Application and RDSI/JTD to CEQA Documents.
- b. Compare Permit Application and RDSI/JTD to Regulatory Requirements.
- c. Analyze the RDSI/JTD to determine whether the landfill operations described in the document are internally consistent and provide adequate detail to allow the estimation described in California Code of Regulations, Title 27, and Section 21570(d) to be made.
- d. Compare the Preliminary Closure Post-closure Maintenance Plan (PCPMP) to CEQA Documents.
- e. Compare PCPCMP to Regulatory Requirements.

This report addresses scope items b., c., and e. A companion report addresses items a. and d. Please call me or Kristen Walker at 858.812.9292 if you have any questions. We appreciate the opportunity to assist you with this important project.

Sincerely,

URS CORPORATION



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Vice President and Project Manager



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DM/KPW:mv

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List of Acronyms and Abbreviations

ADC	Alternative daily cover
AES	Advanced Engineering Software
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
cfm	Cubic feet per minute
COPCs	Chemicals of potential concern
DEH	Department of Environmental Health
JTD	Joint Technical Document
LEA	Local Enforcement Agency
LFG	Landfill gas
MSW	Municipal solid waste
NPDES	National Pollutant Discharge Elimination System
PCPMP	Preliminary Closure Post-closure Maintenance Plan
PSD	Perimeter storm drain
RWQCB	Regional Water Quality Control Board
SWFP	Solid Waste Facility Permit
USLE	Universal Soil Loss Equation

SECTION 1 INTRODUCTION

1.1 BACKGROUND

The County of San Diego, Department of Environmental Health (DEH) is the Local Enforcement Agency (LEA) for administration of solid waste facility permits in the County of San Diego outside of the City of San Diego. The LEA is processing the Solid Waste Facility Permit (SWFP) application package and Joint Technical Document (JTD) dated September 2010 for the proposed Gregory Canyon Landfill project. The proposed landfill is a Class III solid waste disposal facility located in unincorporated San Diego County. DEH retained URS to assist in the review of the SWFP application package, including solid waste facility application and the JTD including the Preliminary Closure/Post-Closure Maintenance Plan (PCPMP), for consistency with the associated California Environmental Quality Act (CEQA) documents and for completeness and compliance with solid waste statutory and regulatory requirements. For the purpose of this work the CEQA documents included the Environmental Impact Report - 2003, Revised Final Environmental Impact Report - 2007; Reclaimed Water Addendum – 2008; Water Support Addendum - 2009; Jurisdictional Waters Addendum - 2010; and 2008 Habitat Restoration Resource Management Plan.

The specific tasks included for the review conducted by URS includes the following items:

- Task A - Compare the JTD/SWFP application to the CEQA Documents to determine whether the JTD is consistent with the CEQA Documents.
- Task B - Compare the JTD/SWFP application to the solid waste regulatory requirements in California Code of Regulations (CCR), Title 27 (27 CCR), sections 21590 and 21600 to determine whether the JTD complies with these regulations.
- Task C - Analyze the RDSI/JTD to determine whether the landfill operations described in the document are internally consistent and provide adequate detail to allow the estimation described in California Code of Regulations, 27 CCR, Section 21570(d) to be made.
- Task D - Compare the Preliminary Closure Post-closure Maintenance Plan (PCPMP) to the CEQA Documents to determine whether it is consistent with the CEQA Documents.
- Task E - Compare the PCPMP to the solid waste closure plan regulatory requirements in California Code of Regulations, 27 CCR, sections 21770 through 21840, as applicable to PCPMPs to determine whether the PCPMP complies with these regulations.

This report addresses Tasks B, C and E above. A companion report addresses Tasks A and D.

1.2 METHODS

DEH provided URS with a hard copy and PDF files for the JTD (Volumes I, II-A, II-B and III) and SWFP application package. The SWFP application package included AutoCad files for the base excavation and the final grade for the purpose of confirming the projected airspace volume. URS reviewed the JTD and SWFP documents and prepared a matrix template to itemize the compliance with the specified requirements in 27 CCR and document consistency between the SWFP application package and the JTD. A separate template was used to document internal inconsistencies in the JTD itself.

SECTION 2 RESULTS

The JTD includes an integrated PCPMP as allowed by 27 CCR section 21780(c)(2). Consequently, the review comments for Tasks B and E are included in a single matrix. It should also be noted that the original JTD Volume I PDF file had numerous sections that were not searchable. URS requested and received a revised searchable PDF file. During the review, it was discovered that the pagination in the new PDF file did not exactly match the pagination in the hard copy or initial PDF file. Consequently, the page numbers related to JTD Volume I in the Tables in this report may be off by one page, depending on whether the tables in this report are compared to the hard copy, initial PDF or searchable PDF file.

2.1 JTD/PCPMP COMPLIANCE WITH SPECIFIED 27 CCR SECTIONS

2.1.1 Tasks B and E

The JTD is in compliance with 27 CCR 21590 as it includes a JTD index and addresses the requirement in 27 CCR 21600. Table 1 presents a summary of the JTD's compliance with 27 CCR sections 21590 and 21600 (Task B) and the PCPMP portion of the JTD's compliance with 27 CCR, sections 21770 through 21840 (Task E). Table 1 is an enhancement of the table that is included in the Statement of Work for this project. A number of items have been added with text shown in blue to reflect requirements that are referenced within the regulatory sections that were included in the initial table. A summary of the key JTD text that is relevant to determining compliance with each regulatory section has been added.

As shown in red on Table 1, there are six areas that appear to be incomplete due to minor items that are missing as noted in the comments column of Table 1. During the review for compliance with the 27 CCR requirements, a number of minor inconsistencies between the various JTD sections, appendices and the SWFP application were identified. These inconsistencies and other comments are provided on Table 2.

The JTD and PCPMP could be considered complete and correct in accordance with 27 CCR section 21563 by correcting the incomplete items on Table 1 and addressing the items on Table 2 as well as the LEA Comments on the Draft September 2010 Permit Application Package document that has previously been provided to the applicant.

2.1.2 Airspace Estimate

At the request of DEH, URS evaluated the airspace volume estimate included in the JTD. URS recreated the excavation and final grade surfaces using AutoCAD Land Development Desktop software and the AutoCad data generated by the applicant. Figure 1 provides the airspace volume estimate developed by the applicant and Figure 2 shows the airspace volume estimate developed by URS. As shown on the figures, the difference in the net airspace estimates vary by only 0.3% and both estimates are approximately 60,000,000 cubic yards.

2.2 ADEQUACY RELATED TO 27 CCR, SECTION 21570(d)

27 CCR 21570(d) states:

(d) The application package shall require that information be supplied in adequate detail to permit thorough evaluation of the environmental effects of the facility and to permit estimation of the likelihood that the facility will be able to conform to the standards over the useful economic life of the facility. The application package shall require, among other things that the applicant and the owner give the address at which process may be served upon them.

The JTD was evaluated with the intent of identifying whether the landfill operations described in the document are internally consistent and provide adequate detail to allow the estimations described in 27 CCR 21570(d). The JTD provides adequate detail to permit thorough evaluation of the environmental effects of the facility and to permit estimation of the likelihood that the facility will be able to conform to the standards over the useful economic life of the facility.

The facility included in the JTD is an alternative addressed in the EIR process and a thorough evaluation of the environmental effects of the facility was conducted during the EIR process. Consequently, the JTD has adequate detail to permit thorough evaluation of the environmental effects of the facility.

The JTD also provides adequate information to permit an estimation of the likelihood that the facility will be able to conform to the standards over the useful economic life of the facility. The following factors support this conclusion:

Operations

- The size of the facility, waste types, staffing level, equipment, operating procedures and disposal volumes are similar to other for municipal solid waste (MSW) landfills that have conformed to the same standards over many years.
- The soil deficit at the site can be managed using the alternative daily cover (ADC) strategies in the JTD and these ADCs have been successfully used at other facilities.
- The phasing of the site is logical for a canyon fill and has successfully been used at many other canyon fill landfills.
- Litter, dust, vector, bird, noise, fire, odor, and hazardous waste controls are typical to techniques that have been successfully used at other similar facilities.
- The site-specific traffic control measures are more robust than typical and should minimize traffic impacts.

Design and Construction

- The double composite liner exceeds the state and federal regulatory standards for MSW landfills.

Gregory Canyon Landfill Permit Documents –Title 27 Compliance

- The leachate collection system is gravity flow, eliminating the possibility of a pump failure causing a leachate release.
- The project includes a subdrain system to intercept potential groundwater, even though the bottom of the subdrain is at an elevation higher than the piezometric surface.
- The methods use for static and seismic stability assessment are current and reasonable for the site.
- The final cover design is reasonable and meets regulatory requirements.
- The Construction Quality Assurance plan is complete and methods are standard.
- The PCPMP contains typical techniques and procedures that have been successfully used at similar facilities.
- The corrective action and closure cost estimates appear reasonable for the facility and the appropriate financial assurance will be in place.

Water Resources

- Leachate generation was estimated using HELP3 modeling and this is a typical model used for this purpose. The model results appear to be reasonable based on the size of the facility and the average annual precipitation at the site.
- The groundwater monitoring program, evaluating water quality in 3 different geological formations with multiple wells in each formation is robust compared to the minimum requirements for upgradient and downgradient wells.
- Approach to addressing reasonably foreseeable release is reasonable.
- The estimated cost to mitigating the reasonably foreseeable release appears reasonable based on costs associated with mitigation at other sites. Groundwater treatment technologies are applicable to the types of anticipated chemicals of potential concern (COPCs).
- Estimated costs for groundwater monitoring and maintenance appearing in this table seem to be within the range of costs that would be expected for a monitoring program of this magnitude.

Drainage Control

- The drainage control system designed for 100-year, 24-hour storm event run-off volumes complies with the regulatory requirements and is reasonable for the site.
- Desilting basins are designed based on the 10-year, 6-hour storm flows sediment capacity and for the storm water runoff flows of the 100-year, 24-hour storm event. The spillway is sized for the 100-year, 24-hour storm event. This complies with the regulatory requirements and is reasonable for the site.
- The surface control and down-drain system design are sized correctly and reasonable for the site.
- The estimated run-off values calculated based on the San Diego County Hydrology Manual (2003 version) in conjunction with computer software developed by Advanced Engineering Software (AES) is appropriate.

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- The hydrologic analysis conducted using the Rational Method Computer program (in accordance with the San Diego County Hydrology Manual Criteria) to determine the peak flows discharged from the Gregory Canyon watershed under pre- and post-developed conditions is reasonable for the project.
- The hydrology map for on-site flows, hydrology analysis and the hydraulic calculations appear to be reasonable.
- The perimeter storm drain (PSD) system consisting of a reinforced concrete trapezoidal drainage channels placed around (outside) the refuse footprint and earthen berms to divert run-on from adjacent slopes and the up-canyon areas of the undisturbed footprint into the perimeter storm drains is appropriate for the site.
- The phased construction of the PSD moving up canyon as the landfill is developed is reasonable.
- The stormwaters conveyed by the PSD system will discharge into percolation areas near the discharge point of the eastern and western desilting basins, located near the ancillary facilities. This area appears to be adequately sized and the energy dissipaters proposed are typical.
- The potential volume of silt generated from the contributing watershed area determined based on the Universal Soil Loss Equation (USLE) and the parameters, variables and coefficients used are reasonable for the project.
- The western perimeter channel is sized to accommodate the rupture of Pipelines 1 and 2 and future Pipeline 6 at the same time as the 100-year storm event. This method is reasonable for the project.

