



**SAN BERNARDINO COUNTY  
SOLID WASTE MANAGEMENT DIVISION**  
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**ADDENDUM NO. 5**

**TO THE PLANS AND BID DOCUMENTS FOR THE PHASE 1B LINER  
CONSTRUCTION PROJECT  
at the LANDERS SANITARY LANDFILL  
in Landers, California**

**February 2, 2026**

**~~BID OPEN: 10:00 A.M. February 3, 2026~~**

**BID OPEN: 10:00 A.M. February 5, 2026**

The following changes and/or additions shall be made to the Plans and Bid Documents for the Phase 1B Liner Construction Project at the Landers Sanitary Landfill. All other requirements of the Plans and Bid Documents shall remain the same.

**The following changes shall be made part of the Contract Documents, and the Bidder should acknowledge receipt thereof on the Bid Proposal.**

**I. PROJECT TECHNICAL SPECIFICATIONS REVISIONS**

1. Section 2E – Geomembrane, Subsection 3.6.1 – Conformance Sampling, Testing and Reporting, Paragraph 1 of the Technical Specifications, delete and replace with the following:

“The Contractor shall obtain all conformance samples directly from the manufacturing plant, under the observation of the Engineer, or as approved by the Engineer, pursuant to Section 2.2.10. Conformance samples shall be taken and tested at a rate of one per lot, or one per 100,000 square feet, whichever results in the greater number of tests. Interface shear strength testing shall be conducted according to Section 2.2.8 – Interface Shear Testing above.”

2. Delete and replace Page 2E-9 with Page 2E-9-A included in Addendum No. 5 as Attachment 1.
3. Delete and replace Page 2G-3 with Page 2G-3-A included in Addendum No. 5 as Attachment 2.

If you have any questions, please contact Joshua LeRoy at (909) 386-8629 or you may contact me at (909) 386-9017.



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Johnny Gayman, P.E.  
Chief Engineer

02/02/2026

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Date

**Attachment 1**

**(Page 2E-9-A of the Technical Specifications)**

**Table 1 – Interface Shear Test Conditions**

Test Series No.	Soaking Phase		Consolidation and Shearing Phases		
	Normal Stress During Soaking (psf)	Soaking Time (hr)	Minimum Consolidation Time (hr)	Test Condition	Displacement Rate (inches/min.)
1	N/A	N/A	24	Submerged	0.04
2	N/A	N/A	24	Submerged	0.04
3	N/A	N/A	48 <sup>1</sup>	at-placement/ “moist”	0.04
4	1440	48	48 <sup>1</sup>	Submerged	0.004
5	N/A	N/A	48 <sup>1</sup>	at-placement/ “moist”	0.04
6	N/A	N/A	48 <sup>1</sup>	at-placement/ “moist”	0.04
7	1440	48	48 <sup>1</sup>	Submerged	0.004
8	1440	48	48 <sup>1</sup>	Submerged	0.004

Note: (1) Vertical settlement versus time will be monitored during consolidation and the consolidation phase shall be continued until the duration in the above table or at least  $t_{100}$  is reached as measured by the square-root time method per ASTM D2435, whichever is greater.

For tests involving a GCL soaking phase, the GCL shall be soaked according to the normal loads and times in the above table. After the soaking phase, the GCL shall be consolidated according to the times and conditions in Table 1 above and under the normal loads prescribed in the Table 2 below. Measures shall be taken so as not to impede drainage of the GCL during consolidation. To accomplish this intent, a “sacrificial” non-woven geotextile shall be placed on the top and bottom of the GCL during soaking and consolidation. Once GCL soaking and consolidation are complete, move the hydrated GCL (without the sacrificial geotextiles) to the shear box, place it on top of the underlying material(s) for the given test series, and then construct the rest of the sample in that series. The shear box must be set up as quickly as possible after removing the GCL from the consolidation device. The entire series sample must then be consolidated in the shear box under the normal stress prescribed in Table 2 below according to the test conditions in Table 1 above.

- B. Final approval of interface shear strength of composite liner system shall be made by the Engineer based on interpretation of the component interface testing results and Table 2 below. Where component testing involves GCL, tests should include “moist” GCL (i.e., at-placement moisture content; not more than 30% by weight) and “hydrated” GCL (hydration and consolidation conditions and rate of shearing to be per this specification). For this project, tests should be conducted under normal stress of 2,500; 5,000; 10,000; and 15,000 psf, commensurate with the proposed future waste fill height. For interfaces against GCL, shear strength should be evaluated as the average of the “moist” and “hydrated” test results. The evaluated shear strength envelope should meet and/or exceed values specified in Table 2 below.

**Attachment 2**

**(Page 2G-3-A of the Technical Specifications)**

**2.1.2 Physical Properties:** Geotextile shall meet or exceed the following minimum average roll values (weakest principal direction):

GEOTEXTILE MANUFACTURING QUALITY ASSURANCE (MQA)						
PHYSICAL PROPERTY	TEST METHOD	FREQUENCY	UNITS	REQUIREMENT		
				8 oz Filter	12 oz. Cushion	16 oz. Cushion
Weight (mass/unit area)	ASTM D-5261	100,000 ft <sup>2</sup> or 1 per lot	oz/yd <sup>1</sup>	8	12	16
Trapezoidal Tear Strength	ASTM D-4533	100,000 ft <sup>2</sup> or 1 per lot	lbs	80	115	145
Puncture (CBR) Strength	ASTM D-6241	100,000 ft <sup>2</sup> or 1 per lot	lbs	130	800	900
Permittivity	ASTM D-4491	100,000 ft <sup>2</sup> or 1 per lot	sec <sup>-1</sup>	1.2	N/A	N/A
Grab Tensile Strength	ASTM D-4632	100,000 ft <sup>2</sup> or 1 per lot	lbs	230	300	370
Grab Tensile Elongation	ASTM D-4632	100,000 ft <sup>2</sup> or 1 per lot	%	N/A	50	50
AOS	ASTM D-4751	100,000 ft <sup>2</sup> or 1 per lot	U.S. Standard Sieve	70	N/A	N/A
UV Resistance	ASTM D-4355	See Note (2)	% strength retained	N/A	70	70
<b>Notes:</b>						
1. Evaluation to be on 2.0-inch strip tensile specimens per ASTM D5035 after 500 lt. hours exposure.						

## 2.2 Welding Equipment/Thread

Welding equipment shall be commercial grade quality manufactured for the specific purpose of seaming adjacent geotextile panels, and adhering geotextile straps to underlying geotextile, respectively.

Thread used to sew panels of geotextile together shall be polymeric thread with physical and chemical-resistance properties that equal or exceed those of the geotextile. The thread color shall contrast with the geotextile color and shall be approved for use by the geotextile manufacturer.

## 2.3 Manufacturing Quality Control

### 2.3.1 Roll Identification

Each roll shall be labeled or tagged with roll identification number, lot, name of manufacturer, date and location of production, product type and grade, and physical dimensions. The label or tag information shall be always affixed or attached to the roll during deployment of the roll. The roll identification number and manufacturer name shall also be marked on the protective covering.

### 2.3.2 Quality Control

The manufacturer shall follow a quality control program during all phases of the manufacturing process. Geotextile shall be monitored throughout the manufacturing process for product integrity and consistency. Manufacturer shall sample rolls in accordance with ASTM D-4354 and test for the physical properties reflected in Table under Section 2.1.2 at the indicated minimum frequencies, or per lot, whichever results in the greatest number of tests: