



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BLISS
1 PERSHING ROAD
FORT BLISS, TEXAS 79916-3803

January 20, 2012

Directorate of Public Works

Frank Zeng
Municipal Solid Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: Fort Bliss Solid Waste Landfill – El Paso County
Municipal Solid Waste (MSW) - Permit No. 1422
Permit Modification – Response to Evapotranspiration (ET) Final Cover Notice of
Deficiency (NOD), Tracking No. 15013496; RN100210095/CN600126262

Dear Mr. Zeng:

Fort Bliss Directorate of Public Works has reviewed the Texas Commission on Environmental Quality (TCEQ) Permit Modification – Evapotranspiration (ET) Final Cover Notice of Deficiency dated November 22, 2011 and received on November 28, 2011 (attached), identifying insufficient information within the application for a municipal solid waste permit modification dated October 19, 2011.

After review of the comments provided, the following responses and necessary forms as attachments to address the TCEQ comments.

If you have any questions, comments or suggestions regarding responses to the NOD comments, please feel free to contact Ms. Lilia Lenhart via phone at (915) 568-5724 or email lilia.a.lenhart.civ@mail.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Alfredo J. Riera".

Alfredo J. Riera, P.E.
Director of Public Works

Enclosure

Attachment: Responses to Notice of Deficiency Comment

1. The application binder cover page and the inside title page list the U.S. Army Corps of Engineers' Fort Worth District and its address. Please explain the role of the U.S. Army Corps of Engineers' Fort Worth District in this application.

Fort Bliss is funding the permitting portion of the landfill closure through the U.S. Army Corps of Engineers.

2. Please provide the payment receipt confirmation information for the \$150.00 application fee. Or please follow the instructions included in Section H of the Part I form to submit the payment and provide the confirmation information.

Payment was sent via TCEQ e-pay on December 15, 2011. The payment receipt confirmation number is 582EA000112797. The payment receipt confirmation number was added to page 14 of the TCEQ Part I form.

3. Appendix A of this application is the TCEQ Core Data Form. Submittal of this form is not required for this type of permit modification application. Please explain the inclusion of the Core Data form or remove the form from this application. If a piece of information required in a Core Data Form and previously submitted for this facility has changed, please identify and explain the change (depending on the type of changed information, certain procedures may need to be followed in submitting and obtaining approval of the changes).

The TCEQ Core Data Form has been included for informational purposes only. The option of "No Change" was selected for each applicable section.

4. Fort Bliss Solid Waste Landfill is the facility name listed in Section A of the Part I form included in this application, while other facility names are also used in this application (for example, Final Closure Plan cover page lists the facility as Fort Bliss Municipal Solid Waste Landfill Facility). The facility name currently listed in the agency's central registry is USAADACENFB Fort Bliss. Please explain the facility naming in the application or revise the application (including the Part I form) to use the correct facility name (please ensure that the facility is referred to consistently throughout the application). Or please submit the Core Data Form to specify a facility name for the facility operated under MSW Permit No. 1422 and use that name consistently in all submittals to the TCEQ (please revise this modification to use the same name identified in the new Core Data Form). The following web page may be viewed for the current and prior names listed for this facility:

http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=regent.showSingleRE®_ent_id=533381592001134.

The facility will be referred to as USAADACENFB Fort Bliss to provide a reference to the name currently listed in the agency's central registry. Additionally, the facility will be referred to as the Fort Bliss Municipal Solid Waste Landfill (MSWLF) throughout the appendices to remain consistent with the approved March 2009 permit modification (March 2009 MOD).

5. Section B of the Part I lists the internet web site (page) where the application documents are posted as <https://www.bliss.army.mil/DPW/Environmental/EISDocuments2.html>. Access to the listed URL seems to require some type of security certificate. Please note that rule §330.57(i) requires posting the application documents at a publicly accessible internet web site. Please make proper arrangement to make the URL readily accessible to the public or please post the documents at a different URL that is accessible to the public and submit the revised Part I form listing the new URL. If the application contains any confidential information, please follow applicable requirements and procedures described in §1.5. The TCEQ rules can be viewed and downloaded from the agency's website at <http://www.tceq.texas.gov/rules/indxpathdf.html>.

Fort Bliss has updated their security certificate and the permit modification application and notice of deficiency (NOD) letter have been posted. In the event a Certificate Error occurs when attempting to access the site, the option to continue to the website is presented.

6. The tables of contents of the appendixes revised or added in this application do not have the responsible engineer's seal and signature. The tables of contents pages that are revised by this application must be signed and sealed by a professional engineer licensed in the State of Texas in accordance with the requirements of 30 TAC §330.57(g)(3). Please also revise page ii of this application to list the firm registration numbers for all the professional engineers whose signatures and seals are shown in this application.

Tables of contents of revised and added appendixes to the permit modification application have been signed and sealed by a professional engineer licensed in the State of Texas.

7. The summary table in Appendix C - 1 of this application lists the replacement pages or newly added pages. Most of the pages listed under Closure Plan are not identified in the summary table as replacement pages, but the pages included in the redline portion are all replacement pages revising previous document pages. The same discrepancy also exists in the pages listed for Post-Closure Plan. Please explain the discrepancy or revise the application as appropriate.

The summary table in Appendix C-1 has been revised to indicate that the Closure Plan and Post-Closure Plan included in the permit modification application are replacement documents to the currently permitted Plans.

8. Please update the contact information in Section 1 of the Closure Plan by specifying Municipal Solid Waste Permits Section or consider deleting all the contact information on this page as it is not required by the rule. If included, the permittee has the responsibility to keep the contact information current. Please also address the same issue for Section 1 of the Post-Closure Care Plan.

TCEQ and Fort Bliss contact information in Section 1 of the Closure Plan and Post-Closure Plan has been deleted as it is not required by rule.

9. Some of the acreages for cells/areas listed in Section 2.1 of the Closure Plan have been revised. Please explain the revisions.

Revised acreages were taken from a 2009 document that incorrectly showed the acreages for the landfill. The acreages listed in Section 2.1 and throughout the rest of the document were revised back to original acreages from the March 2009 MOD for consistency throughout the permit application.

10. Section 2.1 of the Closure Plan refers to the ET final cover as an alternative cover design. Please clarify whether the ET cover will be the only final cover design for the parts of the landfill that have not received a permitted final cover. Please revise this section and other relevant parts of the application as necessary.

The ET final cover is referred to as an alternative cover in the context of 30 TAC §330.457(d)(1) that allows for consideration of alternative design to the requirements set forth in 30 TAC §330.457(a)(2). Section 2.1 of the Closure Plan has been revised to clarify that the ET cover will be the only final cover for those parts of the landfill that have not received a permitted final cover (i.e. all cells except the non-subtitle D cell were capped and closed in 1999). However, the ET cover will also be installed over top of the approved final cover of the non-subtitle D cell for site grading and drainage purposes.

11. Please revise Drawing No. C-2 or other pertinent drawings to identify the cells/areas listed in Table 2-1 of the Closure Plan. Please also revise the drawing(s) to identify the cells/areas that will have ET final cover as specified in Section 2-2 of Closure Plan.

Drawing No. C-2 has been revised to identify the cells listed in Table 2-1 of the Closure Plan and to identify the cells on which the ET final cover will be installed.