Landfill Gas (LFG) Control

- LFG generation rate looks to be reasonable for the 29 year, and 30 million tons of MSW seems reasonable for an arid climate landfill.
- The LFG control well spacing of approximately 200-foot centers is a reasonable distance.
- The proposed LFG well depths and potential double depth wells are reasonable design.
- The LFG well head design is standard.
- LFG monitoring wells spaced 1,000 feet apart around the perimeter of the landfill waste footprint, considering the physical geometry of the areas surrounding the landfill is also reasonable.
- Four 1,500 cubic feet per minute (cfm) flares for a 6,000 cfm ultimate LFG flow rate is reasonable.

SECTION 3 LIMITATIONS

The detailed review of documents was conducted for the purpose of assisting DEH as the LEA to support the issuance of a SWFP for the facility. Though other deficiencies may have been noted, the review did not include an evaluation of these documents for compliance with other agency requirements (e.g., Air Pollution Control District Authority to Construct, California Department of Fish and Game Streambed Alteration Agreement, Regional Water Quality Control Board (RWQCB) Stormwater National Pollutant Discharge Elimination System (NPDES) General Permit, US Fish and Wildlife Service Biological Opinion/Incidental Take Permit, etc.).

Reports, permit applications, and other data (e.g., EIRs, Addendums, etc.) have been furnished to URS by DEH and other third parties, which URS used in preparing this report. URS has relied on this information as furnished, and is neither responsible for nor has confirmed the accuracy of this information.

This report has been prepared based on certain key assumptions made by URS that substantially affect the conclusions and recommendations of this report. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. The conclusions and recommendations of URS are conditioned upon these assumptions:

- An internal review for consistency within and between CEQA Documents was not included within this scope of work. URS assumed the information contained within the CEQA Documents is consistent with the information presented in the attachments and appendices in the CEQA Documents. Appendices in the CEQA Documents were not reviewed for consistency.
- The most logical location(s) for a particular detail was reviewed in the CEQA Documents to determine whether the detail was consistent between the JTD and CEQA Documents, and the SWFP and CEQA Documents. If a detail was not located in the most logical location(s), the detail was assumed to not be contained within the CEQA Documents (e.g., a reviewer would not search for project area climate data in the traffic section of an Environmental Impact Report).
- Mitigation measures tables from the EIR documents were used for the consistency review. URS did not check the mitigation tables for consistency with the mitigation measures text within the individual resources sections of the CEQA Documents.
- The term “correct” reflects the standard of care.
- The following items have been noted; however, the scope did not include thorough peer review, technical edit or detail check related to:
 - Insurance/Financial assurances documents.
 - Legal description.
 - Calculations and models.
 - References.

URS and companies that have been acquired by URS conducted the following studies related to the Gregory Canyon Landfill project that were included in the review package:

Gregory Canyon Landfill Permit Documents – Title 27 Compliance

- The Geology and Hydrogeology Report, Gregory Canyon Landfill, Pala, San Diego County, California: Consultant's Report to Gregory Canyon Ltd. (March 1995) was prepared by Woodward-Clyde Consultants, now URS.
- The Evaluation of Air Toxics Health Risks – Final Report (January 1999) was prepared by Dames & Moore, now URS.
- The Storm Water Management Plan was prepared by URS.
- The Biological Assessment for the Gregory Canyon San Luis Rey River Bridge Replacement was prepared by URS.
- The Habitat Restoration and Resource Management Plan for Gregory Canyon Landfill Property was prepared by URS.
- The initial SWPPP was prepared by URS.

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
General								
Name of Facility, Site Operator and Owner, Type of Facility	21600(b)(1)(A)	Sec. A.1 – pg. A.1-1; Sec. A.2.2 – pg. A.2-3; Sec. A.2.1 – pg. A.2-1	Facility Name - Gregory Canyon Landfill (GCLF). Owner/Operator of Record – Gregory Canyon Limited, LLC. Day to Day Operator – contract operator. Facility Type – Class III Landfill.	2003 EIR: 3.1, p. 3-1 Not identified 3.1, p. 3-4 3.4.1, p. 3-31	Yes	Yes	Owner and operator certification executed in Form E-1-77.	
Description of the Operation Cycle	21600(b)(1)(A)	Sec B.4.2.1 – pg. B.4.2; Sec. B.4.4.2 thru B4.4.5.1 – pgs. B.4-8 thru B.4-16; Sec. B.4.5 – pgs. B.4-19, B.4-20	Receipt/Handling – Staffing depends on handling of 3,200 to 5,000 TPD received. Processing - refuse lifts ~20 ft. high & ~100-200 ft. length. Diversion/Transformation - Hazardous waste exclusion program (HWEP) w/load checking program. Spreading/Compaction - Working face sloped to gradient of ~5:1 (H:V). Disposal – Recycle & resource recovery, no public salvaging, no volume reduction activities at site, only tire shredding.	2003 EIR: 3.4, p. 3-31-41	Yes	Yes		
Site Plan Including Boundaries, Acreage, and Buffer Zones	21600(b)(1)(B)	Sec A.2 Sec. B.1.2.3 – pg. B.1-2; Sec B.1.4 – pgs. B.1-3, B.1-4; Figures 2, 3, 4, 6A, 9, 12, 21B-26, 27A, App. B-3, App. B-4 – pgs. SE44-45	Site - 1,770 acres Landfill activities – 308 acres Landfill footprint – 183 acres Predisposal topo map – Fig 27A Facility boundary of site – Fig 6A, App B-3 Plan w/disposal area – Fig 2 Plan w/extent of Solid Waste Facility permit – Fig 3, 4 Fill/Excavation sequencing plan – Fig 21B, 22, 23, 24, 25, 26 Fill/Excavation master plan – Fig 9, 12 Plan w/buffer zones – Fig 2 Vertical limits of site – Fig 2	2003 EIR: 3.1, p. 3-1, 5 3.2, p. 3-5 Exhibit 3-3 Exhibit 3-4	Yes	Yes	The siting element indicates a landfill footprint of 196 acres so the project at 183 acres is consistent with the siting element. There are other minor inconsistency in acres: EIR 2003 indicates “approximately 308” and “307.8”, and EIR 2007 and Habitat Restoration Plan indicates “308.6”. These rounding inconsistencies are not considered consequential.	
Hours of Operation	21600(b)(1)(C)	Sec. B.4.1 – pg. B.4-1	Public hrs. - Mon-Fri 7am to 6pm, Sat 8am to 5pm, no holidays. Commercial haulers hrs. and Compaction/Cover operation - Mon-Fri 7am to 6pm, Sat 8am to 5pm, no holidays. Yard and enclosed maintenance – no time limit Additional site specific activities – no time limit	2003 EIR: 3.4.7, p. 3-39	Yes	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Waste Classification and Management								
Types and Quantities of Waste	21600(b)(2)(A)	Sec. B.1.5.2 thru B.1.5.4 – pgs. B.1-5 thru B.1-11	Waste types – non-hazardous solid wastes/inert wastes including dewatered sludge, other waste requiring special handling (tires & bulky waste). Estimated daily waste avg volume – 3,200 tpd Estimated peak daily flow volume – 5,000 tpd Projected 5 yr. waste flow volume – 906,000 tons/yr. No liquid, designated, special or hazard waste.	2003 EIR: 3.4.1, p. 3-31	Partial – JTD says manure animal wastes and ashes will be received and boxes on app are not checked.	Yes	Table 1, page A.1-4 indicates that ash will not be accepted and is not consistent with Sec B.1.5.2.	
Waste Management Unit Classification and Siting								
Airport Safety	21600(b)(3)(A)	Sec. B.1.2.2 – pg. B.1-2	Not located w/in a 5 mi radius of airport used by turbojet aircraft or by piston-type aircraft.	2003 EIR Chapter 9, p. 9-2	NA	Yes		
Volumetric Capacity	21600(b)(3)(B)	Sec. B.1.6 – pg. B.1-11, B.1-12; Figure 2, Figure 27A; Apex B-2	675 trucks per day max. Gross Airspace – 59.3 mcy Cap req'd for liner system – 1.6 mcy. Cap req'd for final cover – 0.9 mcy. Net airspace – 56.8 mcy. Cap req'd for daily & intermediate cover – 11.4 mcy. Net refuse – 45.4 mcy. Topo map delineating disposal area w/in site boundary – Fig 2. Assumptions to determine gross cap – Refuse to cover ratio = 4:1; Compaction density = 1,350 pcy. Methods to determine gross cap – difference between proposed bottom grades & proposed final disposal area grading contours. Calculations to determine gross cap including copies & dates of topo maps used.	2003 EIR: 3.4.2, p. 3-32 3.6.1, p. 3-60 3.4.5.1, p. 3-36 Exhibit 3-4	Yes	Incomplete	The required certification by a registered civil engineer or geologist needs finalized. Suggest that Figure 27A with the topo dated 1991 should be referenced in the text for this section.	
Site Life Estimate	21600(b)(3)(C)	Sec. B.1.7 – pg. B.1-12	Site life – ~30 years. Cap of site – net airspace (less liner and final cover) = 56.8 mcy. Refuse to cover ratio – 4:1. Waste flow projections – starting inflow rate = 1,950 tpd. Compaction density – 1,350 pcy.	EIR 2003: 3.6.1, p. 3-60	Yes	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Site Location (vicinity map)	21600(b)(3)(D)	Sec. B.1.3 – pg. B.1-3; Figures 2, 6	Site location description – 9708 Pala Rd, Pala, CA 92059; occupies parts of Sec 4 & 5 of Township 10 S and Sec 32 & 33 of Township 9 S, Range 2 W of USGS 7.5' Pala Quadrangle. Location map w/legal boundaries – Fig 6A. Location map w/points of access – Fig 2. Location map w/major access routes for waste deliveries Fig 6.	EIR 2003: Exhibit 3-1 Exhibit 3-2 3.1, p. 3-1	Yes	Yes		
Waste Management Unit Classification and Siting								
Surrounding Land Use and Zoning (plot plan)	21600(b)(3)(E)	Sec. B.1.2.4 – pg. B.1-2, B.1-3; Figures 3, 4, 5	Plot plan showing land uses for properties w/in 1000 ft. of facility boundary – Fig 3. Plot plan showing zoning for properties w/in 1000 ft. of facility boundary – Fig 4. Distances to structures on adjacent properties – Fig 5. Specific limits of existing & planned disposal area – Fig 5.	EIR 2003: Exhibit 4.1-1 Exhibit 4.1-2 Exhibit 4.1-3 Exhibit 4.1-4 Exhibit 4.8-2	NA	Yes		
Ancillary Facilities (include on plot plan)	21600(b)(3)(F)	Sec. B.3 – pg. B.3-1 thru B.3-7; Figures 8, 8A	Plot plan showing ancillary facilities including admin bldgs., entrance facilities, scales, maint structures, hazardous materials storage areas – Fig 8, 8A.	EIR 2003: 3.2.4, p. 3-19 Exhibit 3-3 Exhibit 3-8 EIR 2007 Exhibit 3-8 Exhibit 3.8c	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Design and Construction Standards for All Waste Management Units								
General Design Parameters	21600(b)(4)(A)	Sec D.1, D.2, D.3, D.4, D.5 and D.6	<p>Site design accommodates service area – 1,770 ac property w/ ~308 ac for landfill activities & 183 ac for refuse disposal (Sec. D.1).</p> <p>Climatological factors – warm, dry weather during summer months & cool, seasonal wet weather during winter months; avg. rainfall = 17.5 to 25.27 in/yr.; wind annual mean speed = 6.6 mph (Sec. D.3).</p> <p>Physical setting – site elevation range from ~1,200 ft. amsl at head of canyon to 300 ft. amsl at mouth of canyon in San Luis Rey River drainage; proposed landfill footprint not in 100-yr floodplain (D.2).</p> <p>Soils – Low areas consist of unconsolidated residual soils, colluvial, & alluvial deposits w/in weathered tonalite; High areas consist of metamorphic/igneous w/varying degrees of weathering (Sec. D.4).</p> <p>Drainage – 2 distinct GW zones - alluvial aquifer hosted by sediment wedge at canyon mouth, & bedrock aquiclude hosted by fractured tonalite that forms substrate of canyon; both GW systems move North toward alluvial aquifer of San Luis Rey River (Sec. D.5).</p>	<p>EIR 2003: 3.1, p. 3-4 3.2, p. 3-4 3.2.1, p. 3-5 4.7.1.1, p. 4.7-1 4.3.1.3, p. 4.3-8 4.2.1.3, p.4.2-3</p>	NA	Yes		
Design Responsibility	21600(b)(4)(B)	Sec. C.1.1 – p. C.1-2	Waste management unit was designed & construction will be certified by a registered civil engr &/or certified engr geologist.	<p>EIR 2003: 3.2.1, p. 3-11 3.5.1, p. 3-42 Table 10-2, p. 10-48</p>	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Construction Sequencing Plans	21600(b)(4)(C)	Sec. C.2.9 – pgs. C.2-25 thru C.2-34; Figures 20-26	Phase I includes ~3.7 mcy excavation & during filling, work will begin on excavation of next area. Phase I will provide ~8.1 mcy of gross airspace & require ~1.6 mcy of soil for daily & intermediate cover (Fig 20, 21, 21A, 21B). Phase II gross fill cap is ~6.3 mcy (Fig 22, 23). Phase III and IV includes ~489,000 cy and ~23,000 cy of excavation, respectively. Phase III fill phase completes landfill to final grading configuration & provides ~43.1 mcy of gross airspace (Fig 24, 25, 26).	EIR 2003: 3.3, p. 3-27-30 3.6.2, p. 3-61-70 6.7.2, p. 6-75 Exhibit 3-18 Exhibit 3-19 Exhibit 3-20 Exhibit 3-21 Exhibit 3-22 Exhibit 3-23 Exhibit 3-24	NA	Yes		
Grading Plan	21600(b)(4)(D)	Sec. B.4.4.1.4 – pg. B.4-8; Sec. E.1.2 – pgs. E.1-1, E.1-2; Figures 2, 9 and 20, 27A	Final landfill slopes were designed w/an overall gradient of 3.5:1 w/ 20-ft benches every 40 vertical ft. & max landfill elev, including final cover system, will be 1,100 feet amsl. Final deck area will have min grade of 3%. Grading plan w/ existing borrow area contours (Fig 27A) & proposed borrow area contours (Fig 2).	EIR 2003: 3.7.3. p. 3-74 Exhibit 3-17 Exhibit 6-7	NA	Yes		
Gas Management Plan	21600(b)(4)(E) refers to 20919	Sec. B.5.2 – pg. B.5-28 thru B.5-32; Sec. C.2.7 – pgs. C.2-14 thru C.2-16; Figures 2, 10D, 11, 16 and 16A	Gas migration monitoring system ultimately includes 14 probes spaced ~1,000-ft centers around entire refuse prism to detect potential gas migration prior to reaching property boundary – Fig 10D. Landfill gas control system includes series of vertical gas extraction wells joined through a system of above ground lateral pipes, which will be connected to main header pipe leading to flare station – Fig 11, 16, 16A.	EIR 2003: 3.5.1, p. 3-42 Exhibit 3-13	NA	Yes	Regs state that JTD should describe any possible use of landfill decomposition gases; this information is not included so the assumption is that there are no plans for energy recovery. Regs state that spacing between probes should not exceed 1,000 ft.; consider modifying text in JTD from <u>approximately</u> 1,000 ft. to no more than 1,000 ft.(This is what is shown on Figure 10D.) There is confusion between 14 probes stated on JTD pg. B.5-29 & 16 probes stated on JTD pg. C.2-16; clarify that 2 probes are only temporary as shown on Figure 10D.	

