



Texas Commission on Environmental Quality Waste Permits Division Correspondence Cover Sheet

Date: November 2023

Facility Name: City of Waco Landfill

Permit or Registration No.: 948A

Nature of Correspondence:

Initial/New

Response/Revision to TCEQ Tracking No.:
_____ (from subject line of TCEQ letter
regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
<input type="checkbox"/> New Notice of Intent	<input type="checkbox"/> Alternative Daily Cover Report
<input type="checkbox"/> Notice of Intent Revision	<input type="checkbox"/> Closure Report
<input type="checkbox"/> New Permit (including Subchapter T)	<input type="checkbox"/> Compost Report
<input type="checkbox"/> New Registration (including Subchapter T)	<input type="checkbox"/> Groundwater Alternate Source Demonstration
<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Groundwater Corrective Action
<input type="checkbox"/> Minor Amendment	<input type="checkbox"/> Groundwater Monitoring Report
<input type="checkbox"/> Limited Scope Major Amendment	<input type="checkbox"/> Groundwater Background Evaluation
<input checked="" type="checkbox"/> Notice Modification	<input type="checkbox"/> Landfill Gas Corrective Action
<input type="checkbox"/> Non-Notice Modification	<input type="checkbox"/> Landfill Gas Monitoring
<input type="checkbox"/> Transfer/Name Change Modification	<input type="checkbox"/> Liner Evaluation Report
<input type="checkbox"/> Temporary Authorization	<input type="checkbox"/> Soil Boring Plan
<input type="checkbox"/> Voluntary Revocation	<input type="checkbox"/> Special Waste Request
<input type="checkbox"/> Subchapter T Disturbance Non-Enclosed Structure	<input type="checkbox"/> Other:
<input type="checkbox"/> Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
<input type="checkbox"/> New	<input type="checkbox"/> Annual/Biennial Site Activity Report
<input type="checkbox"/> Renewal	<input type="checkbox"/> CPT Plan/Result
<input type="checkbox"/> Post-Closure Order	<input type="checkbox"/> Closure Certification/Report
<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Construction Certification/Report
<input type="checkbox"/> Minor Amendment	<input type="checkbox"/> CPT Plan/Result
<input type="checkbox"/> CCR Registration	<input type="checkbox"/> Extension Request
<input type="checkbox"/> CCR Registration Major Amendment	<input type="checkbox"/> Groundwater Monitoring Report
<input type="checkbox"/> CCR Registration Minor Amendment	<input type="checkbox"/> Interim Status Change
<input type="checkbox"/> Class 3 Modification	<input type="checkbox"/> Interim Status Closure Plan
<input type="checkbox"/> Class 2 Modification	<input type="checkbox"/> Soil Core Monitoring Report
<input type="checkbox"/> Class 1 ED Modification	<input type="checkbox"/> Treatability Study
<input type="checkbox"/> Class 1 Modification	<input type="checkbox"/> Trial Burn Plan/Result
<input type="checkbox"/> Endorsement	<input type="checkbox"/> Unsaturated Zone Monitoring Report
<input type="checkbox"/> Temporary Authorization	<input type="checkbox"/> Waste Minimization Report
<input type="checkbox"/> Voluntary Revocation	<input type="checkbox"/> Other:
<input type="checkbox"/> 335.6 Notification	
<input type="checkbox"/> Other:	

November 27, 2022
File No. 16223090.00

Ms. Megan Henson
Waste Permits Division
Texas Commission on Environmental Quality
12100 Park 35 circle Building F
Austin, Texas 78753

Subject: City of Waco Landfill
Municipal Solid Waste (MSW) Permit No. 948A
Permit Modification to Address Revisions for use of Alternate Daily Cover (ADC)
Commercial Spray on Product, VERDac Landfill Cover Pellets
McLennan County, Texas
CN600131940; RN102804051

Dear Ms. Henson:

On behalf of the City of Waco (City), SCS Engineers (SCS) has prepared the attached permit modification for City of Waco Landfill (landfill), TCEQ Permit No. 948A in McLennan County. This permit modification request has been prepared in accordance with Texas Administrative Code (TAC) §305.70(k)(1) related to the use of an alternate daily cover (ADC) material on a permanent basis in accordance with §330.165(d). Specifically, this permit modification is being requested for the use of the commercial spray on product, VERDac Landfill Cover Pellets (VERDac), as manufactured by LSC Environmental Products, LLC. as ADC.

This permit modification is being submitted following the below mentioned authorizations/reports/notifications:

- TCEQ authorized the temporary authorization to use VERDac as ADC on (Tracking No. 28131092). This trial period was authorized to begin on January 7, 2023.
- In a letter dated January 30, 2023, SCS provided a 10-Day Notice of Intent to utilize VERDac as ADC to Mr. David Mann, Region Director, TCEQ Region 9 office.
- A temporary authorization extension for this ADC was submitted, and approved by TCEQ on July 31, 2023 (Tracking No. 28834895).
- Two-month written status reports regarding use of VERDac on February 21, April 21, June 21, August 20, and October 18, 2023; and were approved by TCEQ on March 3, May 11, July 31, September 5, and November 20, 2023 (Tracking Nos. 28327032, 28543384, 28905090, 28834895, and 29175743).
- The final two-month status report will be submitted to TCEQ in January 2024.

