

**SOAH DOCKET NO. 582-08-2178
TCEQ DOCKET NO. 2007-1774-MSW**

IN RE THE APPLICATION OF BFI WASTE SYSTEMS OF NORTH AMERICA, LLC PERMIT NO. MSW-1447A	§ § § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS
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**APPLICANT BFI WASTE SYSTEMS OF NORTH AMERICA, LLC'S
MOTION FOR LEAVE TO FILE
SUPPLEMENTED PRE-FILED TESTIMONY AND EXHIBITS**

Applicant BFI WASTE SYSTEMS OF NORTH AMERICA, LLC (BFI) files this Motion for Leave to File Supplemented Pre-Filed Testimony and Exhibits and, in support thereof, would show the following:

I. INTRODUCTION

BFI seeks leave to supplement its prefiled testimony, to put into evidence two important events that occurred after the deadline for filing pre-filed testimony. The first is testimony regarding a Rule 11 Agreement that BFI reached with the City of Austin. The second is the merger of the Applicant's parent corporation with another corporation. Although BFI is sensitive to the ALJ's prior ruling that the time for filing pre-filed testimony has passed, BFI believes that it is important that these two events be brought out early in the proceedings, where they can be subject to full discussion. All parties are well aware of both events, so that introducing these issues into BFI's direct case will not prejudice any party to this proceeding. BFI has conferred with attorneys for the protestants but, as discussed below, was unable to reach an agreement with all parties that would allow for the supplementation without a ruling from the ALJ.

II. RULE 11 AGREEMENT

Subsequent to the deadline for filing of pre-filed testimony in this case, BFI negotiated an Agreement with the City of Austin, a Protestant in this proceeding, which addressed the City's concerns regarding erosion and sedimentation controls and certain operating practices for the proposed expansion of the Sunset Farms Landfill. The Agreement was made in writing and filed with the pleadings in this case as required by TEX. RULE OF CIVIL PROCEDURE, Rule 11.

Other protestants and other parties are fully aware of the existence of the Rule 11 Agreement and the terms thereof pursuant to filing and service of the Agreement on October 31, 2008. Members of Protestant NNC and representatives of protestant TJFA have appeared before the City of Austin City Council and/or otherwise met with City representatives seeking to persuade the City Council to rescind the Rule 11 Agreement. Indeed, a telephonic pre-hearing conference was held in this proceeding on November 13, 2008, regarding NNC's Motion for Continuance arising from the perceived effects of the Rule 11 Agreement. The existence of the Rule 11 Agreement is not a surprise to the parties of this proceeding for the further reason that the terms of the Rule 11 Agreement were a subject of the depositions of the two protestant witnesses offering expert testimony on these issues and admission of the Agreement into evidence as an exhibit will not prejudice any party.

Attempts by representatives of both TJFA and NNC to have the Rule 11 Agreement set aside culminated at the Austin City Council meeting on January 15, 2009, to consider such action. Item No. 65 on the City Council's agenda stated:

Discuss legal issues related to the application of BFI Waste Systems of North America for a vertical expansion of its landfill located in Northeast Travis County, known as the Sunset Farms Landfill ("the Landfill"), the subject of SOAH Docket No. 582-08-2178. (Private Consultation with Attorney - Section 551.071). Related to Item #69.

Item No. 70 on the City Council's agenda stated:

Take possible action related to the application of BFI Waste Systems of North America for a vertical expansion of its landfill located in Northeast Travis County, known as the Sunset Farms Landfill ("the Landfill"), the subject of SOAH Docket No. 582-08-2178. Related to Item #64.

At the City Council meeting, the City took no action regarding the Rule 11 Agreement, meaning that the Rule 11 Agreement was not rescinded but remained a binding Agreement between the City, BFI and Giles.

In response to the Rule 11 Agreement, the TCEQ has developed certain proposed special provisions, which, as required by the Rule 11 Agreement, BFI will request be added to the permit. In order to avoid any confusion or conflict between the provisions of the Rule 11 Agreement and the Application and to make the terms of the Agreement more easily enforceable by its enforcement personnel, the TCEQ has requested that certain revisions be made to the Application reflecting those special conditions. The Rule 11 Agreement itself is Attachment A hereto. The proposed special provisions to implement the Rule 11 Agreement are attached as Attachment B hereto.

Attachment C, D, and E hereto are supplemented pages of testimony and related exhibits for BFI witnesses Ray Shull, Adam Mehevec, and Brad Dugas, respectively. This supplemented prefiled testimony updates each witness' prior pre-filed testimony by addressing the Rule 11 Agreement (which is also in evidence as City of Austin Exhibit 3), by describing the special conditions proposed by the TCEQ staff to implement the Rule 11 Agreement, and by providing revised pages to the Application which implement the Rule 11 Agreement and special conditions. On the executive director's preliminary review, he finds the revisions to be minor and that they appear to provide an appropriate approach to incorporating the settlement provision into the application.

Applicant proposes supplementation of its testimony to bring the Rule 11 Agreement, the proposed special conditions, and the revised pages of the Application into the record as part of its pre-filed direct case in order to present a full and fair record from the outset of the hearing on the merits and to avoid unnecessary delay in the disposition of the proceeding. (See 1 T.A.C. §155.15(a).) Applicant anticipates that other parties may wish to cross examine Messrs. Mr. Shull, Mehevec and Dugas based on the terms of the Rule 11 Agreement, the proposed special conditions, and/or the proposed revised pages of the Application. Incorporating the testimony and exhibits into the Applicant's direct case through its first witness, rather than waiting until cross examination or rebuttal testimony, will serve to organize the information and aid the Court's understanding of the issues in this case.

For these reasons, BFI requests leave to supplement its pre-filed testimony and exhibits with Attachments A (Rule 11 Agreement, Exhibit RS-42), Attachment B (TCEQ Proposed special conditions, Exhibit RS-43), Attachment C (supplemented testimony of Ray Shull and exhibits of Ray Shull), Attachment D (supplemented testimony and exhibits of Adam Mehevec) and Attachment E (supplemented testimony and exhibits of Brad Dugas).

III. MERGER OF BFI PARENT COMPANY

Also subsequent to the deadline for filing of pre-filed testimony in this case, BFI Waste Services of North America, LLC's parent company, Allied Waste Industries, Inc., completed a merger with Republic Systems, Inc. on December 5, 2009. While the merger does not affect the corporate structure of BFI Waste Services of North America, LLC, the Applicant in this proceeding, the Applicant believes it is appropriate for a complete record to include the fact of the merger in the direct pre-filed testimony of the Applicant's corporate representative in this

hearing, Mr. Brad Dugas. This additional supplemental testimony of Mr. Dugas is also contained in Attachment E hereto.

The fact of the merger is already known to protestants (this matter was a subject of deposition testimony of Mr. Dugas) and including testimony regarding the merger will not prejudice any party but will provide a complete and accurate record of the matters of concern in this proceeding and will avoid unnecessary delay in the disposition of the proceeding.

IV. CONFERENCE WITH PARTIES

BFI has attempted to reach agreement with the parties as to the most expeditious manner in which to present the newly arising issues addressed in the proposed supplemental pre-filed testimony and exhibits as set forth above. Counsel for the TCEQ supports this Motion. The Office of Public Interest Counsel does not oppose this Motion. Counsel for Travis County supports the Motion as long as its approval will not delay these proceedings. BFI and Giles Holding, Inc. and thereby support this Motion. Counsel for the City of Austin supports the introduction of the supplemental testimony and exhibits and does not oppose the Motion. NNC and TJFA oppose the Motion.


V. CONCLUSION AND PRAYER

For the reasons set forth above, BFI requests to be allowed to inform the record as to the Rule 11 Agreement by offering the Rule 11 Agreement as Exhibit RS-42 (Attachment A), by offering the special conditions proposed by the TCEQ as Exhibit RS-43 (Attachment B); by supplementing the pre-filed testimony of Ray Shull, Adam Mehevec, and Brad Dugas, including additional exhibits as set forth in Attachments C, D, and E hereto (respectively); and to inform the record as to the merger of BFI's parent company by supplementing the pre-filed testimony of

Brad Dugas as further set forth in Attachment C hereto. BFI further requests such additional or alternative relief to which it might show itself justly entitled.

Respectfully submitted,

**LLOYD GOSSELINK
ROCHELLE & TOWNSEND, P.C.**
816 Congress Ave., Suite 1900
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(512) 322-5800
(512) 472-0532 (Fax)

By: 

PAUL G. GOSSELINK
State Bar Number 08222800

**ATTORNEYS FOR APPLICANT
BFI WASTE SYSTEMS OF NORTH
AMERICA, LLC**

OF COUNSEL:

JOHN E. CARLSON
State Bar No. 00790426

JOHN R. MOORE
State Bar No. 14348565

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Motion for Leave to File Supplemented Pre-Filed Testimony was served on the following counsel/parties of record by certified mail (return receipt requested), regular U.S. mail, facsimile transmission and/or hand delivery and via e-mail on January 16, 2009:

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Paul G. Gosselink

ATTACHMENT A



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October 31, 2008

Judge William E. Newchurch
State Office of Administrative Hearings
300 W. 15th Street, Suite 504
Austin, Texas 78701

Re: SOAH Docket No. 582-08-2178; TCEQ Docket No. 2007-1774-MSW
Permit Amendment Application of BFI Waste Systems of North America, LLC
MSW Permit No. 1447A; Rule 11 Agreement

Dear Judge Newchurch:

Enclosed for filing please find the Rule 11 Agreement by and between the City of Austin, BFI Waste Systems of North America, LLC, and Giles Holdings, LP.

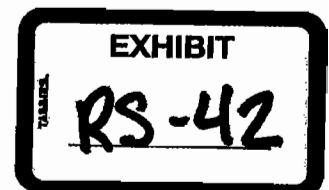
By copy of this letter we are providing copies of the Rule 11 Agreement and all attachments to all parties of record in this case.

Respectfully submitted,


Paul Gosselink

Enclosures

cc: See attached Certificate of Service
Gary McCuiston
Brad Dugas



Certificate of Service

I hereby certify that a true and correct copy of the foregoing document was served on the following counsel/parties of record by certified mail (return receipt requested), regular U.S. mail, facsimile transmission and/or hand delivery on October 31, 2008:

FOR THE CHIEF CLERK:

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Paul G. Gosselink

SOAH Docket No. 582-08-2178
TCEQ Docket Number 2007-1774-MSW

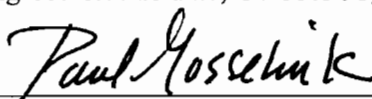
IN THE MATTER OF THE	§	
APPLICATION OF BFI WASTE	§	BEFORE THE STATE
SYSTEMS OF NORTH AMERICA, INC.	§	OFFICE OF ADMINISTRATIVE
PROPOSED SOLID WASTE PERMIT	§	HEARINGS
AMENDMENT No. 1447A	§	

RULE 11 AGREEMENT

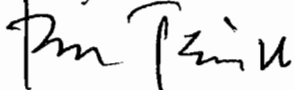
Pursuant to Rule 11 of the Texas Rules of Civil Procedure, the undersigned counsel agree as follows:

1. The City of Austin ("City"), BFI Waste Systems of North America, LLC ("BFI") and Giles Holdings, L.P. ("Giles") have entered into a binding Agreement Regarding Operations and Closure of the Sunset Farms Landfills ("Agreement") (copy attached as Exhibit A).
2. BFI, Giles and the City desire for the TCEQ to consider the Agreement in this contested case.
3. BFI, Giles and the City desire and request that the proposal for decision and any permit amendment issued by the TCEQ in this contested case contain the provisions set out in the Agreement as Special Conditions in the permit.
4. The City participation in the contested case hearing will be limited to testimony and evidence in support of the terms of this Rule 11 Agreement and the Agreement.

Agreed on this date, October 31, 2008.



Paul Gosselink
Texas State Bar No. 0822280
Attorney for BFI Waste Systems of North America, LLC



~~Paul Terrill~~ TERRILL
Texas State Bar No. 00785094
Attorney for Giles Holdings, LP



Holly Noelke
Texas State Bar No. 04651000
Attorney for City of Austin

Certificate of Service

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Paul G. Gosselink

**AGREEMENT REGARDING OPERATIONS
AND CLOSURE OF THE SUNSET FARMS LANDFILL**

This Agreement ("Agreement") is made by and between BFI Waste Systems of North America, LLC ("BFI"), Giles Holdings, L.P. ("Giles"), and the City of Austin ("Austin" or "City") a home rule municipality located in Travis County Texas, in connection with BFI's application to expand the Sunset Farms Landfill ("Landfill") located at 9912 Giles Road in Travis County, Texas.

I. RECITALS

Whereas, BFI applied to the Texas Commission on Environmental Quality (TCEQ) for a vertical expansion to the Sunset Farms Landfill (TCEQ MSW Draft Permit No. 1447A);

Whereas, BFI's application to expand the Landfill has been referred to the State Office of Administrative Hearings (SOAH) for a contested case hearing, SOAH Docket No. 582-08-2178;

Whereas, Austin obtained party status in SOAH Docket No. 582-08-2178 with the stated goals of ensuring discontinuance of waste acceptance at the Landfill by November 1, 2015 and requiring improved enforceable operating standards as long as the Landfill remains open;

Whereas, the area surrounding BFI has become urbanized through the years subsequent to the initial permitting of the Landfill;

Whereas, landfill operations in close proximity to residential neighborhoods present unique problems requiring specialized solutions;

Whereas, a portion of the property on which the Landfill is located is owned by Giles and the remaining property on which the landfill is located is owned by BFI;

Whereas, BFI is of the opinion that it has a valid exemption from the City's site development plan permitting requirements;

Whereas, the City is of the opinion that BFI must obtain administrative site plan approval under Austin City Code Chapter 25-5, Article 2;

Whereas, whether and the extent to which BFI can vertically expand the Landfill and whether Austin can prevent or restrict the expansion is uncertain; and

Whereas BFI and Austin have agreed to resolve their disputes regarding closure and operations of the Landfill.

NOW THEREFORE and in consideration of the mutual covenants and agreements to be performed as set out below, City, BFI and Giles agree as follows:

II. ACKNOWLEDGEMENTS, REPRESENTATIONS, AND WARRANTIES

- A. BFI and Giles and Austin acknowledge that they understand the purpose and intent of this agreement.
- B. BFI and Giles and Austin represent and warrant that they have the full right and authority to execute this agreement.

III. DEFINITIONS

For the purposes of this Agreement:

- A. **Side slope** means the exterior edges of fill areas or sidewalls of detention ponds which generally will have a slope steeper than 10%.
- B. **Top deck** means the top portion of the landfill which generally will have a slope flatter than 10%.
- C. **Adequate vegetation growth** means 85% surface area coverage in vegetation at least 1" tall.
- D. **Seeding events** means seeding in compliance with City of Austin Environmental Criteria Manual (ECM) Section 1.4.7 A (Exhibit 1) except as otherwise noted.
- E. **Amended landfill permit** means proposed TCEQ draft permit 1447A for the Sunset Farms Landfill.
- F. **Property** means the property on which the Landfill operates as described in the amended landfill permit application.

IV. TERMS

- A. BFI agrees to cease accepting waste at the Landfill and agrees to restrict the property on which the landfill operates from accepting waste after November 1, 2015 and to further restrict the property on which the landfill currently operates from use for transfer station operations.
- B. Giles agrees to restrict the property on which the Landfill operates from accepting waste after November 1, 2015 and to further restrict the property on which the landfill currently operates from use for transfer station operations.

C. This Agreement is understood by the parties to be a written contract under which the Parties are granting certain concessions and providing services to one another. This Agreement shall be binding upon and inure to the benefit of each and all of the Parties hereto and their affiliates, successors and assigns and shall be a covenant and restriction running with the land that constitutes the Landfill site and adjacent land owned by BFI and Giles as follows:

Parcel 1: Approximately 54.13 acres of land of the LUCAS MUNOS SURVEY, ABSTRACT NO. 55, in Travis County, Texas and being more particularly described by metes and bounds in Document No. 2005198209 of the Travis County Real Property Records, said Document attached as Exhibit "A" hereto.

Parcel 2: Approximately 172.531 acre tract of land out of the LUCAS MUNOS SURVEY No. 55, Abstract 513, being a portion of a 176.10 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 101, of the deed records of Travis County, Texas; said 172.531 acres being more particularly described by metes and bounds in Exhibit "B" attached hereto.

Parcel 3: Approximately 122.711 acre tract of land out of the LUCAS MUNOS SURVEY No. 55, Abstract 513, being a portion of a 73.20 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 117 and a portion of a 102.87 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 109, both of the deed records of Travis County, Texas; said 122.711 acres being more particularly described by metes and bounds in Exhibit "C" attached hereto.

Giles and BFI represent that no other person or entity other than themselves currently possesses any interest in such land that would allow them to dispose of waste or operate a transfer station at the Landfill and agree that such covenant and restriction shall bind all future holders of any interests in such land. BFI and Giles will execute and deliver to Austin a document memorializing the restrictive covenant and the City of Austin may record the restrictive covenant in the Travis County Real Property Records. BFI and Giles agree that any sale, assignment, or transfer of the Landfill permit shall be made expressly subject to the terms of this Agreement.

D. BFI will comply with the following terms related to drainage, erosion and revegetation:

1. BFI agrees to place intermediate cover and implement seeding events, on all side slope disturbed areas on which activity has not recommenced within 60 days except BFI is under no obligation to seed such areas during the months of July

and August. These seeded areas shall be irrigated in accordance with the requirements of Exhibit 1.

2. BFI agrees to place intermediate cover and implement seeding events on the top deck of the landfill in all disturbed areas on which activity has not recommenced within 120 days except for that area immediately up gradient to the five proposed or constructed drainage down chutes on intermediate cover areas as shown on attached Exhibit 2. Those up gradient areas shall be immediately vegetated upon construction of each down chute with a filter strip of buffalo grass sod that extends at least 100 feet out from each down chute inlet and is wide enough to filter the run off to be directed to each down chute (See Exhibit 2 for width dimensions). The buffalo grass filter strip shall be maintained until final cover is placed. In addition, a silt fence or mulch berm shall be placed on the top deck in front of the inlet of each down chute and at the end of each constructed down chute (See Exhibit 2 for locations). These silt fences or mulch berms shall remain in place and be maintained until the areas contributing runoff to these down chutes achieve adequate vegetation growth.
3. The initial seeding event for all disturbed areas will be accomplished using hydro-mulch seeding application procedures per Exhibit 1.
4. Seeding of the disturbed areas will be of a seasonally appropriate mix. Currently the seed mix is bermuda/millet for warm weather and rye for cold weather. When cold weather seed is used the seeded area shall be reseeded within 60 days of the onset of sufficiently warm weather to support the warm weather mix. The reseeded area shall be irrigated until adequate vegetation growth is achieved.
5. Seeding for the final cover shall include a seasonally appropriate 609-S (native seeds) mix as defined in the City of Austin Standard Specifications Manual on approximately 15% of the surface area of the eastern and northern slopes of the landfill and for the remainder of the site a seasonally appropriate mix.
6. Perimeter sediment/erosion control devices such as silt fences, hay bales or other systems acceptable to the City shall be in place prior to the establishment of any soil stock piles on site. For soil stock piles which have slope lengths greater than 20 feet, mid-slope temporary stabilization controls such as seeding, tarping or placement of silt fences or mulch berms shall be implemented within fourteen days of the initial establishment of the soil stock pile and shall be maintained in good working condition until the stockpile is removed.
7. BFI shall install and maintain silt fences or mulch berms within 14 days of completion of intermediate cover at the base of all side slope and top deck intermediate cover areas until adequate vegetation growth is achieved.
8. Stormwater runoff from the landfill area designated as Drainage Area 2 shall be routed through the existing detention pond, or the proposed water

quality/detention pond, when the waste fill in Drainage Area 2 has reached the final grades proposed in the landfill expansion plan.

9. BFI will ensure that the side slopes of the existing detention pond and the side slopes of the proposed water quality/detention pond in the northeast portion of the landfill shall be adequately stabilized through proper grading and maintenance and by implementing/applying vegetation on the side slopes of the ponds within thirty days of completion of construction of the pond. BFI further agrees to inspect the sedimentation ponds/basins every three months and after every half-inch rainfall event and to clean the ponds/basins by removing the accumulated sediment once the sediment has reached 25% of the respective pond capacity.
10. BFI shall amend its Storm Water Pollution Prevention Plan (SWPPP) for the Sunset Farms Landfill within 90 days of the effective date of this Agreement so as to incorporate the specific practices and procedures described in this Agreement. The SWPPP will be submitted to the City for review and concurrence.
11. BFI agrees to begin operating the Sunset Farms Landfill pursuant to the terms of this Agreement and the amended SWPPP within 60 days after the SWPPP has been amended and the City's concurrence has been achieved.

E. BFI agrees that it shall not accept liquid waste that has not passed the TCEQ's paint filter test and shall not construct or operate a liquid waste stabilization/solidification basin at the Sunset Farms Landfill.

F. BFI agrees to prohibit commercial waste hauling vehicles from utilizing Blue Goose Road as ingress or egress to the Sunset Farms Landfill except for those few vehicles which service businesses and residences in that area. Specifically, BFI shall progressively discipline any of its own drivers, up to and including termination, which ignore this prohibition. BFI shall also incorporate into its future and/or renewal contracts with other commercial waste haulers that the haulers will not be allowed to dispose of their waste loads at the Sunset Farms Landfill if they utilize Blue Goose Road for ingress or egress more than one time.

G. BFI will request that the Administrative Law Judge issue a proposed permit containing special provisions incorporating the terms of paragraphs D. 1 through 9 and E. and F. as set out above .

H. BFI will request a site plan permit from the City for the Landfill vertical expansion, and will file a site plan permit application with Austin within 60 days of execution of this Agreement. The City will process this site plan application as a "D" site plan application under Austin City Code Chapter 25-5, Article 2, and will not unreasonably withhold approval of the site plan if all technical requirements of the City are satisfied.

J. As long as BFI and Giles are in substantial compliance with this Agreement, Austin will limit its participation in the contested case hearing regarding the landfill expansion to testimony and matters in support of the terms of this Agreement.

V. TERM, TERMINATION

A. This Agreement shall be effective from and after the date of execution.

B. If any party defaults in the performance of any of the terms or conditions of this Agreement, the defaulting party shall have 10 days after receipt of written notice of the default within which to cure the default. If such default is not cured within the 10 days, then the offended party shall have the right without further notice to terminate this Agreement or seek enforcement of the Agreement in court including specific performance of the terms of the Agreement and attorneys fees.

C. The parties agree that monetary damages would be inadequate compensation if any party defaults in the performance of any of the terms or conditions of this Agreement, therefore specific performance should be required.

VI. MISCELLANEOUS

A. Severability. If any section, subsection, sentence, clause, or phrase of this Agreement is for any reason held to be unconstitutional, void, or invalid, the validity of the remaining portions of the Agreement shall not be affected thereby. It is the intent of the parties signing this Agreement that no portion of it, or provision or regulation contained in it shall become inoperative or fail by reason of unconstitutionality or invalidity of any other section, subsection, sentence, clause, phrase, provision, or regulation of this Agreement.

B. Force Majeure. No party shall be liable for any delay, failure or default in performing under this Agreement if such delay, failure or default is caused by conditions beyond its control including – but not limited to Acts of God, government restrictions, wars, insurrections and/or any other cause beyond the reasonable control of the party whose performance is affected.

C. Law and Venue. This Agreement shall be governed by the laws of the State of Texas. The obligations under this Agreement are performable in Travis County, Texas. It is expressly understood that any lawsuit or litigation arising out of or relating to this Agreement will take place in Travis County, Texas.

D. Alteration, Amendment, or Modification. This Agreement may not be altered, amended, or modified except in writing, approved by BFI and Giles and the City Manager of the City of Austin or his designee.

E. Entire Agreement. This Agreement constitutes the entire agreement between Austin and BFI and Giles. No other agreement, statement or promise relating to the subject matter of this Agreement which is not contained in this Agreement is valid or binding.