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Operating Criteria								
Disposal Site Records	21600(b)(5)(A) refers to 20510, 20515	Sec. A.3 – pgs. A.3-1 thru A.3-2	<p>Procedures for maintaining records include: (a) Refuse disposal vehicles req'd to check in at entrance facility & weighed prior to unloading at working face. Daily receipts kept by scale operators in operating record.</p> <p>(b) Records showing excavation of future refuse area subgrade will be maintained.</p> <p>(c) Operator will maintain a daily log of unusual occurrences including landfill fire, landslides, flooding, unusual/sudden settlement, EQs & resulting damage, property damage, accidents, explosions & discharges of hazardous or other non-permitted wastes.</p> <p>(d) Personnel training record –health & safety, hazardous waste identification, handling & storage procedures, environ control sys management, waste handling & disposal procedures, and emergency response procedures & environ mitigation.</p> <p>(e) Operator of record - Gregory Canyon Limited.</p> <p>(f) Records available during business hours for inspection by authorized reps of regulatory agencies having jurisdiction.</p> <p>(g) Records for Disposal Reporting System – records on-site at admin office and available during normal business hours for inspection.</p>	EIR 2003: 3.4.11, p. 3-40-41	NA	Yes		
Site Security	21600(b)(5)(B)	Sec. B.3.2 – p. B.3-9	Entry during business hours controlled by site personnel at entrance facilities (single point of public access to site).	EIR 2003: 3.4.8, p. 3-39 4.16.2.2, p. 4.16-13	NA	Yes		
Sanitary Facilities	21600(b)(5)(C)	Sec. B.4.6.1 – p. B.4-21	Portable chemical toilets to be located at N end of ancillary facilities area.	EIR 2003: 3.2.4, p. 3-21	NA	Yes		
Communications Systems	21600(b)(5)(D)	Sec. B.4.6.3 – p. B.4-21	Telephones w/in offices in ancillary facilities area & at each fee booths for computer links w/truck scales. Two-way hand-held radios for communication between ancillary facilities & staff located w/in landfill property boundary.	EIR 2003: 3.2.4, p. 3-19, 20	NA	Yes	Use of cell phones for communication should be included in this section.	

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Lighting {for facilities which operate during darkness}	21600(b)(5)(E)	Sec. B.4.6.4 – p. B.4-21	Disposal equipment outfitted w/sufficient lighting &/or portable lighting fixtures or stands for safe work conditions (only needed for short winter nights as hours of operations stop by 6 pm). Security lighting around bldgs. in ancillary facilities area.	EIR 2003 3.2.3, p. 3-19 3.2.4, p. 3-21	NA	Yes		
Safety Equipment	21600(b)(5)(F)	Sec. B.4.6.5 – p. B.4-22	Hard hats, reflective vests, ear & eye protection, filtration masks, fire extinguishers.	EIR 2003 4.16 (in general) 4.16.2.2, 4.16-13 3.2.4, p. 3-21 3.5.4, p. 3-57 3.5.9, p. 3-60	NA	Yes		
Personnel Requirements	21600(b)(5)(G)	Sec. B.4.2 – pgs. B.4-1 thru B.4-5, Table 6	Site operation staffing (Table 6) req'd to conduct disposal & site maint operations, & record keeping during peak operation. Site personnel trained for health & safety, environ control sys management, & emergency response.	EIR 2003: 3.4.9, p. 3-39 Table 3-2	NA	Incomplete	Regs state <u>minimum</u> number of staff requirements. Suggest adding a column to Table 6 to show minimum.	
Personnel Training	21600(b)(5)(H) refers to 20610	Sec. B.4.2.2 – p. B.4-3, B.4-4	Training emphasis in health & safety, hazardous waste identification, handling & storage procedures, environ control sys management, waste handling & disposal procedures, emergency response procedures & environ mitigation.	EIR 2003: 4.16.2.2, p. 4.16-13, 14	NA	Yes		
Supervisory Structure	21600(b)(5)(I)	Sec. B.4.2.3 – p. B.4-4, B.4-5	Operator will provide adequate supervision of a sufficient number of qualified personnel to conduct proper operation of the site in compliance with all applicable State and federal requirements. Operator will also provide a recycled water supervisor, who has completed a State-approved training course on use of recycled water.	EIR 2003: 3.4.8, p. 3-39 Table 3-2	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Spreading and Compaction	21600(b)(5)(J)	Sec. B.4.4.3 – p. B.4-14	Compactor or dozer will spread waste over working face in ~2-ft thick layers & then make repeated passes over working face to compact refuse. Working face typically sloped to gradient of ~5:1 (H:V) or less to max refuse compaction.	EIR 2003 3.4.3, p.3-32 3.4.3.1, p. 3-34	NA	Yes		
Cover								
Cover Materials	21600(b)(6)(A)	Sec. B.4.4.1.1 - B.4-7; Sec. B.4.4.5 thru B.4.4.8 – pgs. B.4-15 thru B.4-19; Sec. C.3.2 – p. C.3-1; Sec. C.2.2.3 – pgs. C.2-2 thru C.2-4; Figures 14 and 31	Soil materials excavated for daily & intermediate cover of active waste disposal operations obtained from 3 on-site sources: landfill footprint (7.9 mcy), Borrow/Stockpile Area A (1.3 mcy) & Borrow/ Stockpile Area B (3.2 mcy). Excavation/stockpile sequence – Once initial excavation for site facilities area & 1st stage of Phase I refuse area completed, subsequent excavation & stockpiling operations to be conducted concurrent w/refuse disposal throughout landfill development. Borrow/Stockpile Area A (W of landfill footprint) & Borrow/Stockpile Area B (SW & adjacent to footprint). Rock crushing (conducted concurrently w/landfill construction) to occur onsite & excavated rock to be stored on-site for future use, or ground for use as daily or intermediate cover areas.	EIR 2003 3.4.5.1 p. 3-36-37 6.7.2, p. 6-75	NA	Yes		
Alternative Daily Cover and Beneficial Reuse	21600(b)(6)(B) refers to 20690 and 20695	Sec. B.1.5.4/p. B.1-10 B.4.4.5.1 pgs. B.4-16, B.4-17	ADC reduces refuse-to-daily/intermediate cover ratios from 4:1 to 7:1. Geosynthetic blankets & PGM to be used as ADC. Geosynthetic blankets – handling & procedures described in App. F-1.	EIR 2003 3.4.5.1, p. 3-37-38	NA	Incomplete	Regs state that handling and procedures of ADC should be included. A description of PGM application methods and an estimate of range in tons of PGM is required. This language should be consistent with 20690(b)(3)(B to D). The JTD should also state that the PGM will be weighed at the scales. “Synthetic” blankets ADC is specified on pg. B.1-12 in the JTD and this should say “geosynthetic” to be consistent with the regulatory language.	

