



November 7, 2017

Project No. 1401491

Texas Commission on Environmental Quality  
Municipal Solid Waste Permits Section, Waste Permits Division  
P.O. Box 13087, MC-124  
Austin, Texas 78711-3087

ATTN: Frank Zeng, Project Manager

**RE: RESPONSE TO TCEQ NOTICE OF DEFICIENCY  
PERMIT AMENDMENT APPLICATION – PERMIT MSW-956C  
EDINBURG REGIONAL DISPOSAL FACILITY  
EDINBURG, HIDALGO COUNTY, TEXAS  
TRACKING NO. 21832886; CN600647978/RN102217734**

Dear Mr. Zeng:

On behalf of the City of Edinburg, Golder Associates Inc. (Golder) submits this response to the Texas Commission on Environmental Quality's (TCEQ's) Notice of Deficiency (NOD) regarding the above-referenced Permit Amendment Application (PAA). TCEQ's NOD letter was dated on September 18, 2017.

The responses presented herein are cross-referenced to the NOD comments using the comment numbers in the NOD and quoting the original comments. We have also included an itemized list of the revised or new PAA pages.

One original and three (3) copies of the revised PAA materials and one (1) copy of the redline-strikeout revisions are included with this letter. This response package will be posted to a publicly accessible website as indicated in the Part I form of the PAA.

We trust this response is sufficient to address the deficiencies identified by the TCEQ. Upon review of this response, if you have questions, please contact the undersigned at 281-821-6868.

**GOLDER ASSOCIATES INC.**

Chad E. Ireland, PE  
Senior Project Geological Engineer

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Associate

cc: Mr. Ramiro Gomez, Jr., Director of Solid Waste Management  
Jaime A. Garza, Regional Director, TCEQ Region 15 Office

CEI/JBF/kc

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## PERMIT AMENDMENT APPLICATION REVISIONS