12. Rule §330.70(k) (10) cited in Section 2-1 of the Closure Plan does not exist. The intended rule citation might be §305.70(k) (10). Please revise this section as necessary.

Rule citation §330.70(k) (10) in Section 2-1 of the Closure Plan has been revised to cite intended rule §305.70(k) (10).

13. Section 2-1 of the Closure Plan cites rule §330.457(a) (2). Please note that §330.457(a) (2) is regarding landfill units without synthetic bottom liner. Please clarify the type of liners required by permit and/or revise this paragraph as appropriate (or simply replacing §330.457(a) (2) with §330.457(a) (1) as the application indicates that ET cover will be built over all cells/areas that have not been closed).

Rule citation §330.457(a) (2) in Section 2-1 of the Closure Plan has been revised to cite intended rule §330.457(a) (1).

14. Section 3 of the Closure Plan was revised to state that a 2008 permit modification for the 10-foot height increase in the Sub-D cell added additional 180,000 cubic yards of landfill capacity. Our records indicate that a 10-foot height increase was authorized through a temporary authorization (TA) in May 2008. Please provide a copy of the 2008 modification authorizing the 10-foot height increase. Please note that a TA is not supposed to be part of the permit beyond the 180 days specified.

The March 2009 MOD authorizing a 10-ft height increase in final closure grades was approved as a permanent modification on March 19, 2009. A copy of the TCEQ permit modification authorization letter is attached to this response to comments.

15. The revised Section 3 of the Closure Plan states that the ET final cover grading will not significantly alter the final grades presented in the 2008 modification. Please clarify whether the modifications authorizing the height increase and presenting the final grades are the same 2008 modification. A research into our records did not reveal any modifications for final cover grades or height increase around 2008. Please provide more information to help identify this specific 2008 modification. Please revise this application to add discussions and drawings to compare the ET final grades with the final grades presented in the 2008 modification.

As discussed under Comment 14, the March 2009 MOD, approved on March 19, 2009, authorized a 10-ft height increase in the final closure grades. The additional capacity was requested to support the Army's directive for additional troop stationing at Fort Bliss. The September 2011 permit modification application adjusted the final closure grades from the March 2009 MOD to better conform to the existing grades developed during filling operations and to provide more consistent and easily constructible ridges and slopes and more uniform surface for the installation and maintenance of the ET final cover. Specifically:

- ***The final closure grades of the northwest inactive cell were adjusted from the inconsistently directed and varying top and side slopes generally ranging between 2% and 2.2% to a more uniform pyramidal shape with a 3.6% top slope facing to the west and between 6% and 18% side slopes facing to the north, east, and south.***
- ***The final closure grades of the northeast inactive cell were adjusted from the inconsistently directed 2% side slopes to a more uniform pyramidal shape with a 2.2% top slope facing to the west and between 5% and 8.3% side slopes facing to the north, east, and south.***
- ***The final closure grades of the southeast inactive cell were adjusted from the inconsistently directed and varying top and side slopes generally ranging between 2% and 3.3% to a more uniform plateau shape with a 2% top slope facing to the south and between 8.3% and 25% slopes facing east and north respectively.***

- *The final closure grades of the Type IV C&D cell were adjusted from the steep 25% plateau side slopes to a more uniform pyramidal shape with 2% side slopes in all directions.*
- *The final closure grades of the Subtitle D cell were generally kept consistent with those presented in the March 2009 MOD.*

16. The revised Section 3 of the Closure Plan indicates that the maximum in-place waste at closure will be 5,285,200 cubic yards, roughly 10 percent less than the 5.9 million cubic yards as determined based on the 1995 approved final landfill contour. Please explain the causes leading to this reduction.

As reported in the March 2009 MOD and in the 21 February 1996 Report on Volume Calculations and Case Studies, exploratory trenches advanced through the 1970's era filled and operationally closed landfill cells confirmed an in-place waste depth of 25-feet corresponding to an in-place waste volume over the same area of 2,984,467 CY. The permitted waste capacity over this same area, based on the design waste depth of 30-ft, is 3,676,542 CY. Therefore, the disparity between the permitted capacity and the volume of in-place waste is primarily related to the shallower waste depth in the historic cells. The reason for the shallower depth of waste is not known.

17. Please clarify whether the remaining capacity stated in Section 3 of the Closure Plan is consistent with the data reported to the TCEQ.

The Remaining capacity stated in Section 3 of the Closure Plan is consistent with data reported to TCEQ. Remaining capacity as reported in Annual Solid Waste Report FY 2010 prepared by SRT, Inc. was approximately 106,000 cubic yards. The remaining capacity reported in September 2011 permit modification was reduced based on latest waste acceptance data from FY2011.

18. Please discuss the differences between the ET cover descriptions in Section 2-1 and Section 4-3 of the Closure Plan or please revise the description(s) for consistency to avoid any possible confusion.

The discussions of the ET cover system in Section 2-1 and Section 4-3 (now reorganized as Section 4-1) of the Closure Plan have been revised to include the same ET cover descriptions for consistency.

19. Section 4-3 and other parts of the Closure Plan state that the fourth layer in the ET cover system will consist of the 12-inch thick intermediate cover layer and/or additional materials. Section 4-3 also specifies a 75 percent compaction rate for the fourth layer materials. The specifications listed on page 5 of Appendix Q for the fourth layer stipulates a 75 percent compaction rate only for the additional materials. Please revise Sections 4 and 5 of the Closure Plan and the relevant parts of Appendix Q to be clear that before the intermediate cover materials can be counted as part of the fourth layer, they will be tested and/or re-worked to have a 75 compaction rate. Or please explain why a compaction rate is unnecessary for the intermediate cover materials to be used as part of the fourth layer. If the ET's fourth layer will be composed entirely of the additional materials, please revise the application for clarity and consistency.

Sections 4 and 5 of the Closure Plan and Appendix Q have been revised to define regrading and compaction requirements of the existing intermediate cover material.

The Contractor will be required to clear and grub all existing intermediate cover material of all vegetation, roots, and other deleterious materials using bulldozers, graders, tillers, or other suitable equipment to provide a smooth uniformly graded bare surface. All existing intermediate cover material will require watering, re-working, and compaction as necessary to create an intermediate cover material subgrade consistent with the final cover requirements. Prior to final grading and compaction, the existing intermediate cover material will be probed at 100-foot intervals to verify that a minimum of 12-inches of cover soil is in place and verify the existing in-place density. Where existing suitable intermediate cover material does not meet or cannot be re-worked to meet the final cover material or compaction requirements or does not measure the minimum of 12-inches in depth, additional stockpiled SM cover material shall be backfilled, graded, and compacted to create a uniform bare surface of suitable intermediate cover material. Intermediate cover material may exceed the minimum 12-inches in thickness, where necessary.

20. The first paragraph in Section 5-1 of the Closure Plan states that Sub-D cell final cover will be constructed using equipment suitable for completing the construction in accordance with current TCEQ standards. Please revise this paragraph to be more specific about the TCEQ standards. Please explain why this equipment requirement is not specified for constructing the ET cover at other cells/areas or revise this paragraph as appropriate.

