

Environmental Consultants

823 Congress Avenue
Suite 1505
Austin, Texas 78701-2429

ACL 4.3.1
512 480-8557 7-26-99
FAX 512 480-8539
<http://www.scseng.com>

SCS ENGINEERS

July 26, 1999
File No. 1699007.00

Mr. Jerry Allred, Team Leader
MC124
MSW Permits Section
Permits Division
Texas Natural Resource Conservation Commission
P. O. Box 13087
Austin, Texas 78711-3087

**SUBJECT: Municipal Solid Waste – Travis County
Austin Community Recycling and Disposal Facility – Permit No. MSW 249-C
Repair Report and Interim Status Report for Cell WD-3**

Dear Mr. Allred:

On behalf of Waste Management of Texas, Inc. (WMTX), SCS Engineers (SCS) is pleased to submit for your consideration a repair report and an interim status report for Cell WD-3 at the Austin Community Recycling and Disposal Facility. These reports are submitted to ensure compliance with the site-specific Soils and Liner Quality Control Plan and applicable Texas Natural Resource Conservation Commission (TNRCC) requirements.

The repair report documents repairs to the Cell WD-3 liner system performed during January 1999. These repairs were necessary to address damage to a portion of the geonet and geotextile components of the liner system caused by heavy rainfall late last year.

The interim status report documents the existing condition of exposed portions of the Cell WD-3 liner system and the adequacy of the protective cover over other portions of that system. This report addresses requirements of the Flexible Membrane Liner Evaluation Report for the cell.

At this time, no wastes have been deposited in Cell WD-3. Upon TNRCC approval of the enclosed reports, WMTX anticipates commencement of waste disposal over that portion of Cell WD-3 for which the adequacy of the protective cover thickness has been verified in the interim status report. Before waste disposal occurs in other portions of the cell, a supplemental status report documenting the thickness of the protective cover will be submitted to the TNRCC.

Offices Nationwide



WM-053084

Mr. Jerry Allred, Team Leader
July 26, 1999
Page 2

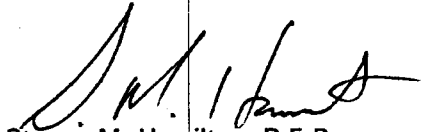
As required by Title 30 Texas Administrative Code, Section 330.113(c) (30 TAC 330.113(c)) of TNRCC rules, please be advised that this letter with enclosures is being placed in the operating record for the subject facility in accordance with the requirements of 30 TAC 330.113(a) and/or (b). Also, as required, this letter with enclosures is submitted to the TNRCC in triplicate.

Your consideration of the enclosed reports is appreciated. Please contact Rusty Fusilier, P.E., of SCS at telephone number (512) 480-8557 in Austin if you have any questions or comments regarding these reports.

Very truly yours,



Rusty Fusilier, P.E.
Project Manager



Steven M. Hamilton, R.E.P
Vice President
SCS ENGINEERS

SMH/RF:rf
Enclosures

cc w/enclosures: Marcos Elizondo, WMTX ✓
Kim Borges, WMTX
Brian Dudley, P.E., Brian Dudley Engineering

WM-053085

**AUSTIN COMMUNITY RECYCLING
AND DISPOSAL FACILITY**

**REPAIR REPORT FOR A PORTION OF THE
SIDEWALL DRAINAGE LAYER FOR CELL WD-3**

Prepared for:

Waste Management of Texas, Inc.
9900 Giles Lane
Austin, Texas 78754

Prepared by:

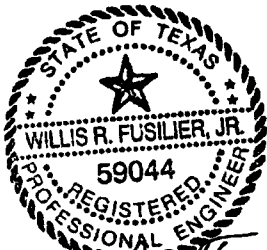
SCS Engineers
823 Congress Avenue
Suite 1505
Austin, Texas 78701
(512) 480-8557

and

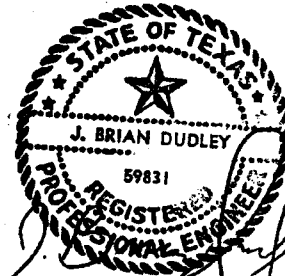
Brian Dudley Engineering
16904 Goldenwood Way
Austin, Texas 78737
(512) 894-3352

July 1999

Project No. 1699007.00



Willis R. Fusilier, Jr.
7/21/99



J. Brian Dudley
7/21/99

WM-053104

AUSTIN COMMUNITY RECYCLING AND DISPOSAL FACILITY

REPAIR REPORT FOR A PORTION OF THE SIDEWALL DRAINAGE LAYER OF CELL WD-3

Background

This report documents oversight of repairs to a portion of the Cell WD-3 liner system provided by Earth Tech, Inc., at the Austin Community Recycling and Disposal Facility during January 1999. Due to heavy rains, the protective cover on a section of the northwest slope of Cell WD-3 (between approximately N + 70 and P + 40) became saturated and slid down the slope, pulling the geonet and geotextile layers (but not the high density polyethylene (HDPE) liner) out of the anchor trench and also down the slope. Cell WD-3 was originally approved for use on October 27, 1998, but disposal operations had not been initiated at the time of the slide or repair.