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Cover Frequency	21600(b)(6)(C) refers to 20680 and 20695	Sec. B.4.4.5 – p. B.4-15 thru B.4-17	Daily cover in form of soil material compacted to min thickness of 6-in or an ADC, such as geosynthetic blanket or PGM, to be placed over all exposed refuse at end of each working day.	EIR 2003 3.4.5.1, p. 3-36-38	NA	Yes		
Intermediate Cover	21600(b)(6)(D)	Sec. B.4.4.6 – pgs. B.4-17, B.4-18	Min 12-in thick layer of suitable cover material to be placed over top, side slopes & working face of advancing lift, refuse cell or portions of disposal area where no additional refuse is to be deposited w/in 180 days.	EIR 2003 3.4.5.2, p. 3-38	NA	Yes		
Handling								
Public Health Design Parameters	21600(b)(7)(A)	Sec. B.5.3 – pgs. B.5-32 thru B.5-41	Dust control – includes both construction/operations & maint procedures & will utilize on-site well water. Noise control – on-site equip noise controlled by installation & maint of mufflers on all motorized vehicles. Fire control – refuse burning not allowed at landfill facility. Odor control – landfill gas control system & placement of daily, ADC or intermediate soil cover over all exposed refuse at end of each operating day. Control of birds, flies, rodents & other vectors – refuse compaction, application of daily cover & professional pest control services. Litter control – perimeter fencing, commercial loads covered w/tarp, disposal operations suspended during high winds, inspection conducted every day landfill is open & cleaned up on 6th day.	EIR 2003 3.5 (in general) 3.5.4, p. 3-57 3.5.5, p. 3-58 3.5.6, p.3-58 3.5.7, p. 3-59 3.5.8, p. 3-59 3.5.9, p. 3-59-60	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Salvaging Activities	21600(b)(7)(B)	Sec. B.4.5 – pgs. B.4-19, B.4-20	Public salvaging not allowed & no salvaging operations other than public dropoff area. Storage – bins for source-separated recyclable materials. Materials handled – tin, newsprint, white paper, aluminum, glass, white goods. White goods physically removed by hand or w/ heavy equipment, as needed from waste stream at working face. Procedures for salvage removal to prevent fire/health problems – Materials kept away from disposal operations & limited to volume & storage time.	“Salvaging” Not identified EIR 2003 3.2.4, p. 3-19	NA	Yes		
Volume Reduction Activities	21600(b)(7)(C)	Sec. B.4.5.5 – p. B.4-20	Volume reduction activities such as incineration, bailing, shredding or composting will not be conducted at landfill, only collection of source separated materials & waste tire processing or shredding.	EIR 2003 3.4.1, p. 3-31 3.2.4, p. 3-19 3.4.6, p. 3-38-39	NA	Yes		
Equipment	21600(b)(7)(D)	Sec. B.4.3 – pgs. B.4-5, B.4-6, Table 7	On-site equipment maint – 4 Dozer, 2 Compactor, 2 Scraper, 1 Water Truck, 6 Light Duty Vehicles, 1 Motor Grader, 1 Surge Bin, 1 Mechanic Truck, 1 Portable Rock Crusher, 1 Fuel Truck, 1 Mobile Tire Shredder. Hawthorne Machinery Company utilized for rental equipment. Operating equip maintained w/preventative maint program for min breakdowns.	EIR 2003 3.4.10, p. 3-39 Table 3-3		Incomplete	Regs state <u>minimum</u> equipment requirements. Suggest adding a column to Table 6 to show minimum.	
Waste Handling	21600(b)(7)(E)	Sec. B.1.5.2 – pgs. B.1-5 thru B.1-7; Sec. B.4.4.2.1 – pgs. B.4-9 thru B.4-14; Sec. B.5.6 – pg. B.5-43; App. F	Non-hazardous solid wastes, inert wastes & dewatered sludge accepted at site. Special handling waste – tires and bulky wastes accepted; tire storage area < 5,000 sf of contiguous area, < 50,000 cf in volume, < 10 ft. in height, > 20 ft. from property line or perimeter fencing, > 40 ft. separation from vegetation & other potential flammable materials. Hazardous waste – Disposal of hazardous wastes, pesticides or other toxic wastes is prohibited.	EIR 2003 3.4.1, p. 3-31 3.2.4, p. 3-19 3.4.6, p. 3-38-39	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Environmental Controls								
Nuisance	21600(b)(8)(A)	Sec. B.5.3 – pgs. B.5-32 thru B.5-41	Procedures to prevent/control public nuisance - dust control, noise control, fire control, odor control, vector control, litter control, noise control, mitigation monitoring & reporting program for project impacts.	EIR 2003 3.5 (in general) 3.5.4, p. 3-57 3.5.5, p. 3-58 3.5.6, p.3-58 3.5.7, p. 3-59 3.5.8, p. 3-59 3.5.9, p. 3-59-60 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Fire Control	21600(b)(8)(B)	Sec. B.5.3-5 – pgs. B.5-39, B.5-40	Burning of refuse not allowed, refuse placed w/in 150 ft. of landfill perimeter, application of daily & intermediate soil cover placement, load checking for smoldering or burning wastes & separation of these wastes if spotted by a dozer & covering of fire w/soil.	EIR 2003 3.5.4, p. 3-57 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Leachate Control (for purposes of public health)	21600(b)(8)(C)	Sec. B.5.1.1 – pgs. B.5-1 thru B.5-9; Sec. C.2.5 – C.2-10 thru C.2-13; Fig. 13, 14, 15, 15A	Containment system design includes LCRS above liner to collect & convey leachate generated w/in refuse prism. LCRS designed to reduce time leachate remains on liner, thereby, reducing potential for migration of leachate through liner system. Leachate collected in storage tanks will be transported off-site for treatment & disposal.	EIR 2003 3.5.3, p. 3-56 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Dust Control	21600(b)(8)(D)	Sec. B.5.3.1 - pgs. B.5-33 thru B.5-37	Main access Rd paving; proper maint, soil sealant & watering on internal haul roads; water spraying of soil excavated & placed for cover; water spraying of areas where soil excavation is occurring for purposes of cell development; ancillary dust control activities; applying water &/or planting temp veg on intermediate soil cover areas; planting & maintaining veg cover on completed slopes.	EIR 2003 3.5.8, p. 3-59 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP) Addendum 2009 4.0, p. 5	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Vector Control	21600(b)(8)(E)	Sec. B.5.3.2 - p. B.5-37, B.5-38	Refuse compaction; daily cover appl; professional pest control services; monthly inspections of landfill areas; items which attract vectors stored in closed containers &/or w/in enclosed structures; bldg. openings, ground holes & deficiencies in perimeter fence repair; removal of existing dairy, operations staff to use dispersal techniques to disturb bird behavioral patterns; proper grading & drainage to eliminate puddles & wet areas; desilting basins cleaned out regularly; tire shredding at min of every 6 month.	EIR 2003 3.5.5, p. 3-58 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Drainage & Erosion Control	21600(b)(8)(F)	Sec. B.5.4 – pgs. B.5-41, B.5-42; Sec. C.2.8 – pgs. C.2-16 thru C.2-25; Figures 17, 19	Perimeter drainage systems for open channels & buried pipe, drainage berms, downdrains, energy dissipaters, desilting basins, drainage swales, structural media filtration, bio-treatment swales & percolation areas.	EIR 2003 3.2.2, p. 3-13-14 3.3.1, p. 3-29 3.5.2, p. 3-44 3.5.2.2, p. 3-44-47 3.5.2.5, p. 3-55 3.7.1.3, p. 3-73 3.7.4, p.3-75 Exhibit 3-14 Exhibit 3-15 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Litter Control	21600(b)(8)(G)	Sec. B.5.3.3 – p. B.5-38, B.5-39	Perimeter fencing; 12-ft high litter fence along bridge deck to control litter from waste collection vehicles; commercial loads require tarp cover; portable, temp fencing to control windblown papers at working face; disposal operations suspended during high winds; clean up team to inspect for & clean up litter & illegal dumping, litter inspection every day that landfill is open to accept refuse & litter clean up on 6th day.	EIR 2003 3.5.6, p. 3-58 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Noise Control	21600(b)(8)(H)	Sec. B.5.3.4 – pgs. B.5-39	Installation & maint of mufflers on motorized vehicles; controlled blasting if necessary w/written notice to residents w/in a 1-mi radius of blast site; site personnel provided w/hearing protection; rock crushing & tire shredding to occur at least 1,500 ft. from nearest residences unless other forms of noise attenuation, such as berms or acoustical curtains, are utilized.	EIR 2003 3.5.9, p. 3-59-60 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Traffic Control (within the facility)	21600(b)(8)(I)	Sec. B.5.5 – p. B.5-42, B.5-43	Entrance facilities located at distance from SR76; monitoring of incoming traffic; early warning sys implemented to assure that traffic requirements are met; on-site internal haul roads to be asphalt or tightly-compacted dirt roads w/speed limit on landfill of 15 mph; modifications to SR76 to improve sight distance & facilitate truck movements; gate at N side of bridge opened 1-hr prior to hours of operation; landfill operator to report traffic count info to Depart of Environ Health on weekly basis in writing.	EIR 2003 3.5.8, p. 3-59, 60 3.2.4, p. 3-21 3.4.3.1, p. 3-32 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Hazardous Waste/Load-checking	21600(b)(8)(J)	Sec. B.4.4.2.1 – pgs. B.4-9 thru B.4-14; Sec. B.5.6 – B.5-43; App. F	HWEP includes descriptions of acceptable & prohibited wastes; gamma-scintillation counter at scale facility to detect radioactive materials; refuse unloading activities obsv by full time spotter at tipping area; random inspections of incoming loads; inspection records; site personnel training to recognize regulated hazard waste & PCB wastes; notification if regulated hazard wastes or PCB wastes are discovered. Designated storage area located in SE corner of ancillary facilities area for temp disposition of wastes collected. On-site storage limited to 90 days & prior to shipment off site, all materials will be overpacked & manifested w/licensed hazard waste hauler/disposer.	EIR 2003 3.4.4, p. 3-34-35 3.4.4.1, p. 3-35, 36 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Approvals								
Compilation of Approvals	21600(b)(9)	Sec. B.2 – pgs. B.2-1 thru B.2-8; Table 5	Approval agencies include CA Integrated Waste Management Board, CA Regional Water Quality Control Board, Department of Environmental Health Services. San Diego APCD, DPLU, CIWMP, USACE, US Fish & Wildlife, SD Public Works Depart, SD Sheriff's Depart, CALTRANS, State Historic Preservation Office, Public Utilities Commission, CA Depart of Fish & Game, etc. Permits req'd & issuing agencies listed in Table 5.	EIR 2003 3.8, p. 3-75-80 Table 3-6	NA	Yes		
CIWMB - Closure/Postclosure Maintenance Plan Requirements if part of Joint Technical Document (JTD) - Preliminary Closure Plans								
Closure/PCM Cost Estimate	21790(b)(1) refers to 21815 and 21820	Sec. F.1 – Tables 17, 18	2010 closure cost estimate – \$25.6M. Estimate includes design, materials, equipment, labor, administration, quality assurance, and 20% contingency. Annual PCM cost = \$29.5M.	NA EIR 2003 3.7.2, p. 3-74	NA	Incorrect	The formula in the spreadsheet used to generate Tables 17 and 18 need to be rechecked. For example, the Subtotal Closure Cost on Table 17 is shown as \$19.7M but adding up sections 1 to 10 results in \$21.6M. The footnotes for the Tables indicate that 2008 costs were adjusted by CalRecycle inflationary factors to obtain the 2010 values. Suggest adding this section to the text. Also, considering the economic conditions between 2008 and 2010, the cost estimates may be skewed to the high side.	