F. Notice. Notices to either party shall be in writing, and may be either hand delivered or sent by certified or registered mail, postage paid, return receipt requested. If sent to the parties at the addresses designated herein, notice shall be deemed effective upon receipt in the case of hand delivery and three days after deposit in the U.S. Mail in case of mailing. The address of the City of Austin for all purposes shall be:

CITY: City of Austin
Solid Waste Services
P.O. Box 1088
Austin, Texas 78767

The address for BFI and for Giles for all purposes under this Agreement and for all notices hereunder shall be:

BFI:
2575 IH 35 South, Suite 103
San Marcos, TX. 78666

Giles:
Steve Mobley
2205 Westover Road
Austin, Texas 78703

Ron Habitzreiter
1208 West Avenue
Austin, Texas 78701

F. Giles joins this Agreement for the reason that it owns fee simple title to land on which the Landfill is located and leases that land to BFI for operation of the Landfill and benefits from the mutual covenants and agreements herein. Giles hereby consents to BFI and Austin entering into, complying with and enforcing the terms of this Agreement and agrees to take no action that would be inconsistent with or impede implementation of and compliance with this Agreement by any Party.

IN WITNESS WHEREOF, the authorized representative of Austin, Giles and BFI, by the signature of their authorized representatives below, have caused this Agreement to be executed in duplicate originals, effective as of the latest of the three dates entered below.

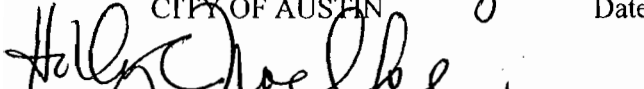
~~BFI WASTE SYSTEMS OF
NORTH AMERICA, LLC~~

Date: _____


Assistant City Manager
CITY OF AUSTIN

Date: _____

Oct. 31, 2008


Assistant City Attorney

~~GILES HOLDINGS, L.P.
Formerly Known as Mobley
Chemicals, Inc.~~

Date: _____

IN WITNESS WHEREOF, the authorized representative of Austin, Giles and BFI, by the signature of their authorized representatives below, have caused this Agreement to be executed in duplicate originals, effective as of the latest of the three dates entered below.

BFI WASTE SYSTEMS OF
NORTH AMERICA, LLC

CITY OF AUSTIN

Brenda Dwyer MANAGER VICE PRESIDENT

GILES HOLDINGS, L.P.
Formerly Known as Mobley Chemicals, Inc.

GILES HOLDINGS, L.P.
Formerly Known as Mobley Chemicals, Inc.

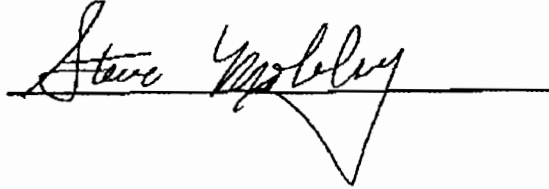
A handwritten signature in cursive script, appearing to read "Steve Mobley", is written over a solid horizontal line. The signature is fluid and somewhat stylized, with a large loop at the end of the last name.

Exhibit A

Approximately 54.13 acres of land of the LUCAS MUNOS SURVEY, ABSTRACT NO. 55, in Travis County, Texas and being more particularly described by metes and bounds in Document No. 2005198209 of the Travis County Real Property Records, said Document attached as Exhibit "A" hereto.

150
2116 1111 / 12

5/30

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER

**FOLLOWING RECORDATION,
RETURN TO:**



LD 2005198209
5 PGS

BFI WASTE SYSTEMS OF NORTH AMERICA, INC.
c/o Allied Waste Industries, Inc.
15880 N. Greenway-Hayden Loop, Suite 100
Scottsdale, AZ 85260
Attn: Steven M. Helm, Vice-President - Legal

SPECIAL WARRANTY DEED

Date: August 17, 2004

Grantor: Giles Holdings, L.P.

Grantor's Mailing Address (including county):
c/o Steve Mobley
2205 Westover Road
Austin, Travis County, Texas 78703

Grantee: BFI WASTE SYSTEMS OF NORTH AMERICA, INC.

Grantee's Mailing Address:
c/o Allied Waste Industries, Inc.
15580 N. Greenway-Hayden Loop, Suite 100
Scottsdale, AZ 85260

I, Dana DeBeauvoir, County Clerk, Travis County, Texas, do hereby certify that this is a true and correct copy as same appears of record in my office. Witness my hand and seal of office of Dana DeBeauvoir, County Clerk
By Deputy: Michael P. Gonzalez
Michael P. Gonzalez
Dec 30 2004

Consideration:

The Grantor acknowledges the receipt of \$10.00 and other good and valuable consideration paid to Grantor by Grantee, for which no lien, express or implied is retained.

Property (including any improvements):

APPROXIMATELY 54.13 acres of land out of the LUCAS MUNOS SURVEY, ABSTRACT NO. 55, in Travis County, Texas and being more particularly described by metes and bounds in Exhibit "A" attached hereto, SAVE AND EXCEPT that

portion of the subject property lying within that certain 1.606 acre tract of land awarded to the City of Austin in Eminent Domain proceedings, recorded in Document No. 2003143218, Official Public Records of Travis County, Texas.

Reservations From and Exceptions to Conveyance and Warranty:

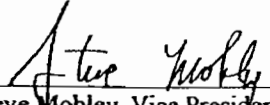
Subject to taxes and assessments not yet delinquent, reservations in patents and all easements, rights of way, liens, covenants, conditions, restrictions, obligations and liabilities as may appear of record and such state of facts as would be disclosed by a proper inspection or accurate TLTA survey of the Property

Grantee is accepting and taking the Property in its current condition, "AS IS".


Grantor, for the consideration set forth herein and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and conveys to Grantee the above referenced property, together all the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's successors, or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators, and successors to warrant and forever defend said property to Grantee and Grantee's successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, when the claim is by, through, or under Grantor, except as to the reservations from and exceptions to conveyance and warranty set forth herein. When the context requires, singular nouns and pronouns include the plural.

EXECUTED this 17 day of AUGUST, 2004.

GILES HOLDINGS, L.P.
by: Mobley Management Company,
General Partner



Steve Mobley, Vice President

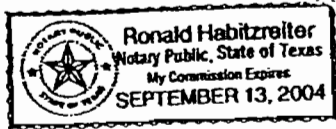
I, Dana DeBeauvoir, County Clerk, Travis County, Texas, do hereby certify that this is a true and correct copy as same appears of record in my office. Witness my hand and seal of office on Dec 30, 2005
Dana DeBeauvoir, County Clerk
By Deputy

Michael P. Gonzalez

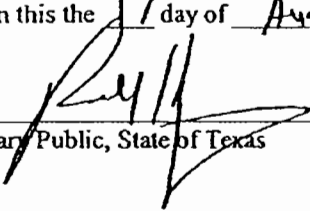
ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

BEFORE ME, the undersigned authority, on this day personally appeared Steve Mobley, the Vice-President of Mobley Management Company in its capacity as General Partner of Giles Holdings, L.P., a Texas limited partnership, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity stated.

Given under my hand and seal of office on this the 17 day of AUGUST, 2004.




Notary Public, State of Texas

I, Dana DeBeauvoir, County Clerk, Travis County, Texas, do hereby certify that this is a true and correct copy as same appears of record in my office. Witness my hand and seal of office on



By Deputy:


Michael P. Gonzales

Dec 30, 2005

EXHIBIT "A" TWO PAGES

54.13 Acres
Lucas Munos Survey No. 55, A-513
Travis County, Texas

FN 2945 (TWH)
May 14, 2003
SAM, Inc. Job No. 23147-01

SAID 54.13 ACRE TRACT OF LAND AS SHOWN ON SURVEYING AND MAPPING, INC. DRAWING NUMBER 23147-01.DWG AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod found in the southwest Right-of-Way (ROW) line of Blue Goose Road, a variable width ROW for which no deed information was found, for the northwest corner of said 55.10 acre tract;

THENCE with the southwest ROW line of said Blue Goose Road, the northeast lines of said 55.10 acre tract, and the northeast lines of the tract described herein, the following two (2) courses and distances:

1. S 63° 16' 26" E, a distance of 532.82 feet to A 1/2-inch iron rod found, and
2. S 63° 01' 29" E, a distance of 2574.44 feet to a 1/2-inch iron rod with a plastic cap marked "SAM, INC" set in the proposed northwest ROW Line of Giles Road, a variable width ROW, described in a Right of Entry and Possession Agreement with the City of Austin as recorded in Document No. 2000069038 of the Official Public Records of Travis County Texas;

THENCE leaving the northeast line of said 55.10 acre tract, and crossing said 55.10 acre tract with the proposed northwest ROW line of said Giles Road, being the southeast line of the tract described herein, the following six (6) courses and distances:

1. S 26° 54' 06" W, a distance of 20.00 feet to a 1/2-inch iron rod with a plastic cap found at the beginning of a non-tangent curve to the right, from which a 1/2-inch iron rod found in the southeast ROW line of said Giles Road bears S 61° 54' 17" E, a distance of 179.98 feet.
2. with the arc of said curve to the right, passing at a distance of 17.14 feet a 1/2-inch iron rod found for the northeast corner of a proposed slope easement described in said Right of Entry and Possession Agreement, in all a total distance of 40.00 feet, through a central angle of 91° 40' 42", having a radius of 25.00 feet, and a long chord which bears S 17° 38' 12" E, a distance of 35.87 feet to a 1/2-inch iron rod with a plastic cap found for the end of said curve to the left.
3. S 27° 57' 12" W, a distance of 250.98 feet to a 1/2-inch iron rod with a plastic cap found,
4. S 26° 51' 02" W, a distance of 224.98 feet to a 1/2-inch iron rod with a plastic cap marked "SAM INC" set,
5. S 27° 52' 16" W, a distance of 356.71 feet to a 1/2-inch iron rod with a plastic cap marked "SAM, INC" set, from which rod a 1/2-inch iron rod found for the west corner of said proposed slope easement bears with the west line of said easement, N 61° 56' 34" W, a distance of 16.04 feet,
6. S 27° 59' 39" W, a distance of 803.63 feet to a 1/2-inch iron rod with a plastic cap marked "SAM, INC" set in the south line of said 55.10 acre tract, from which a 1/2-inch iron rod found for a point of intersection in the northwest ROW line of said Giles Road bears with said ROW line, S 26° 52' 08" W, a distance of 28.68 feet.

I, Dana DeBeauvoir, County Clerk, Travis County, Texas, do hereby certify that this is a true and correct copy as same appears of record in my office. Witness my hand and seal of office this 30th day of May, 2005.



Dana DeBeauvoir, County Clerk
By Deput:

Michael P. Gonzalez
Michael P. Gonzalez

54.13 Acres
Lucas Munos Survey No. 55, A-513
Travis County, Texas

FN 2945 (TWF)
May 14, 2003
SAM, Inc. Job No. 23147-01

THENCE with the west and south lines of said 55.10 acre tract and the tract described herein, being the remaining lines of a called 102.87 acre tract described in a deed as recorded in Volume 7671, Page 109 of the Deed Records of Travis County, Texas, and a called 176.10 acre tract of land described in a deed as recorded in Volume 7671, Page 101 of the Deed Records of Travis County, Texas, the following six (6) courses and distances:

1. N 62° 45' 22" W, a distance of 224.16 feet to an X chiseled in the top of a headwall,
2. N 27° 49' 51" E, a distance of 1233.92 feet to a 1/2-inch iron rod found,
3. N 83° 43' 02" W, a distance of 1282.31 feet to a 1/2-inch iron rod found,
4. N 63° 03' 14" W, a distance of 1080.00 feet to a calculated point in the margin of a spoils pile,
5. N 27° 35' 24" E, a distance of 260.00 feet to a 1/2-inch iron rod found,
6. N 17° 29' 12" W, a distance of 894.12 feet to the POINT OF BEGINNING, and containing 54.13 acres of land, more or less.

Bearing Basis: Bearings are based on the Texas State Coordinate System, NAD 83(86), Central Zone.

THE STATE OF TEXAS

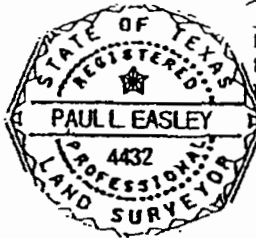
KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS

That I, Paul L. Easley, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and belief and that the property described herein was determined by a survey made on the ground during May, 2003 under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 14th day of May 2003 A.D.

SURVEYING AND MAPPING, Inc.
4029 Capital Of Texas Hwy., So. Suite 125
Austin, Texas 78704




Paul L. Easley
Registered Professional Land Surveyor
No. 4432 - State of Texas

I, Dana DeBeauvoir County Clerk, Travis County, Texas, do hereby certify that this is a true and correct copy as same appears of record in my office. Witness my hand and seal of office on this 30th day of May, 2005.



By Deputy:


Michael P. Gonzales

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

2005 Oct 24 04:41 PM 2005198209

WILLIAMS \$32.00

DANA DEBEAUVOIR COUNTY CLERK
TRAVIS COUNTY TEXAS

Exhibit B

Approximately 172.531 acre tract of land out of the LUCAS MUNOS SURVEY No. 55, Abstract 513, being a portion of a 176.10 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 101, of the deed records of Travis County, Texas; said 172.531 acres being more particularly described by metes and bounds in Exhibit "B" attached hereto.



Professional Land Surveying, Inc.
Surveying and Mapping

Office: 512-443-1724
Fax: 512-441-6987

2807 Manchaca Road
Building One
Austin, Texas 78704

172.531 ACRES
MOBLEY CHEMICALS, INC.

A DESCRIPTION OF A 172.531 ACRE (APPROXIMATELY 7,515,455 S.F.) TRACT OF LAND OUT OF THE LUCAS MUNOS SURVEY NO. 55, ABSTRACT 513, BEING A PORTION OF A 176.10 ACRE TRACT OF LAND CONVEYED TO MOBLEY CHEMICALS, INC., BY WARRANTY DEED, DATED JANUARY 22, 1982, RECORDED IN VOLUME 7671, PAGE 101, OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 172.531 ACRES BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2" rebar with cap set for the southeast corner of the remainder of the 176.10 acre tract, being also the southwest corner of the remainder of a 73.20 acre tract recorded in Volume 7671, Page 117, of the Deed Records of Travis County, Texas, and in the north line of a 108.272 acre tract recorded in Volume 7579, Page 500, of the Deed Records of Travis County, Texas;

THENCE along the north line of the 108.272, over and across the 176.10 acre tract the following two (2) courses:

1. North 62°34'02" West, a distance of 1091.65 feet to a 112" rebar with cap set in the south line of the 176.10 acre tract, being also in the north line of the 108.272 acre tract;
2. North 62°17'02" West, a distance of 1558.29 feet to a 1" iron pipe found for the southwest corner of the 176.10 acre tract, being also the northwest corner of the 108.272 acre tract, and in the east line of a 90.00 acre tract of land conveyed to Elizabeth Jarmon Wilder by deed of record in Volume 3499, Page 1369, of Deed Records of Travis County, Texas and in Document No. 2002128106 of the Official

THENCE North 26°51'46" East, along the west line of the 176.10 acre tract, being also the east line of the 90.00 acre tract, 432.99 feet to a 60d nail found in a post in the west line of the 176.10 acre tract, being also the southeast corner of a 40.00 acre tract recorded in Volume 10845, Page 198 of the Real Property records of Travis County, Texas;

THENCE North 27°02'31" East, along the common line of the 176.10 acre tract, and the 40.00 acre tract, a distance of 381.28 feet to a 60d nail found in a tree stump for the south corner of the 0.136 acre Quit Claim Deed recorded in Document No. 2001155894, of the Official Public Records of Travis County, Texas;

THENCE along the west line of the remainder of the 176.10 acre tract, and east line of the 0.136 acre tract the following two (2) courses:

1. North 37°05'31" East, a distance of 83.25 feet to a 60d nail found in a tree stump;
2. North 26°47'17" East, a distance of 794.19 feet to a 1/2" rebar found in the west line of the remainder of the 176.10 acre tract, being also the northeast corner of the 0.136 acre tract and the south corner of a 0.048 acre Quit Claim Deed recorded in Document No. 2001125471, of the Official Public Records of Travis County, Texas;

THENCE North 27°57'24" East, along the common line of the remainder of the 176.10 acre tract and the 0.048 acre tract, a distance of 1228.30 feet to a 1/2" rebar with cap set for the northwest corner of the remainder of the 176.10 acre tract, being also the north corner of the 0.048 acre tract, and in the south right-of-way line of Blue Goose Road (right-of-way width varies) and the beginning of a non-tangent curve to the left;

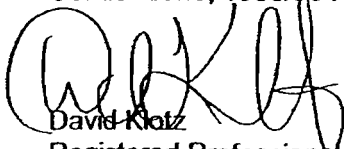
THENCE along the south right-of-way line of Blue Goose Road, and in part the north line of the remainder of the 176.10 acre tract the following two (2) courses:

1. 251.34 feet along the arc of said non-tangent curve to the left, having a radius of 615.15 feet, and through a central angle of 23°24'35 the chord of which bears South 51°22'47" East, a distance of 249.59 feet to a 1/2" rebar with cap set;
2. South 63°07'59" East, a distance 1869.68 feet to a 1/2" rebar with cap set in the north line of the remainder of the 176.10 acre tract, being also the northwest corner of a 54.13 acre tract of land recorded in Document No. 20005198209, of the Official Public Records of Travis County, Texas, from which a 1/2" rebar found bears South 63°07'59" East, a distance of 532.70 feet;

THENCE leaving the south right-of-way line of Blue Goose Road, South 17°27'36" East, over and across the 176.10 acre tract and along the southwest line of the 54.13 acre tract, a distance of 753.01 feet to a calculated point in the east line of the 176.10 acre tract, being also in the west line of a 102.87 acre tract recorded in Volume 7671, Page 109, of the Deed Records of Travis County, Texas;

THENCE leaving the southwest line of the 54.13 acre tract, South 27°33'43" West, along the east line of the 176.10 acre tract, and in part the west line of the 102.87 acre tract and the 73.20 acre tract, a distance of 2363.00 feet to the **POINT OF BEGINNING**, containing an area of 172.631 acres of land, more or less.

Surveyed on the ground in January, 2001. BEARING BASIS: Grid azimuth for Texas Central Zone, 1983/93 HARN values from LCRA control network. Attachments: None.


David Klotz

Registered Professional Land Surveyor
State of Texas No. 5428



Exhibit C

Approximately 122.711 acre tract of land out of the LUCAS MUNOS SURVEY No. 55, Abstract 513, being a portion of a 73.20 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 117 and a portion of a 102.87 acre tract of land conveyed to Mobley Chemicals, Inc., by warranty deed, dated January 22, 1982, recorded in volume 7671, page 109, both of the deed records of Travis County, Texas; said 122.711 acres being more particularly described by metes and bounds in Exhibit "C" attached hereto.



Professional Land Surveying, Inc.
Surveying and Mapping

Office: 512-443-1724
Fax: 512-441-6987

2807 Manchaca Road
Building One
Austin, Texas 78704

**122.711 ACRES
MOBLEY CHEMICALS, INC.**

A DESCRIPTION OF A 122.711 ACRE (APPROXIMATELY 5,345,291 S.F.) TRACT OF LAND OUT OF THE LUCAS MUNOS SURVEY NO. 55, ABSTRACT 513, BEING A PORTION OF A 73.20 ACRE TRACT OF LAND CONVEYED TO MOBLEY CHEMICALS, INC., BY WARRANTY DEED, DATED JANUARY 22, 1982, RECORDED IN VOLUME 7671, PAGE 117 AND A PORTION OF A 102.87 ACRE TRACT OF LAND CONVEYED TO MOBLEY CHEMICALS, INC., BY WARRANTY DEED, DATED JANUARY 22, 1982, RECORDED IN VOLUME 7671, PAGE 109, BOTH OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 122.711 ACRES BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at 1/2" rebar found for the southeast corner of the remainder of the 73.20 acre tract, being also in the west right-of-way line of Giles Road (right-of-way width varies), in the west line of a 1.606 acre tract recorded in Document No. 2003143218, of the Official Public Records of Travis County, Texas, and the northeast corner of the remainder of a 108.272 acre tract recorded in Volume 7579, Page 500, of the Deed Records of Travis County, Texas;

THENCE North 62°34'06" West leaving the west right-of-way line of Giles Road, over and across the 73.20 acre tract and along the north line of the 108.272 acre tract, a distance of 2586.52 feet to a 1/2" rebar with cap set in the west line of the 73.20 acre tract, being also in the east line of a 176.10 acre tract, recorded in Volume 7671, Page 101, of the Deed Records of Travis County, Texas for the southwest corner of the herein described tract, from which a 1/2" rebar with cap set bears South 62°34'02" East, a distance of 1091.65 feet;

THENCE leaving the north line of the 108.272 acre tract, North 27°33'43" East, along the east line of the 176.10 acre tract and in part the west line of the 73.20 acre tract and the 102.87 acre tract, a distance of 2363.00 feet to a calculated point for the northwest corner of the remainder of the 102.87 acre tract, being also in the west line of a 54.13 acre tract recorded in Document No. 2005198209, of the Official Public Records of Travis County, Texas;

THENCE leaving the east line of the 176.10 acre tract, along the common line of the 54.13 acre tract and the remainder of the 102.87 acre tract, the following six (6) courses:

1. South 17°27'36" East, a distance of 141.95 feet to a 1/2" rebar found;

2. South 27°32'10" West, a distance of 260.07 feet to a 1/2" rebar found;
3. South 63°05'47" East, a distance of 1079.88 feet to a 1/2" rebar found;
4. South 83°44'54" East, a distance of 1282.25 feet to a 1/2" rebar found;
5. South 27°47'49" West, a distance of 1233.87 feet to a punch hole found;
6. South 62°46'49" East, a distance of 224.65 feet to a calculated point in the east line of the remainder of the 102.87 acre tract, being also in the west right-of-way line of Giles Road and the west line of the 1.606 acre tract;

THENCE South 27°55'44" West, along the east line of the remainder of the 102.87 acre tract, being also the west right-of-way line of Giles Road, and the west line of the 1.606 acre tract, a distance of 28.62 feet to a 1/2" rebar found for the northeast corner of the remainder of the 73.20 acre tract, being also the southeast corner of the remainder of the 102.87 acre tract, in the west right-of-way line of Giles Road and the west line of a 1.606 acre tract recorded in Document No. 2003143218, of the Official Public Records of Travis County, Texas;

THENCE South 27°55'48" West, along the east line of the remainder of the 73.20 acre tract, being also the west right-of-way line of Giles Road, and the west line of the 1.606 acre tract, a distance of 1214.01 feet to the **POINT OF BEGINNING**, containing an area of 122.711 acres of land, more or less.

Surveyed on the ground in January, 2001. BEARING BASIS: Grid azimuth for Texas Central Zone, 1983/93 HARN values from LCRA control network. Attachments: None.

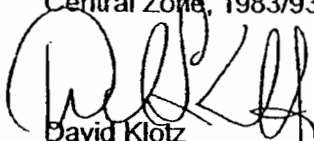

David Klotz
Registered Professional Land Surveyor
State of Texas No. 5428



Exhibit 1

EXHIBIT 1

Vegetative Practices

Temporary Vegetative Stabilization of Disturbed Areas

1. Description.

Stabilize soil in disturbed areas with temporary vegetation or mulching.

2. Purpose.

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

3. Conditions Where Practice Applies.

Use vegetation to temporarily stabilize the soil on disturbed, graded or cleared areas prior to establishment of permanent vegetation.

4. Design Criteria.

Prior to vegetative establishment, install needed erosion control practices, such as diversions, grade stabilization structures, berms, dikes, level spreaders, and sediment basins.

Final grading and shaping has usually not been completed for temporary stabilization.

5. Fertilizer.

For temporary vegetative establishment, apply fertilizer with an analysis of 15-15-15 at the rate of .5 pounds of nitrogen per 1,000 square feet during the installation period. In order to avoid the conveyance of nutrients off-site, the timing shall not occur when rainfall is expected.