The reference to current standards imposed by TCEQ in the first paragraph of Section 5-1 of the Closure Plan has been removed as no specific TCEQ standards are applicable to this portion of the Closure Plan.

21. Please revise Section 5.2.2 of the Closure Plan to discuss whether (and how) the vegetation including the roots will be removed during the intermediate cover re-works. Please also revise this section to include measures to be followed when the existing intermediate cover materials cannot be re-worked to the desired conditions.

Section 5.2.2.2 of the Closure Plan has been revised to discuss clearing and grubbing, tilling, watering, regrading, and compaction requirements for existing intermediate cover materials. See comment response 19 for the specific requirements added to the Closure Plan.

22. Discussions regarding the intermediate cover in Section 5.2.3, Capillary Break Layer, of the Closure Plan seem to be a repeat of the same discussions in Section 5.2.2. The same discrepancy also exists in other sub-sections of Section 5, Construction Quality Assurance. Please explain the repeated discussions or revise the sections as appropriate.

Section 5 has been revised to include component-specific QA procedures. It should be noted that the QA procedures for the Storage Layer and Vegetative Surface Layer are the same because the two soil layers consist of the same materials. Typos referencing incorrect soil layers have been corrected.

23. Please discuss how the construction quality assurance activities described in Section 5 of the Closure Plan will ensure and confirm that the constructed ET cover layers have the properties specified on pages 4 and 5 of Appendix Q, ET Cover Design Report. Please revise Section 5 as necessary.

Section 5.2 of the Closure Plan has been revised to explain why the soil testing and construction QA procedures will be required during construction to ensure that the ET final cover is constructed in accordance with the design intent and to ensure the performance of ET cover.

The primary soil parameters and construction specifications that will impact the performance of the ET final cover system are soil gradation, saturated hydraulic properties, and degree of compaction. The modeling and design of the ET cover system was based on these material and construction specification requirements. Therefore, the QA testing procedures presented in the Closure Plan will be required during the final closure construction to ensure that the ET final cover is constructed in accordance with the design intent and to maximize ET performance.

24. Please discuss why measures included in Section 5.3, Vegetation Planting Plan, of the Closure Plan are deemed feasible (opinions from a vegetation expert will suffice in addressing this comment).

Section 5.3 of the Closure Plan was prepared by an experienced team of ARCADIS environmental scientists and biologists and was reviewed by Dr. Rafael Corral of the Fort Bliss Environmental Division and Mrs. Leah Markowitz, a biology expert with Zia Engineering & Environmental Consultants.

Measures to establish vegetative cover were initially evaluated by comparing site conditions to regional, soil type and characteristic land use institutional standards found in TxDOT Specification 164 for District 24 (El Paso). Following review of this specification, botanical information was gathered on a species specific level from both previously completed project reports (Evapotranspiration Cover Design Report; Zia Engineering), as well as public repositories (USDA NRCS Plant Database, Texas A&M Cooperative Extension Horticulture Database) to verify whether expected site conditions, in conjunction with the measures proposed in the planting plan, would represent a limiting factor in establishing vegetation with respect to seeding, germinating, propagating and/or managing forbs and herbs as specified. The measures included in Section 5.3 were ultimately selected as a reasonable means and methods to foster plant development towards achieving the project goal of establishing vegetative cover.

25. Section 5.4.4 of the Closure Plan specifies a 50 percent vegetation cover. The actual soil bare areas will be greater than 50 percent if the definition of bare soils is considered. Please discuss whether erosions due to wind and surface runoff will be an issue and, if necessary, include the control measures to be used.

It is acknowledged that, by the definition of bare soils, actual soil bare areas may be greater than 50% while still meeting the 10% ground coverage requirement. However, it is anticipated that the re-use of local stockpiled soils containing native plant seed stock will significantly aid in facilitating vegetative growth based on observations of the existing vegetative growth throughout the 1970's era landfill cells coupled with the initial fertilization. Additionally, the regrading of the final closure grades to between 2 and 8.3% slopes, generally, will limit flow velocities and flow erosion.

Section 5.4 has been revised to more clearly describe the 10% vegetative ground coverage and maximum of 50% bare area requirements for the final ET cover. Additionally, Section 5.4.3 has been revised to indicate that temporary erosion protection measures will be considered, as necessary, if greater than 50% of bare areas are determined to exist and erosion is observed throughout the vegetative establishment period.

26. Section 6, Schedule for Closure Activities, of the Closure Plan is apparently prepared for closing all cells/areas in accordance with §330.457. Please add one paragraph in Section 6 of the Closure Plan (preferably before Section 6.1) to state that the closure schedule and other closure related activities shall follow the requirements of §330.457(f) and (g). The actual wording may differ as long as the same meaning is expressed.

Section 6 of the Closure Plan has been revised to indicate that landfill closure schedule and other closure related activities shall follow the requirements of 30 TAC §330.457(f) and (g).

27. The rule citation §330.5 in Section 7 of the Closure Plan seems incorrectly cited. Please explain the purpose of this citation or revise this section as necessary. Please also address the same issue for Section 3 of the Post-Closure Plan.

Rule citation §330.5 in Section 7 has been revised to §37.8001 (Financial Assurance for Municipal Solid Waste Facilities).

28. Section 2.1.1 of the Post-Closure Plan mentions a 5-year post-closure care period, while other parts of this application stipulates a 30-year post-closure care period. Please explain why the 5-year period is applicable or revise this section to remove the reference of 5-year period. If the 5-year period is not applicable, please revise Section 2 of the Post-Closure Plan and/or other relevant portions of the application to remove all references to any requirements of §330.463(a).

Section 2.1.1 of the Post Closure Plan has been revised to reference the thirty year post-closure period. All references to a five-year post-closure period and the requirements of §330.463(a) were removed.

29. Please note that land use over a closed landfill is subject to the requirements of Subchapter T of the TCEQ MSW rule Chapter 330. Please review Subchapter T and revise Section 4 of the Post-Closure Plan as appropriate.

Section 4 of the Post-Closure Plan has been revised to incorporate the requirements for future land use and development set forth in Title 30 TAC Chapter 330, Subchapter T: Use of Land Over Closed Municipal Solid Waste Landfills.

30. The proposed final cover conditions listed on page 4 of Appendix I, Slope Stability and Settlement Analysis, appear to be different than the ET cover specifications included in Appendix O and Appendix Q. Please explain the discrepancies and/or revise Appendix I and other pertinent parts of the application as necessary. Please also clarify whether the slope stability analysis has been conducted to satisfy a specific regulatory requirement or for general engineering considerations.

The proposed final cover conditions on page 4 of Appendix I, Slope Stability and Settlement Analysis has been revised to show the correct ET cover. The slope stability analysis in this permit modification has been provided for general engineering considerations in accordance with TCEQ Industrial Solid Waste Management Technical Guideline No. 3.

31. Section 5.1.1 of Appendix I states that the slope stability analysis was conducted based on an assumption that no external loads are applied to the selected cross section after the final grades have been achieved. Please clarify whether the assumed scenario is the worst case scenario of the landfill development from filling to completion of the final cover construction, including the periods when the slopes are under impact of waste hauling vehicles and cover construction equipment. Slope stability analysis for this section should consider all external loads unless the exclusions are explained and justified. Please revise Appendix I as necessary.