In an effort to minimize the amount of time that the landfill will not be able to use the VERDac [i.e., between the last day of the temporary authorization extension (January 7, 2024) and approval of this permit modification], we are respectfully requesting that this permit modification be reviewed and approved pending submission of the final status report.

Specifically, Part IV – Site Operating Plan, Appendix IV-A was **revised** to incorporate information related to VERDac as ADC.

Ms. Megan Henson
November 27, 2023
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Consistent with 30 TAC §305.70(d), this submittal addresses minor changes to the landfill that do not substantially alter the permit conditions and do not reduce the capability of the facility to protect human health and the environment. Based on our review of the regulations, this permit modification does require public notice; therefore, the adjacent landowners list and map has been included in Attachment B.

Consistent with §305.70(f), we are submitting one original and two copies of the attached permit modification, with one of the copies marked to clearly show the above described revisions using redline/strikeout format for narrative pages. Also, we have included a completed Application Form to support this modification. Lastly, in accordance with §330.59(h)(1), SCS has also remitted payment of the \$150.00 application fee through e-Pay (see Attachment A for receipt).

If you have any questions or comments concerning this submittal, please contact at 817-358-6110 for Brett DeVries, Ph.D., P.E. or 817-358-6117 for Ryan Kuntz, P.E.

Sincerely,



Brett DeVries, Ph.D., P.E.
Sr. Project Manager
SCS ENGINEERS
TBPE Registration No. F-3407



Ryan Kuntz, P.E.
Vice President/Satellite Office Manager
SCS ENGINEERS

Attachments Attachment A: Permit Modification Application Form and EPay Receipt
Attachment B: Landowner's List and Map
Attachment C: Marked Version
Attachment D: Unmarked Version

Cc: Kody Petillo, City of Waco
Doug Hughes, City of Waco
TCEQ Region 9

ATTACHMENT A

PERMIT/REGISTRATION MODIFICATION AND E-PAY RECEIPT



Texas Commission on Environmental Quality

Application Form for Municipal Solid Waste Permit or Registration Modification or Temporary Authorization

Application Tracking Information

Facility Name: City of Waco Landfill

Permittee or Registrant Name: City of Waco

MSW Authorization Number: 948A

Initial Submission Date: November 2023

Revision Date: _____

Instructions for completing this form are provided in [form TCEQ-20650-instr](#)¹. If you have questions, contact the Municipal Solid Waste Permits Section by email to mswper@tceq.texas.gov, or by phone at 512-239-2335.

Application Data

1. Submission Type
<input checked="" type="checkbox"/> Initial Submission <input type="checkbox"/> Notice of Deficiency (NOD) Response
2. Authorization Type
<input checked="" type="checkbox"/> Permit <input type="checkbox"/> Registration
3. Application Type
<input checked="" type="checkbox"/> Modification with Public Notice <input type="checkbox"/> Modification without Public Notice
<input type="checkbox"/> Temporary Authorization (TA) <input type="checkbox"/> Modification for Name Change or Transfer
4. Application Fee
Amount
The application fee for a modification or temporary authorization is \$150.
Payment Method
<input type="checkbox"/> Check
<input checked="" type="checkbox"/> Online through ePay portal www3.tceq.texas.gov/epay/
If paid online, enter ePay Trace Number: <u>582EA000575280</u>

¹ www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/20650-instr.pdf

5. Application URL

For modifications that require notice (other than those for arid exempt landfills), provide the URL address of a publicly accessible internet web site where the application and all revisions to the application will be posted:

https://www.scsengineers.com/state/city-of-waco-landfill/

6. Party Responsible for Mailing Notice

For modifications that require notice, indicate who will be responsible for mailing notice:

Applicant Agent in Service Consultant

Contact Name: Brett DeVries

Title: Sr. Project Manager

Email Address: bdevries@scsengineers.com

7. Confidential Documents

Does the application contain confidential documents?

Yes No

If "Yes", reference the confidential documents in the application, but submit the confidential documents as an attachment in a separate binder marked "CONFIDENTIAL."

8. Facility General Information

Facility Name: City of Waco Landfill

Contact Name: Kody Petillo Title: Director of Solid Waste

MSW Authorization Number (if existing): 948A

Regulated Entity Reference Number: **RN** 102804051

Physical or Street Address: 11400 Old McGregor Rd.

City: Waco County: McLennan State: TX Zip Code: 76712

Phone Number: 254-299-2623

Latitude (Degrees, Minutes, Seconds): N 42°24'03"

Longitude (Degrees, Minutes, Seconds): W 93°47'36"

9. Facility Types

Type I Type IV Type V

Type IAE Type IVAE Type VI

10. Description of the Revisions to the Facility

Provide a brief description of revisions to permit or registration conditions and supporting documents referred to by the permit or registration, and a reference to the specific provisions under which the modification or temporary authorization application is being made. Also, provide an explanation of why the modification or temporary authorization is needed:

This permit modification request has been prepared in accordance with Texas Administrative Code (TAC) §305.70(k)(1) related to the use of an alternate daily cover (ADC) material on a permanent basis in accordance with §330.165(d). See transmittal letter for specifics of the proposed permit modification.