6. Seed Bed Preparation.

Prepare a suitable seed bed which allows good seed-to-soil contact and soil conditions that are conducive to vegetative growth. Do not disturb the soil within the critical root zone of existing trees.

Areas of compacted soil shall be loosened to a depth of at least two (2) inches by plowing, discing, raking or other acceptable means before seeding. In areas where no topsoil exists, or where fill is needed, the subgrade shall be loosened by discing or by scarifying to a depth of at least two (2) inches to permit bonding of the topsoil to the subsoil.

Topsoil, when used, shall have the following requirements: The depth of the topsoil shall be a minimum of 6" in all areas except within the critical root zone of existing trees. Do not add topsoil within the critical root zone of existing trees.

For temporary vegetative stabilization, the top six inches of soil used for intermediate cover must contain sufficient organic matter and nutrients to support vegetative cover. The following description is not required but is a suggested mix which will be presumed to meet this performance requirement: *The topsoil shall be composed of 3 parts of soil mixed with 1 part Compost, by volume. The compost*

shall be Dillo Dirt or an equal approved by the Engineer, or designated representative. –The soil shall be locally available native soil that meets the following specifications:

- Shall be free of trash, weeds, deleterious materials, rocks, and debris.
- 100% shall pass through a 0.75-inch screen.
- Less than 25 % shall pass through a #200 sieve.

Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards.

7. Seeding.

If seeding is to be conducted during the cool season (November 1 to February 15) select species noted as “cool season cover crop” from the tables in Standard Specification 604S and/or 609S. If seeding is to be conducted during the warm season (February 16 to October 31) use one of the following options (whichever is applicable).

- Native Seeding: Green Sprangletop (*Leptochloa dubia*) at the rate of 4 lbs. per acre.
- Non-native Seeding: Comply with 604S.5 using Bermuda grass.
 - Apply seed uniformly with a seed spreader, drill, cultipacker seeder or hydroseeder (slurry includes seed, fertilizer and binder).

8. Protection of Seed Bed with Hydromulching or Soil Retention Blanket.

Newly-installed temporary vegetation must be protected by hydromulch or soil retention blanket (refer to Standard Specification 605S Soil Retention Blanket)immediately after seeding. Protection of the seed bed shall occur in a manner that will allow seed germination and that encourages effective vegetative growth. Hydromulching, when used, shall comply with the requirements of Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization.

Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
70/30 Wood/ Cellulose Blend Mulch	70% Wood 30% Paper 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf
Wood Fiber Mulch	96% Wood 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf

a. 70/30 Wood/Cellulose Blend Fiber Mulch. Wood/Cellulose blend fiber mulch shall consist of 70% long wood grain fibers produced from grinding clean, whole wood chips and 30% cellulose fiber produced from ground newsprint. Refer to Table 1.4.7-B for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

b. Wood Fiber Mulch. Wood fiber mulch shall consist of 100% long wood grain fibers produced from grinding clean, whole wood chips. . Refer to Table 1.4.7-C for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

Table 1.4.7-B: Properties of 70/30 Wood/Cellulose Blend Fiber Mulch

<u>Property (Test Method)</u>	<u>Required Value</u>
<u>Moisture content %</u>	<u>12.0% ±3.0% (max.)</u>
<u>Organic matter % - wood fiber</u>	<u>70% ±1% Oven Dry Basis (min.)</u>
<u>Organic matter % - paper fiber</u>	<u>30.0% ±1% Oven Dry Basis (max.)</u>
<u>Tacking Agent</u>	<u>3.0% (min.)</u>
<u>Water holding capacity</u>	<u>1,000 Grams of water per 100 grams of fiber (min.)</u>

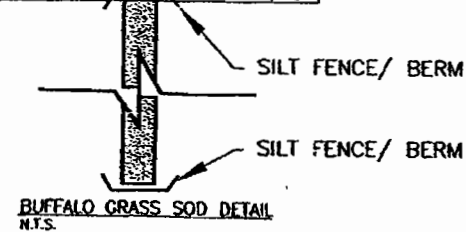
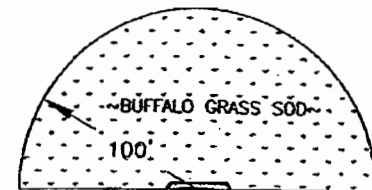
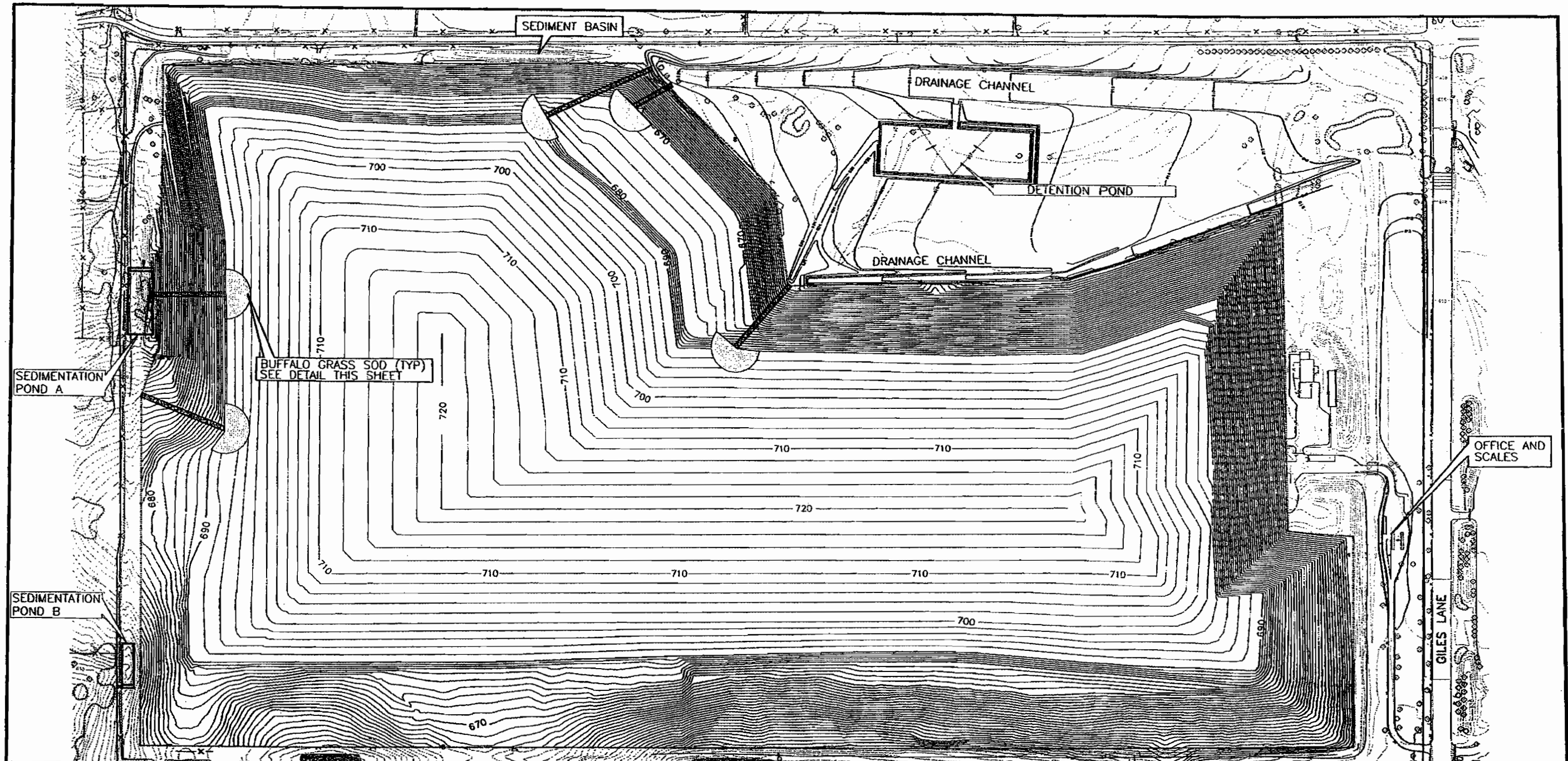
Table 1.4.7-C: Properties of Wood Fiber Mulch

<u>Property (Test Method)</u>	<u>Required Value</u>
<u>Moisture content %</u>	<u>12.0% ±3.0% (max.)</u>
<u>Organic matter % - wood fiber</u>	<u>96% ±1% Oven Dry Basis (min.)</u>
<u>Organic matter % - paper fiber</u>	<u>30.0% ±1% Oven Dry Basis (max.)</u>
<u>Tacking Agent</u>	<u>3.0% (min.)</u>
<u>Water holding capacity</u>	<u>1,000 Grams of water per 100 grams of fiber (min.)</u>

9. Watering

Seed germination will be expected within 1 week of sowing. Watering is required to germinate seed and maintain growth. Seedlings shall be watered daily, or more often as necessary to ensure growth and to ensure that the vegetative cover stabilizes the soil as required.

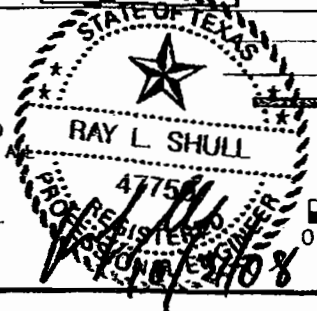
Exhibit 2



SEDIMENT BASIN

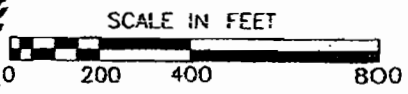
SEDIMENT BASIN

- NOTES:
1. BASEMAP CREATED FROM TOPOGRAPHIC SURVEY DATED MARCH 28, 2005 BY BASE MAPPING COMPANY, LTD. ELEVATIONS ARE FEET MSL.
 2. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.



LEGEND

- EXISTING COUNTOUR
- PERMITTED COUNTOUR
- DOWNCHUTE



REV. NO.	DATE	DR. BY	APP. BY
----------	------	--------	---------

ACE ASSOCIATED CONSULTING ENGINEERS, INC.

BFI BFI SUNSET FARMS LANDFILL PERMIT AMENDMENT MSW 1447-A

ACE REFERENCE NO. 070-03	SITE LAYOUT PLAN	EXHIBIT 2
DATE:		
FILE: EXHIBIT 2.dwg		

ATTACHMENT B

Buddy Garcia, *Chairman*
Larry R. Sward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 16, 2009

Paul Gosselink
LLOYD GOSSELINK BLEVINS ROCHELL & TOWNSEND, P.C
816 CONGRESS AVENUE, SUITE 1900
AUSTIN, TX 78701

Re: SOAH Docket No. 582-08-2178; TCEQ Docket No. 2007-1774-MSW;
In re: the Application of BFI Waste Systems of North America, L.L.C.,
for a Major Amendment to Type I MSW Permit No. 1447A

Dear Mr. Gosselink:

I am writing on behalf of the executive director to confirm our preliminary review of the attached Special Settlement Provisions which would incorporate provisions from BFI's agreement with the City of Austin into the permit. If allowed by the Administrative Law Judge, these provisions would make the permit more protective and the executive director would not oppose adding them to the permit at this time. The executive director received the corresponding application revision pages today and conducted a preliminary review. The revisions are minor and appear to provide an appropriate approach to incorporate the settlement provisions into the application. The executive director plans to complete his review and be prepared to make a recommendation on incorporating the provisions during the hearing next week.

Please let me know if you have any questions or want to discuss this matter further.



Sincerely,

THE OFFICE OF THE EXECUTIVE DIRECTOR

By:

Steven Shepherd
Staff Attorney
Environmental Law Division

cc: Mailing List

MAILING LIST
BFI SUNSET FARMS MSW LANDFILL
SOAH DOCKET NO. 582-08-217
TCEQ DOCKET NO. 2007-1774-MSW

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WILLIAMS, LTD.

- E. For the purposes of the following Special Settlement Provisions numbers 1 – 11 which were included as a result of negotiations with the City of Austin during the permitting process:

Side slope means the exterior edges of fill areas or sidewalls of detention ponds which generally will have a slope steeper than 10%.

Top deck means the top portion of the landfill which generally will have a slope flatter than 10%.

Adequate vegetation growth means 85% surface area coverage in vegetation at least 1" tall.

Seeding events means seeding in compliance with City of Austin Environmental Criteria Manual (ECM) Section 1.4.7 A (Exhibit 1) except as otherwise noted.

Amended landfill permit means proposed TCEQ draft permit 1447A for the Sunset Farms Landfill.

Property means the property on which the Landfill operates as described in the amended landfill permit application.

Special Settlement Provisions

1. BFI shall place intermediate cover and implement seeding events, on all side slope disturbed areas on which activity has not recommenced within 60 days except BFI is under no obligation to seed such areas during the months of July and August. These seeded areas shall be irrigated in accordance with the requirements of Exhibit 1.
2. BFI shall place intermediate cover and implement seeding events on the top deck of the landfill in all disturbed areas on which waste placement activity has not recommenced within 120 days except for that area immediately up gradient of the five constructed temporary drainage down chutes on intermediate cover areas as shown on attached Exhibit 2. Those up gradient areas shall be immediately vegetated upon construction of each down chute with a filter strip of buffalo grass sod that extends at least 100 feet out from each down chute inlet and is wide enough to filter the run off to be directed to each down chute (See Exhibit 2 for width dimensions). The buffalo grass filter strip shall be maintained until final cover is placed. In addition, a silt fence or mulch berm or other erosion control mechanisms approved by the TCEQ shall be placed on the top deck in front of the inlet of each down chute and at the end of each constructed down chute (See Exhibit 2 for locations). These controls shall remain in place and be maintained until the areas contributing runoff to these down chutes achieve adequate vegetation growth.

3. The initial seeding event for all disturbed areas will be accomplished using hydro-mulch seeding application procedures per Exhibit 1.
4. Seeding of the disturbed areas will be of a seasonally appropriate mix. Currently the seed mix is bermuda/millet for warm weather and rye for cold weather. When cold weather seed is used the seeded area shall be reseeded with warm weather mix within 60 days of the onset of sufficiently warm weather to support the warm weather mix. The reseeded area shall be irrigated until adequate vegetation growth is achieved.
5. Seeding for the final cover shall include a seasonally appropriate 609-S (native seeds) mix, as defined in the City of Austin Standard Specifications Manual, on approximately 15% of the surface area of the eastern and northern slopes of the landfill and for the remainder of the site a seasonally appropriate mix.
6. Perimeter sediment/erosion control devices such as silt fences, hay bales, mulch tubes or mulch berms shall be in place prior to the establishment of any soil stock piles on site. For soil stock piles which have slope lengths greater than 20 feet, mid-slope temporary stabilization controls such as seeding, tarping or placement of silt fences or mulch berms shall be implemented within fourteen days of the initial establishment of the soil stock pile and shall be maintained in good working condition until the stockpile is removed.
7. BFI shall install and maintain silt fences or mulch berms within 14 days of completion of intermediate cover at the base of all side slope and top deck intermediate cover areas until adequate vegetation growth is achieved.
8. Stormwater runoff from the landfill area designated as Drainage Area 2 shall be routed through the existing detention pond, or the proposed water quality/detention pond, when the waste fill in Drainage Area 2 has reached the final grades proposed in the landfill expansion plan.
9. BFI will ensure that the side slopes of the existing detention pond and the side slopes of the proposed water quality/detention pond in the northeast portion of the landfill shall be adequately stabilized through proper grading and maintenance and by implementing/applying vegetation on the side slopes of the ponds within thirty days of completion of construction of the pond. BFI further agrees to inspect the sedimentation ponds/basins every three months and after every half-inch rainfall event and to clean the ponds/basins by removing the accumulated sediment once the sediment has reached 25% of the respective pond capacity.
10. BFI shall not accept liquid waste as defined in 30 Texas Administrative Code §330.2(70) and shall not construct or operate a liquid waste stabilization/solidification basin at the Sunset Farms Landfill.

11. BFI shall take steps to discourage commercial waste hauling vehicles from utilizing Blue Goose Road as ingress or egress to the Sunset Farms Landfill except for those few vehicles which service businesses and residences in that area. These steps may include posting signs, adding surcharges, or similar measures.

EXHIBIT 1**Vegetative Practices*****Temporary Vegetative Stabilization of Disturbed Areas***

1. Description.

Stabilize soil in disturbed areas with temporary vegetation or mulching.

2. Purpose.

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

3. Conditions Where Practice Applies.

Use vegetation to temporarily stabilize the soil on disturbed, graded or cleared areas prior to establishment of permanent vegetation.

4. Design Criteria.

Prior to vegetative establishment, install needed erosion control practices, such as diversions, grade stabilization structures, berms, dikes, level spreaders, and sediment basins.

Final grading and shaping has usually not been completed for temporary stabilization.

5. Fertilizer.

For temporary vegetative establishment, apply fertilizer with an analysis of 15-15-15 at the rate of 5 pounds of nitrogen per 1,000 square feet during the installation period. In order to avoid the conveyance of nutrients off-site, the timing shall not occur when rainfall is expected.

6. Seed Bed Preparation.

Prepare a suitable seed bed which allows good seed-to-soil contact and soil conditions that are conducive to vegetative growth. Do not disturb the soil within the critical root zone of existing trees.

Areas of compacted soil shall be loosened to a depth of at least two (2) inches by plowing, discing, raking or other acceptable means before seeding. In areas where no topsoil exists, or where fill is needed, the subgrade shall be loosened by discing or by scarifying to a depth of at least two (2) inches to permit bonding of the topsoil to the subsoil.

Topsoil, when used, shall have the following requirements: The depth of the topsoil shall be a minimum of 6" in all areas except within the critical root zone of existing trees. Do not add topsoil within the critical root zone of existing trees.

For temporary vegetative stabilization, the top six inches of soil used for intermediate cover must contain sufficient organic matter and nutrients to support vegetative cover. The following description is not required but is a suggested mix which will be presumed to meet this performance requirement: *The topsoil shall be composed of 3 parts of soil mixed with 1 part Compost, by volume. The compost*

shall be Dillo Dirt or an equal approved by the Engineer, or designated representative. The soil shall be locally available native soil that meets the following specifications:

- Shall be free of trash, weeds, deleterious materials, rocks, and debris.
- 100% shall pass through a 0.75-inch screen.
- Less than 25 % shall pass through a #200 sieve.

Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards.

7. Seeding.

If seeding is to be conducted during the cool season (November 1 to February 15) select species noted as "cool season cover crop" from the tables in Standard Specification 604S and/or 609S. If seeding is to be conducted during the warm season (February 16 to October 31) use one of the following options (whichever is applicable).

- Native Seeding: Green Sprangletop (*Leptochloa dubia*) at the rate of 4 lbs. per acre.
- Non-native Seeding: Comply with 604S.5 using Bermuda grass.
 - Apply seed uniformly with a seed spreader, drill, cullipacker seeder or hydroseeder (slurry includes seed, fertilizer and binder).

8. Protection of Seed Bed with Hydromulching or Soil Retention Blanket.

Newly-installed temporary vegetation must be protected by hydromulch or soil retention blanket (refer to Standard Specification 605S Soil Retention Blanket) immediately after seeding. Protection of the seed bed shall occur in a manner that will allow seed germination and that encourages effective vegetative growth. Hydromulching, when used, shall comply with the requirements of Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization.

Table 1.4.7-A: Hydromulching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
70/30 Wood/Cellulose Blend Mulch	70% Wood 30% Paper 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf
Wood Fiber Mulch	96% Wood 3% Tackifier	0-3 months	Moderate slopes; from flat to 3:1	45.9 lbs/1000 sf

a. 70/30 Wood/Cellulose Blend Fiber Mulch. Wood/Cellulose blend fiber mulch shall consist of 70% long wood grain fibers produced from grinding clean, whole wood chips and 30% cellulose fiber produced from ground newsprint. Refer to Table 1.4.7-B for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

b. Wood Fiber Mulch. Wood fiber mulch shall consist of 100% long wood grain fibers produced from grinding clean, whole wood chips. Refer to Table 1.4.7-C for mulch properties and to Standard Specification 604S – Seeding for additional mulch requirements.

Table 1.4.7-B: Properties of 70/30 Wood/Cellulose Blend Fiber Mulch

<u>Property (Test Method)</u>	<u>Required Value</u>
<u>Moisture content %</u>	<u>12.0% ±3.0% (max.)</u>
<u>Organic matter % - wood fiber</u>	<u>70% ±1% Oven Dry Basis (min.)</u>
<u>Organic matter % - paper fiber</u>	<u>30.0% ±1% Oven Dry Basis (max.)</u>
<u>Tacking Agent</u>	<u>3.0% (min.)</u>
<u>Water holding capacity</u>	<u>1,000 Grams of water per 100 grams of fiber (min.)</u>

Table 1.4.7-C: Properties of Wood Fiber Mulch

<u>Property (Test Method)</u>	<u>Required Value</u>
<u>Moisture content %</u>	<u>12.0% ±3.0% (max.)</u>
<u>Organic matter % - wood fiber</u>	<u>96% ±1% Oven Dry Basis (min.)</u>
<u>Organic matter % - paper fiber</u>	<u>30.0% ±1% Oven Dry Basis (max.)</u>
<u>Tacking Agent</u>	<u>3.0% (min.)</u>
<u>Water holding capacity</u>	<u>1,000 Grams of water per 100 grams of fiber (min.)</u>

9. Watering

Seed germination will be expected within 1 week of sowing. Watering is required to germinate seed and maintain growth. Seedlings shall be watered daily, or more often as necessary to ensure growth and to ensure that the vegetative cover stabilizes the soil as required.