The slope stability was performed on the basis of the worst case scenario at completion of the landfill. After landfill completion, we have assumed no heavy external load will be applied, such as buildings or facilities constructed on top of the landfill.

32. Section 5.1.1 of Appendix I indicates that Slope-W 2007 Version 7.17 by Geo-Slope International, Ltd was used to perform the slope stability analyses; and the General Limit Equilibrium (GLE) method developed by Fredlund was used in the analyses. Please confirm that the software and the GLE method are suitable for slope stability analysis in the landfill environment.

It is a common practice to perform landfill slope stability and natural/man-made embankment slope stability analyses using limit equilibrium methods, such as GLE, Morgenstern-Price, Bishop, etc. Therefore, the method and the software have been used as suitable tool for the slope stability analyses of the landfill.

33. Section 5 of Appendix I discusses stability analyses for two slope scenarios at one selected cross section, Cross Section B. The second paragraph in Section 5.1.1 states that “the selection of the cross section analyzed was based on considering slope heights and slope inclination for the proposed final landfill grading plan.” Please clarify and explain whether the two slope scenarios at Cross Section B represent the worst case scenarios of Cross Section B and all possible cross sections. Please revise this section as necessary.

The selected sections represent the worst case scenario of all possible cross sections with respect to side slopes and potential slide failure conditions. The section selection were based on the slope geometry, slope heights and slope inclination (steepest and tallest slopes), as well as materials properties (strength and unit weight).

34. Please confirm and explain whether the stability analyses, referred to as global stability analysis in Section 5, contain sliding failures along ET layers; and if not, please demonstrate that the two analyses represent the worst case scenarios of all possible slope stability conditions. Otherwise, please revise this section to include an analysis for the worst case scenario of all possible sliding failures along ET layers out of all possible slopes.

Slope analyses have been done considering worst case scenarios, including, but not limited to, potential sliding failure through ET layers (veneer failure) and deep seated failure , as shown on Exhibits B-1 through B-6 of the Slope Stability and Settlement Analyses Report prepared by Terracon.

35. Please clarify whether the friction angles listed on page 6 of Appendix I are internal or between certain surfaces or other type of frictions (please briefly explain the friction angles with respect to the analysis type or method). Please clarify whether the listed degrees are determined by testing; and if not by testing, please explain the basis for the assumptions of the effective friction angle degrees for the solid waste and other materials/interfaces. Please revise this section as necessary.

The friction angles cited on page 6 of Appendix I are all internal friction angles, unless noted as interface friction angles in parenthesis in the column titled "Soil/Material Type" of the provided Assumed Geotechnical Parameters Table. All geotechnical parameters are based on published average data for similar materials and on our experience. No testing was performed to determine these values. The parameters were also based on the approved original slope stability report for the same landfill.

36. Please clarify whether the settlement analysis results presented in Appendix I have been properly considered in the design, construction, and maintenance of the ET final cover or revise this application as appropriate.

The design, construction, and maintenance of the ET final cover have taken the settlement analysis results presented in Appendix I into consideration. The design of the ET final cover has safety factors built into the analysis. The runoff is minimized in an effort to meet the TCEQ performance criteria of 10% of the annual precipitation maximum, the storage capacity of the soil layers exceeds 50% for every year of the simulation and the plant coverage was modeled at 10% to further add to the conservative nature of our ET final cover performance simulation. Section 2.2.1 General Maintenance of the Post-Closure Plan requires the operator to maintain the integrity and effectiveness of the ET final cover in the event of settlement. Additionally, both the Post-Closure Plan and the Stormwater Pollution Protection Plan require periodic visual inspections, which increase the frequency of the observations.

37. Section 1 of Appendix L, the Facility Surface Water Drainage Report, suggests that Appendix L has been prepared as a new drainage report. The summary table included in Appendix C-1 of this application indicates that the included drainage report is a replacement of a March 2008 Facility Surface Water Drainage Report. Please clarify whether the 2008 drainage report was approved by the TCEQ and has been a part of the permit. Please discuss the major differences of the two drainage reports.

This facility surface water drainage report was developed from the report submitted as a part of the March 2009 MOD. Therefore, the drainage analysis, erosion and sediment controls, and maintenance/inspection requirements were updated only where changes were necessary. This report replaces the report which was approved as a part of the March 2009 MOD.

38. Section 1 of Appendix L lists the types of waste disposed of at the facility. Please clarify whether the listed types of waste are the same wastes authorized in the current permit or please revise this section for consistency. Or please remove these listings. Please revise this section as appropriate.

The general description of the types of waste disposed of at the facility as described in Section 1 is consistent with the waste acceptance plan from the March 2009 MOD (Section 2.2.1.1 in Part II of the application).

39. Please revise Section 2 of Appendix L to discuss the existing or planned perimeter drainage systems (for example, a drainage ditch, etc.), if any. Please also revise drawing C-3 or another drawing to show the perimeter drainage systems (if the perimeter drainage system is already shown in the drawing, please revise the drawing to include a proper legend). Please also revise drawing C-3 or another drawing to show the locations where the surface drainage discharges offsite (drawing C-3 appears to show that offsite discharges take place at the southeast and southwest corners of the landfill). Please revise drawing C-3 to depict the permitted site boundary (or please confirm whether the boundary line dotted by the boundary posts shown in drawing T-1 is the site boundary specified by the permit).

A planned perimeter ditch system has been added to the overall drainage design. Sections 2.0, 2.3, 2.4, and 3.2.1 have been revised to provide detail regarding the planned perimeter drainage ditches and their offsite discharge locations. Drawing C-3 has been revised to identify the planned perimeter drainage ditches, off-site discharge locations and permitted site boundary. Perimeter drainage ditch flow calculations have been added to Attachment 2.

40. Section 2 of Appendix L states that “the surrounding drainage pattern will not be adversely altered as a result of this alternative cover design and grading plan.” Please expand this section or other parts of the drainage report to discuss how this conclusion has been reached (if the requested information has already been included in the report, please identify the locations where the relevant information is contained. It was noticed that Table 2-5 shows some comparisons between pre-and post-development conditions). Please revise Table 2-5 to show comparisons between pre-and post-development conditions at the locations where the surface discharges leave the site.

Section 2.4 has been revised to more clearly demonstrate why “the surrounding drainage pattern will not be adversely altered as a result of this alternative cover design and grading plan.” Table 2.5 has been revised to compare peak discharge, runoff volume, average flow depth, and flow velocity at the locations where the surface discharge leaves the site.

41. Section 2.1 of Appendix L includes a rule citation §330.63(c) (i) (C) that does not exist. Please check this citation and revise the section as necessary.

The referenced citation in Section 2.1 has been corrected to 30 TAC §330.63(c) (1) (C).

42. Table 2-5 identifies the pre-development conditions as 2005 permitted. Please elaborate on the 2005 authorization or provide a copy of the 2005 authorization.

The last permit authorization was in submitted in 2008 and approved in 2009. The beginning of Section 2.4 was revised to elaborate on the basic drainage concept of the permitted condition as compared to the proposed drainage concept.