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Location Maps	21790(b)(2 & 4)	Figures 1, 2, 5 6, 13, 14, 15, 15A, 16, 16A, 17, 19	Location map w/property boundary & existing, permitted & proposed final limits of waste placement – Fig 6. Location map w/entry roads – Fig 2. Location map w/structures outside property boundary but w/in 1000 ft. – Fig 5. Location map w/general location of landfill – Fig 1. Location map w/leachate control – Fig 13, 14, 15, 15A. Location map w/drainage & erosion control – Fig 17, 19. Location map w/gas monitoring & control system – Fig 16, 16A.	EIR 2003 Exhibit 3-1 Exhibit 3-2 Exhibit 3-3 Exhibit 3-4 Exhibit 3-6 Exhibit 3-7 Exhibit 3-8 Exhibit 3-9 Exhibit 3-10 Exhibit 3-16 EIR 2007 Exhibit 3-8 Exhibit 3.8c	NA	Yes		
Post-Closure Land Uses	21790(b)(5)	Sec. B.1.9 – p. B.1-14; Sec. D.1.3 – p. D.1-2	Post-closure land use will be undeveloped open space. In accordance w/Prop C.	EIR 2003 3.2.5, p. 3-21 3.7.4, p. 3-75	NA	Yes		
Estimate of Required Closure	21790(b)(6)	?	Implies entire site will be closed at the same time.	Not identified EIR 2003 3.7.2, p. 3-74	NA	Incomplete	The regs require a statement regarding the maximum extent of the landfill that would require closure at any given time. Add a sentence to Section E.1.1 that states that the Closure Plan assumes that maximum extent of the landfill that will require closure at any given time during the life of the landfill is the entire landfill. This can be changed in the future if a decision is made down the road to initiate a phased closure.	

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Estimated Closure Date	21790(b)(7)	Sec. B.1.7 – p. B.1-12	Site life – ~30 years. Estimate includes settlement & volume occupied by daily cover. Cap of site – net airspace (less liner & final cover) = 56.8 mcy; Liner system = 1.6 mcy Final cover = 0.9 mcy; Daily & immediate cover = 11.4 mcy. Refuse to cover ratio = 4:1 Waste flow projections – starting inflow rate = 1,950 tpd Compaction density = 1,350 pcy	EIR 2003 3.6.1, p. 3-60	NA	Yes		
Closure Activities	21790(b)(8)	Sec. E.1.12 – pg. E.1-16 thru E.1-19	Closure construction to start w/in 30 days after final shipment of waste & occurs over 14 mos. Equip Mob (2 wk); Site Security Fencing/Signage (2 wk); Site Exploration/Survey (3 wk); Structure Removal/Demo (3 wk); Drain Control Sys Const (6 wk); Fndn Layer Prelim Grading (8 wk); Fndn Layer Place (10 wk); Barrier Layer Place (20 wk); Veg Layer Place (16 wk); Drain Control Sys Const - over refuse (6 wk); Access/Internal Rd Grading (3 wk); Gas Extract Sys (13 wk); Demob (3 wk)	EIR 2003 3.7, p. 3-71-75 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Site Security and Structure Removal	21790(b)(8)(A) refers to 21135 and 21137	Sec. E.1.10, 11 – pgs. E.1-14, E.1-15	Site security includes perimeter fence/gates; signs posted 60 days prior to last receipt of waste & not <180 days after final waste shipment received; notice in local newspaper 30 days prior last receipt of waste; operator to secure all points of access w/lock & gate & place signs at all access points prohibiting unauthorized entry. Structures removal includes scales & scalehouse, admin, maint & visitor bldg. Structures/ fndns to be demolished & disposed onsite. Scale pits & excavations to be backfilled & compacted. Scales & associated mechanisms, office supplies & computer equip for scalehouse to be removed & salvaged.	EIR 2003 3.7.4, p. 3-75 4.16.2.2, p. 4.16-13 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

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Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
			No plans to decommission any of proposed environ control systems.					
Final Cover and Grading	21790(b)(8)(B) <i>refers to 21140, 21142, 21090(a)(1)-(3), (a)(6), 21090(b)(1)-(3) 21750(f)(5)</i>	Sec. B.1.7 – pg. B.1-12; Sec. C.3.3 – pg. C.3-2; Sec. E.1.2 – pgs., E.1-1, E.1-2; Sec. E.1.3 – pgs. E.1-2 thru E.1-6; Sec. D.4.6 – pgs. D.4-16 thru D.4-20; App. C – pgs. 3-6 thru 3-10; Figures 9 and 31	See below.	EIR 2003 3.7.1, p. 3-71 3.7.1.1, p. 3-71 3.7.1.2, p. 3-71 3.7.1.3, p. 3-73 3.7.3, p. 3-74-75 Exhibit 3-25 Exhibit 3-17	NA	Yes		
- Final Cover	21140 21090(a)(1)-(3)	See above.	Final cover consists of min 2 ft. thick frdn layer (random soil materials); barrier layer (60-mil LLDPE geomembrane); HDPE drainage geocomposite layer (deck areas only); & 2 ft. veg layer (silty sand to sandy silt) from Stockpile A.	EIR 2003 3.7.1, p. 3-71 3.7.1.1, p. 3-71 3.7.1.2, p. 3-71 3.7.1.3, p. 3-73 Exhibit 3-25	NA	Yes		
- Final Grading	21142 21090(b)(1)-(3) 21090(e)(1)-(3)	See above.	Max elev of landfill w/final cover = 1,100 feet amsl. Final deck area = 3% min grade (to promote drainage & allow for future settlement). Final landfill slopes w/overall gradient of ~3.5:1. Benches to be 20 ft. wide, placed every 40 vertical ft., sloped inward ~6%, overall horiz gradient 3%. Final cover surveys - operator to prepare an iso-settlement map of entire permitted site every five years thru post-closure maint period.	EIR 2003 3.7.3, p. 3-74-75 Exhibit 3-17	NA	Yes		