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TCEQ Legal Services

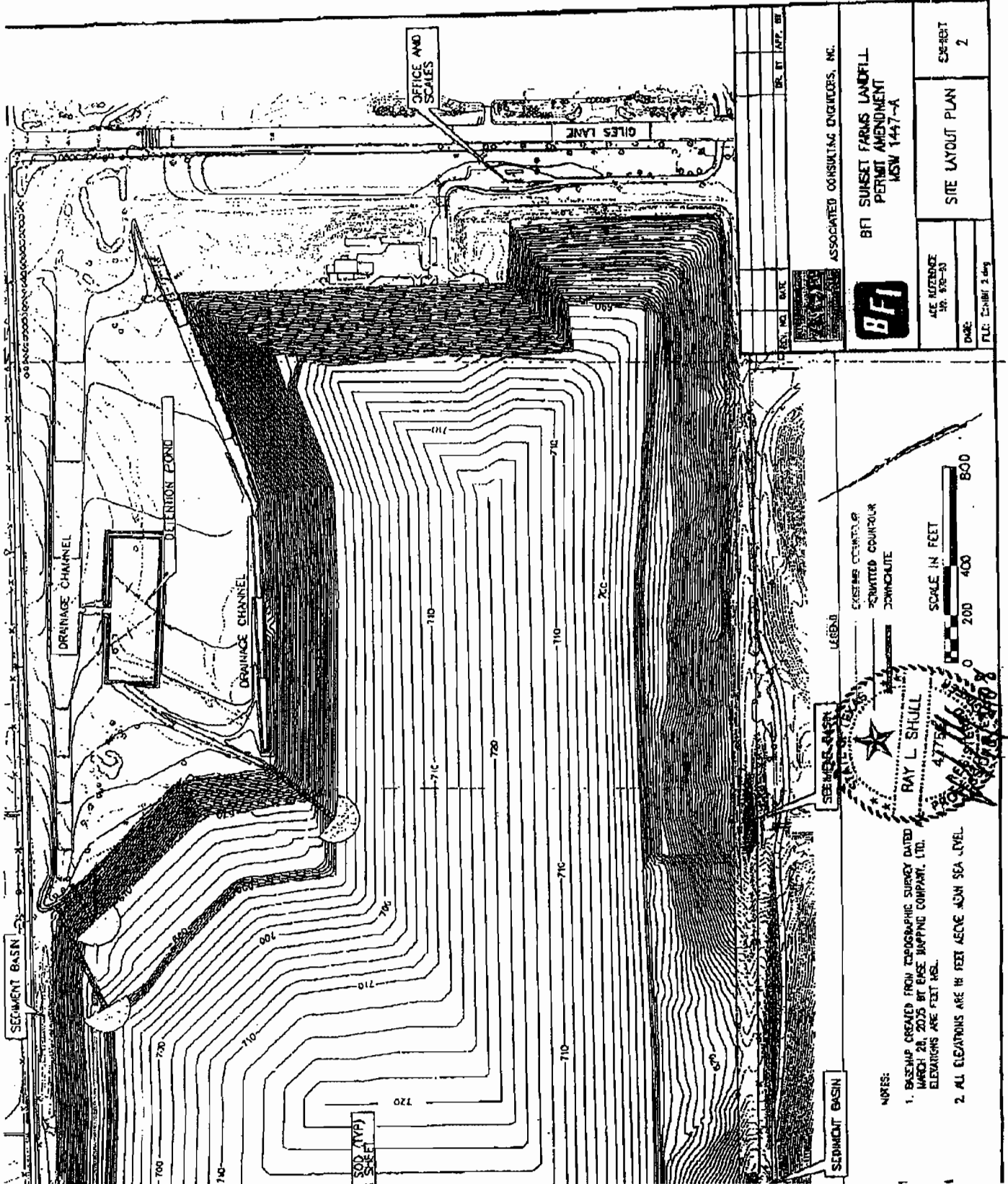
011/013

10/31/08 18:13 FAX 51247205

Lloyd Gosselink

012/013

Exhibit 2



ATTACHMENT C

**SOAH DOCKET NO. 582-08-2178
TCEQ DOCKET NO. 2007-1774-MSW**

**IN RE: THE APPLICATION OF
BFI WASTE SYSTEMS OF NORTH
AMERICA, LLC
PERMIT NO. MSW-1447A**

**§
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§**

**BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS**

**DIRECT TESTIMONY OF
MR. RAY L. SHULL, P.E.**

**ON BEHALF OF
BFI WASTE SYSTEMS OF NORTH AMERICA, LLC (APPLICANT)**

January 16, 2009

**DIRECT TESTIMONY OF
RAY L. SHULL, P.E.**

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LIST OF EXHIBITS

Exhibit	Description
RS-2	Resume of Ray Shull, P.E.
RS-3	Part III, Attachment 1, Figure 1.1
RS-4	Part III, Attachment 1, Site Layout Plan
RS-5	ACE site plan showing "one-acre" at 795 msl
RS-6	Travis County's Response to BFI's Discovery Requests
RS-7	City of Austin approval of Site Development Permit (SDP) for new water quality pond
RS-8	City of Austin letter regarding Site Plan exemption
RS-9	Travis County development permit for new water quality pond
RS-10	Travis County staff letter recommending issuance of SDP for expansion
RS-11	Sunset Farms Permit Application
RS-12	TCEQ letter declaring application administratively complete
RS-13	TCEQ letter declaring application technically complete
RS-14	TCEQ Draft Permit
RS-15	TCEQ ED Letter Approving Transfer of Existing Permit from "Inc." to "LLC"
RS-16	BFI written notice to affected persons of transfer to "LLC"
RS-17	Affidavit of Publication for transfer to "LLC"
RS-18	ACE coordination letter to U.S. Army Corps of Engineers
RS-19	U.S. Army Corps of Engineers coordination response letter
RS-20	ACE coordination letter to Texas Parks and Wildlife
RS-21	Texas Parks and Wildlife coordination response
RS-22	ACE coordination letter to Fish and Wildlife Service
RS-23	ACE phone memorandum documenting Fish and Wildlife Service coordination response
RS-24	ACE coordination letter to Federal Aviation Administration
RS-25	Federal Aviation Administration coordination response
RS-26	ACE coordination letter to TCEQ Watershed Management Team
RS-27	TCEQ Watershed Management Team coordination response
RS-28	ACE coordination letter to Texas Historical Commission
RS-29	ACE coordination letter to Texas Department of Transportation
RS-30	Texas Department of Transportation coordination response
RS-31	BFI Coordination Letter to CAPCOG
RS-32	CAPCOG Conditional Conformance Letter
RS-33	BFI letter to CAPCOG agreeing to conditions of conditional conformance
RS-34	TCEQ Regulatory Guidance RG-417
RS-35	Multi-Sector General Permit Coverage Notice
RS-36	SWPPP for Sunset Farms
RS-37	TCEQ Regulatory Guidance RG-420
RS-38	TCEQ Strike Team Executive Summary

Exhibit	Description
RS-39	Litter Control Log
RS-40	Generator Waste Profile Sheet
RS-41	Compliance History Rating Document
<u>RS-42</u>	<u>Rule 11 Agreement between BFI and the City of Austin</u>
<u>RS-43</u>	<u>Letter from the TCEQ setting forth special conditions for implementation of the Rule 11 Agreement</u>
<u>RS-44</u>	<u>Revision pages to SOP in redline/strikeout</u>
<u>RS-45</u>	<u>Same revision pages to SOP with changes accepted</u>

1 authorized for the site for many years. The site has accepted wastes under these
2 parameters and has developed long-standing waste delivery schedules and acceptance
3 procedures that its customers rely upon. These operating hours are consistent with other
4 operating landfills in the County and are consistent with industry practices.

5 **Q. Is it your opinion that the application satisfies the requirements of the**
6 **regulations that you listed as applicable to this issue?**

7 A. Yes.

8 **VI. RULE 11 AGREEMENT WITH CITY OF AUSTIN**

9 **Q. Mr. Shull, since you initially prepared your pre-filed testimony, has BFI**
10 **entered into an agreement, which affects the future operations at the Sunset**
11 **Farms Landfill in the event the Application for expansion permit is granted?**

12 A. Yes.

13 **Q. Please identify Exhibit RS-42.**

14 A. That is a copy of the Rule 11 Agreement between BFI and the City of Austin effective
15 October 31, 2008. It is also City of Austin Exhibit 3 in this proceeding.

16 **Q. What commitments does BFI make in the Rule 11 Agreement, which you**
17 **have identified as Exhibit RS-42, regarding site operations at the Sunset**
18 **Farms Landfill?**

19 A. Attachment A to Exhibit RS-42 is an Agreement Regarding Operations and waste
20 acceptance of the Sunset Farms Landfill which details the commitments of BFI regarding
21 site operations and waste acceptance. It requires the site to stop accepting waste on or
22 before November 1, 2015. It requires that BFI and Giles Holdings execute a restrictive
23 covenant that will prohibit disposal of waste or operation of a transfer station on the

1 property after November 1, 2015. It requires that BFI perform specific erosion and
2 sedimentation controls which are above and beyond the requirements of the Application,
3 including: additional requirements for seeding and irrigation of intermediate cover;
4 additional silt fences or mulch berms; routing of additional storm water to and through
5 detention/sedimentation ponds; and amendment of BFI's Storm Water Pollution
6 Prevention Plan to incorporate the additional erosion control requirements; all within
7 specified time frames. The Agreement also prohibits BFI from accepting liquid waste
8 that has not passed the TCEQ's paint filter test and from constructing or operating a liquid
9 waste stabilization/solidification basin at the Sunset Farms Landfill.

10 The Rule 11 Agreement also requires BFI to prohibit commercial waste hauling
11 vehicles from utilizing Blue Goose Road as ingress or egress for the Sunset Farms
12 Landfill except for those few vehicles which service businesses and residences in that
13 area. The Agreement requires BFI to request that the Administrative Law Judge
14 recommend to the Commissioners of the TCEQ that certain of the foregoing requirements
15 be included as special provisions to the permit granting the expansion Application. The
16 Agreement also requires BFI to submit a site plan permit application with the City of
17 Austin. As I stated previously, these requirements are set out in detail in Attachment A to
18 the Rule 11 Agreement.

19 **Q. Has the Rule 11 Agreement, Exhibit RS-42, been filed with the State Office of**
20 **Administrative Hearings in the record of this proceeding?**

21 **A. Yes it has.**

22 **[APPLICANT OFFERS APPLICANT'S EXHIBIT RS-42]**

23 **Q. Has the TCEQ reviewed the Rule 11 Agreement?**

1 A. Yes it has.

2 **Q. Please identify Exhibit RS-43.**

3 A. Exhibit RS-43 is a letter from the Texas Commission on Environmental Quality that sets
4 forth special conditions for implementation of the Rule 11 Agreement in any permit
5 issued for the proposed expansion permit.

6 **Q. Does Exhibit RS-43 contain specific language that the TCEQ staff requests be**
7 **adopted as special provisions for an expansion permit for the Sunset Farms**
8 **Landfill to implement the Rule 11 Agreement?**

9 A. Yes it does.

10 **Q. Do you concur with the TCEQ that the special provisions as specified in**
11 **Exhibit RS-43 accurately reflect, and would fully implement the requirements**
12 **of the Rule 11 Agreement?**

13 A. Yes I do.

14 **[APPLICANT OFFERS APPLICANT'S EXHIBIT RS-43]**

15 **Q. Have any of these requirements of the Rule 11 Agreement already been**
16 **implemented?**

17 A. Yes. The site plan permit application has been submitted to the City of Austin. Also,
18 BFI has instructed commercial waste hauling vehicles that they shall not utilize Blue
19 Goose Road for ingress or egress unless they service businesses and residences in that
20 area. On behalf of BFI, we at ACE have prepared new figures that have been submitted
21 to the TCEQ as revisions to the permit Application's Site Development Plan and Site
22 Operating Plan, which will make the new controls enforceable by the TCEQ. On the
23 executive director's preliminary review, he finds the revisions to be minor and that they

1 appear to provide an appropriate approach to incorporating the settlement provision into
2 the application.

3 **Q. Have you prepared revisions to the Site Development Plan and Site Operating**
4 **Plan, to be submitted as revisions to the Application at issue in this**
5 **proceeding?**

6 A. Yes. I personally have prepared revisions for the Site Operating Plan. All of the
7 revisions to the Site Development Plan have been prepared by, or under the direct
8 supervision of Adam Mehevec. Mr. Mehevec will therefore offer amended pages to the
9 Exhibits he is sponsoring.

10 **Q. Please Identify Exhibit RS-44.**

11 A. Exhibit RS-44 is the series of revisions, in under-line/strike-out format, to pages of the
12 Site Operating Plan contained in the Application. It includes revisions to the cover page
13 and table of contents and revised text on pages 55 and 56. It also contains a revised cover
14 page for the entire Application, Exhibit RS-11.

15 **Q. Please Identify Exhibit RS-45.**

16 A. Exhibit RS-45 is the same series of revisions with the changes accepted. There are three
17 additional pages that have been included because of pagination changes. There is no
18 change to the content of those three additional pages.

19 **Q. Would replacement of the pages contained in Exhibit RS-45 into the**
20 **Application, effect the purposes of the Rule 11 Agreement and satisfy the**
21 **special conditions contained in Exhibit RS-43?**

22 A. Yes it would.

1 **Q. Do you request that the Application at issue in this proceeding be revised by**
2 **replacing the pages as you have just described?**

3 **A. Yes I do.**

4 **[APPLICANT OFFERS APPLICANT'S EXHIBITS RS-44 AND RS-45]**

5 **Q. Would BFI be able to implement the new operational requirements detailed**
6 **in the Rule 11 Agreement under the current Permit and Site Development**
7 **Plan?**

8 **A. Yes, I believe that the requirements of the existing Permit and Site Development Plan are**
9 **sufficiently flexible to allow implementation of all of the new operational requirements**
10 **without revisions.**

11 **Q. Would BFI be able to implement the new operational requirements under the**
12 **expansion Application without revising the pages of the Site Operating Plan?**

13 **A. Yes. The new operational requirements are additional provisions that do not conflict with**
14 **the currently proposed requirements in the Application.**

15 **Q. Then why is BFI proposing revisions to the Site Operating Plan proposed in**
16 **the Application?**

17 **A. Specifying the operational requirements in the Site Operating Plan of the Application to**
18 **restate the requirements of the special provisions may be a belt and suspenders approach,**
19 **but it does clarify the requirements that can be enforced by the TCEQ field inspectors and**
20 **other TCEQ personnel in the event the expansion permit is granted. The TCEQ staff**
21 **requested the revised pages as part of their normal practice and to assist them in any**
22 **potential need to enforce the new requirements. On the executive director's preliminary**

1 review, he finds the revisions to be minor and that they appear to provide an appropriate
2 approach to incorporating the settlement provision into the Application.

3 **VI.VII. CONCLUSION**

4 **Q. Mr. Shull, do you recommend that Permit No. MSW-1447A be issued?**

5 A. Yes.

6 **Q. Are all of the letters, permits, reports, memos, notices and notice-related**
7 **documents that have been marked as exhibits in your deposition true and**
8 **correct copies of business records that ACE keeps in its files in the regular**
9 **course of business, and it was the regular course of business for an employee**
10 **or representative of the company with knowledge of the act, event, condition,**
11 **opinion or diagnosis recorded to make the record or to transmit information**
12 **thereof to be included in such record, and the record was made at or near the**
13 **time or reasonably soon thereafter?**

14 A. Yes.

15 **Q. Did you rely on each of these documents in connection with the opinions you**
16 **have offered in your testimony?**

17 A. Yes.

18 **Q. Does this conclude your testimony?**

19 A. Yes, but I reserve the right to amend or supplement my testimony as additional
20 information is obtained through pre-hearing discovery.

SUNSET FARMS LANDFILL
EXPANSION AMENDMENT APPLICATION
TCEQ MSW PERMIT NO. 1447-A

Located in
TRAVIS COUNTY, TEXAS
And
THE CITY OF AUSTIN, TEXAS

ORIGINAL SUBMITTAL DATED: AUGUST 1, 2005
LAST REVISED May 12, 2008 January 16, 2009



Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714



Sunset Farms Landfill Permit Amendment

MSW Permit No. 1447-A

Original Submittal Dated, August 1, 2005

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Part IV – Site Operating Plan



SUNSET FARMS LANDFILL

EXPANSION AMENDMENT APPLICATION

TCEQ MSW PERMIT NO. 1447-A

PART III

Located in

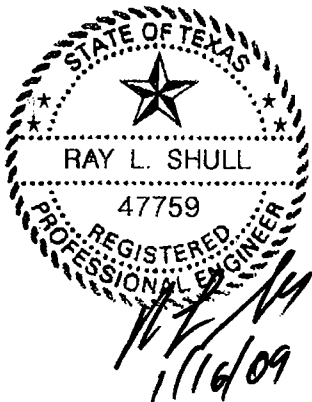
TRAVIS COUNTY, TEXAS

And

THE CITY OF AUSTIN, TEXAS

REVISED ~~January 18, 2007~~ ~~May 12, 2008~~ January 16, 2009

Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714

Sunset Farms Landfill Permit Amendment

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PART IV

SITE OPERATING PLAN

**SUNSET FARMS LANDFILL
AUSTIN, TEXAS**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
PERMIT AMENDMENT APPLICATION
PERMIT NO. MSW-1447A
Revision 32**

Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714

Prepared by

Associated Consulting Engineers, Inc.
January 16, 2009 ~~August 22, 2006~~

Handwritten signature and date:
1/16/09

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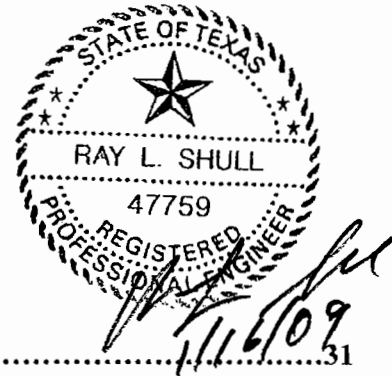
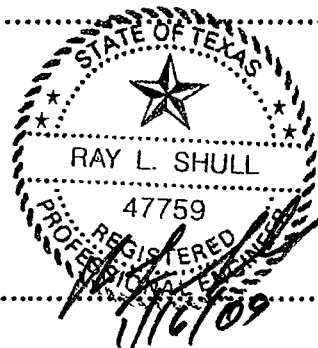


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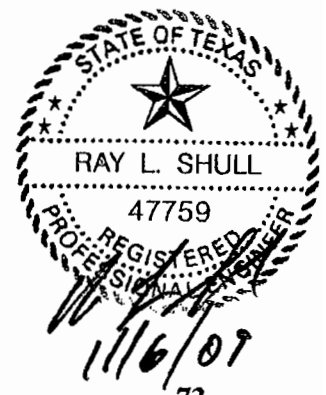


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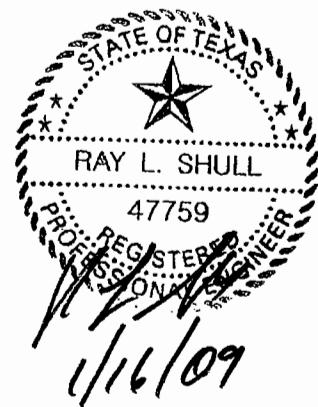
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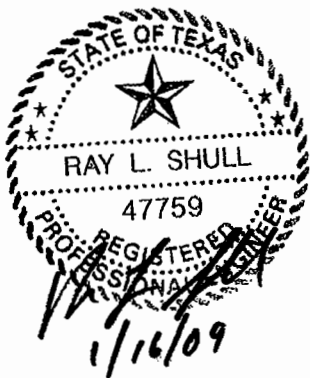
Appendix C – Easement Map



SUNSET FARMS LANDFILL
EXPANSION AMENDMENT APPLICATION
TCEQ MSW PERMIT NO. 1447-A

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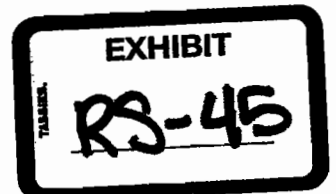
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Sunset Farms Landfill Permit Amendment

MSW Permit No. 1447-A

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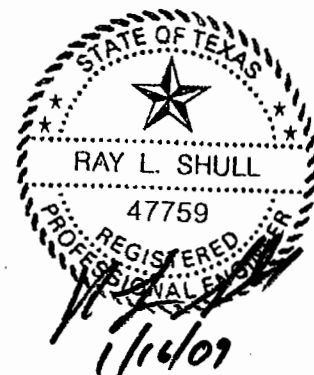
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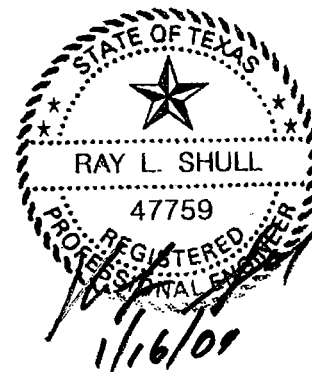
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SUNSET FARMS LANDFILL

EXPANSION AMENDMENT APPLICATION

TCEQ MSW PERMIT NO. 1447-A

PART III

Located in

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And

THE CITY OF AUSTIN, TEXAS

REVISED January 16, 2009

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**SUNSET FARMS LANDFILL
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**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
PERMIT AMENDMENT APPLICATION
PERMIT NO. MSW-1447A
Revision 3**

Applicant:



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P.O. Box 140026
Austin, Texas 78714

Prepared by

**Associated Consulting Engineers, Inc.
January 16, 2009**

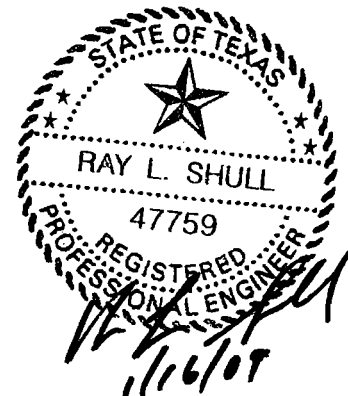


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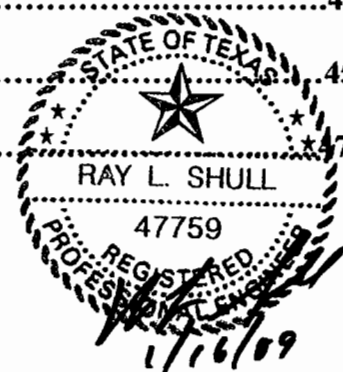


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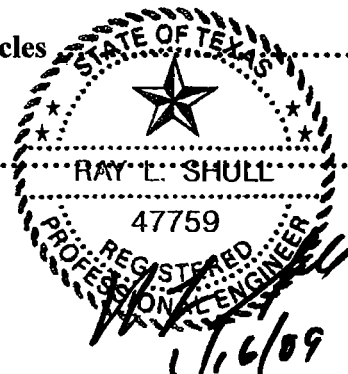


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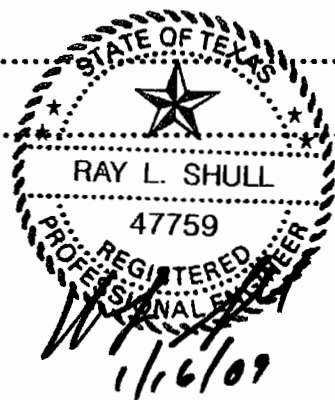


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Appendices

Appendix A – Example Forms

Appendix B – Threatened and Endangered Species Habitat Review, May 8, 2006

Appendix C – Easement Map



All waste hauling vehicles must enter and exit the site through the main site entrance off Giles Lane. The main entrance will have a gate, which will be closed and locked to waste hauling vehicles when waste is not being accepted. All other gates will normally be closed and locked except when used by site personnel and non-waste hauling vehicles. Confirmation that appropriate gates and locks are operating properly will be recorded on the Monthly Inspection Report, an example of which is included in Appendix A, Forms.

After entering the facility through the main gate and gatehouse area, vehicles will be directed by signage along the main haul road toward the active disposal area and to other facility operations. Signs will be located to direct waste hauling vehicles to the active disposal area. Gatehouse staff will direct vehicles needing access to other parts of the facility. A citizen's drop-off facility may be maintained near the entrance to the site for use by small hauling vehicles and individuals as directed by gatehouse staff. Additional signs will be posted beyond the intermediate gate to direct vehicles to the other operational areas at the facility.

Signs or barricades may also be positioned on side roads off the main haul road to other non-waste disposal operational areas to prevent uncontrolled access. Signs posted at the entrance to these side roads will state that dumping is prohibited and identify the facility operational areas located on that road. A sign will be positioned at the entrance informing drivers of waste hauling vehicles that Blue Goose Road shall not be used for ingress or egress to the landfill. Any BFI employed drivers that ignore this direction shall be progressively disciplined, up to and including termination.

6.2. Fencing

The site perimeter is surrounded by a chain link fence. The fence is at least five feet high. The perimeter fencing shall be inspected at least weekly and any damaged portions that would allow access to the site shall be temporarily repaired as soon as possible but at least within 24 hours of when the damage is discovered. The damaged area shall be replaced or permanently repaired as soon as practicable. The TCEQ Region Office shall be contacted by telephone within 24 hours of detection of any breach in the perimeter fence and a time specified to them for completing the permanent repairs of this breach, unless the breach is repaired within eight hours of detection. Temporary repairs to prevent access to the site through a breach in the fence include replacing

The waste lift must be covered by at least six inches of well-compacted earthen material. Scrapers, or other equipment, will be used to transport cover material to the active face. A bulldozer or compactor will spread the cover material to adequately cover exposed waste at the active face with a minimum of 6 inches of cover. Nominal compaction of this soil will be provided by the tracks on the bulldozer or compactor wheels to reduce voids. Daily cover material must be clean and not previously mixed with garbage, rubbish, or other solid waste materials.

During typical operations, daily cover will be applied during the day as waste placement is in progress, and upon completion of daily waste acceptance, to assure complete covering of the active face. As the working face is established each day, or as it moves during the day, part of the previous daily cover may be removed at the new working face, provided that no previously covered waste is exposed. This removed daily cover will be reused as cover material at the landfill. As the waste lift is constructed and the active face moves, exposed waste will be covered with soil to maintain a small working face. This small working face minimizes the potential for windblown waste and litter and odors. The working face shall be covered with daily cover at least once every 24 hours.