11. Facility Contact Information

Site Operator (Permittee or Registrant)

Name: City of Waco

Customer Reference Number: **CN** 600131940

Contact Name: Kody Petillo Title: Director of Solid Waste

Mailing Address: P.O. Box 2570

City: Waco County: McLennan State: TX Zip Code: 76702

Phone Number: 254-750-6627

Email Address: KodyP@wacotx.gov

Texas Secretary of State (SOS) Filing Number: _____

Operator (if different from *Site Operator*)

Name: _____

Customer Reference Number: **CN** _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____

Email Address: _____

Texas Secretary of State (SOS) Filing Number: _____

Consultant (if applicable)

Firm Name: SCS Engineers
Consultant Name: Brett DeVries
Texas Board of Professional Engineers Firm Registration Number: F-3407
Contact Name: Brett DeVries Title: Senior Project Manager
Mailing Address: 1901 Central Drive, Suite 550
City: Bedford County: Tarrant State: TX Zip Code: 76021
Phone Number: (817) 571-2288
Email Address: bdevries@scsengineers.com

Agent in Service (required for out-of-state applicants)

Name: _____
Mailing Address: _____
City: _____ County: _____ State: TX Zip Code: _____
Phone Number: _____
Email Address: _____

12. Ownership Status of the Facility

Is this a modification that changes the legal description, the property owner, or the Site Operator (Permittee or Registrant)?

Yes No

If the answer is "No", skip this section.

Does the Site Operator (Permittee or Registrant) own all the facility units and all the facility property?

Yes No

If "No", provide the following information for other owners.

Owner Name: _____
Mailing Address: _____
City: _____ County: _____ State: TX Zip Code: _____
Phone Number: _____
Email Address: _____

Signature Page

Site Operator or Authorized Signatory

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Bradley Ford Title: City Manager

Email Address: BradleyF@wacotx.gov

SR-2 Signature: [Signature] Date: 11/30/23

Operator or Principal Executive Officer Designation of Authorized Signatory

To be completed by the operator if the application is signed by an authorized representative for the operator.

I hereby designate _____ as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Operator or Principal Executive Officer Name: _____

Email Address: _____

Signature: _____ Date: _____

Notary

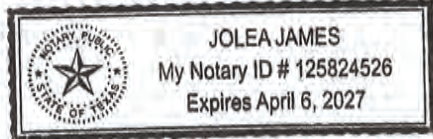
SUBSCRIBED AND SWORN to before me by the said Bradley Ford, City Manager

On this 30th day of November, 2023

My commission expires on the 6th day of April, 2027

Jolea James

Notary Public in and for McLennan County, Texas



Note: Application Must Bear Signature and Seal of Notary Public

Attachments for Permit or Registration Modification with Public Notice

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 1. Required attachments.

Required Attachments	Attachment Number
Land Ownership Map	B
Landowners List	B
Marked (Redline/Strikeout) Pages	C
Unmarked Revised Pages	D

Attachments Table 2. Additional attachments as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
<input type="checkbox"/> TCEQ Core Data Form(s)	NA
<input type="checkbox"/> Signatory Authority Delegation	NA
<input checked="" type="checkbox"/> Fee Payment Receipt	A
<input type="checkbox"/> Confidential Documents	NA

Attachments for Permit or Registration Modification without Public Notice, or Temporary Authorization

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 3. Required attachments for modifications.

Required Attachments for Modification	Attachment Number
Marked (Redline/Strikeout) Pages	NA
Unmarked Revised Pages	NA

Attachments Table 4. Additional attachments for modifications and temporary authorizations, as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
<input type="checkbox"/> TCEQ Core Data Form(s)	NA
<input type="checkbox"/> Signatory Authority Delegation	NA
<input type="checkbox"/> Fee Payment Receipt	NA
<input type="checkbox"/> Confidential Documents	NA

Attachments for Permit or Registration Name Change or Transfer Modification

Refer to instruction document **200650-instr** for professional engineer seal requirements.

Attachments Table 5. Required attachments.

Required Attachments	Attachment Number
TCEQ Core Data Form(s)	NA
Property Legal Description	NA
Property Metes and Bounds Description	NA
Metes and Bounds Drawings	NA
On-Site Easements Drawing	NA
Land Ownership Map	NA
Land Ownership List	NA
Property Owner Affidavit	NA
Verification of Legal Status	NA
Evidence of Competency	NA

Attachments Table 6. Additional attachments as applicable.

Additional Attachments as Applicable (select all that apply and add others as needed)	Attachment Number
<input type="checkbox"/> Signatory Authority Delegation	NA
<input type="checkbox"/> Fee Payment Receipt	NA
<input type="checkbox"/> Confidential Documents	NA
<input type="checkbox"/> Final Plat Record of Property	NA
<input type="checkbox"/> Assumed Name Certificate	NA

Your transaction is complete. Thank you for using TCEQ ePay.

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.