Repair Procedures

On January 5, 1999, Brian Dudley, P.E. made an initial visit to the site to inspect the exposed 60-mil HDPE liner. H.B. Zachry Company (Zachry) had removed the protective cover material, cleaned the liner, and removed cohesive soil from the anchor trench at the area where the geosynthetics pulled out of the anchor trench. Mr. Dudley inspected the exposed liner and did not encounter any damage or abrasions.

National Seal Company arrived on-site January 7, 1999 to replace geonet and geotextile materials which slid down the slope. The compromised materials were removed and discarded. Replacement HDPE geonet was deployed down the slope and seams were tied at maximum five foot intervals using plastic ties. A construction quality assurance (CQA) technician observed and documented that the installation was in accordance with the site-specific Soils and Liner Quality Control Plan (SLQCP).

The geotextile, a 16 ounce-per-square-yard non-woven polypropylene fabric, was then deployed over the geonet. The seams were sewn with portable hand-held sewing machines using polymeric thread with chemical and ultraviolet light resistance equal to or greater than those of the geotextile. A CQA technician observed and documented that the installation was in accordance with the SLQCP.

On January 12, 1999, after replacement of the geonet and geotextile was completed, Zachry backfilled and compacted the cohesive soil in the anchor trench in a manner to avoid damaging the underlying geosynthetics. A low ground-pressure dozer was used to push stockpiled protective cover material from the floor of the cell up the sideslope. A CQA technician observed and monitored this activity to ensure the underlying geosynthetics were not damaged. Mr. Dudley observed the completed work on January 12 and 20, 1999. Martin Survey Associates, Inc., provided verification that the protective cover thickness was adequate in the area of the repairs.

Attached Documentation

Repair documentation, which is attached to this report, consists of the following:

- Photographs of the subject area prior to, during, and after repair (Attachment 1).
- Field observation report sheets from the CQA technician and Professional of Record (Attachment 2).
- Protective cover thickness record drawing (Attachment 3).

Certification of Repairs

Based on our professional judgement and the information obtained through on-site observation of activities and CQA technician daily reports, the repair work to the northwest sideslope of Cell WD-3 at the Austin Community Recycling and Disposal Facility was completed in general accordance with the design drawings, the approved SLOCP, and industry-acceptable practices.

ATTACHMENT 1
REPAIR AREA PHOTOGRAPHS

WM-053107



Cell WD-3 Northwest Sideslope
Geonet/Geotextile Slippage Area Prior to Repair
View Toward Southwest
January 5, 1999



Cell WD-3 Northwest Sideslope
Geonet/Geotextile Slippage Area at Toe of Slope Prior to Repair
View Toward South
January 5, 1999

WM-053108



Cell WD-3 Northwest Sideslope
Geonet/Geotextile Slippage Area at Top of Slope Prior to Repair
View Toward North
January 5, 1999



Cell WD-3 Northwest Sideslope
Deployment of Geotextile at Top of Slope
View Toward North
January 7, 1999

WM-053109



Cell WD-3 Northwest Sideslope
Geonet/Geotextile Slippage Area After Repair
View Toward West
January 7, 1999



Cell WD-3 Northwest Sideslope
Geonet/Geotextile Slippage Area After Repair
View Toward West
January 7, 1999

WM-053110

ATTACHMENT 2
FIELD OBSERVATION REPORT SHEETS

WM-053111

Owner: WASTEMANAGEMENT Report No.: 1
 Project: ACRDF CELL WD-3 REPAIR Page 1 of 1
 Project No.: 10339 Weather: _____ Date: 1/5/99
BILLED AS 30537 (E.T.) Temp. (°F): 75 A.M. _____ P.M. 3:00
 High: _____ Low _____ Rain _____

Contractor(s): ~~XXXX~~ H.P. ZACHARY
 Contractor Super(s): _____

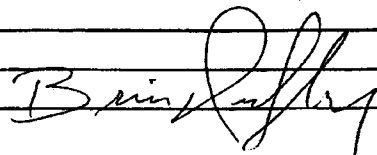
Number and Function of Contractors' Personnel, Hours Worked (Identify Subcontractors Separately)

Contractor	No. of People	Major Constr. Equip. Description	Size/Capacity	No.	No. in Use

Visitors

Representing

Daily Notations: PRE REPAIR INSPECTION -
1. MET WITH KIM BORGES AND JACK STEELE TO
DISCUSS REPAIR. PROJECT COORDINATED W/ MARCOS
ELIZONDO (NOTICE TO PROCEED REC'D 1/5/99) & RANDY RAINER (MARTIN
BUVE);
2. ZACHARY HAD COMPLETED CLEANING SOIL & NET/TEXTILE DEBRIS
FROM "SLIV" AREA AT NORTHWEST SIDE OF CELL WD-3.
3. LINER IN GOOD SHAPE, NO HOLES OR ABRASIONS OBSERVED.
SEVERAL NET PANELS STILL IN PLACE. SOIL COVER
WAS AT SLOPE BOTTOM ON NORTH END AND ABOUT 10 FT
VERTICAL UP SLOPE AT CELL WALL CURVE ON SOUTH
END OF REPAIR AREA. ANCHOR TRENCH NOT EXCAVATED
YET.
4. ZACHARY CREWS CONSTRUCTING BERM BETWEEN
EVAPORATION POND & DRAINAGE CHANNEL SOUTHWEST
OF REPAIR AREA.
5. PHOTOS TAKEN.