43. Section 1.3 of Appendix L, Facility Surface Water Drainage Report, indicates that surface water runoff may flow downstream to the stormwater retention basin located approximately two miles south of the landfill. Please clarify whether all surface runoff from the landfill site will flow into the stormwater retention basin; please also clarify whether all the ditches leading to the stormwater retention basin and the stormwater retention basin itself are located on the permittee’s property and controlled by the permittee.

Section 1.3 has been revised to state the all runoff from the landfill will ultimately discharge to the storm water retention basin downstream which is managed by the Fort Bliss Stormwater Pollution Prevention Team.

44. The fourth paragraph in Section 3 of Appendix L states that the active internal slopes within Sub-D cell are not subject to the erosion and sediment control requirements. Please note that the active portion of a landfill including the working face is subject to the requirements of §330.305(b) and (e) for surface run-on and runoff control. Contaminated water as defined by §330.3(36) generated at the working face needs to be contained and properly managed in the same or similar manner as leachate is managed. Please clarify if the current permit document includes measures to comply with §330.305(b) or revise the application to include proper measures.

The fourth paragraph of Section 3.0 has been revised to clarify that active internal slopes also require controls per §330.305(b) and (e) for surface run-on and runoff. The first paragraph of Section 3.2.1 has been revised to clarify that the requirement of §330.305(b) and (e) and management of contaminated storm water are being met through the implementation of the March 2008 Fort Bliss Solid Waste Landfill Site Operating Plan.

45. (Comment Nos. 45 through 49 are regarding Section 3.2, Interim Construction Stages, of Appendix L) The last paragraph in Section 3.2.1 of Appendix L states that drainage swales in Sub-D cell will convey runoff off-site to the existing perimeter topography. Please briefly discuss the existing perimeter topography (please also refer to Comment Nos. 39 and 40 of this letter).

A brief description of the surrounding topography was added to the fifth paragraph of Section 3.2.1.

46. Please clarify whether (and where) the temporary soil berms mentioned in Section 3.2 of Appendix L are shown in the drawings of this application or revise drawing C-3 or other relevant drawings to show the locations of the temporary soil berms.

As stated in the third paragraph of Section 3.2.1, temporary soil berms are shown on Sheet C-5 in Appendix D.

47. Rule §330.305(d) (1) states, "Estimated peak velocities for top surfaces and external embankment slopes should be less than the permissible non-erodible velocities under similar conditions." Section 3.2 does not appear to include calculations to demonstrate compliance with §330.305(d) (1). Please explain how this requirement is satisfied or revise this section as necessary. Please calculate the velocity for worst case slopes with justification for choosing the worst case slopes.

Table 3-1 within the "Peak Runoff Velocities Calculations" subsection demonstrates compliance with §330.305(d) (1) with worst case slopes. The first paragraph in the "Peak Runoff Velocities Calculations" subsection has been revised to discuss justification for selecting worst case slopes.

48. Please explain how the slope lengths and the slope angles used in the soil loss calculations of Section 3.2 .2 were determined (please refer to Comment Nos. 46 and 47 of this letter). Please describe how the cover and management factor was determined for the soil loss calculations of Section 3.2 .2. Please calculate the soil loss for worst case slopes with justification for choosing the worst case slopes. Please consider using on-slope swales (and down chutes) to limit the uninterrupted surface flows along the slope when the results from velocity and/or soil loss calculations require control measures (please refer to Comment No. 47 for velocity calculations). Please note that the permissible soil loss of 50 tons/acre/year is the maximum loss of soil leaving the slopes (the amount of soil intercepted off-slope and returned to the slopes may not be subtracted from the calculated loss of soil leaving the slopes). In general, the interim erosion control measures should be consistent with the guidance on the interim erosion control found at <http://www.tceq.texas.gov/assets/public/permitting/waste/msw/interimdrainageguide.pdf>.

The second paragraph in the “Peak Runoff Velocities Calculations” subsection within Section 3.2.2 has been revised to indicate the location of each flow length segment and corresponding slope used to determine the overall flow length and average slope used in the soil loss calculations.

RUSLE2 calculates the cover management factor based on types of operations, operation dates, vegetation, and surface residue cover. Based on these inputs RUSLE2 assigns a value from its database to each sub-factor for each time step. As shown in the erosion calculation record for interim conditions (Attachment 2) the operations include fill blading, cut blading and installation of the check dam (listed as Man #2: default). Present vegetation and residue cover are zero. Based on these inputs a cover management factor was calculated for each time step by the RUSLE2 software.

As discussed in the first paragraph of Section 3.1, the worst case scenario for soil loss occurs in 1) areas actively disturbed by landfill operations, 2) areas with steep intermediate or final cover slopes, and 3) intermediate or permanent swales. Therefore, calculating soil loss off the Subtitle D top dome disturbed by landfill operations, down the steep (4:1) embankment with either intermediate or final cover, and into the permanent swale is area of interest when assessing worst case erosion and soil losses.

The temporary on-slope soil berms (down chute) on the top dome and embankment surfaces include a conveyance channel by design; therefore they will perform the same function as the on-slope swale you are requesting.

The soil loss calculations do not subtract the amount of soil intercepted off-slope and return it to the slopes for a net loss.

49. After re-calculations of the surface velocities and soil losses in response to the comments of this letter, the downward swales (or down chutes) described in Section 3.2 of Appendix L may need to be redesigned to consist of a more erosion resistant component (for example, a layer of geomembrane) and to incorporate energy dissipating measures, as necessary.

No changes were made to the berm and swale flow velocity calculations and associated soil loss calculations. As shown in Table 3-1 these structures are designed with flow velocities less than the permissible flow velocity for each erosion control measure (i.e. Reno®Mattress lining of the temporary berms channel down the subtitle D embankment and gravel lining of the swale off the landfill). As describe in the paragraph after Table 3-1 check dams located at the outlet of each swale off the landfill will reduce flow velocity and allow sediment pollutants to settle.

50. Please revise Section 3.3, Final Cover Stage, of Appendix L to address the same or similar deficiencies described in Comment Nos. 45 through 49 of this letter.

As explained in section 3.3.1 under “Peak Runoff Velocity Calculations” the flow velocity in all permanent swales is less than the permissible flow velocity of 5 ft/s for gravel lining as shown in Table 2.4.

The paragraph in the “Soil Loss Calculations” subsection within Section 3.3.1 has been revised to indicate the location of each flow length segment and corresponding slope used to determine the overall flow length and average slope used in the soil loss calculations.

With regard to the cover management factor calculation as discussed in response to Comment 48, in the final cover condition, mulch is added as an operation and the cut blading is removed. Present vegetation and residue cover remain zero. Based on these inputs a cover management factor was calculated for each time step by the RUSLE2 software for the final condition (Attachment 3).

The worst case soil loss scenario in the final cover condition is from flow coming off the Subtitle D top dome, down the steep (4:1) embankment, and into the permanent swale.

No changes were made to the swale flow velocity calculations and associated soil loss calculations. As shown in Table 2.4 these swales are designed with velocities less than the permissible flow velocity for gravel lining. Check dams located at the outlet of each swale off the landfill will reduce flow velocities and allow sediment pollutant to settle.