23.2. Intermediate Cover

The maximum amount of time a waste lift can be covered with only daily cover without activity not recommencing is 60 days for side slopes and 120 days for the top deck areas. By the end of the respective period, the waste lift must either receive additional waste (with the required daily cover) or the installation of intermediate cover. Intermediate cover must consist of at least 12 inches of compacted, clean earthen material that has not been previously mixed with garbage, rubbish, or other solid waste materials. This earthen material must be capable of sustaining native plant growth. The 12 inches of compacted, clean soil may include the previously placed 6 inches of daily cover material. 12 inches of compacted, clean soil may also be applied to serve as both daily and intermediate covers.

Intermediate cover will be placed, and seeding will be performed, on all side slope disturbed areas on which activity has not recommenced within 60 days except seeding will not be required during the months of July or August. Intermediate cover will be placed, and seeding will be performed, on all top deck disturbed areas on which activity has not recommenced within 120 days, except within 100 feet of any temporary down chutes. Those areas of the top deck up gradient from the down chutes shall be immediately vegetated upon construction of each down chute with a filter strip of buffalo grass sod that extends at least 100 feet out from each down chute inlet. In addition, a silt fence, mulch berm, or other control mechanisms approved by the TCEQ shall be placed on the top deck in front of the inlet of each down chute and at the end of each constructed down chute. The initial seeding event for all disturbed areas will be accomplished using hydro-mulch seeding application procedures. Seeding of the disturbed areas will be of a seasonally appropriate mix. Currently the seed mix is bermuda/millet for warm weather and rye for cold weather. When cold weather seed is used the seeded area shall be reseeded with warm weather seed mix within 60 days of the onset of sufficiently warm weather to support the warm weather mix. The reseeded area shall be irrigated until adequate vegetation growth is achieved. Perimeter sediment/erosion control devices such as silt fences, hay bales, mulch tubes, or mulch berms shall be in place prior to the establishment of any soil stock piles on site. For soil stock piles which have slope lengths greater than 20 feet, mid-slope temporary stabilization controls such as seeding, tarping or placement of silt fences or mulch berms shall be implemented within fourteen days of the initial establishment of the soil stock pile. BFI shall install and maintain silt fences or mulch berms within 14 days of completion of intermediate cover at the base of all side slope and top deck intermediate cover areas until adequate vegetation growth is achieved.

The establishment of grass is desirable to reduce erosion, which helps to maintain the cover's integrity and improve the aesthetic appearance of the landfill, and aid in sediment control. Intermediate cover must be inspected at least weekly to verify the integrity of the cover material. Intermediate cover shall be graded to prevent ponding of water and plant growth will be maintained after seeding. Any erosion shall be promptly repaired by restoring the cover material, grading, compacting, and re-seeding it, as necessary.

23.3. Alternative Daily Cover Material

Alternative daily cover is not proposed at this facility. No alternative daily cover materials are currently approved for use at the site.

23.4. Cover Log

A cover application log will be maintained by the site manager, or his designee, documenting the area over which daily, intermediate, or final cover is applied. For daily and intermediate cover, the log shall specify the date the area was covered (no exposed waste), how it was accomplished, where cover was applied, and the last area that was covered. Areas with cover will be inspected on a weekly basis to verify the integrity of the cover material.

For final cover, this log shall specify the area covered, the date cover was applied, and the thickness applied that date. Each entry shall be signed by the on-site supervisor designating that the work was accomplished as stated in the log. The cover log shall be available for inspection by TCEQ representatives and authorized agents or employees of local governments having jurisdiction. An example of the Cover Log is included in Appendix A, Forms.

23.5. Final Cover

Final cover for the landfill will be in accordance with Attachment 12, Final Closure Plan, of the permit amendment application.

23.6. Erosion of Cover

The landfill final and intermediate cover areas will be inspected for erosion not later than the next operating day after each day that measurable rainfall occurs at the site. The inspection will be performed on the next Monday through Friday operating day after the measurable rainfall occurs. Maintenance of the landfill cover will be performed to prevent exposure of waste due to erosion. Areas of the cover that require maintenance due to erosion will be identified. Any damage to the landfill cover due to erosion which could expose deposited waste will be repaired within five days of detection, unless a different schedule is approved by the TCEQ, by restoring the cover material, grading, compacting, and seeding as applicable.

Areas of final and intermediate cover will also be inspected for erosion at least monthly during the operating life of the landfill, and final cover will be inspected at least semi-annually during the post-closure care period of the landfill. Any areas requiring maintenance will be promptly restored during the entire operational life and for the post-closure maintenance period of the facility. These cover erosion inspections will be documented on the Monthly Inspection Report. An example of each of this report is included in Appendix A, Forms.

24. Ponded Water

24.1. Landfill Unit

The ponding of water over waste placed at the municipal solid waste landfill shall be prevented or promptly eliminated after any such occurrence is identified. Waste fill areas with daily, intermediate, or final cover will be sloped to prevent ponding. Any areas of ponded water that occur will be eliminated. Any area in which ponding occurs will be filled in and regraded as soon as the surface dries adequately for regrading or adding soil such that the ponding will be eliminated within seven days of occurrence. The filled areas of the landfill will be inspected at least weekly for the presence of any ponded water. If any ponded water has come into contact with waste, leachate, or waste contaminated soils, the ponded water will be managed in the accordance with Attachment 15, the Leachate and Contaminated Water Plan, of this permit amendment application.

24.2. Other Areas

Ponded water in areas not over waste, such as in excavations, and retention ponds, is not prohibited so long as ponding in other areas does not cause or contribute to nuisance conditions. Ponding in these areas will be monitored to prevent the occurrence of nuisance odors. In addition, excavations will be pumped out as necessary to maintain the area as accessible to earth-moving equipment. Detention and retention basins will be maintained to perform as designed. Water contained in basins or excavations may be used on site for dust control.

25. Waste in Enclosed Containers or Enclosed Vehicles Accepted at Type IV Landfills

This section is inapplicable to this site.

ATTACHMENT D

**SOAH DOCKET NO. 582-08-2178
TCEQ DOCKET NO. 2007-1774-MSW**

IN RE: THE APPLICATION OF	§	BEFORE THE STATE OFFICE
BFI WASTE SYSTEMS OF NORTH	§	OF
AMERICA, LLC	§	ADMINISTRATIVE HEARINGS
PERMIT NO. MSW-1447A	§	

DIRECT TESTIMONY OF

ADAM MEHEVEC, P.E.

ON BEHALF OF

BFI WASTE SYSTEMS OF NORTH AMERICA, LLC (APPLICANT)

January 16, 2009

**DIRECT TESTIMONY OF
ADAM MEHEVEC, P.E.**

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LIST OF EXHIBITS

Exhibit	Description
AM-2	Resume
AM-3	Part III-Site Development Plan
AM-4	Part III-Appendix III-A
AM-5	Part III-Appendix III-B
AM-6	Part III-Appendix III-C
AM-7	Part III-Attachment 1-Site Layout Plan
AM-8	Part III-Attachment 3-Existing Contour Map
AM-9	Part III-Attachment 6-Groundwater and Surface Water Protection Plan
AM-10	Part III-Attachment 7-Final Contour Map
AM-11	Part III-Attachment 8-Closure and Post-Closure Cost Estimate
AM-12	Part III-Attachment 12-Closure Plan
AM-13	Part III-Attachment 13-Post-Closure Care Plan
AM-14	Part III-Attachment 15-Leachate and Contaminated Water Management Plan
AM-15	Part III- Attachment 6, Figure 6-2
AM-16	Part III- Attachment 6, Figure 6-3
AM-17	Part III- Attachment 6, Figure 6-4
AM-18	Comparison of Pre-Development and Post-Development Conditions for 100 year storm event table
AM-19	Photo - East Slope near Giles
AM-20	Photo - South Slope looking west from Giles
AM-21	Photo - Looking North at Outfall 2
AM-22	Photo - Looking West at Outfall 3
AM-23	Photo - Grass on South Slope
AM-24	Photo - Looking Northeast at Outfall 4
AM-25	Photo - Looking East at Outfall 4
AM-26	Photo - Looking East at Outfall 5
AM-27	Photo - North Slope looking East
AM-28	Photo - Final cover at WMI – East Slope
<u>AM-29</u>	<u>Underline/strike-out version of revisions to the text and figures of Attachment 6 of the Application</u>
<u>AM-30</u>	<u>Replacement pages that have accepted the changes of the underline/strike-out revisions</u>

1 A. I believe the erosion control practices proposed in the application are adequate based on
2 the fact that they meet the MSW rules, have been reviewed by the TCEQ, and are similar
3 to practices proposed and accepted at other permitted landfills.

4 **Q. Do you believe that the application satisfies the requirements of the rules and**
5 **guidance for erosion control?**

6 A. Yes.

7 **Q. Mr. Mehevec, are you aware of a "Rule 11 Agreement" between BFI, Giles**
8 **Holdings, Inc. , and the City of Austin?**

9 A. Yes.

10 **Q. Is Exhibit RS-42 a true and correct copy of that Agreement?**

11 A. Yes it is.

12 **Q. Does Exhibit RS-42 include provisions that affect erosion and sedimentation**
13 **controls?**

14 A. Yes. Exhibit A to the Rule 11 Agreement is an agreement regarding operations and
15 closure of the landfill. This agreement includes more detailed requirements regarding
16 erosion and sedimentation controls than those contained in the Application.

17 **Q. What commitments does BFI make in the Rule 11 Agreement, regarding**
18 **erosion and sedimentation controls at the Sunset Farms Landfill?**

19 A. It requires that BFI perform specific erosion and sedimentation controls which are above
20 and beyond the requirements of the Application, including: additional requirements for
21 placement of intermediate cover, revegetation, and irrigation; additional silt fences or
22 mulch berms; routing of additional storm water to and through detention/sedimentation

1 ponds; and amendment of BFI's Storm Water Pollution Prevention Plan to incorporate the
2 additional erosion and sedimentation control requirements; all within specified time
3 frames.

4 **Q. Does Exhibit RS-43 contain specific language that the TCEQ staff requests be**
5 **adopted as special conditions for an expansion permit for the Sunset Farms**
6 **Landfill to implement the Rule 11 Agreement?**

7 A. Yes it does.

8 **Q. Do you concur with the TCEQ that the special provisions as specified in**
9 **Exhibit RS-43 accurately reflect the requirements of the Rule 11 Agreement?**

10 A. I do.

11 **Q. Will the Application be revised to implement the requirements of the Rule 11**
12 **Agreement?**

13 A. Yes.

14 **Q. Have you in fact made revisions to the Application to implement the**
15 **requirements of the Rule 11 Agreement?**

16 A. Yes. I have revised a few lines in each of six pages and modified the notes in two
17 drawings in Attachment 6 to reflect the proposed special conditions. Those changes have
18 now been submitted to the TCEQ's executive director. On the executive director's
19 preliminary review, he finds the revisions to be minor and that they appear to provide an
20 appropriate approach to incorporating the settlement provision into the application..

1 **Q. Can you identify Applicant's Exhibit AM-29?**

2 A. It is an underline/strike-out version of those revisions to the text and figures of
3 Attachment 6 of the Application.

4 **Q. Can you identify Applicant's Exhibit AM-30?**

5 A. Yes, those are replacement pages that have accepted the changes of the underline/strike-
6 out version of the revisions. This also includes a replacement cover page and table of
7 contents, each with new engineering seals, along with all of the pages that were affected
8 by the repagination caused by the changes I made.

9 **Q. Are those revisions to parts of the Application that you previously identified**
10 **in your testimony?**

11 A. Yes. Revised pages III-ATT6-A-6 through III-ATT6-A-12, and Figures 6-A-3 and 6-A-4
12 are intended to replace the same numbered pages in Exhibits AM-3 and AM-9.

13 **Q. Would replacement of these pages in Exhibits AM-3 and, AM-9 with the new**
14 **pages in Exhibit AM-30 as you have described, implement the purposes of the**
15 **Rule 11 Agreement and satisfy the proposed special conditions regarding**
16 **erosion and sedimentation controls?**

17 A. Yes it would.

18 **Q. Do you request that the Application at issue in this proceeding be revised by**
19 **replacing the pages as you have just described?**

20 A. Yes I do.

21 **[APPLICANT OFFERS APPLICANT'S EXHIBITS AM-29 AND AM-30]**

1 **Q. Do these revisions comply with the TCEQ rules?**

2 A. Yes. They are at least as stringent as the TCEQ rules, and are generally more stringent
3 than the TCEQ rules.

4 **Q. Would BFI be able to implement the new erosion and sedimentation controls**
5 **detailed in the Rule 11 Agreement and the proposed special conditions under**
6 **the Application, even without revising these pages?**

7 A. Yes, The new operational requirements are additional provisions that do not conflict with
8 the currently proposed requirements in the Application.

9 **Q. Then why is BFI proposing revisions to the existing Site Development Plan**
10 **proposed in the Application?**

11 A. Specifying the new erosion and sedimentation controls in the Site Development Plan will
12 make the requirements easier to enforce by the TCEQ field inspectors and other TCEQ
13 personnel. The TCEQ staff requested the revised pages so that it would be able to
14 enforce the new controls.

15 ***Contaminated Water (Referred Issue Z)***

16 **Q. Referred Issue Z deals with whether the application proposes adequate**
17 **provisions for management and disposal for contaminated water, correct?**

18 A. Correct.

19 **Q. What MSW regulations apply to this issue?**

20 A. 30 TAC §330.56(o)(1)-(4).

1 **Q. What parts of the application address the storage, treatment, and disposal of**
2 **contaminated water?**

3 A. The Leachate and Contaminated Water Management Plan, which is Attachment 15 to
4 Part III of the application. (APP 001566 to APP 001699)

5 **Q. What provisions does the application include for the storage, treatment, and**
6 **disposal of contaminated water?**

7 A. Attachment 15 contains the provisions addressing the following matters related to the
8 storage, treatment and disposal of contaminated water:

9 1. Procedures that identify whether or not run-off from an area of the facility should
10 be contaminated.

11 2. Procedures for installation of daily cover in order to control run-off from that area
12 to be considered uncontaminated.

13 3. Discussion and sizing of run-on and run-off control berms for the active area to
14 limit and contain contaminated water.

15 4. Allowable storage methods for contaminated water.

16 5. Disposal options for contaminated water.

17 6. Prohibition against recirculating contaminated water into the waste mass.

18 **Q. What specific procedures or practices does the application include that**
19 **pertain to the storage, treatment, and disposal of contaminated water?**

20 A. Attachment 15 provides the following procedures and practices: Contaminated water
21 will initially be stored behind run-off control berms at the active face, the accumulated
22 contaminated water will then be transferred to portable storage tanks or a lined pond.

23 The current application does not include a lined contaminated water storage pond, so if

1 this option is implemented, a permit modification would be required prior to construction
2 of the pond. The application provides the following list of options for disposal of the
3 contaminated water:

- 4 1. Discharge from an authorized off-site POTW or commercial treatment facility of
5 treated effluent in accordance with existing NPDES permits and other required
6 discharge permits. Pretreatment of contaminated stormwater may be performed if
7 required;
- 8 2. Discharge from an on-site full treatment facility in accordance with NPDES
9 permits and other required permits;
- 10 3. Evaporation of collected liquid; and
- 11 4. Discharge to the surface water drainage system if chemical analysis determines
12 that the water meets all analytical requirements of the site's current Stormwater
13 Discharge Permit.

14 The site is currently sending all collected contaminated water to an off-site POTW
15 for treatment and disposal. This application does not include an authorization request for
16 either an on-site treatment facility or an evaporation pond. In order to implement either
17 of these options a MSW permit modification and other discharge permits would required.

18 **Q. Has the TCEQ Executive Director reviewed and approved the provisions for**
19 **storage, treatment, and disposal of contaminated water?**

20 A. Yes.

21 **Q. In your experience, are the provisions for the storage, treatment, and disposal**
22 **of contaminated water that are included in the application and draft permit**
23 **consistent with the design used in other, similar facilities that have been**
24 **recently permitted?**

1 A. Yes, including the La Gloria Ranch Landfill in Hidalgo County (MSW# 2348), the City
2 of Kerrville Landfill in Kerr County (MSW # 1506A), the Tessman Road Landfill in
3 Bexar County (MSW# 1410C), and the current permit for this site.

4 **Q. Based on the work you have performed on the project, your education,**
5 **experience and expertise, have you formed an opinion as to whether the**
6 **provisions for the storage, treatment, and disposal of contaminated water that**
7 **are proposed in the application and draft permit are adequate?**

8 A. Yes.

9 **Q. What is your opinion and the basis for your opinion?**

10 A. My opinion is that the application provides adequate provisions for the treatment, storage,
11 and disposal of contaminated water. This opinion is based on the fact that the provisions
12 contained in the application meet the MSW rules, have been reviewed by the TCEQ, and
13 are essentially the same as the provisions that have been successfully used at this site for
14 over 20 years under the current permit.

15 **Q. Do you believe that the application and draft permit satisfy the requirements**
16 **of the rules for the storage, treatment, and disposal of contaminated water?**

17 A. Yes.

18 **Ground Water and Surface Water Protection (Referred Issue C)**

19 **Q. Referred Issue C deals with whether application proposes adequate**
20 **protection of ground water and surface water, correct?**

21 A. Correct.

1 **Q. What will your testimony cover with respect to this issue?**

2 A. The protection of surface water. I understand that groundwater protection will be
3 covered by other experts.

4 **Q. What are the MSW regulations that are applicable to the surface water
5 portion of this issue?**

6 A. 30 TAC § 330.55(b)(1), 330.56(f) and 330.134 address surface water protection.

7 **Q. What do those regulations require?**

8 A. All of the regulations applicable to protection of surface waters have been discussed in
9 previous portions of my testimony. The regulations require that natural drainage patterns
10 not be significantly altered, that cover be provided, that discharges of waste, pollutants,
11 or dredged or filled materials into public waters be prohibited (discussed in my erosion
12 control discussion), and that contaminated water be correctly managed.

13 **Q. What parts of the application address protection of surface waters?**

14 A. Primarily Attachment 6 to the Site Development Plan (Part III), but also Attachment 12
15 and Attachment 15. (APP 000921 to APP 00112; APP 001402 to APP 001487; APP
16 001566 to APP 001699) In addition to the requirements in the application, the site also
17 operates in compliance with the requirements of the TPDES permit program.

18 **Q. What is the TPDES permit program?**

19 A. TPDES stands for the Texas Pollutant Discharge Elimination System. It is state version
20 of the National Pollutant Discharge Elimination System (NPDES). The TPDES
21 permitting program was established to protect surface waters. Most sites that operate

1 under the TPDES program do so under the General Multi-Sector Permit as opposed to a
2 site-specific permit.

3 **Q. Does BFI operate Sunset Farms under the General Multi-Sector Permit or**
4 **under a site-specific permit?**

5 A. A General Multi-Sector Permit.

6 **Q. Who issues the TPDES general permit?**

7 A. TCEQ.

8 **Q. What must a landfill owner or operator such as BFI do in order to comply**
9 **with the TPDES general permit?**

10 A. The owner must file a Notice of Intent to operate under the TPDES General Permit with
11 the TCEQ and must develop and comply with a Stormwater Pollution Prevention Plan
12 (SW3P) that specifies the practices, inspections and reporting required to be in
13 compliance with the permit.

14 **Q. Has a Notice of Intent (NOI) been filed with the TCEQ for the Sunset Farms**
15 **Landfill?**

16 A. Yes.

17 **Q. Can you identify what has previously been marked Applicant's Exhibit**
18 **RS-35?**

19 A. Yes. It is a true and correct copy of the Multi-Sector General Permit Coverage Notice
20 from the TCEQ, acknowledging that the TCEQ has processed the NOI.

1 **Q. Does BFI have a Storm Water Pollution Protection Plan (SW3P) for the**
2 **Sunset Farms Landfill?**

3 A. Yes.

4 **Q. Can you identify what has previously been marked Applicant's Exhibit**
5 **RS-36?**

6 A. Yes. It is a true and correct copy of the SW3P for the Sunset Farms Landfill.

7 **Q. It is a true and correct copy of the SW3P?**

8 A. Yes.

9 **Q. Is this the same SW3P that the site will follow if the application is granted?**

10 A. The SW3P is a living document that is constantly updated to account for changing site
11 conditions. However, the requirements within the document will remain essentially the
12 same if the expansion is approved.

13 **Q. Are the requirements of the SW3P consistent with the requirements of the**
14 **application?**

15 A. The provisions in the two documents are generally consistent. However, since each was
16 created for a different purpose, there are provisions in each that are not necessarily
17 included in the other. Nevertheless, the two plans were designed to complement each
18 other. The SW3P is referenced in several places in the MSW application, and Section 1.2
19 of the SW3P references the SOP and the Site Development Plan for the MSW permit as
20 integral components of the plan.

1 **Q. Based on the work you have performed on the project, your education,**
2 **experience and expertise, have you formed an opinion whether the**
3 **application provides for the protection of surface waters?**

4 A. Yes.

5 **Q. What is your opinion and what are the bases for that opinion?**

6 A. The application provides for the protection of surface waters in accordance with the
7 MSW rules. BFI has both a TPDES general permit and SW3P for the facility. The
8 application includes provisions for interim and final erosion controls. In addition, the
9 entire facility will have a Subtitle D compliant final cover system to prevent surface
10 waters from coming in contact with waste materials and an extensive drainage collection
11 and conveyance system to safely route run-off from the landfill cap to the existing offsite
12 drainage conveyances.

13 **Operating Life (Referred Issue I)**

14 **Q. One of the referred issues deals with whether the application proposes**
15 **adequate provisions for estimating the rate of solid waste deposition and the**
16 **operating life of the site, correct?**

17 A. Correct.

18 **Q. What regulations apply to Referred Issue I?**

19 A. 30 TAC §330.55(a)(4).

20 **Q. What does §330.55(a)(4) require?**

21 A. That the applicant provides a calculation of the estimated rate of solid waste deposition
22 and the estimated operating life of the facility.

1 **Q. Do the rules or any guidance require that this estimate be exact or bind the**
2 **applicant to that site life in the application?**

3 A. No, the rules require that an estimate be prepared. Since this estimate projects into the
4 future and is affected by a wide variety of factors that cannot be exactly determined, it is
5 only required that the estimate be a reasonable prediction of the future site development.

6 **Q. What part of the application includes any such calculations?**

7 A. Appendix III-A of the Site Development Plan (Part III). (APP 000379 to APP 000381)

8 **Q. If the application is approved, what will the remaining capacity be for the**
9 **landfill from the date of your site life calculations?**

10 A. As of August 31, 2005, the date the site life calculations were prepared, it was estimated
11 that the remaining capacity of the amended landfill would be 18,144,984 cubic yards.

12 **Q. What is the estimated rate of solid waste deposition stated in the application?**

13 A. The initial rate of solid waste deposition stated Appendix III.A is 1,653,582 cubic yards
14 per year, as of August 31, 2005.

15 **Q. How did you arrive at this estimated rate of solid waste deposition?**

16 A. I calculated the volume of landfill space that had been consumed between August 31,
17 2004 and August 31, 2005 from the annual reports submitted to the TCEQ.

18 **Q. What is the estimated annual increase in disposal rate in the calculations?**

19 A. One percent per year.

1 **Q. How did you arrive at this estimated annual increase in disposal rate?**

2 A. By looking at the growth rates that the site had encountered in previous years, and also by
3 factoring in other measures such as increased emphasis on recycling in the area and price
4 increases that have been instituted by BFI to reduce the disposal rate.

5 **Q. Why did BFI want to reduce the amount of waste it would accept?**

6 A. This application was filed in order to provide BFI with a few more years of site life to try
7 and locate and permit a new site in the Austin area, and was in fact only expected to give
8 it eight years of additional capacity. BFI wanted to gain a few years for both
9 contingencies – whether the application was granted or not.

10 **Q. What measures did BFI institute to reduce the amount of waste it would
11 accept at the site?**

12 A. These measures included disposal price increases and not renewing certain disposal
13 contracts as they expired.

14 **Q. What effect did this have on your estimated annual increase in disposal rate?**

15 A. It caused me to reduce the rate from the level of growth BFI had been experiencing at the
16 site in previous years to 1% per year.