Transaction Information

Trace Number: 582EA000575280
Date: 11/02/2023 06:07 PM
Payment Method: CC - Authorization 0000054607
ePay Actor: KRYSTAL KUNTZ
Actor Email: kkuntz@scsengineers.com
IP: 99.48.161.145
TCEQ Amount: \$150.00
Texas.gov Price: \$153.63*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: BRETT DEVRIES
Company: SCS ENGINEERS
Address: 1901 CENTRAL DR SUITE 550, BEDFORD, TX 76021
Phone: 817-571-2288

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
668515	NONHAZARDOUS WASTE PERMIT - MODIFICATIONS		\$100.00
668516	30 TAC 305.53B HWP NOTIFICATION FEE		\$50.00
TCEQ Amount:			\$150.00

[ePay Again](#) [Exit ePay](#)

Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.

ATTACHMENT B

LANDOWNER'S LIST AND MAP

LIST OF ADJACENT LANDOWNERS
Permit No. MSW 948-A
City of Waco Landfill

The following landowner list provides the names, mailing addresses, and locations of the “Adjacent and Potentially Affected Landowners” around the facility. The list is based on Deed Records for McLennan County, and includes all tracts within 1/4-mile of the site. Refer to the Land Ownership map (Drawing 1), for location of the properties. The numbering on the landowner list corresponds to the numbers listed on the drawing. Additionally, no mineral interest owners were identified under the permit boundary, based on the real property appraisal records at the McLennan Central Appraisal District.

1	CITY OF WACO PO BOX 2570 WACO TX 76702	2	KRUEGER BRETT & TIERNY KRUEGER 1884 HANNAH HILL RD WACO TX 76712
3	OH HANA G 1606 HANNAH HILL RD WOODWAY TX 76712	4	PICKENS JOEY 1857 HANNA HILL RD WACO TX 76712
5	CHADWICK AMY ETAL 1759 HANNAH HILL RD WACO TX 76712	6	RUCKER PAMELA R & STEPHANIE LEIGH VEST 1693 HANNAH HILL RD WOODWAY TX 76712
7	BALDWIN JEFFREY A & JANIS C 1671 HANNAH HILL RD WACO TX 76712	8	MERIDIAN PRECAST & GRANITE INC 24000 WOODWAY DR WACO TX 76712
9	CITY OF WOODWAY 924 ESTATES DR WOODWAY TX 76712	10	TEX MIX LAND LTD PO BOX 830 LEANDER TX 78646
11	WATTS DINA CHIAROMONTE PO BOX 11015 COLLEGE STATION TX 77844	12	ANCIRA CARLOS A ETUX 443 STONE MANOR DR MCGREGOR TX 76657
13	ENVISION OFFERS LLC 2201 WASHINGTON AVE WACO TX 76701	14	SCHROEDER GREGORY M PO BOX 21628 WACO TX 76702

15	HOLLINGSHEAD MATERIALS LLC 1000 HOLLINGSHEAD CIR MURFREESBORO TN 37129	16	BETBAN INVESTMENTS LLC PO BOX 23131 WACO TX 76702
17	GSM PROPERTIES LTD 2524 AUSTIN AVE WACO TX 76710	18	WARREN SIGN CO PO BOX 23087 WACO TX 76702
19	KINCO INC 22009 BUSH DR WACO TX 76712	20	WOODWAY FIRST UNITED METHODIST CHURCH PO BOX 20548 WACO TX 76702
21	LEHIGH WHITE CEMENT CO 1601 FORUM PL STE 1110 WEST PALM BEACH FL 33401	22	LEHIGH PORTLAND CEMENT CO PO BOX 660140 DALLAS TX 75266
23	KUYKENDALL JASON & TONYA PO BOX 878 LORENA TX 76655	24	ANDERTON DAVID R & DEBRA D 11370 CHAPEL RD LORENA TX 76655
25	PIPE PORTFOLIO OWNER MULTI LP 5 CONCOURSE PKWY STE 1900 ATLANTA GA 30328	26	LEUTWYLER YOUNG BUICE PO BOX 741 GLEN ROSE TX 76043
27	LEUTWYLER JAYHUGH BEECHER III & BARBARA 788 LEUTWYLER LN WACO TX 76712	28	GLAZE WANDA LEUTWYLER ET AL 181 LEUTWYLER LN WACO TX 76712
29	GLAZE STEPHEN COOKE 401 OKLAHOMA AVE HEWITT TX 76643	30	SMITH MOLLIE ELIZABETH 777 LEUTWYLER LN WACO TX 76712

31 MCANINCH TRAVIS C &
KATHERINE L SHAVER
639 LEUTWYLER LN
WACO TX 76712

33 LEUTWYLER THOMAS
R LTE
CHAD LEUTWYLER 1571
CR 5035
LEONARD TX 75452

35 FARRAR CHARLES D
FAMILY LP
PO BOX 789
ELM MOTT TX 76640

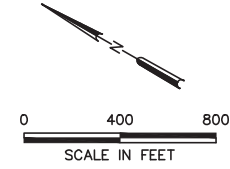
37 SMITH CONNIE DREW
PO BOX 23756
WACO TX 76702