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(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Stability Analysis	21090(a)(6) 21750(f)(5)	See above.	<p>Static stability of refuse slopes – SLOPE/W used to find FS; method to calc FS: Bishop for circular failure, Spencer & Morgenstern/Price for block & non-circular failure; assumptions: refuse fill (unit weight = 80 pd, Phi = 30°, C = 200 psf), smooth HDPE (Phi = 8°, C = 0 psf), textured HDPE (Phi = 14°, C = 0 psf); FS>1.5.</p> <p>Dynamic stability of refuse slopes – Bray & Rathje (1998) used to estimate seismic displacement; assumptions: slope height = 300 ft, shear wave velocity = 1,200 ft. /s, M7.1 at 6 miles from site, MCE site acceleration = 0.4g, period of shaking = 0.5s, duration of MCE = 16s; displacement = 0.1 in (less than acceptable, OK).</p> <p>Static stability of final cover – SLOPE/W used to find FS; assumptions: veg layer thickness = 2 ft., soil density = 100 pcf, friction angle between soil/LLDPE = 27°, max slope gradient = 3:1, PGA = 0.4g; FS>1.5.</p> <p>Dynamic stability of final cover – Makdisi & Seed (1978) used to estimate seismic displacement; displacement = 1.7 to 5.1 in (depending on waste thickness); Bray & Rathje (1998) used to estimate seismic displacement; displacement = 0.5 to 3.7 in (depending on waste thickness); less than the regulatory limit, both OK.</p>	EIR 2003 4.2.3.1, p. 4.2-27 4.2.3.2, p. 4.2-35, -42	NA	Yes		
Construction Quality Assurance	21790(b)(8)(C) refers to 20323, and 20324	Sec C.4 – pgs. C.4-1 thru C.4-12; Sec. E.1.6 – p. E.1-9; App. M and N		EIR 2003 3.2.1, p. 3-11 3.7.1.1, p. 3-71 3.7.1.4, p. 3-73, 74	NA	Yes		
- Professional Qualifications	20324(b)	See above.	Registered civil engr or certified engr geologist – CQA Officer, oversees CQA program, prepares CQA plan.	EIR 2003: 3.2.1, p. 3-11 3.5.1, p. 3-42 Table 10-2, p. 10-48	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Reports	20324(c)	See above.	Text identifies that CQA reports will include CQA management organization (CQA Management Org: Geo Project Director, Geo Officer, Geo Monitors), a detailed description of the level of experience and training for the contractor (Experience/Training requirements included for CQA Officer, CQA inspection personnel, geosynthetic installation contractor, geosynthetic placement superintendent, seaming personnel) and a description of the CQA testing protocols (Preconstruction test protocols: inspection of const materials, inspection of manufacturing process & QA procedures used in manufacturing geosynthetics, obsv in transport, handling, & storage of geosynthetics, inspection of fndn conditions. Construction test protocols: Obsv of all phases of const & documentation of contractor's compliance or noncompliance w/approved plans & specs, &/or direction of engr; field tests & visual obsv to evaluate construction practices).	EIR 2003 3.4.11, p. 3-40-41 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes	The positions of "Geo Project Director" and "Geo Consultant" are not defined in the JTD text in Sec. C.4.2 and C.4.3. Include position description from App. M and N or reference the appendices when position is first mentioned. Consider adding a statement saying that "CQA inspection personnel" position described in JTD is same as "CQA monitors" described in App M and N.	
- Documentation	20324(d)	See above.	Daily summary reports – prepared daily by technician w/supporting inspection data sheets & records of problems that occur or corrective measures implemented thru construction period. Acceptance reports – CQA Officer to review daily inspection reports, data sheets, & photos; reports evaluated for internal consistency, accuracy & completeness. Document storage – after const completion, facility will store all original documents so protected from damage thru post-closure maint period.	EIR 2003 3.4.11, p. 3-40-41 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Laboratory and Field Testing Requirements	20324(e), (f)	See above.	Field testing – ASTM D 2488 93. Earthen material lab testing – ASTM D 1557 91, ASTM D 422 63, ASTM D 2487 93. Low hydraulic conductivity layer lab testing – ASTM 4318 93, USEPA 9100. Test program implemented prior to incorporation of material into containment sys & once approved, during const to evaluate components const according to design specs.	EIR 2003 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
- Test Fill Pad Requirements	20324(g)	See above.	Test fill pad fdn to be constructed by Contractor selected to complete liner construction w/designated equip to determine if specified density/moisture content/hydraulic conductivity relationships from lab can be achieved in field w/compaction equip to be used & at specified lift thickness & to find correlation between design hydraulic conductivity & density at which that conductivity is achieved.	EIR 2003 3.2.1, p. 3-11 Ch. 10 (MMRP) EIR 2007 3.2.4, p. 3-1 Ch. 10 (MMRP)	NA	Yes		
- Earthen Material Requirements	20324(h)	See above.	Field compaction testing to be conducted by nuclear gauge at min freq of 4 tests per 1,000 cy & evaluated by sand cone methods at min freq 1 test per 1,000 cy placed. ASTM 1557 & ASTM 4318 93 to be performed at freq of 1test for every 5,000 cubic yards of material placed, or per change in material. Permeability testing: lab - 1 test per 5,000 cy placed, field - 1 test per 2,500 cy placed.	EIR 2003 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Geosynthetic Membrane Requirements	20324(i)	See above.	<p>Conformance samples taken & tested at > rate of 1 per lot or 1 per 100,000sf.</p> <p>Interface shear test conducted at rate of 1 per 200,000 sf.</p> <p>Conformance tests include density (ASTM D1505A); environ stress crack (ASTM 05397); tear resistance (ASTM 01004 Die C); carbon black content (ASTM 01603); thickness (ASTM 05199); tensile characteristics (ASTM 0638); direct shear testing for interface strength (ASTM 0-5321); puncture resistance (ASTM 04833).</p> <p>Electrical leak location survey - identify holes in geomembrane liner after LCRS gravel &/or operations layer soil is placed, after geomembrane subjected to construction activities & after 1st refuse lift is placed.</p>	<p>EIR 2003 3.2.1, p. 3-11 Ch. 10 (MMRP)</p> <p>EIR 2007 3.2.4, p. 3-1 Ch. 10 (MMRP)</p>	NA	Yes		
Drainage and Erosion Control	21790(b)(8)(D) refers to 21150, 21090(a)(3)-(a)(3)(b)	Sec. E.1.7 – pgs. E.1-10 thru E.1-12; Sec. B.5.4 – pgs. B.5-41, B.5-42; Sec. C.2.8 – pgs. C.2-16 thru C.2-25; Figure 17, 19, 20	<p>Final drainage control system includes exterior slope downdrains, engineered deck area gradients & drainage berms, deck inlets, bench drains & inlets, buried drain pipes, trapezoidal channels, & 2 desilting basins.</p> <p>Primary erosion control includes fill area grading, vegetation (erosion control mats, mulching, & hydroseed), & slope bench system.</p>	<p>EIR 2003 3.2.2, p. 3-13-14 3.3.1, p. 3-29 3.5.2, p. 3-44 3.5.2.2, p. 3-44-47 3.5.2.5, p. 3-55 3.7.1.3, p. 3-73 3.7.4, p.3-75 Exhibit 3-14 Exhibit 3-15 Ch. 10 (MMRP)</p> <p>EIR 2007 Ch. 10 (MMRP)</p>	NA	Yes		
Gas Monitoring	21790(b)(8)(E) – refers to 20920 thru 20939	Sec. E.1.8 – pgs. E.1-12, E.1-13; Sec. Sec. B.5.2 – pgs. B.5-22 thru B.5-25, Sec. C.2.7 – pgs. C.2-14 thru C.2-16; Figures 10D, 11, 16 and 16A	See below.	<p>EIR 2003: 3.5.1, p. 3-42 Exhibit 3-13</p>	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Gas Monitoring and Control	20921	See above.	Landfill gas control system includes 3 main subsystems; extraction well field; conveyance lines & treatment facility. A perimeter landfill gas migration monitoring network will be installed. Limitations for emissions from crushing, screening, transfer points & other operations & process. System taken off line in stages as final cover constructed.	EIR 2003: 3.5.1, p. 3-42 Exhibit 3-13	NA	Yes		
- Monitoring	20923	See above.	Landfill gas migration monitoring probes will be installed in native soils around perimeter to monitor for possible subsurface migration.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
- Perimeter Monitoring Network	20925	See above.	Location – Terrain surrounding footprint is very steep & heavily vegetated, requiring significant construction of access roads & drilling pads in order to place probes at or near facility boundary. This would create significant environ issues, thus probes will be placed closer to permitted refuse limit. Spacing/Depth – 16 probes (2 temp) will be installed at multiple depths on approx 1,000 ft. centers around refuse prism. Monitoring well construction – drilled by licensed drilling contractor or drilling crew under supervision of design engr or engr geologist & wells logged by a geologist or geo engr. Min 5-ft bentonite seal at surface & between monitored zones.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes	The closure perimeter probe locations on Figure 10D are no more than 1000 feet apart. Regs state that spacing between probes should not exceed 1,000 ft.; consider modifying text in JTD from approximately 1,000 ft. to no more than 1,000 ft. There is confusion between 14 probes stated on JTD pg. B.5-29 & 16 probes stated on JTD pg. C.2-16; clarify that 2 probes are only temporary.	
- Structure Monitoring	20931	See above.	On-site structures monitored for detection of potential landfill gas migrating into bldg. structures in accordance with 27 CCR, Sec 20931.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
				Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)				
- Monitored Parameters	20932	See above.	Landfill gas consists of methane & carbon dioxide along w/traces of other constituents. Production of landfill gas w/in refuse cell is of interest due both to flammability of methane in conc between 5 & 15 % by volume in air & for air pollution reasons.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
- Monitoring Frequency	20933	See above.	Monitoring probes will be sampled at min on quarterly basis to determine if landfill gas is migrating away from landfill.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
- Reporting	20934	See above.	Results from perimeter gas monitoring probes will be compiled into report & submitted to SDAPCD, EA & CalRecycle on a regular basis.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
- Reporting and Control of Excessive Gas Concentrations	20937	See above.	If compliance levels are exceeded in any monitoring probe, adjustments to gas system will be initiated &/or additional extraction wells will be installed.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
- Control of Excessive Gas Concentrations	20939	See above.	Once gas control system is installed & operational, landfill gas flare station will be primary method for disposal of collected gas. Liquid condensate collected will be incinerated in flares, treated onsite, & removed off-site for disposal.	EIR 2003 3.5.1, p. 3-42 Exhibit 3-13 3.5.2.3, p. 3-53 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		
Leachate Monitoring	21790(b)(8)(F) refers to 21160, 20340, 21090(c)(2)	Sec. B.5.1.1 – pgs. B.5-1 thru B.5-9; Sec. C.2.5 – C.2-10 thru C.2-12; Sec. E.1.9.1 – pg. E.1-13; Fig. 13, 15, 15A	LCRS designed on basis of max anticipated leachate generation for disposal area. LCRS design consists of granular drainage blanket constructed immediately above liner in bottom liner areas. Network of leachate collection pipes placed w/in granular drainage blanket will convey accumulated fluid by gravity flow to mouth of canyon to be discharged into two double-walled collection tanks. System in place at closure & maintained thru post-closure. LCRS design over slope liner areas consists of gravel pipe collectors wrapped w/geotextile filter fabric placed on interior benches along slopes. Prelim analysis includes HDPE pipe w/6-in ID & SDR of 11 to carry anticipated liquid volume & resist crushing under anticipated refuse loads. LCRS will be operated to function w/out clogging, clean-outs will be utilized to annually test LCRS flow capability.	EIR 2003 3.5.3, p. 3-56, 57	NA	Yes		
Items Under 21790 (Preliminary Plans)	21800(c)	Preliminary Closure Plan included in Parts E and F of the JTD.	The PCPMP specifies that the Final Closure Plan to include following items given in above rows for Preliminary Closure Plan – closure cost estimate, location maps, post-closure land uses, estimate of req'd closure, & closure activities.	EIR 2003 3.7, p. 3-71-75 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Sequence of Closure Stages With Dates	21800(c)	Not applicable to a Preliminary Closure Plan	NA	NA	NA	NA		
Schedule for Disbursement	21800(d)	Not applicable to a Preliminary Closure Plan	NA	NA	NA	NA		
Criteria for Cost Estimate	21815 and 21820	Table 17, 18 and Appendix R	Adequate documentation of costs provided. Estimates appear to be in compliance with Labor Code and Caltrans requirements in section 21815.	NA	NA	Yes		
Description of Planned Uses	21825(b)(1) refers to 21190	Sec. B.1.9 – pg. B.1-14; Sec. D.1.3 – pg. D.1-2	Ultimate post-closure end use will be undeveloped open space. Final cover will be designed to meet reg requirements effective at time of closure. Final Closure Plan will be prepared & submitted to appropriate regulatory agencies at least 2 yrs. prior to landfill's anticipated closure date.	EIR 2003 3.2.5, p. 3-21 3.7.4, p. 3-75	NA	Yes		
Description of Maintenance	21825(b)(2) refers to 21180	Sec. E.2 – pgs. E.2-1 thru E.2-21	Monitoring & Maint activities will include Landfill Gas Migration System (¼ yr.); Groundwater System (¼ yr.); Stormwater; Final Cover (¼ yr.); Settlement (iso settlement maps every 5 yrs.); Vegetative Cover (weed control, reseeding, mulching - ½ yr., rodent control - 1 yr.); Main Access Road & Bridge (¼ yr.); Drainage Control System (¼ yr.); Site Security (¼ yr.).	EIR 2003 3.7, p. 3-71-75 Ch. 10 (MMRP) EIR 2007 Ch. 10 (MMRP)	NA	Yes		

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Emergency Response Plans	21830(b)(1) refers to 21130	Sec. E.3 – pgs. E.3-1 thru E.3-7	ERP will be carried out immediately whenever an event occurs such as fire, explosion, flood, EQ, vandalism, surface drainage problems or release of any waste product which may threaten public health &/or environ. ERP Procedures include removal of non-essential employees & equip from incident vicinity; identify nearest equip/supplies for response; SSO may utilize on-site personnel to control incident if possible; Site Engr will communicate any damage &/or injury reports to SSO & coordinate all emergency actions directed by SSO; immediate surveillance of areas affected by incident; monitoring conducted to prevent an incident from affecting other areas; operator prepared for req'd immediate cover placement.	Not identified	NA	Yes	Note - Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	
List of Responsible Parties	21830(b)(2)	Sec. E.2.2 – pg. E.2-1; E.2-2	Gregory Canyon Limited 160 Industrial Street, Suite 200 San Marcos, CA 92708 Jim Simmons, Authorized Representative Phone: (760) 471-2365	2003 EIR: 3.1, p. 3-1	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	
Post-Closure Planned Uses	21830(b)(3) refers to 21190	Sec. B.1.9 – p. B.1-14; Sec. D.1.3 – p. D.1-2	Ultimate post-closure end use will be undeveloped open space.	EIR 2003 3.2.5, p. 3-21 3.7.4, p. 3-75	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	
As-builts for Monitoring and Control Systems, etc.	21830(b)(4)	Not applicable.	Not applicable.	N/A	NA	NA	Requirements apply to final, not preliminary post closure maintenance plans.	
Description of Maintenance	21830(b)(5)	Not applicable.	Not applicable.	N/A	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	
Operations and Maintenance plan for Gas Control System	21830(b)(6)	Not applicable.	Not applicable.	N/A	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	