17 **Q. Are you aware that BFI has agreed to a special provision requiring that the
18 landfill cease accepting waste on or before November 1, 2015?**

19 A. Yes.

20 **Q. Did that agreement affect your estimated waste acceptance rate?**

21 A. Yes.

1 **Q. Why would that affect your estimated waste acceptance rate?**

2 A. As I stated, this application was filed in order to provide BFI with additional time to try
3 and locate and permit a new site to provide solid waste disposal for the Austin area.
4 When the application was initially submitted, the site life calculations showed an
5 estimated closure date of 2018. This date was based on a estimated 2% annual increase
6 in waste acceptance until the year 2013 and then a gradual reduction in waste acceptance
7 until final closure. These assumptions were based on recent growth trends at the landfill
8 and discussions with BFI personnel concerning how they planned to manage the landfill.

9 However, when BFI agreed to close the facility by November 1, 2015, I consulted
10 with BFI and re-analyzed how the landfill would likely be operated in order to comply
11 with that date. I determined that BFI would no longer be able to grow at the higher 2%
12 rate and then gradually reduce its waste acceptance in anticipation of closure. In order to
13 meet the agreed closure date and substantially complete the landfill to its shown final
14 configuration, BFI would have to continue to increase the waste acceptance rate until
15 closure of the facility, but at a slightly lower rate than the 2% increase shown before.

16 Because BFI had already taken the measures to slow the growth of the incoming
17 waste stream to maximize the time it has have available for locating and permitting a new
18 site, I factored in these measures when I was determining an appropriate annual growth
19 percentage to use in the estimate. The deposition rates at the facility have historically
20 grown at a slightly higher rate than one percent, but when countered by the volume
21 reduction measures mentioned above, my professional opinion was that an assumed net
22 one percent growth in waste deposition was both appropriate and reasonable.

23 **Q. What is the estimated operating life of the site stated in the application?**

1 A. Appendix III-A shows that the site is estimated to run out of capacity in June of 2015.

2 **Q. How did you arrive at this estimated operating life?**

3 A. I took the remaining permitted landfill volume as of 2005 plus the calculated additional
4 volume associated with this application and then subtracted the anticipated disposal
5 volume for each year until all of the available volume was consumed.

6 **Q. Is supporting information for these estimates included in the application?**

7 A. Yes. The sources that I utilized to perform the calculations are referenced on the
8 calculation sheet included in Appendix III-A.

9 **Q. In your opinion are the assumptions you made reasonable?**

10 A. Yes.

11 **Q. Based on the work you have performed on the project, your education,
12 experience and expertise, have you formed an opinion whether these
13 calculations comply with the MSW regulations?**

14 A. Yes.

15 **Q. What is your opinion?**

16 A. The calculations do comply with the MSW regulations because they provide a reasonable
17 calculation of the estimated rate of solid waste deposition and the estimated operating life
18 of the facility.

19 **Q. Earlier you discussed the special provision for closure on November 1, 2015.**

20 **Suppose that, despite your calculations, the landfill is not full on that date.**

21 **How would that affect the landfill?**

1 A. The site will cease accepting waste in accordance with the permit condition. However, if
2 the landfill is not full at that time, then the final configuration will not match the
3 condition that I assumed. This might impact several portions of the application,
4 including the final drainage plan and the closure cost. The landfill would need to have a
5 closure modification approved by TCEQ to adjust for the actual final conditions.

6 **Q. Is that unusual?**

7 A. No. It is relatively common for a landfill to require a closure modification at the time of
8 facility closure to reflect the final constructed grades.

9 **Closure and Post-Closure (Referred Issue J)**

10 **Q. Referred Issue J deals with whether application proposes adequate provisions**
11 **for closure and post-closure, correct?**

12 A. Correct.

13 **Q. What MSW regulations apply to closure and post-closure?**

14 A. 30 TAC §330.56(l), §330.56(m) and §§330.250 through 330.256.

15 **Q. What does “post-closure” mean?**

16 A. Post-closure is the period after the closing of the landfill where the permittee is
17 responsible for inspections, monitoring and maintenance of the facility. The standard
18 period for post-closure is 30 years, but the TCEQ has the authority to shorten or lengthen
19 that time based on the performance of the site.

20 **Q. What parts of the application address closure and post-closure?**

1 A. Site closure is addressed in Attachment 12 and the Post-Closure Plan is included in
2 Attachment 13 of the Site Development Plan (Part III). (APP 001402 to APP 001487;
3 APP 001488 to APP 001499)

4 **Q. Can you give a brief overview of the some of the features of the Final Closure**
5 **Plan?**

6 A. The Final Closure Plan provides design details, material specifications, construction
7 testing procedures and scheduling of closure activities at the site. The plan also includes
8 an estimate of the largest area ever requiring final cover, a maximum inventory of waste,
9 and a cost estimate for third-party closure of the landfill at the time of the largest area
10 requiring final cover. The Final Closure Plan also includes a Final Cover Quality Control
11 Plan (FCQCP) which provides detailed material specifications, installation requirements,
12 and construction testing and monitoring requirements for the final cover system
13 construction.

14 **Q. What is the estimate of the largest area ever requiring final cover?**

15 A. 251.5 acres. The text in Section 3.3 of Attachment 12 mistakenly states that the largest
16 area is 262 acres. (APP 001414) However, this mistake does not impact the Final
17 Closure Plan because the correct value of 251.5 acres was used for the cost estimates and
18 other calculations. The 262-acre value was the area of the landfill footprint prior to BFI
19 agreeing to remove 10.5 acres from the landfill footprint in 2006.

20 **Q. How did you arrive at the 215.5-acre estimate?**

1 A. That is the entire acreage of the landfill. Since all of the cells within the landfill will have
2 been constructed and partially filled by the time this application is approved and there is
3 currently no final cover in-place at the site, the entire footprint could require final cover.

4 **Q. What is the estimate for the maximum capacity of waste?**

5 A. This is the volume of waste that will be in-place in the landfill at the time it reaches its
6 maximum permitted grades, which for this application is 41.7 million cubic yards.

7 **Q. How did you arrive at that estimate?**

8 A. We used a three-dimensional computer modeling program known as TerraModel to
9 calculate the disposal volume of the expanded landfill.

10 **Q. What is the cost estimate for closure?**

11 A. The cost estimate for closure is the anticipated third-party cost to install final cover and
12 construct the other facilities necessary to close the landfill in the event that the applicant
13 is unable to perform these activities. The estimate is based upon the anticipated
14 configuration of the landfill development that would require the largest area of final
15 cover to be constructed. The estimated closure cost for this application is \$39,099,849 as
16 presented on Table 8-1 in Attachment 8 of the Site Development Plan (Part III). (APP
17 001150)

18 **Q. Are the numbers contained in the Final Closure Plan reasonable and
19 consistent with those used in the MSW industry?**

20 A. Yes.

21 **Q. Is the FCQCP consistent with such plans used in the MSW industry for
22 facilities like this one?**

1 A. Yes.

2 **Q. Do you believe the design for the final cover system is consistent with MSW**
3 **industry standards?**

4 A. Yes.

5 **Q. Do you believe that the Final Closure Plan complies with the Final Closure**
6 **Provisions in the MSW rules?**

7 A. Yes.

8 **Q. What is included in the Post-Closure Care Plan?**

9 A. The Post-Closure Care Plan outlines the inspections, monitoring, and maintenance
10 activities that will be conducted at the site during the post-closure period.

11 **Q. Can you give a brief overview of the some of the features of the post-closure**
12 **care plan?**

13 A. The Post-Closure Care Plan requires BFI to comply with the following during the post-
14 closure period:

15 1. BFI will retain the right of entry and maintain all rights-of-way to the closed
16 landfill;

17 2. BFI will conduct site inspections after closure at the same frequency as
18 groundwater monitoring (semi-annual);

19 3. BFI will conduct maintenance and/or remediation activities, as needed, in order to
20 maintain the integrity and effectiveness of all final cover, site vegetation, and
21 drainage control systems;

22 4. BFI will control surface run-on and run-off in order to minimize the erosion of the
23 final cover system;

- 1 5. BFI will correct the effects of settlement, subsidence, ponded water, erosion, or
2 other events or failures in as much as these situations are detrimental to the
3 integrity of the closed landfill;
- 4 6. BFI will maintain and operate the leachate collection system in accordance with
5 the requirements of 30 TAC §330.200 and §330.201;
- 6 7. BFI will maintain the ground-water monitoring system and monitor ground water
7 in accordance with the requirements of 30 TAC §330.230-330.242. As specified
8 in 30 TAC §330.234(b), the monitoring frequency will be semi-annual.
9 Parameters to be monitored will be those constituents listed in 30 TAC §330.241
10 (Constituents for Detection Monitoring);
- 11 8. BFI will maintain and operate the landfill gas monitoring system. In accordance
12 with 30 TAC §330.56(n), the minimum monitoring frequency will be quarterly. In
13 addition, GRS (which operates the on-site landfill gas-to-energy facility) will
14 continue to collect landfill gas and produce electricity for much of the post-
15 closure period;
- 16 9. BFI will retain the "Site Operating Record" and will document post-closure care
17 by retaining groundwater and gas monitoring results, as well as the results of any
18 inspections and records of maintenance performed;
- 19 10. BFI will maintain the benchmark and easement markers; and
- 20 11. Access to the top and sideslopes of the landfill will be provided via temporary or
21 permanent roads that connect to the site entrance road at the east toe of the
22 landfill.

23 **Q. In your opinion does the Post-Closure Care Plan comply with the post-closure**
24 **provisions in the MSW rules?**

25 A. Yes.

1 **Q. Based on the work you have performed on the project, your education,**
2 **experience and expertise, have you formed an opinion whether the**
3 **application provides for adequate closure and post-closure?**

4 **A.** Yes.

5 **Q. What is your opinion?**

6 **A.** It does.

7 **Q. What is the basis for your opinion?**

8 **A.** The closure and post-closure plans are in compliance with the MSW rules and are
9 comparable to the plans approved by the TCEQ at various other landfill sites throughout
10 the state, including the recently approved La Gloria Ranch Landfill in Hidalgo County
11 (MSW# 2348), and the City of Kerrville Landfill in Kerr County (MSW # 1506A)

12 **IV. CONCLUSION**

13 **Q. Does this conclude your direct testimony at this time?**

14 **A.** Yes. However, with the judge's permission, I would like to reserve the right to amend
15 and/or supplement my testimony as may be required.

PART III
ATTACHMENT 6
GROUNDWATER AND SURFACE WATER
PROTECTION PLAN

SUNSET FARMS LANDFILL
AUSTIN, TEXAS

REVISED ~~August 22, 2006~~ January 16, 2009

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EXPANSION AMENDMENT APPLICATION
PERMIT NO. 1447-A



*Strikethrough
Version*



Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714



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1-16-09



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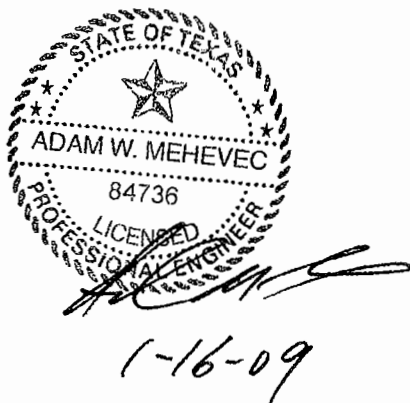
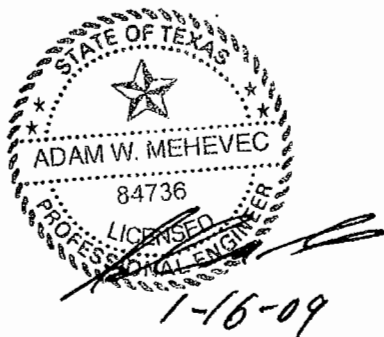


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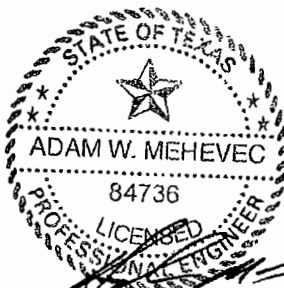


PART III
APPENDIX ATT6-A
EROSION AND
SEDIMENTATION CONTROL PLAN
SUNSET FARMS LANDFILL
AUSTIN, TEXAS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EXPANSION AMENDMENT APPLICATION
PERMIT NO. 1447-A

*Strikethrough
Version*

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Rainfall runoff from excavated areas will be collected within the excavation area itself. The bottom of the excavated pit will be graded to drain to one location. Storm water which has not contacted waste may then be pumped from the excavation to the perimeter drainage system or temporary diversion channel. The pump intake will be positioned above the bottom of the excavation to minimize the discharge of sediment. The discharge from the cell will be observed to ensure that excessive sediment loadings are not discharged into the drainage system. Drainage channels will be inspected for accumulation of significant sediment. If necessary, sediment will be removed.

- Daily Cover Area

To minimize stormwater contact with the active face and daily cover, diversion structures are located upgradient of the landfill working area. Retention berms are located downgradient of the working area to contain potentially contaminated stormwater. If a rainfall event occurs after the placement of the daily cover and certain criteria are met, the stormwater retained behind the berm will be considered uncontaminated. This uncontaminated stormwater may be discharged offsite as authorized under the TCEQ and NPDES water quality permits. To be considered uncontaminated stormwater, the following criteria must be met:

- Clean soil only has been used for daily cover;
- According to the site operating log, the daily cover was in place prior to the rainfall event; and
- Inspection of the daily cover after the rainfall event indicates that the daily cover has not been breached.

All three criteria must be met for the retained stormwater to be considered uncontaminated. The pump intake will be positioned above the bottom of the stormwater pool to minimize the discharge of sediment. If inspection of the retention berms detects an accumulation of a significant amount of sediment, the sediment will be removed.

- Above Grade Intermediate Covered Areas

Areas of the landfill that are above grade and have received intermediate cover will be re-vegetated as described on Figures 6-A-3 and 6-A-4. These areas will be inspected quarterly or after a significant rainfall event for evidence of erosion. If significant erosion is occurring

then one or more of the following actions will be taken to mitigate the erosion including the placement of rock berms, silt fencing, re-vegetation (or other stabilization procedures), and contouring wherein the surface of the cover may be roughened with a series of horizontal grooves running parallel to the contour of the cover to reduce the velocity of runoff across the cover surface. This may be accomplished with heavy equipment (i.e., a track dozer).

- Final Covered Landfill Area

Figure 6-A-1 shows grading and direction of flow for landfill areas constructed to their final design elevations. Runoff from the landfill cover is collected in a perimeter ditch system.

Erosion control measures for the final cap of the Sunset Farms landfill will consist of a series of drainage berms to intercept runoff from the slopes of the landfill. This flow will then be conveyed to downchutes and conveyed to the perimeter drainage system. The berm/downchute system is described in greater detail in Part III, Attachment 6, Groundwater and Surface Water Protection Plan.

After landfill activities have ceased in an area, the final cover will be constructed. The top layer will be seeded as soon as practicable described on Figures 6-A-3 and 6-A-4 and in Attachment 12.

3.0 SEDIMENT AND EROSION CONTROLS

The Sunset Farms landfill will be operated so that the surface water contamination by sediment is minimal. BFI will employ a variety of best management practices (BMPs), including sediment and erosion control structures, individually or in concert to minimize surface water pollution. These may include but are not limited to:

- Sedimentation basins and wet ponds;
- Silt fences or mulch berms;
- Berms;
- Grass-lined drainage swales and ditches; and

- Rock Berms.

These sediment and erosion control measures and BMPs are intended to work in conjunction with the Sunset Farms Stormwater Pollution Prevention Plan.

Figure ATT6-A-3, Erosion and Sedimentation Control Detail Sheet shows some structural measures used to control pollutant discharges.

3.1 SOIL STOCKPILES

Soil stockpiles used for temporary storage of fill dirt pose a potential for soil erosion. The facility will manage soil stockpiles in the following methods to minimize soil erosion:

- stockpiles will have sideslopes no greater than 2 horizontal to 1 vertical.
- stockpiles will be crowned and graded smooth, with side slopes no steeper than necessary.
- stockpiles that remain in place for long periods of time will be seeded to prevent erosion.
- drainage will be rerouted when stockpiles are constructed in a manner that will interrupt a portion of the drainage.
- ~~silt fences or, rock berms, or other erosion control devices will be placed around the stockpiles as specified on Figures 6-A-3 and 6-A-4, may be placed around the stockpile.~~
- **Undeveloped areas of the landfill will be disturbed to the minimum degree possible in order to preserve the natural vegetative cover. Vehicles disposing of waste will be confined to roadways. While in use, the sediment/erosion control structures will be regularly inspected. These inspections will occur on a quarterly basis and a significant rainfall event during the operating life of the facility. Inspection, repair and sediment removal are conducted by the Landfill Manager or his/her designated alternate.**

3.2 SEDIMENTATION BASINS

Sedimentation/detention basins will be used for storage of storm water runoff on-site prior to its discharge. The effect of the detention basin is to regulate runoff from a rainfall event and control discharge rates to minimize impact to downstream drainage systems. Storm water falling on exposed waste, leachate, or landfill gas condensate is considered to be contaminated. Contaminated water will be handled in accordance with Part III, Attachment 15, Leachate and Contaminated Water Plan.

As part of regular basin maintenance, sedimentation and detention basins will be inspected on a quarterly basis and after a significant rainfall event during the operating life of the facility. Repairs will be made and sediment removed as appropriate.

3.3 SILT FENCES

Silt fences may be utilized in the following situations:

- Immediately upstream from site discharge point(s) of sheet flow;
- Where sheet flow design flow rate will not exceed 0.5 cubic feet per second; and
- Below disturbed areas where runoff occurs as overland flow.
- Around stockpile areas.

When used as part of the runoff control system, silt fences will be installed prior to any major soil disturbance in the drainage area.

Silt fencing shall conform to the detail shown on Figure 6-A-4, Erosion Details.

During inspections, the fences should be checked for structural defects (i.e., channeling under the fence, sagging or collapse of the fence, fabric failure) and sediment accumulation. Sediment accumulation should not be allowed to exceed one-half of the fence height shall be monitored and removed as specified on Figure 6-A-4.

Final removal of all silt fences should not occur until the upgradient area has been permanently

stabilized. Stabilization procedures are outlined in Section 3.7, Stabilization Procedures. Any remaining sediment should be graded to conform with the final slope, prepared and planted.

3.4 BERMS

Berms may be used throughout the active working area and around the site for run-on and runoff control. In the active disposal area, berms or ditches will be constructed upgradient from the working face of the waste to divert storm water around the work area. This storm water may be diverted to the perimeter drainage system. Berms will also be constructed downgradient from the working face to capture the storm water contacting waste. This storm water is deemed to be contaminated and will be handled in accordance with Part III, Appendix 15, Leachate and Contaminated Water Plan.

Typical temporary berm construction will use compacted clayey soils with approximately 2:1 sideslopes and a minimum 1 foot crest width. Further details of the toe and diversion berms can be found in Attachment 15, Leachate and Contaminated Water Plan.

As part of the regular inspections, the berms, ditch outflows, and outflow pipes will be inspected for structural integrity and signs of erosion. Any material added to the berms will be properly compacted.

3.5 DRAINAGE DITCHES

Drainage ditches are utilized for drainage control at the site and are noted on Figures 6-A-1 and 6-A-2. Appropriate ditches, channels and ponds will be constructed prior to construction within a phase. Appropriate ditches and channels would be those adjacent to the phase and appropriate ponds would be those ponds that serve as the outfalls for the drains. Further design details can be found in Attachment 6, Groundwater and Surface Water Protection Plan and Drainage Plan.

Ditches and channels will be constructed such that flow is not obstructed. Ditch and channel bottoms will be compacted and stabilized as appropriate (vegetation or riprap) and will be designed and maintained to minimize erosion.

Structural integrity and signs of erosion will be checked during regular inspections. Any material added to the ditches and channels will be properly compacted; the ditches and channels will then be reseeded or restabilized.

3.6 ROCK BERMS

Rock berms may be utilized as temporary erosion control structures with installation occurring prior to any major soil disturbance in the drainage area. Rock berms act as a sediment trap and a velocity reducing device. Similar to silt fences, the rock berm can be used for sheet flow situations and is installed perpendicular to the flow, at the toe of a slope, across a slope. Rock berms can also be used for more concentrated flow in ditches and channels. The rock berm should be installed across the drainageway and shall be placed so that it traverses the entire width of the drainageway with no gaps.

After sediments have accumulated to approximately one-third the height of the berm, the sediment should be removed. Typical Rock Berm detail is shown on Figure 6-A-4, Erosion Details.

3.7 STABILIZATION PROCEDURES

Disturbed areas will be stabilized according to the provisions on Figures 6-A-3 and 6-A-4 in a timely manner to minimize the potential for off-site migration of suspended solids. Stabilization practices that may be employed either singularly or in concert with other control measures include:

- Seeding;
- Nonvegetative mulching (straw, gravel, woodchips);
- Vegetative mulching (nonvegetative mulching in combination with seeding);
- Geotextiles; and
- Vegetated buffer zones.

~~A fast-growing, easily established grass may be established on the slope undergoing erosion to reduce erosive effects. Prior to initiating this option, the Travis County Agricultural Extension Agent or the City~~

~~of Austin may be contacted to determine the species and strains of grasses best suited for the season and the recommended methods for establishing growth of the selected grass or grasses. Prior to sowing, the slope should be roughened as described above to reduce runoff velocity and thereby give seed an opportunity to take hold and grow.~~

Mulching, matting, and netting may be used in areas where excessive erosion is occurring. A variety of products are available, and these products should be evaluated to determine the most economical and best-suited material for the condition under consideration.

4.0 OTHER ENVIRONMENTAL MANAGEMENT PLANS

This site is operated under the conditions of a landfill permit from the Texas Commission on Environmental Quality and the TCEQ's Municipal Solid Waste Management Regulations. All plans described here are retained on-site as part of the site operating record. This facility is governed by a Spill Prevention Control and Countermeasure Plan under Section 311 of the Clean Water Act (40 *CFR* Part 122). Also, in compliance with Section 402 of the Clean Water Act (40 *CFR* 122), this facility has received a Group Multi-sector Stormwater TPDES Permit from the TCEQ. In accordance with the Clean Water Act, BFI Sunset Farms Landfill has also developed a Stormwater Pollution Prevention Plan. BFI has also signed an agreement with the City of Austin that specifies interim and permanent erosion control practices. The relevant terms of this agreement have been incorporated into the requirements listed on Figures 6-A-3 and 6-A-4.

Permanent Erosion Control:

All disturbed areas shall be restored as noted below.

- A. A minimum of four inches of topsoil shall be placed in all drainage channels (except rock) and between the curb and right-of-way line.