32 BERRY BRANDON J &
JEANIE RENAY
445 LEUTWYLER LN
WOODWAY TX 76712

34 A-AFFORDABLE BOAT & RV
STORAGE LORENA LLC
725 HIGHWAY 287 N
SUTE 503
MANSFEILD TX 76063

36 CYGNUS PROPERTIES LLC
PO BOX 165
MARSHALL MN 56258

11/27/2023 1:08 PM \\BED-FSR\Users\cald\30 Projects\CADD\WACO\1822096.00 Task 14 - P-mx\LANDOWNERSHIP MAP



LEGEND

	PERMIT BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	1/4 MILE RADIUS

NOTES:

- ⑤ CORRESPONDS TO LANDOWNERS LISTED ON LANDOWNERS LIST.
- PROPERTY OWNERS WITHIN 1/4 MILE OF THE PERMIT BOUNDARY ARE SHOWN.
- ADJACENT LANDOWNER PROPERTY BOUNDARIES INDICATED ARE APPROXIMATE.



REV	DATE	DESCRIPTION	BY

DRAWING TITLE	LAND OWNERSHIP MAP
PROJECT TITLE	ATTACHMENT 14 LFG MANAGEMENT PLAN

CLIENT	CITY OF WACO LANDFILL, PERMIT NO. MSW-948A MCLENNAN COUNTY, TEXAS
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SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 1901 CENTRAL DRIVE, SUITE 550, BEDFORD, TX 76021 PH (817) 571-2288 FAX NO. (817) 571-2188	DATE: 11/27/23
PROJECT NO. 1822096.00 DRAWN BY: BJC CHECKED BY: B.J.D.	SCALE: AS SHOWN
DATE: 11/27/23	DRAWING NO. 1

CADD FILE: LANDOWNERSHIP MAP
DATE: 11/2023
SCALE: AS SHOWN
DRAWING NO. 1

FOR PERMITTING PURPOSES ONLY

TEXAS BOARD OF PROFESSIONAL ENGINEERS REG. NO. F-3407

ATTACHMENT C

MARKED VERSION

**CITY OF WACO LANDFILL
MCLENNAN COUNTY, TEXAS
TCEQ PERMIT NO. MSW-948A**

**PART IV
SITE OPERATING PLAN**

Prepared for:

City of Waco



Prepared by:

SCS ENGINEERS

TBPE Firm Registration No. F-3407
Dallas/Fort Worth Office
1901 Central Drive, Suite 550
Bedford, Texas 76021
817/571-2288



Revision 2 – December 2005, March 2006, April 21, 2006

Revision 3 – January 2012 and April 2012

Revision 4 – July 2013 and September 2013

Revision 5 – October 2020

Revision 6 – November 2023

SCS Project No. 16205047.00, 16210056.00, 16212092.00, 16220084.00 and 16223090.00

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Appendix IV-A Alternative Daily Cover Operating Plan

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APPENDIX IV-A
Alternative Daily Cover Operating Plan

**CITY OF WACO LANDFILL
McLENNAN COUNTY, TEXAS
TCEQ MSW PERMIT NO. 948-A**

ALTERNATE DAILY COVER OPERATING PLAN

Prepared for:

City of Waco



Prepared by:

SCS ENGINEERS
Dallas/Fort Worth Office
1901 Central Drive, Suite 550
Bedford, Texas 76021
817/571-2288



Brett J. DeVries 11/27/23

Note: This Alternate Daily Cover Operating Plan was previously approved by the TCEQ by permit modification dated January 24, 2005.

Revision 1 – December 2005
Revision 2 – November 2023

SCS Project No. 16205047.00 and 16223090.00

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Attachments

- 1 Tarps
- 2 DURASHIELD 12000
- 3 Waste-Cover
- 4 BioCover
- 5 TCEQ Permanent Approval of Alternate Daily Cover Operating Plan dated January 24, 2005.
- 6 VERDac Landfill Cover Pellets



SECTION 2

MATERIAL CHARACTERISTICS

2.1 DESCRIPTION OF ADC MATERIALS

The following types of ADC materials may be used at the Waco Landfill:

- Tarps – This category of alternative daily cover includes tarps comprised of polyethylene-coated fabric. This material is deployed in various sized panels. Typical panels are approximately 30-foot by 50-foot. The material is pulled over the working face on approved lined cells by a dozer or similar equipment at the close of business and removed the following morning prior to waste receipt. Tarps were approved for use as an ADC in a letter to the City of Waco, dated November 16, 1994 (see Attachment 1). This ADCOP updates that prior approval.

One example of material used for tarps is DURASHIELD 12000 which is manufactured by THOR Enterprises, Ltd. The tarp is manufactured in approximately 50' by 50', 2-layer panels. The material is reported to have a 5,000 pound tensile strength. DURASHIELD 12000 has been approved by the TNRCC (predecessor to TCEQ) for use at other landfills in Texas. Manufacturer's data is provided in Attachment 2).