**Table 1
Gregory Canyon Landfill – Title 27 Compliance Matrix
(Continued)**

Item	27 CCR Section No.	JTD Section/Page*	Summary of JTD text	CEQA Documents Section/Page	Consistent with SWFP Application	Complies with Requirements?	Comment	Resolution
Plan to Report Results of Monitoring and Collection	21830(b)(7)	Not applicable.	Not applicable.	N/A	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	
Postclosure Maintenance Cost Estimates	21830(b)(8)	Not applicable.	Not applicable.	N/A	NA	NA	Section 21830 requirements apply to final, not preliminary post closure maintenance plans.	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments**

Item #	Section	Page*	Inconsistency or Comment	Resolution
JTD Volume I				
1.	General		The PDF files would be much more useful with the following bookmarks: JTD Volume I to at least the second level on the Table of Contents and all of the Figures. Volume II – Appendices and sub-appendices (e.g., D-1, D-2, etc.) slip sheets. Volume 3 – Each drawing.	
2.	General		DEH contact info will need to be updated due to recent LEA move.	
3.	Table 2	A.1-11	The “Cover” section of Table 2 is missing a row. The four rows should be: Cover Materials 21600(b)(6)(A) <u>Alternative Daily Cover and Beneficial Reuse 21600(b)(6)(B).</u> Cover Frequency 21600(b)(6)(C). Intermediate Cover 21600(b)(6)(D).	
4.	B.2.2.3	B.2-4	Typo - Delete “n” in “Water Course Alternation Permit.”	
5.	B.4.4.8	B.4-17	Text states “... 11.4 million cubic yards (mcy) would be needed for daily operations during the life of the landfill. An additional 2.7 mcy of material will be necessary to provide for canyon shaping, the operations layer and final cover over for the site.” JTD Appendix. B-2 indicates 11.4 mcy + 1.2 for operations layer and final cover (JTD).	
6.	B.1.8	B.1-13	“Traffic counts will be made using computerized records. These records will be available for review by LEA during operational hours.” B.5.5 on page B.5-44 states – “The landfill operator shall report traffic count information to the Department of Environmental Health on a weekly basis in writing.”	
7.	B.1.8	B.1-14	The end of B.1.8 states “Those mitigation measures can be found in Attachment 3A, Table 10-1, Pages 6-7 of the Joint Technical Document.” Should be Appendix D of the JTD or Attachment 3 of the SWFP application.	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
8.	B.3.1.4	B.3-4	The location of the proposed well and 10,000-gallon storage tank is shown in Figure 1 of Appendix G-1 (2009 Technical Memorandum). These features are not shown on Fig 1 in G-1. Suggest adding them to JTD Fig 2 or inserting the existing Figure that shows them as Fig 2B.	
9.	B.4.4.5.1	B.4-15	“The use of ADC has been shown to reduce refuse-to-daily/intermediate cover ratios from 4:1 to 7:1” C.2.2.2, p. C.2-3 (and Table 9A, p. C.2-4) states – “The use of ADC has been shown to reduce refuse-to daily cover ratios from 4:1 to at least 7.5:1.”	
10.	B.4.4.8	B.4-17	Sections B.4.4.8, Appendix B-2 and C.2.2.3 need to be consistent. May be practical to develop text in B.4.4.8 and refer reader to that section in C.2.2.3 instead of repeating it. Additionally C.3.1 also needs to be consistent.	
11.	B.5.1.3.1	B.5-12 to 15	Groundwater Monitoring Well Locations: To eliminate inconsistencies and improve clarity to the reader it is suggested that a table be included that identifies the names of wells in the network, the groundwater zone or zones that will be monitored (alluvium, weathered bedrock, fractured bedrock, consistent with the Huntley recommendations) and the purpose of the well (compliance, sentry, background, upgradient, downgradient, cross gradient). It is recommended that the table be presented in this manner and in the order of the groundwater zone—alluvial, weathered bedrock and fractured bedrock. The number of the wells in the network should be updated in the text to reflect those wells recommended by Dr. Huntley that are yet to be installed. The proposed wells should be shown on a figure and designated as such.	
12.	B.5.2.2	B.5-28	Text should also include reference to: San Diego Rule 59.1 – Municipal Solid Waste Landfills and its landfill gas control requirements, with respect to surface emissions. New AB 32, Greenhouse Gas (GHG), requirements for landfills California Code of Regulations, Title 17, Subchapter 10 – Climate Change, Article 4, Subarticle 6, Sections 95460 to 95476 as it applies to the proposed GCLF.	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
13.	B.5.2.3.3	B.5-32	"The condensate will then be transported off-site." Section C.2.7.1 (second paragraph) and Section C.2.7.2 (paragraph 3) state that there are several options for condensate disposal including on-site treatment and/or injection into a LFG flare. Not consistent.	
14.	B.5.3.1	B.5-33 to 36	The discussion of riparian groundwater use and mitigation in the Dust Control section is a little odd. It would probably fit better in the groundwater monitoring, hydrogeology or utilities section.	
15.	B.5.3.1	B.5-33	"The location of the wells where riparian underflow would be pumped are shown on Figure 1 of Appendix G-1 (Water Supply Report)." Figure call out is not correct. Same issue on p. B.5-33.	
16.	C.2.2.2	C.2-2	The graphical documentation (stereographic plots showing the fracture data and proposed slope inclinations) to support the kinematic analyses of proposed the excavation slopes should be included in Appendix C.	
17.	C.2.2.4	C.2-4	The six critical sections, static analyses and psuedo-static analyses performed on the stockpile/barrow area sections are not included in Appendix C.	
18.	C.2.7.3	C.2-16	Landfill gas probes are on Figure 10D, not Figure 2. Also, text should be revised to reflect 14 perimeter probes and two temporary probes consistent with B.5.2.3.2.	
19.	C.2.9.4.5	C.2-34	"Once an area reaches 20 percent of pre-developed vegetative condition then storm water flows will be diverted to the perimeter channels." It should say 70%.	
20.	C.4.3	C.4-3	The terms Geotechnical Consultant and Geotechnical CQA Consultant are inconsistently used in the JTD text, App. M (pg. 3) & App. N (pg. 5).	
21.	C.4.2; C.4.3	C.4-2; C.4-3	CQA inspection personnel should be called CQA inspectors instead of monitors in Appendix M & Appendix N to be consistent with Title 27.	
22.	C.4.4.2	C.4-10	List of minimum requirements in Section 20324(d)(1) or for daily reports should be included in the JTD text, Appendix M (pgs 32, 33) and Appendix N (page 49).	
23.	C.4.4.2	C.4-10, C.4-11	Monthly Construction summaries are included in App M and N but not in text.	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
24.	D.3.2; Appendix. I-1	D.3-1; 2-1	App. I-1 uses Fallbrook rain gauge data (~10 miles NW of project); median annual rainfall for 30 yrs. of data = 14.1in. D.3.2 uses gauging stations in Escondido to S, Fallbrook to W, & Lake Henshaw to E (10-20 miles from project); average annual rainfall = 17.5-25.27in. Figure 28A – laohyetal Map shows ~16.6 in.	
25.	D.3.2; Appendix. I-2	D.3-1; 2-2	App. I-1 uses rainy season from Oct thru April w/most significant rain events occurring Dec thru March. D.3.2 says rainy season from Nov thru April.	
26.	D.5.6	D.5-24	The JTD text correctly indicates that the wells are shown on Figure 30A, but the footnote on Table 12D says well locations are shown on Figure 2-2.	
27.	E.1.4.2	E.1.8	“Two settlement monuments and two permanent survey monuments will be placed on the landfill area in accordance with 27 CCR, Section 20950. The locations proposed for the monuments are shown on Figure 9.” Only one monument location is shown on Fig 9.	
28.	E.1.7.2	E.1-11	States USLE is used. Make consistent with Section C.2.8.3.4 and Appendix L.	
29.	E.2.3.4	E.2-4	“The general maintenance of the landfill gas extraction/control system involves weekly inspections by operating personnel of all wells, pipelines, mainline valves, and mainline sample points.” Table 14 and page E.2-7 says quarterly.	
30.	E.2.4.1	E.2-7	Suggest updating to reflect the surface emission limits of <= 200ppmv (per the California GHG regulations – Title 17, Subchapter 10, Article 4, Subarticle 6, Sections 95460 to 95476).	
31.	E.2.8.2	E.2-13	“Figure 30 shows a typical cross-section of the final cover system design.” The correct Figure is 31.	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
32.	Figure 11		The footprint shown on Figure 11 to accommodate the LFG flares, blowers, condensate knockout tanks, and condensate collection sumps that would be a little tight within the footprint included on this figure. Ultimately, generating the quantity of LFG expected would likely warrant the opportunity to install a LFG to energy facility and there does not appear to be enough room for this.	
JTD Appendices				
33.	Appendix A		Subtitle D Checklist, Location Restriction B2 - Wetlands - The location restriction addresses wetlands related to MSWLF units. The ACOE 404 permit application and indicates that <0.1 acres of wetlands would be impacted by the bridge construction. It would be reasonable to consider that the current location restriction analysis is correct considering that the bridge is not the MSWLF unit and that the bridge could be designed and constructed without impacting the wetlands (albeit at a significant cost). Legal counsel may be appropriate to determine if the checklist should be changed.	
34.	Appendix B , Appendix B-4		Siting element is included twice in the JTD (Appendix B and Appendix B-4) as well as in the SWFP App – Attachment 4. JTD Appendix B is 1997 version. Unclear why this is here since the 2005 version in Appendix B-4 supersedes it. DEH prefers it in the SWFP application and not the JTD.	
35.	Appendix. B-3		Legal Description same as SWFP-A (redundant).	
36.	Appendix. C;D.4.6,	3-7, Figs 3- 3A, 3- 3B; D.4- 17	Text says calculated min FS = 1.9 from results in Fig 3-3A and 3-3B; Fig 3-3A shows a FS = 1.5. The 1.9 number appears to be a typo.	
37.	Appendix. C	3-7	Cannot locate Figure 3-1 that is referenced in Appendix C.	
38.	Appendix. D		Though the BMPs and monitoring strategy is still current, it appears that all elements of the SWPPP may not have been updated per the latest General Construction Permit (Project Risk Level assessment, identification of the LRP, QSD, and QSP, etc.). If it is acceptable to the	