51. Please clarify whether Attachment 5, 2005 Stormwater Pollution Prevention Plan, of Appendix L has been previously reviewed and approved by the TCEQ and included as a part of the current MSW permit document. Please explain the meaning of “For Reference Only” shown under the Attachment 5 title. Please note that if Attachment 5, 2005 Stormwater Pollution Prevention Plan was prepared to comply with the stormwater permit requirements, it will not be reviewed during this modification review process.

The 2005 SWPPP previously included in Attachment 5 has been replaced with an updated 2011 version. According to our conversation with the Fort Bliss Storm Water Pollution prevention team, this SWPPP has not been reviewed by TCEQ. The phrase “For Reference Only” means that it is being included to demonstrate compliance but is not for review and approval.

52. After revising Appendix L in response to the comments on erosion control measures, please update or revise the attachments to Appendix L accordingly.

The only revision made to the attachments is the addition of the perimeter ditch flow calculations in Attachment 2. Drawing C-3 was revised to show the planed perimeter ditches, discharge locations and permitted site boundary.

53. Pages 4 and 5 of Appendix Q, ET Cover Design Report, list the parameter values for the constructed ET cover layers. Please specify the ranges of the parameter values within which the ET cover can be expected to meet the performance limit (please refer to Comment No. 23 of this letter). It was noticed that a brief discussion on the model sensitivity was included on page 6 of Appendix Q; the brief sensitivity discussion may be expanded to address the concerns of this comment.

Additional discussion was added to the last paragraph on page 7 of Appendix Q to identify the range of the parameter values within which the ET cover can be expected to meet the performance limit and the QA/QC methods found in the Final Closure Plan that will be in place to ensure compliance.

54. Page 5 of Appendix Q states that “Dr. Rafal Corral of the Fort Bliss Environmental Division and Leah Markiewitz with Zia provided an optimum vegetative design to utilize indigenous species of the area such as alkali sacaton and sand dropseed.” Please refer to Comment No. 24 of this letter and revise this page as necessary.

Mrs. Markiewitz modified her choices of indigenous grasses to be used for transpiration/erosion control purposes and provided supporting information from a published range experiment on page 5 of Appendix Q to justify the plant selections.

55. Page 6 of Appendix Q states that “potential transpiration and evaporation were generated from empirical cheatgrass data published by Hinds (1975).” Table 1 of Appendix Q lists the PET, transpiration, and evaporation for the 30 years modeled in the ET cover design. Please clarify whether the methods used in generation of the PET, the transpiration, and the evaporation is consistent with the procedures described in the UNSAT-H guidance or revise the application as appropriate.

According to Section 2.2.1 Processes on page 2.2 and 2.3 of the UNSAT-H Manual, the UNSAT-H model simulates evaporation in two ways, isothermal mode and thermal mode. In the isothermal mode, which is the method we chose, UNSAT-H uses the PET concept. The user supplies either daily values of PET or daily weather data, with which the code calculates daily PET values using the Penman equation. The UNSAT-H model simulates the effects of plant transpiration using the PET concept. Plant information is supplied to the code to partition the PET into potential evaporation and potential transpiration. We chose to supply daily weather data provided by Southern Regional Climate Center and plant information from the Hinds publication and have the code calculate the daily PET values. Additionally, Mrs. Markiewitz provided additional discussion on page 5 of Appendix Q as to why she felt the similarities between the indigenous species chosen and cheatgrass justified the use of cheatgrass data in the UNSAT-H simulation.

56. Page 6 of Appendix Q indicates that the 6-inch thick capillary break layer consists of well graded, fine to coarse sand. Please discuss whether or not the capillary breaking function of the capillary break layer might be reduced by silts/fines from the storage layer and the vegetative surface layer and/or revise the ET cover design as necessary. In addition, please model the performance of a final cover with a storage layer of 18 inch thick and without the capillary break layer (for this modeling purpose, the material specifications and the thickness of the other layers should stay the same as currently designed).

The Fort Bliss Municipal Solid Waste Landfill is located within one of the most arid regions in the United States. With annual rain fall of less than 10 inches per year, the region does not expose the cap to either the volume of water or velocity of water moving downward through the layers necessary to transport silt into the capillary break layer. The analysis also shows that the cap never exceeds 50% of its storage capacity, which would mean that the 12" vegetative layer and the 12" storage layer have the capacity to store the entire volume of water being modeled through the ET cover. I have attached the model you requested and it shows that if we replaced the capillary break layer with native soil we only meet the 4 mm/yr performance criteria in 13 of the 30 years (TCEQ Requested Simulation Results).



Texas Commission on Environmental Quality

Permit or Registration Application for Municipal Solid Waste Facility

Part I

A. General Information

Facility Name:	USAADACENFB Fort Bliss Municipal Solid Waste Landfill			
Physical or Street Address (if available):	Building 367, Landfill Road			
(City) (County)(State)(Zip Code):	Fort Bliss	El Paso	TX	79913-0058
(Area Code) Telephone Number:	915-568-5919			
Charter Number:	N/A			

If the application is submitted on behalf of a corporation, provide the Charter Number as recorded with the Office of the Secretary of State for Texas.

Operator Name ¹ :	U.S. Army Garrison, Fort Bliss IMWE-BLS-PW			
Mailing Address:	Building 777			
(City) (County)(State)(Zip Code):	Fort Bliss	El Paso	TX	79916
(Area Code) Telephone Number:	915-568-5919			
(Area Code) FAX Number:	915-568-3943			
Charter Number:	N/A			

If the permittee is the same as the operator, type "Same as Operator".

Permittee Name:	Headquarters, U.S. Army Garrison, Fort Bliss IMWE-BLS-PW			
Physical or Street Address (if available):	Same as Operator			
(City) (County)(State)(Zip Code):			TX	
(Area Code) Telephone Number:				
Charter Number:				

If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

Agent Name:	N/A			
Mailing Address:				
(City) (County)(State)(Zip Code):				
(Area Code) Telephone Number:				
(Area Code) FAX Number:				

Application Type:

<input checked="" type="checkbox"/>	Permit	<input type="checkbox"/>	Major Amendment	<input type="checkbox"/>	Minor Amendment
<input type="checkbox"/>	Registration	<input checked="" type="checkbox"/>	Modification	<input type="checkbox"/>	Temporary Authorization
		<input checked="" type="checkbox"/>	w/Public Notice		
		<input type="checkbox"/>	w/out Public Notice	<input type="checkbox"/>	Notice of Deficiency Response

¹ The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

Facility Classification:

<input checked="" type="checkbox"/>	Type I	<input checked="" type="checkbox"/>	Type IV	<input type="checkbox"/>	Type V	<input type="checkbox"/>	Type IX
<input type="checkbox"/>	Type I AE	<input type="checkbox"/>	Type IV AE	<input type="checkbox"/>	Type VI		

Activities covered by this application (check all that apply):

<input type="checkbox"/>	Storage	<input type="checkbox"/>	Processing	<input checked="" type="checkbox"/>	Disposal
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Waste management units covered by this application (check all that apply):

<input type="checkbox"/>	Containers	<input type="checkbox"/>	Tanks	<input type="checkbox"/>	Surface Impoundments	<input checked="" type="checkbox"/>	Landfills
<input type="checkbox"/>	Incinerators	<input type="checkbox"/>	Composting	<input type="checkbox"/>	Type IV Demonstration Unit	<input type="checkbox"/>	Type IX Energy/Material Recovery
<input checked="" type="checkbox"/>	Other (Specify)		C&D Debris	<input type="checkbox"/>	Other (Specify)		
<input checked="" type="checkbox"/>	Other (Specify)		Mulching	<input type="checkbox"/>	Other (Specify)		

Is this submittal part of a Consolidated Permit Processing request, in accordance with 30 TAC Chapter 33?