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 - Waste-Cover, a product of Southwest Environmental Services, Inc., is sprayed at the working face using a mobile applicator. Waste-Cover is manufactured from recycled paper and wood, and other proprietary ingredients. Technical data on Waste-Cover is included in Attachment 3. Waste-Cover has been approved by TNRCC/TCEQ for use at other landfills in Texas.
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2.2 CHEMICAL CHARACTERISTICS

Characteristics of each ADC material are included in the Attachments to this ADCOP. The ADC materials proposed for use at the Waco Landfill are not reactive, ignitable, or corrosive.

SECTION 3

OPERATIONAL METHODS

The following subsections discuss the operational procedures that will be used to employ the proposed ADC materials. For each type of ADC, the Waco Landfill personnel will verify that the waste fill area has been covered with the minimum required thickness at the completion of each working day.

3.1 TARPS

Tarps will be deployed as follows:

- Panels of ADC material will be pulled over the working face.
- The perimeter of the tarps will be anchored approximately every 20 feet with tires, sandbags, or suitable material.
- The tarps will be removed the following morning and stored in an inactive area.
- This ADC will not be used if the landfill will be closed for more than 24 hours.

Based on experiences at numerous landfills in Texas and other states, this type of ADC has been shown to be effective in controlling vectors, fires, odors and windblown litter and waste.

3.2 SPRAY TYPE ADCS

The spray type ADCs included in this plan are Waste-Cover, ~~and~~ BioCover, ~~and~~ VERDac. Each material will be handled similarly. The material will be applied to the working face using a FINN T90 (900-gallon capacity) or similar equipment following the procedure listed below:

1. The operator will become familiar with the MSDS sheet on the product to be used before operating the application machine for ADC.
2. The operator will not operate the application machine until he has been trained by qualified personnel.
3. The operator will mix the spray ADC according to the manufacturer's recommendations. Then, using the application machine, the operator will apply the ADC from at least two different directions to achieve an overall thickness ~~of approximately 0.25 inches~~ consistent with manufacturer's recommendations over the exposed waste at the working face.
4. ~~This~~ ADC will not be used if the landfill will be closed for more than 24 hours.

Based on experiences at numerous landfills in Texas and other states, ~~these~~ these types of ADC ~~have~~ has been shown to be effective in controlling vectors, fires, odors and windblown litter and waste.

ATTACHMENT 6

VERDac LANDFILL COVER PELLETS

ATTACHMENT D

UNMARKED VERSION

**CITY OF WACO LANDFILL
MCLENNAN COUNTY, TEXAS
TCEQ PERMIT NO. MSW-948A**

**PART IV
SITE OPERATING PLAN**

Prepared for:

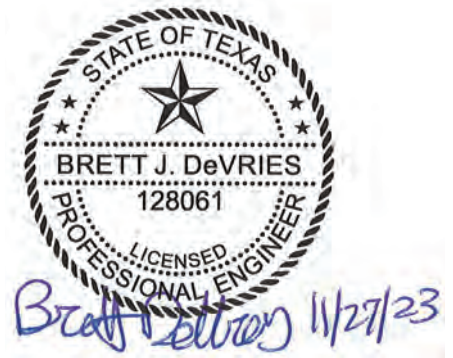
City of Waco



Prepared by:

SCS ENGINEERS

TBPE Firm Registration No. F-3407
Dallas/Fort Worth Office
1901 Central Drive, Suite 550
Bedford, Texas 76021
817/571-2288



Revision 2 – December 2005, March 2006, April 21, 2006

Revision 3 – January 2012 and April 2012

Revision 4 – July 2013 and September 2013

Revision 5 – October 2020

Revision 6 – November 2023

SCS Project No. 16205047.00, 16210056.00, 16212092.00, 16220084.00 and 16223090.00

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APPENDIX IV-A
Alternative Daily Cover Operating Plan

**CITY OF WACO LANDFILL
McLENNAN COUNTY, TEXAS
TCEQ MSW PERMIT NO. 948-A**

ALTERNATE DAILY COVER OPERATING PLAN

Prepared for:

City of Waco



Prepared by:

SCS ENGINEERS
Dallas/Fort Worth Office
1901 Central Drive, Suite 550
Bedford, Texas 76021
817/571-2288



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ATTACHMENT 6

VERDac LANDFILL COVER PELLETS



VERDac

LANDFILL COVER PELLETS

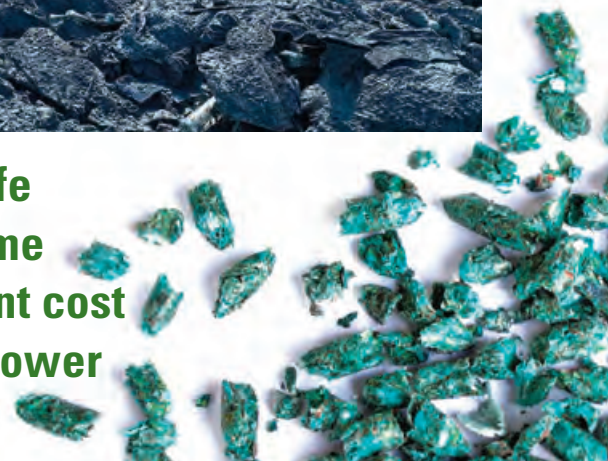


A revolutionary low cost pelletized daily cover.