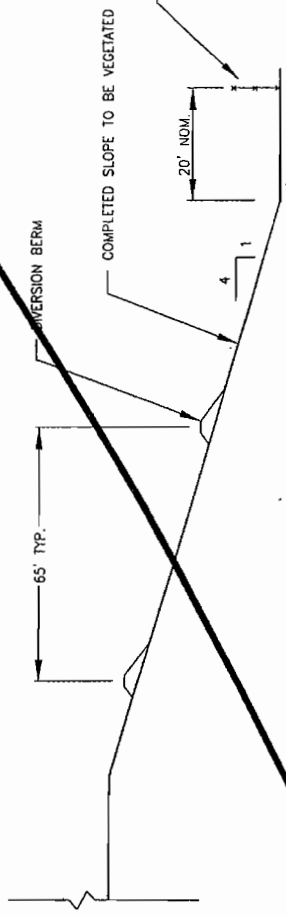
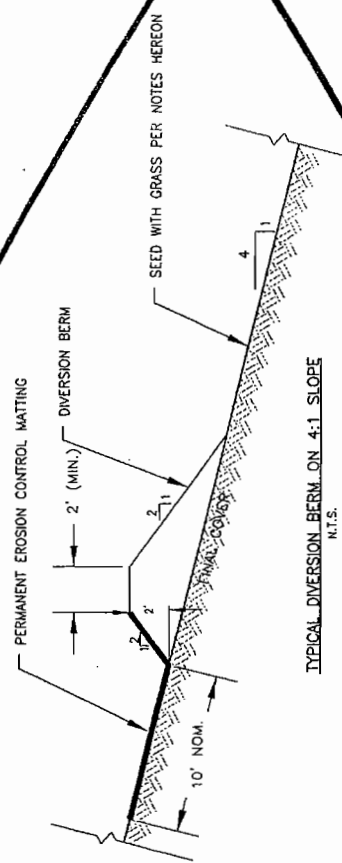
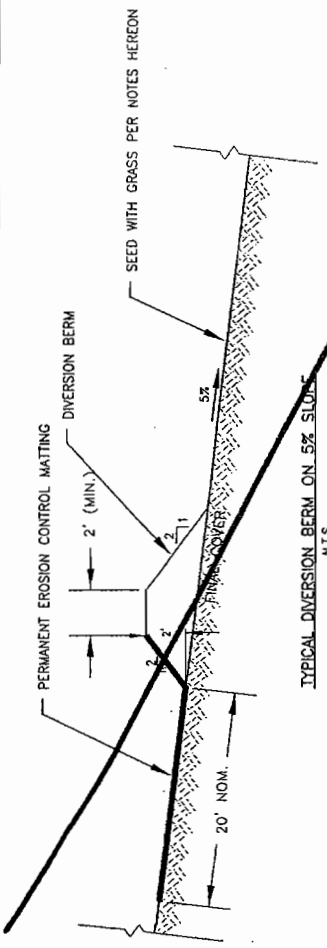
The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows:

BROADCAST SEEDING:



- From September 15 to March 1, seeding shall be with a combination of 2 pounds per 1000 SF of unhulled Bermuda and 7 pounds per 1000 SF of Winter rye with a purity of 90% germination.
- From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 2 pounds per 1000 SF with a purity of 95% with 85% germination.
 - A. Fertilizer shall be a pelleted or granular slow release with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1 pound per 1000 SF.

HYDRAULIC SEEDING:

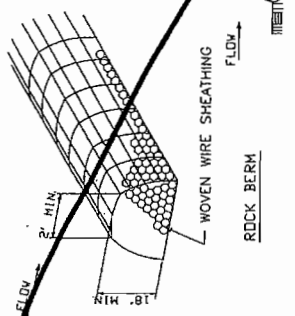
- From September 15 to March 1, seeding shall be with a combination of 1 pound per 1000 SF of unhulled Bermuda and 7 pounds per 1000 SF of Winter rye with a purity of 95% with 90% germination.
 - A. Fertilizer shall be water soluble fertilizer with an analysis of 15-15-15 at a rate of 1.5 pounds per 1000 SF.
 - B. Mulch type used shall be hay, straw or mulch applied at a rate of 45 pounds per 1000 SF with soil tackifier at a rate of 1.4 pounds per 1000 SF.
- From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 SF with a purity of 95% with 85% germination.
 - A. Fertilizer shall be water soluble fertilizer with an analysis of 15-15-15 at a rate of 1.5 pounds per 1000 SF.
 - B. Mulch type used shall be hay, straw or mulch applied at a rate of 45 pounds per 1000 SF with soil tackifier at a rate of 1.4 pounds per 1000 SF.



SILT FENCE SHALL BE INSTALLED AND MAINTAINED UNTIL VEGETATION IS ESTABLISHED ON COMPLETED SLOPE.

REV. NO.	DATE	DR. BY	APP. BY
			
			
ASSOCIATED CONSULTING ENGINEERS, INC. BFI SUNSET FARMS LANDFILL PERMIT AMENDMENT MSW 1447-4			
ACE REFERENCE NO. 070-03			EROSION DETAILS
DATE: 5/8/06			
FILE: DETALS.dwg			
FIGURE 6-A-3			

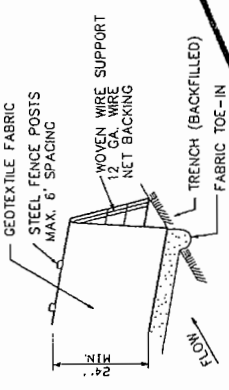
REVISED 5/8/2006
PERMIT DRAWINGS



ROCK BERM
CROSS SECTION

- GENERAL NOTES:
1. USE ONLY OPEN GRADED ROCK 4-8 INCH DIAMETER FOR STREAM FLOW CONDITIONS
 2. USE OPEN GRADED ROCK 3-5 INCH DIAMETER FOR OTHER CONDITIONS.
 3. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENING AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
 4. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
 5. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
 6. WHEN THE SITE IS COMPLETELY STABILIZED THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

TYPICAL ROCK BERM
N.T.S.



SILT FENCE
TRENCH CROSS SECTION

STANDARD SYMBOL $\frac{SF}{L}$

GENERAL NOTES:

1. Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one foot.
2. The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the down slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g. pavement) weight fabric flap with washed gravel on uphill side to prevent flow under fence.
3. The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
4. Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post.
5. Inspection shall be made weekly or after each rainfall event and repair or replacement shall be made promptly as needed.
6. Silt fence shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.
7. Accumulated silt shall be removed when it reaches a depth of 6 inches. The silt shall be disposed of in an approved site and in such a manner as to not contribute to additional siltation.

TYPICAL SILT FENCE
N.T.S.



FINAL
AUG 01 2005

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PERMIT DRAWINGS

REV. NO.	DATE	DR. BY	APP. BY
BFI BFI SUBJECT FARMS LANDFILL PERMIT AMENDMENT MSW 14417-A			
ACE REFERENCE NO. 0720/05		EROSION DETAILS	
DATE: 07/20/05		FIGURE 6-A-1	
FILE: DETAILS.dwg			

PART III
ATTACHMENT 6
GROUNDWATER AND SURFACE WATER
PROTECTION PLAN

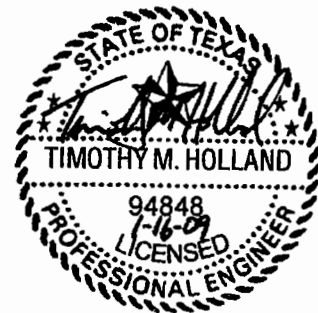
SUNSET FARMS LANDFILL
AUSTIN, TEXAS

REVISED January 16, 2009

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EXPANSION AMENDMENT APPLICATION
PERMIT NO. 1447-A



Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714

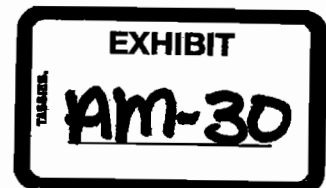
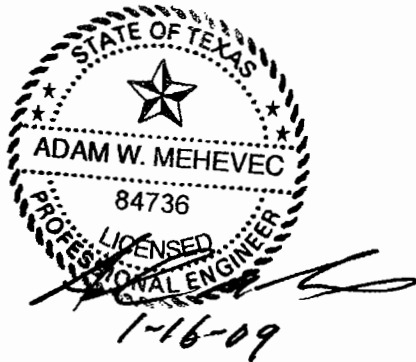


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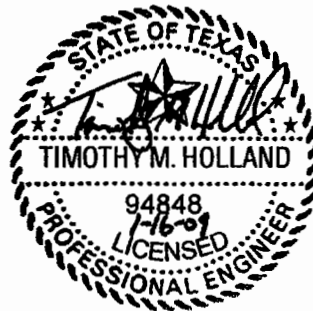
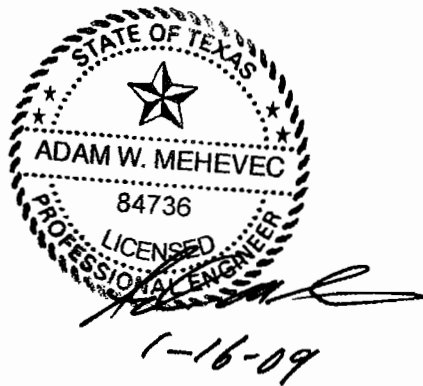
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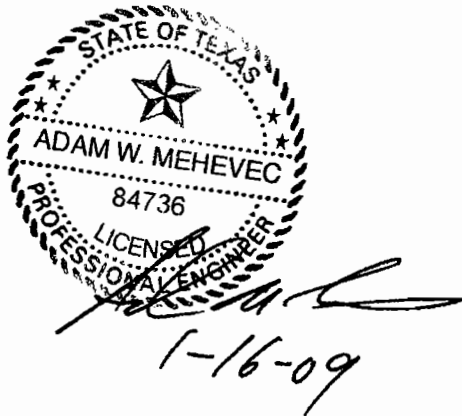
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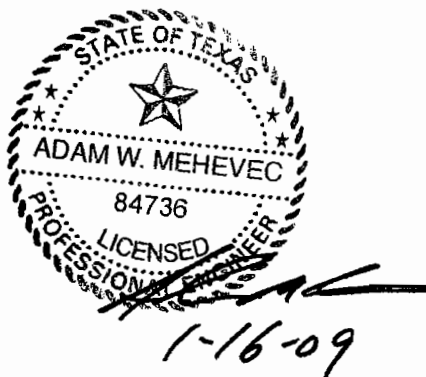
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PART III
APPENDIX ATT6-A
EROSION AND
SEDIMENTATION CONTROL PLAN

SUNSET FARMS LANDFILL
AUSTIN, TEXAS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EXPANSION AMENDMENT APPLICATION
PERMIT NO. 1447-A



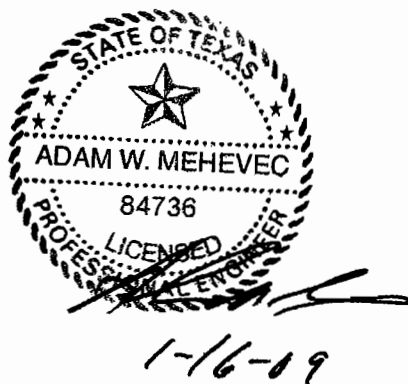
Applicant:



BFI Waste Systems of North America, Inc.
P.O. Box 140026
Austin, Texas 78714

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water which has not contacted waste may then be pumped from the excavation to the perimeter drainage system or temporary diversion channel. The pump intake will be positioned above the bottom of the excavation to minimize the discharge of sediment. The discharge from the cell will be observed to ensure that excessive sediment loadings are not discharged into the drainage system. Drainage channels will be inspected for accumulation of significant sediment. If necessary, sediment will be removed.

- Daily Cover Area

To minimize stormwater contact with the active face and daily cover, diversion structures are located upgradient of the landfill working area. Retention berms are located downgradient of the working area to contain potentially contaminated stormwater. If a rainfall event occurs after the placement of the daily cover and certain criteria are met, the stormwater retained behind the berm will be considered uncontaminated. This uncontaminated stormwater may be discharged offsite as authorized under the TCEQ and NPDES water quality permits. To be considered uncontaminated stormwater, the following criteria must be met:

- Clean soil only has been used for daily cover;
- According to the site operating log, the daily cover was in place prior to the rainfall event; and
- Inspection of the daily cover after the rainfall event indicates that the daily cover has not been breached.

All three criteria must be met for the retained stormwater to be considered uncontaminated. The pump intake will be positioned above the bottom of the stormwater pool to minimize the discharge of sediment. If inspection of the retention berms detects an accumulation of a significant amount of sediment, the sediment will be removed.

- Above Grade Intermediate Covered Areas

Areas of the landfill that are above grade and have received intermediate cover will be re-vegetated as described on Figures 6-A-3 and 6-A-4. These areas will be inspected quarterly or after a significant rainfall event for evidence of erosion. If significant erosion is occurring then one or more of the following actions will be taken to mitigate the erosion including the placement of rock berms, silt fencing, re-vegetation (or other stabilization procedures), and contouring wherein the surface of the cover may be roughened with a series of horizontal

grooves running parallel to the contour of the cover to reduce the velocity of runoff across the cover surface. This may be accomplished with heavy equipment (i.e., a track dozer).

- Final Covered Landfill Area

Figure 6-A-1 shows grading and direction of flow for landfill areas constructed to their final design elevations. Runoff from the landfill cover is collected in a perimeter ditch system.

Erosion control measures for the final cap of the Sunset Farms landfill will consist of a series of drainage berms to intercept runoff from the slopes of the landfill. This flow will then be conveyed to downchutes and conveyed to the perimeter drainage system. The berm/downchute system is described in greater detail in Part III, Attachment 6, Groundwater and Surface Water Protection Plan.

After landfill activities have ceased in an area, the final cover will be constructed. The top layer will be seeded as described on Figures 6-A-3 and 6-A-4 and in Attachment 12.

3.0 SEDIMENT AND EROSION CONTROLS

The Sunset Farms landfill will be operated so that the surface water contamination by sediment is minimal. BFI will employ a variety of best management practices (BMPs), including sediment and erosion control structures, individually or in concert to minimize surface water pollution. These may include but are not limited to:

- Sedimentation basins and wet ponds;
- Silt fences or mulch berms;
- Berms;
- Grass-lined drainage swales and ditches; and
- Rock Berms.

These sediment and erosion control measures and BMPs are intended to work in conjunction with the Sunset Farms Stormwater Pollution Prevention Plan.

Figure ATT6-A-3, Erosion and Sedimentation Control Detail Sheet shows some structural measures used to control pollutant discharges.

3.1 SOIL STOCKPILES

Soil stockpiles used for temporary storage of fill dirt pose a potential for soil erosion. The facility will manage soil stockpiles in the following methods to minimize soil erosion:

- stockpiles will have sideslopes no greater than 2 horizontal to 1 vertical.
- stockpiles will be crowned and graded smooth, with side slopes no steeper than necessary.
- stockpiles that remain in place for long periods of time will be seeded to prevent erosion.
- drainage will be rerouted when stockpiles are constructed in a manner that will interrupt a portion of the drainage.
- silt fences, rock berms, or other erosion control devices will be placed around the stockpiles as specified on Figures 6-A-3 and 6-A-4. Undeveloped areas of the landfill will be disturbed to the minimum degree possible in order to preserve the natural vegetative cover. Vehicles disposing of waste will be confined to roadways. While in use, the sediment/erosion control structures will be regularly inspected. These inspections will occur on a quarterly basis and a significant rainfall event during the operating life of the facility. Inspection, repair and sediment removal are conducted by the Landfill Manager or his/her designated alternate.

3.2 SEDIMENTATION BASINS

Sedimentation/detention basins will be used for storage of storm water runoff on-site prior to its discharge. The effect of the detention basin is to regulate runoff from a rainfall event and control discharge rates to minimize impact to downstream drainage systems. Storm water falling on exposed waste, leachate, or landfill gas condensate is considered to be contaminated. Contaminated water will be handled in accordance with Part III, Attachment 15, Leachate and Contaminated Water Plan.

As part of regular basin maintenance, sedimentation and detention basins will be inspected on a quarterly basis and after a significant rainfall event during the operating life of the facility. Repairs will be made and sediment removed as appropriate.

3.3 SILT FENCES

Silt fences may be utilized in the following situations:

- Immediately upstream from site discharge point(s) of sheet flow;
- Where sheet flow design flow rate will not exceed 0.5 cubic feet per second; and
- Below disturbed areas where runoff occurs as overland flow.
- Around stockpile areas.

When used as part of the runoff control system, silt fences will be installed prior to any major soil disturbance in the drainage area.

Silt fencing shall conform to the detail shown on Figure 6-A-4, Erosion Details.

During inspections, the fences should be checked for structural defects (i.e., channeling under the fence, sagging or collapse of the fence, fabric failure) and sediment accumulation. Sediment accumulation shall be monitored and removed as specified on Figure 6-A-4.

Final removal of all silt fences should not occur until the upgradient area has been permanently stabilized. Stabilization procedures are outlined in Section 3.7, Stabilization Procedures. Any remaining sediment should be graded to conform with the final slope, prepared and planted.

3.4 BERMS

Berms may be used throughout the active working area and around the site for run-on and runoff control. In the active disposal area, berms or ditches will be constructed upgradient from the working face of the

waste to divert storm water around the work area. This storm water may be diverted to the perimeter drainage system. Berms will also be constructed downgradient from the working face to capture the storm water contacting waste. This storm water is deemed to be contaminated and will be handled in accordance with Part III, Appendix 15, Leachate and Contaminated Water Plan.

Typical temporary berm construction will use compacted clayey soils with approximately 2:1 sideslopes and a minimum 1 foot crest width. Further details of the toe and diversion berms can be found in Attachment 15, Leachate and Contaminated Water Plan.

As part of the regular inspections, the berms, ditch outflows, and outflow pipes will be inspected for structural integrity and signs of erosion. Any material added to the berms will be properly compacted.

3.5 DRAINAGE DITCHES

Drainage ditches are utilized for drainage control at the site and are noted on Figures 6-A-1 and 6-A-2. Appropriate ditches, channels and ponds will be constructed prior to construction within a phase. Appropriate ditches and channels would be those adjacent to the phase and appropriate ponds would be those ponds that serve as the outfalls for the drains. Further design details can be found in Attachment 6, Groundwater and Surface Water Protection Plan and Drainage Plan.

Ditches and channels will be constructed such that flow is not obstructed. Ditch and channel bottoms will be compacted and stabilized as appropriate (vegetation or riprap) and will be designed and maintained to minimize erosion.

Structural integrity and signs of erosion will be checked during regular inspections. Any material added to the ditches and channels will be properly compacted; the ditches and channels will then be reseeded or restabilized.

3.6 ROCK BERMS

Rock berms may be utilized as temporary erosion control structures with installation occurring prior to any major soil disturbance in the drainage area. Rock berms act as a sediment trap and a velocity reducing device. Similar to silt fences, the rock berm can be used for sheet flow situations and is installed

perpendicular to the flow, at the toe of a slope, across a slope. Rock berms can also be used for more concentrated flow in ditches and channels. The rock berm should be installed across the drainageway and shall be placed so that it traverses the entire width of the drainageway with no gaps.

After sediments have accumulated to approximately one-third the height of the berm, the sediment should be removed. Typical Rock Berm detail is shown on Figure 6-A-4, Erosion Details.

3.7 STABILIZATION PROCEDURES

Disturbed areas will be stabilized according to the provisions on Figures 6-A-3 and 6-A-4 to minimize the potential for off-site migration of suspended solids. Stabilization practices that may be employed either singularly or in concert with other control measures include:

- Seeding;
- Nonvegetative mulching (straw, gravel, woodchips);
- Vegetative mulching (nonvegetative mulching in combination with seeding);
- Geotextiles; and
- Vegetated buffer zones.

Mulching, matting, and netting may be used in areas where excessive erosion is occurring. A variety of products are available, and these products should be evaluated to determine the most economical and best-suited material for the condition under consideration.

4.0 OTHER ENVIRONMENTAL MANAGEMENT PLANS

This site is operated under the conditions of a landfill permit from the Texas Commission on Environmental Quality and the TCEQ's Municipal Solid Waste Management Regulations. All plans described here are retained on-site as part of the site operating record. This facility is governed by a Spill Prevention Control and Countermeasure Plan under Section 311 of the Clean Water Act (40 *CFR* Part 122). Also, in compliance with Section 402 of the Clean Water Act (40 *CFR* 122), this facility has

received a Group Multi-sector Stormwater TPDES Permit from the TCEQ. In accordance with the Clean Water Act, BFI Sunset Farms Landfill has also developed a Stormwater Pollution Prevention Plan. BFI has also signed an agreement with the City of Austin that specifies interim and permanent erosion control practices. The relevant terms of this agreement have been incorporated into the requirements listed on Figures 6-A-3 and 6-A-4.

EROSION CONTROL AND RE-VEGETATION NOTES

- Intermediate cover will be placed and seeding events implemented on all side slope disturbed areas on which activity has not recommenced within 60 days except BFI is under no obligation to seed such areas during months of July and August. These seeded areas shall be irrigated in accordance with the requirements of Note 10 below.
- Intermediate cover will be placed and seeding events implemented on the top deck of the landfill in all disturbed areas on which activity has not recommenced within 120 days except for that area immediately up gradient to any proposed or constructed temporary drainage down chutes on intermediate cover areas. Those up gradient areas shall be immediately vegetated upon construction of each down chute with a filter strip of buffalo grass sod that extends at least 100 feet out from each down chute inlet and is wide enough to filter the run off to be directed to each down chute. The buffalo grass filter strip shall be maintained until final cover is placed. In addition, a silt fence or mulch berm shall be placed on the top deck in front of the inlet of each down chute and at the end of each constructed down chute. These silt fences or mulch berms shall remain in place and be maintained until the areas contributing runoff to these down chutes achieve adequate vegetation growth.
- The initial seeding event for all disturbed areas will be accomplished using hydro-mulch seeding application procedures per Table 7-A on Sheet 6-A-4.
- Seeding of the disturbed areas will be of a seasonally appropriate mix. Currently the seed mix is bermuda/millet for warm weather and rye for cold weather. When cold weather seed is used the seeded area shall be reseeded within 60 days of the onset of sufficiently warm weather to support the warm weather mix. The reseeded area shall be irrigated until adequate vegetation growth is achieved.
- Seeding for the final cover shall include a seasonally appropriate 609-S (native seeds) mix as defined in the City of Austin Standard Specifications Manual on approximately 15% of the surface area of the eastern and northern slopes of the landfill and for the remainder of the site a seasonally appropriate mix.
- Perimeter sediment/ erosion control devices such as silt fences, hay bales, rock berms, or mulch berms shall be in place prior to the establishment of any soil stock piles on site. For soil stock piles which have slope lengths greater than 20 feet, mid-slope temporary stabilization controls such as seeding, tarping or placement of silt fences or mulch berms shall be implemented within fourteen days of initial establishment of the soil stock pile and shall be maintained in good working condition until the stockpile is removed.
- Silt fences or mulch berms shall be installed within 14 days of completion of intermediate cover at the base of all side slope and top deck intermediate cover areas until adequate vegetation growth is achieved.
- Stormwater runoff from the landfill area designated as Drainage Area 2 shall be routed through the existing detention pond, or the proposed water quality/detention pond, when the waste fill in Drainage Area 2 has reached the final grades proposed in the landfill expansion plan.
- The side slopes of the existing detention pond and the side slopes of the proposed water quality/detention pond in the northeast portion of the landfill shall be adequately stabilized through proper grading and maintenance and by implementing/applying vegetation on the side slopes of the ponds within thirty days of completion of construction of the pond. The sedimentation ponds/basins will be inspected every three months and after every half-inch rainfall event and the pond/basins will be cleaned by removing the accumulated sediment once the sediment has reached 25% of the respective pond capacity.

10. Vegetative Practices-Temporary Vegetative Stabilization of Disturbed Areas

A. Description.

Stabilize soil in disturbed areas with temporary vegetation or mulching.

B. Purpose

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

C. Conditions Where Practice Applies.

Use vegetation to temporarily stabilize the soil on disturbed, graded or cleared areas prior to establishment of permanent vegetation.

D. Design Criteria.

Prior to vegetative establishment, install needed erosion control practices, such as diversions, grade stabilization structures, berms, dikes, level spreaders, and sediment basins. Final grading and shaping has usually not been completed for temporary stabilization.

E. Fertilizer.

For temporary vegetative establishment, apply fertilizer with an analysis of 15-15-15 at the rate of .5 pounds of nitrogen per 1,000 square feet during the installation period. In order to avoid the conveyance of nutrients off-site, the timing shall not occur when rainfall is expected.

F. Seed Bed Preparation.

Prepare a suitable seed bed which allows good seed-to-soil contact and soil conditions that are conducive to vegetation growth. Do not disturb the soil within the critical root zone of existing trees. Areas of compacted soil shall be loosened to a depth of at least two (2) inches by plowing, discing, raking or other acceptable means before seeding. In areas where no topsoil exists, or where fill is needed, the subgrade shall be loosened by discing or by scarifying to a depth of at least two (2) inches to permit bonding of the topsoil to the subsoil.

Topsoil, when used, shall have the following requirements: The depth of the topsoil shall be a minimum of 6" in all areas except within the critical root zone of existing trees. Do not add topsoil within the critical root zone of existing trees.