Yes No

If yes, state the other TCEQ program authorizations requested.

Provide a brief description of the portion of the facility covered by this application. For amendments, modifications, and temporary authorizations, provide a brief description of the exact changes to the permit or registration conditions and supporting documents referenced by the permit or registration. Also, provide an explanation of why the amendment, modification, or temporary authorization is requested.

Does the application contain confidential Material? Yes No

If yes, cross-reference the confidential material *throughout the application* and submit as a separate document or binder conspicuously marked "CONFIDENTIAL."

Alternative Language Notice Instructions

For certain permit applications, public notice in an alternate language is required. If an elementary school or middle school nearest to the facility offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, trigger a bilingual education program to apply to an entire school district should the requisite alternative language speaking student population exist. However, there may not exist any bilingual students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if the nearest elementary or middle school, as a part of a larger school district, is required to make a bilingual education program available to qualifying students and either the school has students enrolled at such a program on-site, or has students who attend such a program at another location in satisfaction of the school's obligation to provide such a program as a member of a triggered district.

If it is determined that an alternative language notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language. Electronic versions of the Spanish template examples are available from the TCEQ to help the applicant complete

the publication in the alternative language.

Alternative Language Notice Application Form:

Alternative language notice confirmation for this application:

1. Is a bilingual program required by the Texas Education Code in the school district where the facility is located? YES NO

(If NO, alternative language notice publication not required)

2. If YES to question 1, are students enrolled in a bilingual education program at either the elementary school or the middle school nearest to the facility? YES NO

(If YES to questions 1 and 2, alternative language publication is required; If NO to question 2, then consider the next question)

3. If YES to question 1, are there students enrolled at either the elementary school or the middle school nearest to the facility who attend a bilingual education program at another location? YES NO

(If Yes to questions 1 and 3, alternative language publication is required; If NO to question 3, then consider the next question)

4. If YES to question 1, would either the elementary school or the middle school nearest to the facility be required to provide a bilingual education program but for the fact that it secured a waiver from this requirement, as available under 19 TAC '89.1205(g)? YES NO

(If Yes to questions 1 and 4, alternative language publication is required; If NO to question 4, alternative language notice publication not required)

If a bilingual education program(s) is provided by either the elementary school or the middle school nearest to the facility, which language(s) is required by the bilingual program?

Note: Applicants for new permits and major amendments must make a copy of the administratively complete application available at a public place in the county where the facility is, or will be, located for review and copying by the public.

Public place where administratively complete permit application will be located.			
Public Place (e.g., public library, county court house, city hall, etc.):	El Paso Public Library		
Mailing Address:	501 North Oregon Street		
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX 79901-0058
(Area Code) Telephone Number:	915-543-5433		

B. Facility Location

Except for Type I AE and Type IV AE landfill facilities, for permits, registrations, amendments, and modifications requiring public notice, provide the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted.
<https://www.bliss.army.mil/DPW/Environmental/EISDocuments2.html>

Local Government Jurisdiction:	N/A
Within City Limits of:	N/A
Within Extraterritorial Jurisdiction of City of:	N/A
Is the proposed municipal or industrial solid waste disposal or processing facility located in an area in which the governing body of the municipality or county has prohibited the disposal or processing of municipal or industrial solid waste? (If YES, provide a copy of the ordinance or order):	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

Provide a description of the location of the facility with respect to known or easily identifiable landmarks.
 The landfill is located on Fort Bliss property near the Union Southern Pacific Railroad tracks along Sanitary Rill Road, approximately 4 miles north of the intersection with Fred Wilson Road

Detail the access routes from the nearest United States or state highway to the facility.
 The paved landfill access road, referred to as Sanitary Road, is located on Fort Bliss property running south from the landfill site, parallel to the Union Southern Pacific Railroad tracks, to Fred Wilson Road. Fred Wilson Road is located approximately 4 miles south of the landfill site. The Sanitary Fill Road is a two-lane asphalt concrete paved road. The road is 30-ft wide with road shoulder on both sides. The access road is owned and maintained by Fort Bliss.

Provide the latitudinal and longitudinal geographic coordinates of the facility.

Latitude	N 31° 52.70'
Longitude	W 106° 22.60'
Elevation (above msl)	3930

Is the facility within the Coastal Management Program boundary?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Texas Department of Transportation District Location:

TXDOT District Name & Number:	El Paso District #4			
District Engineer's Name:	Charles H. Berry, Jr., PE			
Street or P. O. Box:	13301 Gateway East			
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX	79928
(Area Code) Telephone Number:	915-790-4203			
(Area Code) FAX Number:	915-790-4311			

The local governmental authority or agency responsible for road maintenance:

Agency Name	Fort Bliss			
Contact Person's Name:	John Ghim			
Street or P. O. Box:	IMWE-BLS-PW, Building 777			
(City) (County)(State)(Zip Code):	Fort Bliss	El Paso	TX	79916
(Area Code) Telephone Number:	915-568-5201			
(Area Code) FAX Number:	915-568-3943			

State Representative:

District Number:	79			
State Representative's Name:	Joe Pickett			
District Office Address:	1790 Lee Trevino #307			
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX	79936
(Area Code) Telephone Number:	915-590-4349			
(Area Code) FAX Number:	915-590-4726			

State Senator:

District Number:	29			
State Senator's Name:	The Honorable Jose Rodriquez			
District Office Address:	911 Dallas Street			
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX	79902
(Area Code) Telephone Number:	915-521-3500			
(Area Code) FAX Number:	No fax listed			

Council of Government (COG) Information:

COG Name:	Rio Grande Council of Governments			
COG Representative's Name:	Michael Ada			
COG Representative's Title:	Director, Environmental Services			
Street or P. O. Box:	1100 N. Stanton St. Suite 610			
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX	79902
(Area Code) Telephone Number:	915-533-0998 x 121			
(Area Code) FAX Number:	915-532-9382			

River Basin Information:

River Authority:	International Boundary & Water Commission			
Contact Person's Name:	Gilbert Anaya			
Watershed Sub-Basin Name:	Tularosa Closed Basin			
Street or P. O. Box:	4171 N. Mesa, Suite C-100			
(City) (County)(State)(Zip Code):	El Paso	El Paso	TX	79902
(Area Code) Telephone Number:	915-832-4702			
(Area Code) FAX Number:	915-832-4190			

This site is located in the following District of the U.S. Army Corps of Engineers:

<input type="checkbox"/> Albuquerque, NM <input checked="" type="checkbox"/> Ft. Worth, TX <input type="checkbox"/> Galveston, TX <input type="checkbox"/> Tulsa, OK
--

C. Maps**General**

For permits, registrations, and amendments only, submit a topographic map, ownership map, county highway map, or a map prepared by a registered professional engineer or a registered surveyor which shows the facility and each of its intake and discharge structures and any other structure or location regarding the regulated facility and associated activities. Maps must be of material suitable for a permanent record, and shall be on sheets 8-1/2 inches by 14 inches or folded to that size, and shall be on a scale of not less than one inch equals one mile. The map shall depict the approximate boundaries of the tract of land owned or to be used by the applicant and shall extend at least one mile beyond the tract boundaries sufficient to show the following:

each well, spring, and surface water body or other water in the state within the map area;

the general character of the areas adjacent to the facility, including public roads, towns and the nature of development of adjacent lands such as residential, commercial, agricultural, recreational, undeveloped, etc;

the location of any waste disposal activities conducted on the tract not included in the application;
and

the ownership of tracts of land adjacent to the facility and within a reasonable distance from the proposed point or points of discharge, deposit, injection, or other place of disposal or activity.