VERDac is an economical spray applied cover that reduces equipment costs, liberates manpower, significantly shortens your daily cover operation, and returns valuable airspace formerly consumed by bulky soil cover.



- **Extend landfill life**
- **Shorten cover time**
- **Reduce equipment cost**
- **Reallocate manpower**



Shorter pallet height – easy to transport, ability to load full 1 ton pallet on top of hydroseeder without unpacking.



1 Ton Pallet of VERDac Pellets

1 Ton Pallet of Standard Hydromulch



Contact us today for more information.



VACP0720

VERDac

LANDFILL COVER PELLETS

Save time while you're saving airspace.

Loading and mixing is accomplished in less than half the time required for other standard mulch products. Can be used in any type or size hydroseeding unit, including jet agitated.

Features:

- Pelletized mulch combined with Posi-Shell® technology
- Meets all daily cover requirements
- Adheres to landfill surfaces
- Ideal for recycling waste latex paint
- Load and mix in less than half the time
- No dust
- Packaged in 50 lb (22.7 kg) bags, 40 bags per pallet
- VERDac pallets are half the size of traditional bale pallets
- May also be used for hydroseeding

For technical services or to locate your nearest VERDac dealer:



Call: **1-800-800-7671** • Email: **Sales@LSCenv.com**

Visit LSC online at: **www.LSCenv.com**

LSC Environmental Products, LLC

2183 Pennsylvania Ave., Apalachin, NY 13732

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Solutions for the Greener Good



ASTM D6523 COMPLIANCE

This document is designed to describe attributes, features, and specifications of VERDac Landfill Cover Pellets, as they relate to ASTM D6523 Evaluation and Selection of Alternative Daily Cover (ADCs) for Sanitary Landfills.

VERDAC LANDFILL COVER PELLETS BRIEF DESCRIPTION:

VERDac Landfill Cover Pellets is a spray-applied mulch and mineral mortar slurry comprised of water and a proprietary combination of cellulose fiber, powdered clay, adhesives, and water conditioners, used for waste cover and hydroseeding. It is a low-cost alternative to the conventional six inches (150 mm) of soil used as daily cover at most landfills. VERDac Pellets is a non-flammable blend of mulch and mineral binder providing a thin, non-toxic coating that performs all functions of landfill daily cover. Applied with a standard hydroseeding unit, this product provides increased landfill capacity while providing a more environmentally effective cover system for the landfill.

ASTM D6523 COMPLIANCE:

Classification: Spray-On Slurry

Features:

- 1. Method of Application:** Hydroseeding unit with spray tower and nozzles.
- 2. Cleaning & Maintenance:** VERDac cleans easily from application equipment and requires no modifications or additional maintenance.
- 3. Cover Removal:** Not a removable cover. VERDac tracks in easily when additional waste is placed on top of coating.
- 4. Weather Considerations:** VERDac can withstand rainfall and can be applied in windy conditions and during freezing temperatures or snow events.
- 5. Disease & Vector Control:** VERDac is easily applied at uniform thickness to visually conceal waste and not attract vectors.

2183 Pennsylvania Avenue, Apalachin, NY 13732



6. **Fire Control:** VERDac is nonflammable as tested per ASTM D-4982.
7. **Barrier to Gas Movement:** VERDac breaks up easily in the working face and does not form a barrier to landfill gas movement.
8. **Odor & Emissions Control:** As overnight cover on landfill working faces, VERDac performs equivalent or greater than typical soil cover.
9. **Erosion & Dust Control:** VERDac is primarily used for overnight waste cover but can also provide dust control on soil surfaces.
10. **Blowing Litter Control:** High adhesion and slurry density allow VERDac to efficiently control blowing litter.
11. **Water Shedding:** While VERDac sheds some water, these properties are not applicable to working face conditions where drained water typically remains within the limits of a lined cell.
12. **Life Expectancy:** VERDac Landfill Cover pellets are designed for overnight cover.

Cost Considerations:

VERDac is the most efficient and economical spray-applied overnight cover material on the market. It's unique compact pellet design make storage and handling of the product highly desirable for landfill personnel.

Proprietary Sole Source Product:

VERDac is the proprietary technology of LSC Environmental Products, LLC and is produced solely by LSC Environmental Products, LLC.

Additional Resources:

For additional resources such as test documentation, case studies, and customer references, please contact LSC Environmental Products, LLC. at 800-800-7671 or visit us at www.LSCenv.com



GHS Safety Data Sheet

SDS

LSC Environmental Products, LLC
Issue Date: July 10, 2020

VERDac Landfill Cover Pellets

Page 1 of 4

1 Identification

Supplier LSC Environmental Products, LLC
2183 Pennsylvania Ave
Apalachin, NY 13732

Telephone: 607-625-3050
Fax: 607-625-2688
Web: www.lscenv.com

Product Name **VERDac Landfill Cover Pellets**
Description: Green Dyed Cellulose Fiber from Shredded Wastepaper and Corn Fiber and Sodium Montmorillonite Clay with Additives
CAS Number: N/A
Recommended Use: Alternative Daily Cover and Hydroseeding.