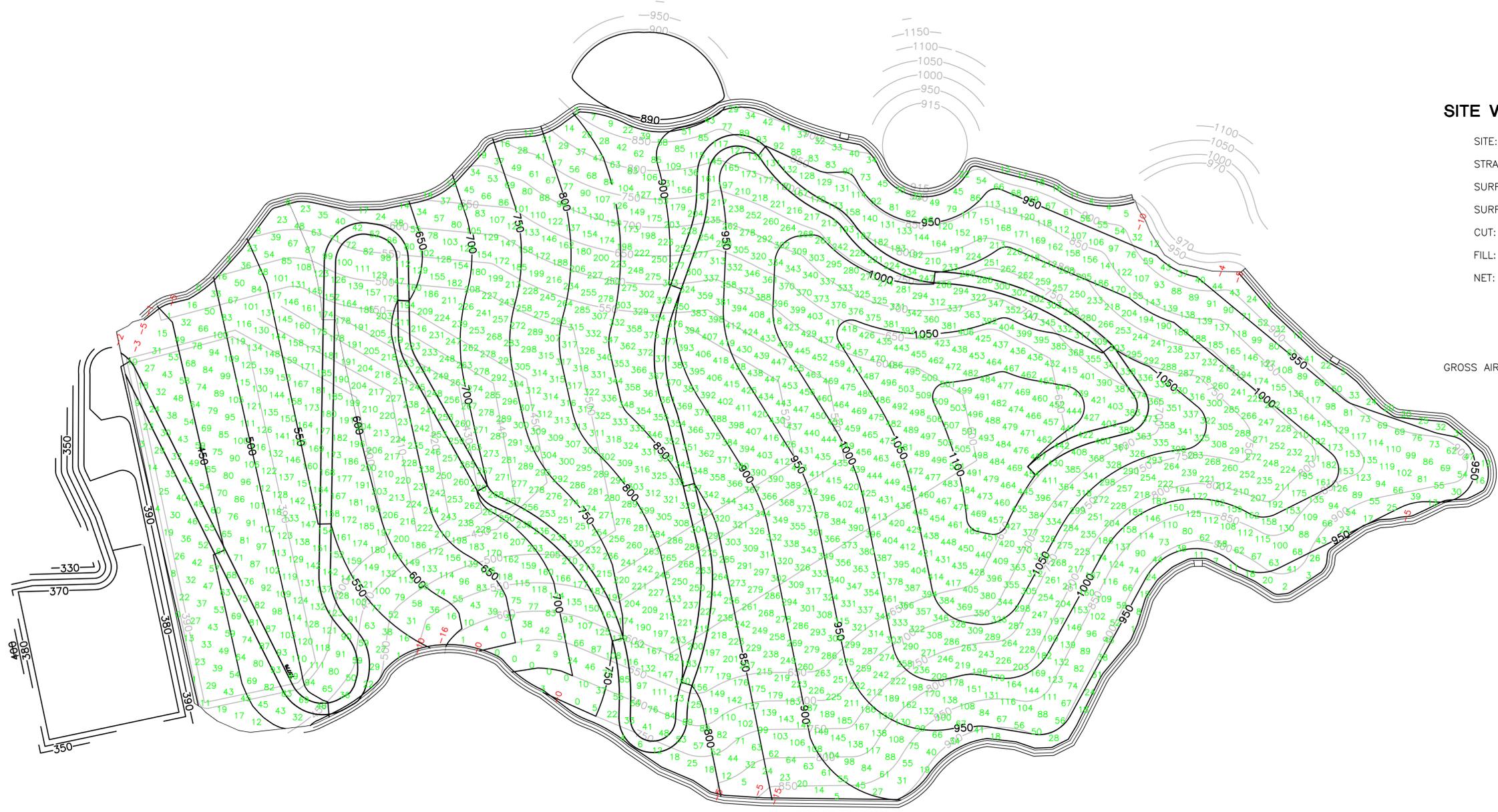
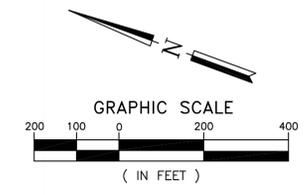
**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
			RWQCB and LEA, in order to avoid needing to amend the JTD every time the stormwater regs or SWPPP changes, it may be advisable to revise the JTD text to indicate that the facility will operate under a current SWPPP that has been prepared and updated to reflect the current general permit requirements, and that the current version of the SWPPP will be provided to the LEA (it has to be submitted to the RWQCB anyway) This language, combined with the general drainage and erosion control discussion in Section B.5.4 and the BMPs shown on the JTD Figures could be adequate for a complete and correct determination by the LEA.	
39.	Appendix D-2 and associated tables 10-1 and 10-3		The Mitigation Monitoring and Reporting Program (MMRP) users guide would be much more useful if it included the source document for each measure (e.g., Prop C, 2003 EIR, 2007 EIR, etc.). With this additional clarification, the source documents themselves could be cited as references in the JTD and MM excerpts from the source documents may not need to be included in the JTD.	
40.	Appendix. I		The 100-yr and 10-year, 6-hr calculations are provided but not the 100-yr, 24-hr calculations as stated on page B.5-41 in the JTD.	
41.	Appendix. I-1		Hydrogeomorphology report - The hydrology calculations in Appendix I show that the proposed condition reduces the flow compared to the existing conditions. In the Hydromod section, it states that the infiltration areas are used to reduce the WQ volume. If the proposed condition is less than existing, infiltration basins would not be needed for hydromod.	
42.	Appendix. J		Confirm that facilities were sized for 100-year, 24 hour storm event since calculations were not found in Appendix I.	
43.	Appendix. N	6, 7	Title 27 requires that the CQA Officer be a CA reg civil engr or certified engr geologist. Appendix N lists the Geotechnical Project Director with these qualifications.	
44.	Appendix P		Financial Assurance Docs are redundantly included in both Appendix R and in the SWFP application, Attachment 5 - "to be provided" is stated in both locations. (Finalized documents will be needed).	
45.	Appendix. S		WDRs are also in SWFP Tab D-2 (redundant).	

**Table 2
Gregory Canyon JTD/SWFP Application Inconsistencies and Other Comments
(Continued)**

Item #	Section	Page*	Inconsistency or Comment	Resolution
SWFP Application				
1.	SWFP	Part 6	Item C shows that date of the JTD as March 2010 instead of September	
2.	SWFP	D-2	County Water Authority ROW application is in PDF in this section but should be D-6 instead of D-2.	
3.	SWFP		EIR Mitigation Measures in Attachment 3 are redundant with JTD Appendix D-2. Suggest eliminating the copy in the SWFP app and replace with a slip sheet referring to JTD Appendix D-2.	
4.	SWFP		Attachment 6 Insurance cert in hard copy missing from PDF.	

*Page number may be off by one in some sections, as electronic and "editable" PDFs had a page deleted and changed the numbering versus the hardcopies.



SITE VOLUME TABLE: UNADJUSTED

SITE:	GREGORY CANYON LANDFILL
STRATUM:	BASE GRADES VS PROPOSED GRADES
SURF1:	BASE GRADES
SURF2:	PROPOSED GRADES
CUT:	11,901 cu.yds.
FILL:	59,505,822 cu.yds.
NET:	59,493,921 cu.yds. (F)

GROSS AIRSPACE FOR PERMITTING PURPOSES: 60 MCY

FIGURE 1

GREGORY CANYON LANDFILL

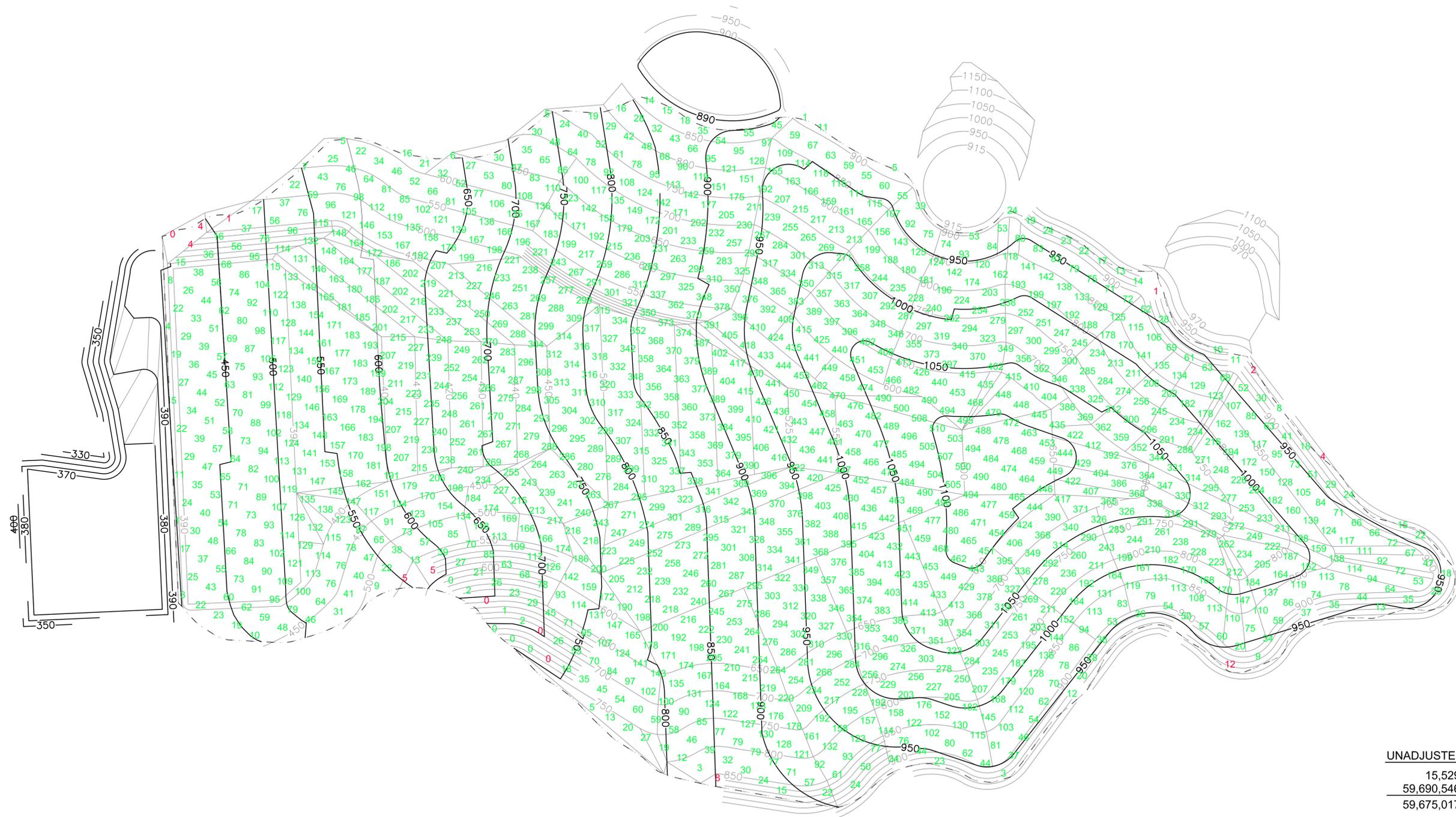
BASE GRADES VS PROPOSED GRADES

BAS
BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE
DIAMOND BAR, CALIFORNIA 91765
(909) 860-7777

DESIGNED BY :	SCALE : AS SHOWN
DRAWN BY : LHT	DATE : 12-2010 FILE NO.: 44-0007VOL
CHECKED BY : JSN	DATE : 12-2010
APPROVED BY :	DATE : 12-2010

DRAWING 1

NO.	REVISION DESCRIPTION	BY:



UNADJUSTED SITE VOLUME
 15,529 CY CUT
 59,690,546 CY FILL
 59,675,017 CY IMPORT

FIGURE 2