General location maps

For permits, registrations, and amendments only, submit at least one general location map at a scale of one-half inch equals one mile. This map shall be all or a portion of a county map prepared by Texas Department of Transportation (TxDOT). If TxDOT publishes more detailed maps of the proposed facility area, the more detailed maps shall also be included in Part I. Use the latest revision of all maps.

Land ownership map

Provide a map that locates the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 1/4 mile of the facility, on-site facility easement holders, and all mineral interest ownership under the facility.

Landowners list

Provide the adjacent and potentially affected landowners' list, keyed to the land ownership map with each property owner's name and mailing address. The list shall include all property owners within 1/4 mile of the facility, easement holders, and all mineral interest ownership under the facility. Provide the property, easement holders', and mineral interest owners' names and mailing addresses derived from the real property appraisal records as listed on the date that the application is filed. Provide the list in electronic form, as well.

D. Property owner information

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operator only, provide the following:

(1) the legal description of the facility;

- (A) the abstract number as maintained by the Texas General Land Office for the surveyed tract of land;
- (B) the legal description of the property and the county, book, and page number or other generally accepted identifying reference of the current ownership record;
- (C) for property that is platted, the county, book, and page number or other generally accepted identifying reference of the final plat record that includes the acreage encompassed in the application and a copy of the final plat, in addition to a written legal description;
- (D) a boundary metes and bounds description of the facility signed and sealed by a registered professional land surveyor;
- (E) on-site easements at the facility, and
- (F) drawings of the boundary metes and bounds description; and

(2) a property owner affidavit signed by the owner.

E. Legal authority

Provide verification of the legal status of the owner and operator, such as a one-page certificate of incorporation issued by the secretary of state. List all persons having over a 20% ownership in the proposed facility.

Indicate Ownership status of the facility:									
<input type="checkbox"/>	Private	<input type="checkbox"/>	Corporation	<input type="checkbox"/>	Partnership	<input type="checkbox"/>	Proprietorship	<input type="checkbox"/>	Non-Profit Organization
<input type="checkbox"/>	Public	<input checked="" type="checkbox"/>	Federal	<input type="checkbox"/>	Military	<input type="checkbox"/>	State	<input type="checkbox"/>	Regional
<input type="checkbox"/>	County	<input type="checkbox"/>	Municipal	<input type="checkbox"/>	Other (Specify)				

Does the operator own the facility units and the facility property?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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If "No," for permits, registrations, amendments, and modifications that changes the legal description, a change in owner, or a change in operators submit a copy of the lease for the use of or the option to buy the facility units or facility property, as appropriate, and identify:

Owner Name:			
Street or P. O. Box:			
(City) (County)(State)(Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			
Charter Number:			

F. Evidence of competency

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operators submit a list of all Texas solid waste sites that the owner and operator have owned or operated within the last ten years.

Site Name	Site Type	Permit/Reg. No.	County	Dates of Operation
N/A				

Submit a list of all solid waste sites in all states, territories, or countries in which the owner and operator have a direct financial interest.

Site Name	Location	Dates of Operation	Regulatory Agency (Name & Address)
N/A			

A licensed solid waste facility supervisor, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations will be employed before commencing facility operation.

Provide the names of the principals and supervisors of the owner's and operator's organization, together with previous affiliations with other organizations engaged in solid waste activities.

Name	Previous Affiliation	Other Organization
Manuel Talamantes	N/A	Moore Services, Inc.

For landfill permit applications only, evidence of competency to operate the facility shall also include landfilling and earthmoving experience if applicable, and other pertinent experience, or licenses as described in 30 TAC Chapter 30 possessed by key personnel. The number and size of each type of equipment to be dedicated to facility operation will be specified in greater detail on Part IV of the application within the site operating plan.

Landfilling/Earthmoving Equipment Types	Personnel Experience or Licenses
N/A	

For mobile liquid waste processing units, submit a list of all solid waste, liquid waste, or mobile waste units that the owner and operator have owned or operated within the past five years. Submit a list of any final enforcement orders, court judgments, consent decrees, and criminal convictions of this state and the federal government within the last five years relating to compliance with applicable legal requirements relating to the handling of solid or liquid waste under the jurisdiction of the commission or the United States Environmental Protection Agency. Applicable legal requirement means an environmental law, regulation, permit, order, consent decree, or other requirement.

Solid waste, liquid waste, or mobile waste units owned or operated within past 5 years	Texas and federal final enforcement orders, court judgments, consent decrees, and criminal convictions
N/A	

G. Appointments

Provide documentation that the person signing the application meets the requirements of 30 TAC §305.44, Signatories to Applications. If the authority has been delegated, provide a copy of the document issued by the governing body of the owner or operator authorizing the person that signed the application to act as agent for the owner or operator.

H. Application Fees

For a new permit, registration, amendment, modification, or temporary authorization, submit a \$150 application fee.

For authorization to construct an enclosed structure over an old, closed municipal solid waste landfill in accordance with 30 TAC 330 Subchapter T, submit a \$2,500 application fee.

If paying by check, send payment to:

Texas Commission on Environmental Quality
 Financial Administration Division, MC 214
 P. O. Box 13087
 Austin, Texas 78711-3087

Payment maybe made online using TCEQ e-pay at www.tceq.state.tx.us/e-services/	
E-pay confirmation number	582EA000112797

PROPERTY OWNER AFFIDAVIT

"I, Alfredo J. Riera, P.E.

(property owner)

acknowledge that the State of Texas may hold me either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the facility. For a facility where waste will remain after closure, I acknowledge that I have a responsibility to file with the county deed records an affidavit to the public advising that the land will be used for a solid waste facility prior to the time that the facility actually begins operating as a municipal solid waste landfill facility, and to file a final recording upon completion of disposal operations and closure of the landfill units in accordance with Title 30 Texas Administrative Code §330.19, Deed Recordation. I further acknowledge that I or the operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance."


(Owner signature)

1/18/12
(Date)

Signature Page

I, Alfredo J. Riera, P.E.
(Operator)

Director of Public Works
(Title)

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.

Signature: 

Date: 1/18/12

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____
(Print or Type Operator Name) (Print or Type Representative Name)

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

Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said _____

On this _____ day of _____, _____

My commission expires on the _____ day of _____, _____

Notary Public in and for _____

_____ County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)