2 Hazards Identification

Route of Entry: Eye Contact, Skin Contact, Inhalation

Hazards: Eye: May cause mechanical irritation.
Skin: May cause mild skin irritation.
Ingestion: No known health effects.
Inhalation: Acute: Short term exposure may cause mechanical irritation resulting in dry cough. May aggravate existing respiratory illness.
Chronic: Repeated inhalation of respirable* crystalline silica above exposure limits can cause lung disease, including silicosis and lung cancer.

3 Composition / Information on Ingredients

Components in order of Volume:
Cellulose Fiber, Corn Fiber, Sodium Montmorillonite Clay* (Cas # 1318-93-0), Proprietary ingredients and biodegradable green coloring.

*Typical western SMC contains 1-6% crystalline silica as quartz CAS# 14808-60-7.

4 First-Aid Measures

Eye: Flush eyes and under eye lids with plenty of water until irritation ceases. Contact physician if irritation persists.

Skin: Wash with soap and water until clean. Contact physician if irritation develops.

Ingestion: None known.

Inhalation: Move to area free from dust. If symptoms of irritation persist, contact physician.



GHS Safety Data Sheet

SDS

LSC Environmental Products, LLC
Issue Date: July 10, 2020

VERDac Landfill Cover Pellets

Page 2 of 4

Inhalation may aggravate existing respiratory illness.

5 Fire Fighting Measures

Flammability: Combustible product
Auto-ignition Temp: 400-500 F
Fire Extinguishing Media: Water, Carbon Dioxide, Sand.

6 Accidental Release Measures

Personal Precaution: Avoid breathing dust; wear respirator approved for silica bearing dust.
Cleanup: Vacuum to avoid generating airborne dust. Avoid using water. Material becomes slippery when wet.

7 Handling and Storage

Handling: Use NIOSH/MSHA respirators approved for silica bearing dust when airborne SMC dust levels exceed PEL/TLVs. Clean up spills promptly to avoid making dust. Storage area floors may become slippery if wetted.
Storage: Store in a dry place. Keep away from ignition sources.

8 Exposure Controls / Personal Protection

Exposure Guidelines (Inhalation):

Component	OSHA PEL (8 hr TWA)	ACGIH TVL
Crystalline Silica as Quartz	0.1 mg/m ³	0.1 mg/m ³
Wood Dust	1 mg/m ³	1 mg/m ³
Particles Not Otherwise Regulated		
Total Dust	15 mg/m ³	N/A
Respirable Dust	5 mg/m ³	N/A

Engineering Controls: None required for outdoor mixing and application. Use local ventilation to maintain PELs/TLVs if handling indoors.

Personal Protective Equipment:

Eye and Face Protection: Wear safety glasses or goggles during loading and application to protect from dust, splashing, and spray mist.

Skin Protection: Wear gloves and overalls to protect skin and clothing from contact with product. Personal hygiene measures, such as washing hands and face after working with materials, are recommended.



GHS Safety Data Sheet

SDS

LSC Environmental Products, LLC
Issue Date: July 10, 2020

VERDac Landfill Cover Pellets

Page 3 of 4

Respiratory Protection:

When handling generates dust levels above exposure limits, use respirators approved by NIOSH/MSHA for silica bearing dust.

9 Physical and Chemical Properties

Appearance:	Green Pellets
Odor:	N/A
Physical State:	Granular Mixture of Cellulose Fiber, Corn Fiber, Sodium Montmorillonite Clay, Proprietary Ingredients, Dye
pH:	5.5-7.0
Specific Density:	20-35#s/ft ³ (approximate)
Specific Gravity:	N/A
Solubility in Water:	<2%
Vapor Pressure (mm Hg):	N/A

10 Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	Avoid open flame. Store in dry areas.
Materials to Avoid:	N/A
Hazardous Polymerization:	No.

11 Toxicological Information

- Carcinogenicity:
- Sodium Montmorillonite Clay is not listed by ACGIH, IARC, NTP, or OSHA.
 - IARC, 1997, concludes that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica from occupational sources (IARC Class 1), that carcinogenicity was not detected in all industrial circumstances studied and that carcinogenicity may depend on characteristics of the crystalline silica or on external factors affecting its biological activity. NTP classifies respirable crystalline silica as "known to be a human carcinogen" (NTP 9th Report on Carcinogens - 2000). ACGIH classifies crystalline silica quartz as a suspected human carcinogen (A2).

12 Ecological Information

No information available.

13 Disposal Considerations

Bury in licensed landfill according to local, state, and federal regulations.



GHS Safety Data Sheet

SDS

LSC Environmental Products, LLC
Issue Date: July 10, 2020

VERDac Landfill Cover Pellets

Page 4 of 4

14 Transportation Information

US DOT: Non-regulated

15 Regulatory Information

None of the components in this product are known to be regulated by national or international regulatory bodies.

16 Other Information

SDS Status: Revised from MSDS format in 2015 to comply with GHS requirements.

All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances.

No warranty or guarantee, expressed or implied, is made by LSC Environmental Products, LLC as to this information or as to the safety, toxicity, or effect of the use of this product.