Signature: 

Owner: Waste Management Report No.: 1
 Project: ACRDF Cell WD-3 Repair Page _____ of _____
 Project No.: _____ Weather: _____ Date: 1/7/99
 Temp. (°F): _____ A.M. 10:30 P.M. _____
 High: _____ Low _____ Rain _____

Contractor(s): National Seal Corp.

Contractor Super(s): Khata

Number and Function of Contractors' Personnel, Hours Worked (Identify Subcontractors Separately)

Contractor	No. of People	Major Constr. Equip. Description	Size/Capacity	No.	No. in Use
<u>National Seal Corp</u>	<u>3</u>				

Visitors

Representing

Daily Notations: Repair Work Inspection

1. Took photos of repair work, the anchor trench and net and textile. The net was installed & tied at 5' intervals and the textile was sewed & in-place.

Signature: George E. Fenton

Owner: WASTE MANAGEMENT Report No.: 2
 Project: ACURDF CELL WD-3 REPAIR Page 1 of 1
 Project No.: 10339 Weather: 1/7/99 Date: 1/7/99
BILLED AS 30537 (ET) Temp. (°F): 75 A.M. _____ P.M. 1:00
 High: _____ Low _____ Rain _____

Contractor(s): NATIONAL SEAL CORP., H.P. ZACHARY

Contractor Super(s): _____

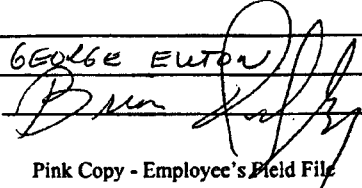
Number and Function of Contractors' Personnel, Hours Worked (Identify Subcontractors Separately)

Contractor	No. of People	Major Constr. Equip. Description	Size/Capacity	No.	No. in Use

Visitors _____

Representing _____

Daily Notations: REPAIR WORK INSPECTION
 1. MET WITH MARCOS ELIZONDO & JACK STEELE (WM) & ZACHARY SUPERINT, MARTIN SURVEYOR
 2. POND PROTECTIVE COVER HOPE REPAIRS OBSERVED - 1 PANEL (15'x15') EXTRUSION WELDED ON SOUTH SLOPE & 3 EXTRUSION WELD PATCH ON SOUTHWEST SLOPE (AREAS SCUFFED BY PUMPING EQUIP)
 3. NET INSTALLED & TIED @ 5' INTERVALS, TEXTILE SEWED & IN PLACE; 1 LIFT OF SOIL PLACED IN ANCHOR TRENCH.
 4. SURVEYING SHOTS TAKEN, SOIL TO BE PUSHED ON 1/12. GEORGE EWTON (EARTHTECH) WILL BE PRESENT. ZACHARY WILL PUSH AVAILABLE SOIL FROM BOTTOM OF SLOPE TO A 2' THICKNESS - HEIGHT OF SOIL WILL BE DEPENDENT ON AMOUNT OF SOIL STOCKPIL AT TOE OF SLOPE.
 5. PHOTOS TAKEN EARLIER BY GEORGE EWTON

Signature: 

Owner: Waste Management Report No.: _____
 Project: ACRDF Cell WD-3P ~~Repair~~ Page _____ of _____
 Date: 1/12/99
 Project No.: _____ Weather: _____ A.M. 10:00 P.M. 3:00
 Temp. (°F): _____ High: _____ Low _____ Rain _____

Contractor(s): H.P. Zachary, Martin Surveyor

Contractor Super(s): _____

Number and Function of Contractors' Personnel, Hours Worked (Identify Subcontractors Separately)

Contractor	No. of People	Major Constr. Equip. Description	Size/Capacity	No.	No. in Use
<u>Zachary</u>	<u>2</u>				
<u>Martin Surveyor</u>	<u>2</u>				

Visitors _____ Representing _____

Daily Notations: Repair Work Inspection

1. Met with H.P. Zachary representative and Martin Surveyor representative.
2. H.P. Zachary used a dozer to push dirt back up on the textile. Zachary used either a DC3 or DC4 dozer. The dozer operator was competent in his driving and pushing dirt. He did not make radical changes. He removed trash liner from the site (the liner from before the incident). He had markers to help him identify where the toe of the slope was. He pushed the dirt up ~~as far as possible~~ as far as possible while maintaining the desired thickness.
3. Martin Surveyor then proceeded to shoot measurements so that an accurate survey rendering could be made.

Signature: George E. E...

WM-053115



ATTACHMENT 3
PROTECTIVE COVER THICKNESS RECORD DRAWING

WM-053116