For temporary vegetative stabilization, the top six inches of soil used for intermediate cover must contain sufficient organic matter and nutrients to support vegetative cover. The following description is not required but is a suggested mix which will be presumed to meet this performance requirement: The topsoil shall be composed of 3 parts of soil mixed with 1 part of compost, by volume. The compost shall be Dillo Dirt or an equal approved by the Engineer, or designated representative. The soil shall be locally available native soil that meets the following specifications: Shall be free of trash, weeds, deleterious material, rocks, and debris. 100% shall pass through a 0.75-inch screen. Less than 25% shall pass through a #200 sieve. Topsoil salvaged from the existing site may often be used, but it should meet the same standards as set forth in these standards.

G. Seeding.

If seeding is to be conducted during the cool season (November 1 to February 15) select species noted as "cool season cover crop" from the tables in Standard Specification 604S. If seeding is to be conducted during the warm season (February 15 to October 31) use one of the following options (whichever is applicable).

Native Seeding: Green Sprangletop (*Leptochloa dubia*) at the rate of 4 lbs. per acre. Non-native Seeding: Comply with 604S.5 using Bermuda grass.

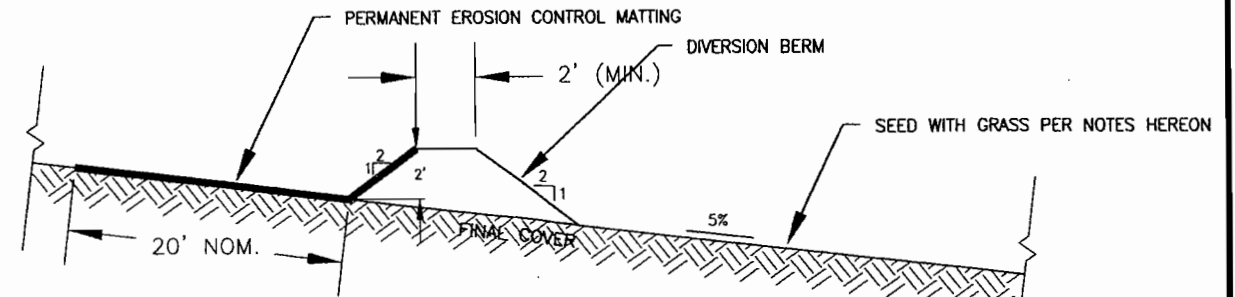
- Apply seed uniformly with a seed spreader, drill, cultipacker seeder or hydroseeder (slurry includes seed, fertilizer, and binder).

H. Protection of Seed Bed with Hydromulching or Soil Retention Blanket.

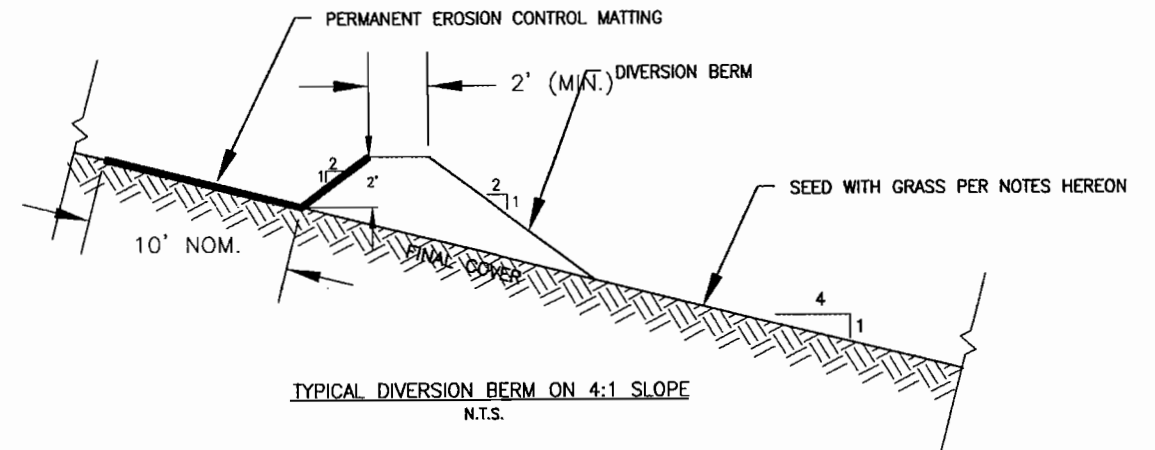
Newly-installed temporary vegetation must be protected by hydromulch or soil retention blanket (refer to Standard Specification 605S Soil Retention Blanket) immediately after seeding. Protection of the seed bed shall occur in a manner that will allow seed germination and that encourages effective vegetative growth. Hydromulching, when used, shall comply with requirements of Table 7-A:Hydromulching for Temporary Vegetative Stabilization.

I. Watering

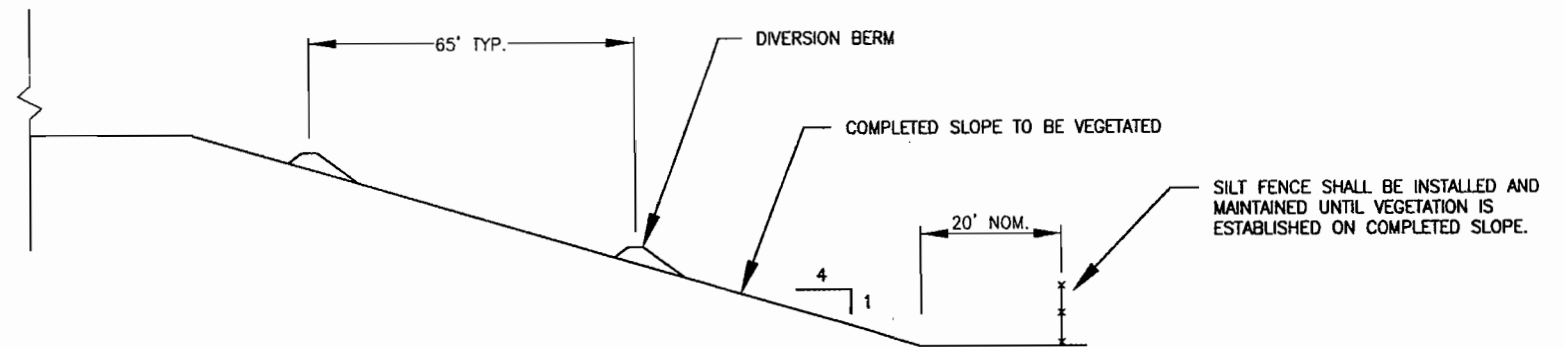
Seed germination will be expected within 1 week of sowing. Watering is required to germinate seed and maintain growth. Seedlings shall be watered daily, or more often as necessary to ensure growth and to ensure that the vegetative cover stabilizes the soil as required.



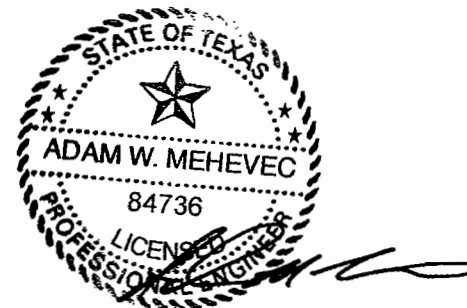
TYPICAL DIVERSION BERM ON 5% SLOPE
N.T.S.



TYPICAL DIVERSION BERM ON 4:1 SLOPE
N.T.S.





TYPICAL SIDE SLOPE PROTECTION
N.T.S.

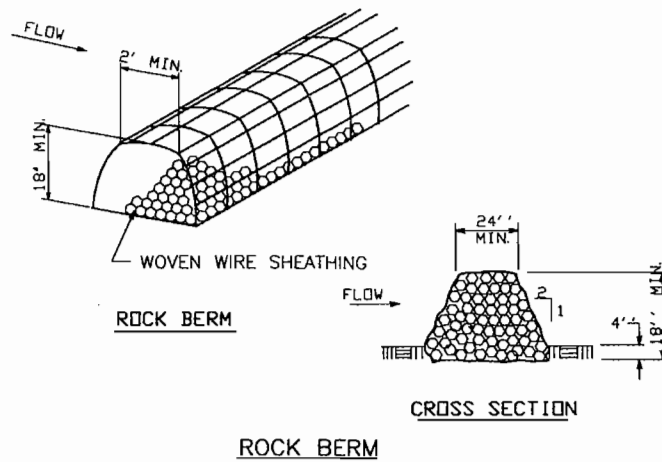


1-16-09

REVISED 1-16-09

REV. NO.	DATE	DR. BY	APP. BY
 ASSOCIATED CONSULTING ENGINEERS, INC.			
 BFI SUNSET FARMS LANDFILL PERMIT AMENDMENT MSW 1447-A			
ACE REFERENCE NO. 070-03		EROSION DETAILS	FIGURE 6-A-3
DATE: 01/15/09			
FILE: DETAILS.dwg			

NOTES CONTINUED ON SHEET 6-A-4.

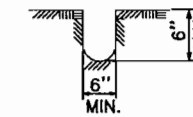


ROCK BERM

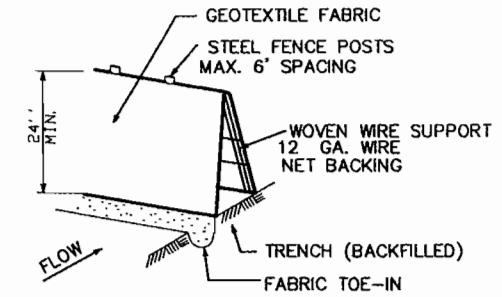
GENERAL NOTES:

1. USE ONLY OPEN GRADED ROCK 4-8 INCH DIAMETER FOR STREAM FLOW CONDITIONS USE OPEN GRADED ROCK 3-5 INCH DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENING AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

TYPICAL ROCK BERM
N.T.S.



TRENCH CROSS SECTION



SILT FENCE

STANDARD SYMBOL $\frac{SF}{L}$

GENERAL NOTES:

1. Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one foot.
2. The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow. Where fence can not be trenched in (e.g. pavement) weight fabric flap with washed gravel on uphill side to prevent flow under fence.
3. The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
4. Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post.
5. Inspection shall be made weekly or after each rainfall event and repair or replacement shall be made promptly as needed.
6. Silt fence shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.
7. Accumulated silt shall be removed when it reaches a depth of 6 inches. The silt shall be disposed of in an approved site and in such a manner as to not contribute to additional siltation.

TYPICAL SILT FENCE
N.T.S.

EROSION CONTROL AND RE-VEGETATION NOTES (CONT)

TABLE 7-A: HYDROMULCHING FOR TEMPORARY STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
70/30 WOOD/CELLULOSE BLEND MULCH	70% WOOD 30% PAPER 3% TACKIFIER	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	45.9 LBS/1000 SF
WOOD FIBER MULCH	96% WOOD 3% TACKIFIER	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	45.9 LBS/1000 SF

a. 70/30 Wood/Cellulose Blend Fiber Mulch. Wood/Cellulose blend fiber mulch shall consist of 70% long wood grain fibers produced from grinding clean, whole wood chips and 30% cellulose fiber produced from ground newsprint. Refer to Table 7-B for mulch properties and to Standard Specification 604S - Seeding for additional mulch requirements.

b. Wood Fiber Mulch. Wood fiber mulch shall consist of 100% long wood grain fibers produced from grinding clean, whole wood chips. Refer to Table 7-C for mulch properties and to Standard Specification 604S - Seeding for additional mulch requirements.

TABLE 7-B: PROPERTIES OF 70/30 WOOD CELLULOSE BLEND OF FIBER MULCH

PROPERTY (TEST METHOD)	REQUIRED VALUE
MOISTURE CONTENT %	12.0% +/- 3.0% (MAX)
ORGANIC MATTER %-WOOD FIBER	70.0% +/- 1% OVEN DRY BASIS (MIN)
ORGANIC MATTER %-PAPER FIBER	30.0% +/- 1% OVEN DRY BASIS (MAX)
TACKING AGENT	3.0% (MIN)
WATER HOLD CAPACITY	1,000 GRAMS OF WATER PER 100 GRAMS OF FIBER (MIN)



TABLE 7-C: PROPERTIES OF WOOD FIBER MULCH

PROPERTY (TEST METHOD)	REQUIRED VALUE
MOISTURE CONTENT %	12.0% +/- 3.0% (MAX)
ORGANIC MATTER %-WOOD FIBER	96.0% +/- 1% OVEN DRY BASIS (MIN)
ORGANIC MATTER %-PAPER FIBER	30.0% +/- 1% OVEN DRY BASIS (MAX)
TACKING AGENT	3.0% (MIN)
WATER HOLD CAPACITY	1,000 GRAMS OF WATER PER 100 GRAMS OF FIBER (MIN)

14. Watering
Seed germination will be expected within 1 week of sowing. Watering is required to germinate seed and maintain growth. Seedlings shall be watered daily, or more often as necessary to ensure growth and to ensure that the vegetative cover stabilizes the soil as required.



REVISED 1-16-09

REV. NO.	DATE	DR. BY	APP. BY
 ASSOCIATED CONSULTING ENGINEERS, INC.			
 BFI SUNSET FARMS LANDFILL PERMIT AMENDMENT MSW 1447-A			
ACE REFERENCE NO. 070-03		EROSION DETAILS	FIGURE 6-A-4
DATE: 07/20/05			
FILE: DETAILS.dwg			

ATTACHMENT E

TCEQ DOCKET NO. 2007-1774-MSW

IN RE: THE APPLICATION OF	§	BEFORE THE STATE OFFICE
BFI WASTE SYSTEMS OF NORTH	§	OF
AMERICA, LLC	§	ADMINISTRATIVE HEARINGS
PERMIT NO. MSW-1447A	§	

DIRECT TESTIMONY OF

BRAD DUGAS

ON BEHALF OF

BFI WASTE SYSTEMS OF NORTH AMERICA, LLC (APPLICANT)

January 16, 2009

**DIRECT TESTIMONY OF
BRAD DUGAS**
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LIST OF EXHIBITS

Exhibit	Description
BD-2	Resume of Brad Dugas
BD-3	Copy of the SOP that was approved by the TCEQ in 2005
BD-4	Copy of letter from the TCEQ
BD-5	First Amended Purchase and Sale Agreement
BD-6	Reciprocal Access License Agreement
<u>BD-7</u>	<u>Revised Applicant's Statement</u>
<u>BD-8</u>	<u>Revised Applicant's Certification</u>

1 A. Yes.

2 **Q. Do you agree with and adopt the testimony and opinions expressed by Mr.**
3 **Shull on this issue?**

4 A. Yes, I do.

5 **VI. RULE 11 AGREEMENT**

6 **Q. Are you aware that BFI entered into a Rule 11 Agreement with the City of**
7 **Austin regarding implementation of additional erosion and sedimentation**
8 **controls and other matters?**

9 **A. Yes, in fact I participated in negotiation of the Agreement and signed it on behalf of BFI.**

10 **Q. Have you reviewed the testimony of Ray Shull regarding this issue?**

11 **A. Yes, I have.**

12 **Q. Do you agree with and adopt the testimony and opinions expressed by Mr.**
13 **Shull on this issue?**

14 **A. Yes, I do.**

15 **Q. Have you reviewed the testimony of Adam Mehevec regarding this issue?**

16 **A. Yes, I have.**

17 **Q. Do you agree with and adopt the testimony and opinions expressed by Mr.**
18 **Mehevec on this issue?**

19 **A. Yes, I do.**

20 **Q. Do you believe BFI will be able to successfully implement the additional**
21 **erosion and sedimentation control measures and the other requirements**

1 regarding the operations at the Sunset Farms Landfill as set forth in the Rule
2 11 Agreement, which is also Exhibit RS-42?

3 A. Yes I do.

4 Q. Have you reviewed the specific language proposed by the TCEQ for inclusion
5 as special provisions to implement the Rule 11 Agreement that are contained
6 in Exhibit RS-43.

7 A. Yes I have.

8 Q. Do you commit BFI to comply with the special provisions as stated in Exhibit
9 RS-43.

10 A. Yes I do.

11 Q. Do you request that the Administrative Law Judge propose the special
12 conditions as stated in Exhibit RS-43 as special conditions of any permit
13 issued for expansion of the Sunset Farms Landfill?

14 A. Yes I do.

15 Q. Do you commit BFI to implement the additional erosion controls and other
16 requirements of the Rule 11 Agreement at the Sunset Farms Landfill?

17 A. Yes I do.

18 Q. Have any of the requirements of the Rule 11 Agreement already been
19 implemented?

20 A. Yes. The site development plan permit application has been submitted to the City of
21 Austin. Also, BFI has instructed commercial waste hauling vehicles that they shall not
22 utilize Blue Goose Road for ingress or egress unless they service businesses and

1 residences in that area. Also, BFI directed its engineers, ACE, to prepare revisions to the
2 Site Operating Plan and to the Site Development Plan of the Application as requested by
3 the TCEQ. On the executive director's preliminary review, he finds the revisions to be
4 minor and that they appear to provide an appropriate approach to incorporating the
5 settlement provision into the application.

6 **Q. Do you request that the Administrative Law Judge make compliance with the**
7 **erosion and sedimentation controls and other requirements set forth in**
8 **Exhibit RS-43 as special provisions, for any permit granted to expand the**
9 **Sunset Farms Landfill?**

10 A. Yes I do.

11 **Q. Have you reviewed the revised pages of the Site Operating Plan contained in**
12 **Exhibits RS-44 and RS-45 and the revised pages of the Site Development Plan**
13 **of the Application contained in Exhibits AM-29 and AM-30?**

14 A. Yes I have.

15 **Q. Do you believe that Sunset Farms Landfill management and operations**
16 **personnel will be able to implement all of the additional requirements for**
17 **erosion and sedimentation controls and other operational requirements as set**
18 **forth in those documents.**

19 A. Yes I do.

20 **Q. Do you request that the pages proposed in RS-45 and AM-30 be substituted**
21 **into the Application in order to implement the Rule 11 Agreement and the**
22 **special conditions which are RS-42 and RS-43 respectively?**

1 A. Yes I do.

2 **Q. Please identify Exhibits BD-7 and BD-8.**

3 A. BD-7 is a revised Applicant's Statement updated to confirm the commitment of BFI to
4 comply with the terms of the Application as amended by the revisions set forth in
5 Exhibits RS-45 and AM-30 as required by 30 T.A.C. 330.56(i). BD-8 is a revised
6 Applicants Certification which makes additional statements and certifications regarding
7 BFI's use of qualified personnel in preparation of the Application and its revisions
8 contained in RS-45 and AM-30 as required by 30 T.A.C. 305.45.

9 **Q. Do you request that the new statements and certifications be substituted for**
10 **the statements and certifications contained in the Application, which has been**
11 **identified as Exhibit RS-11, in order to reflect BFI's commitment to**
12 **implement the additional erosion and sedimentation controls and other**
13 **requirements set forth in Exhibits BD-7 and BD-8?**

14 A. Yes I do.

15 **VII. MERGER WITH REPUBLIC WASTE**

16 **Q. Are you aware of any changes to the ownership of BFI Waste Systems of**
17 **North America, LLC's parent company since your pre-filed testimony was**
18 **initially filed?**

19 A. Yes I am.

20 **Q. Please describe those changes.**

21 A. On December 5, 2008, Allied Waste Industries, Inc. merged with Republic Services, Inc.

22 **Q. Did that merger have any effect on the corporate structure of BFI Waste**
23 **Systems of North America, LLC?**

1 A. Only to the extent that it is now owned by the merged entity, Republic Services, Inc.

2 **Q. Does the merger adversely affect BFI's competency to operate the Sunset**
3 **Farms Landfill.**

4 A. No, in fact it gives us additional resources to draw upon if ever needed.

5 **Q. Does the merger adversely affect BFI's ability or commitment to provide**
6 **financial assurance for operations, closure or post-closure care at the Sunset**
7 **Farms Landfill?**

8 A. No it does not.

9 **Q. Will you still be responsible for operations at the Sunset farms Landfill.**

10 A. Yes I will.

11 **Q. Are you still the corporate officer in charge of the Sunset Farms Landfill?**

12 A. Yes I am.

13 **Q. Have any of the personnel responsible for the operation of the Sunset Farms**
14 **Landfill changed as a result of the merger?**

15 A. The only change is that Mr. Lee Kuhn changed roles but is still involved in the operations
16 and other issues regarding Sunset Farms Landfill.

17 **Q. Is it fair to say that for purposes of this Application, there is effectively no**
18 **change as a result of the merger.**

19 A. Yes, I would say that the only change is that the corporation now has greater over-all
20 assets.

21 **VI.VIII. CONCLUSION**

22 **Q. Do you request that the permit for Sunset Farms expansion be issued?**

1 A. Yes.

2 **Q. Does this conclude your testimony?**

3 A. Yes, however I request that I be allowed to amend this testimony based on information
4 developed through discovery.

Name of Applicant: BFI Waste Systems of North America

Applicant's Statement

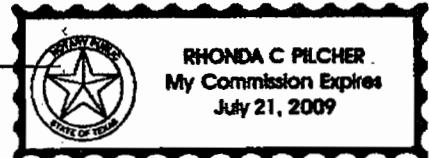
"I, Brad Dugas, state that I have knowledge of the facts here in set forth and that these facts are true and correct, to the best of my knowledge and belief. Furthermore, I am familiar with all pertinent requirements contained in the Municipal Solid Waste Rules, and BFI Waste Systems North America, LLC, agrees to develop and operate the municipal solid waste facility in accordance with the plan, the rules and any permit provisions. I further state that, to the best of my knowledge and belief, the project for which the application is made will not violate any law, rule, ordinance, decree of any duly authorized governmental entity having jurisdiction. I further state that I am the applicant or am authorized to act for the applicant." [30 TAC§330.56(i)]

Signature of Applicant	<i>Brad Dugas</i>		
Type, or Print Name and Title	Brad Dugas South Central Texas District Manager		
Street of P.O. Box	4542 SE Loop 410		
(City)(County)(State)(Zip)	San Antonio	Bexar	TX 78222
(Area Code)(Phone #)	210	648-5222	
(Area Code)(FAX #)	210	648-5227	
Date	1-16-09		

Notary Public's Certificate

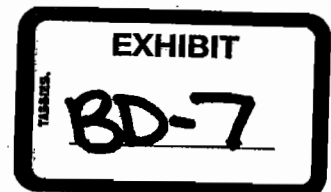
Subscribed and sworn to before me, by the said Brad Dugas, this 16th day of January, 2009, to certify which witness my hand and seal of office.

Rhonda C Pilcher



Notary Public in and for Hays County, Texas

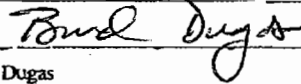
My Commission Expires July 21, 2009



Name of Applicant: BFI Waste Systems of North America

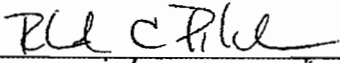
Applicant's Certification

"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." [30 TAC §305.44(b)]

Signature of Applicant				
Type or Print Name and Title	Brad Dugas South Central Texas District Manager			
Street or P.O. Box	4542 SE Loop 410			
(City)(County) (State)(Zip)	San Antonio	Bexar	TX	78222
(Area Code)(Phone #)	210	648-5222		
(Area Code)(FAX #)	210	648-5227		
Date	1-16-09			

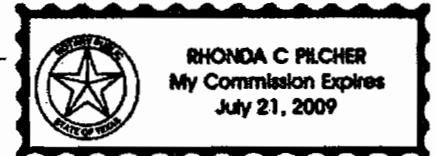
Notary Public's Certificate

Subscribed and sworn to before me, by the said Brad Dugas, this 16th day of January, 2009, to certify which witness my hand and seal of office.



Notary Public in and for HAYS County, Texas

My Commission Expires July 21, 2009



Please submit completed Application and a TCEQ Core Data Form(s) (TCEQ-10400) to:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Waste Permits Division
MC 124/Municipal Solid Waste Permits Section
P.O. Box 13087
Austin, Texas 78711-3087