Application Part Revisions			Figure Revisions	
■ I Form	■ III5 §3.6.2	■ III9 §2.1.2	■ I-1	■ III3B-2D-1
■ I §1.2.3	■ Table III5-1	■ III9 §2.2	■ I-2	■ III3B-2D-2
■ I §2.2	■ Table III5-2	■ IV	■ I-3	■ III3B-3A-1
■ Table I-1	■ III5B §3.8	■ Table IV-4	■ I-4	■ III3B-3A-2
■ Table I-6	■ Table III6-1	■ IV §1.1.1	■ I-5	■ III3B-3A-3
■ IA4	■ III6 §2.4	■ IV §4.2.2.4	■ I-6	■ III3B-3B-1
■ IA5	■ III7 §2.0	■ IV §4.6.1.2	■ IA-1	■ III3B-3C-1
■ II §3.3.2	■ III7 §2.2.1	■ IV §4.6.1.6	■ II-4	■ III3B-3C-2
■ IIE2-3	■ III7 §2.3	■ IV §4.6.1.7	■ II-5	■ III3D-1-1
■ III	■ III7A §1.1	■ IV §4.6.1.8	■ II-6	■ III3E-1-1
■ III1 §1.1	■ III7AA	■ IV §4.10.1	■ II-11	■ III3E-1-2
■ III1 §1.3	■ III7C	■ IV §4.11.9	■ II-16	■ III3E-2A-1
■ III2 §2.2	■ III7C §III D	■ IV §4.12	■ II-17	■ III3F-3A
■ III2 §2.3.4	■ III7D-1 §3.1	■ IV §4.18	■ II-18A	■ III3F-3B
■ III2 §2.3.5	■ III7D-1 §3.2.1	■ IV §4.21	■ II-18B	■ III4-12A
■ III2 §4.4	■ III7D-1 §3.3.2	■ IV §4.22.3.4	■ II-19	■ III4-12B
■ III2 §4.4.2.3	■ III7D-1 §3.3.3	■ IV §4.23.1	■ II-20A	■ III4-12C
■ III2 §4.5.1	■ III7D-1 §4.0	■ IV §4.26	■ II-20B	■ III4-12D
■ III2 §5.1	■ III7D-1 §5.0	■ IV §4.28	■ III3-2A	■ III4-12E
■ III2B	■ III7D-1 §5.1.2	■ IV §4.29	■ III3-2B	■ III4-12F
■ III3 §1.4	■ Table III7D-1-6	■ IV §4.29.1	■ III3-3	■ III4-12G
■ III3 §2.2	■ IV §4.5	■ IV §4.29.2	■ III3-4A	■ III4-12H
■ III3 §3.0	■ III8	■ IV §4.29.3	■ III3-4B	■ III5-1
■ III3 §5.1	■ III8 §1.0	■ IV §4.30	■ III3-4C	■ III5B-1
■ III3 §5.2	■ III8 §1.1	■ IV §4.31	■ III3-4D	■ III6-1
■ III3A-1 §1.0	■ III8 §1.2	■ IVG §1.0	■ III3-5A	■ III6-4
■ III3A-2 §2.0	■ III8 §1.2.1	■ IVG §2.1	■ III3-6A	■ III7-1
■ III3A-2 §5.0	■ III8 §1.2.2	■ IVG §2.3	■ III3-6B	■ III7-2A
■ III3D-4	■ III8 §1.2.3	■ IVG §2.4	■ III3-9A	■ III7-3A
■ III3E-1	■ III8 §1.2.4	■ IVG §2.5	■ III3A-1-1	■ III7-3B
■ III3E-2A	■ III8 §1.2.6	■ IVG §3.2	■ III3A-1-2	■ III7-4
■ III3F	■ III8 §1.3	■ IVG §3.4	■ III3A-1-3	■ III7D-1-1
■ III3F §8.0	■ III8 §1.4	■ IVG §6.0	■ III3A-1-4	■ III7D-1-2
■ III4 §3.1	■ III8 §1.4.1	■ IVH §1.1	■ III3A-1-5	
■ Table III4-4A	■ III8 §1.4.2	■ IVH §4.0	■ III3B-1-1	
■ Table III4-4B	■ III8 §1.4.3	■ IVH-3	■ III3B-1-2	
■ Table III4-5A	■ III8 §1.4.4		■ III3B-2A-1	
■ Table III4-5B	■ III8 §2.0		■ III3B-2C-1	
■ Table III4E1	■ III9 §ES		■ III3B-2D-1	
■ Table III4E2	■ III9 §1.1.2		■ III3B-2D-2	
■ III5 §2.2.3.2.4	■ III9 §1.2		■ III3B-3A-1	

## RESPONSE TO LETTER NOTICE OF DEFICIENCY COMMENTS

Comments and Reponses	Revisions
<p>1 <i>Figure IA-1 shows two easements that appear to be located within the waste footprint. To demonstrate compliance with §330.543(a), please revise the application to document that agreements have been reached with the easement holders to remove the easements prior to disposal area development (if the easements will be relocated within the permit boundary, please also specify and illustrate the new locations). Please also revise Section 3.1.1 of Part II and Part IV to address this deficiency.</i></p> <p>Figure IA-1, Land Ownership Record Map was developed to aid with referencing city-owned properties with warranty deeds as referenced in Note 1 on the figure. City owned properties within the facility boundary for TCEQ Permit MSW-956C and easement agreements are depicted on this figure with reference to corresponding documents provided in Part IA1, Ownership Record. The easement location agreements are not located within the waste footprint; both easement locations are within 40 feet of the facility boundary. A unit boundary / limits of waste placement has been added to Figure IA-1, Land Ownership Record Map for clarity. Revision to Part II §3.1.1 and Part IV is not needed.</p>	<p><u>Figure IA-1</u></p>
<p>2 <i>To demonstrate compliance with §330.59(d)(1), please revise Figure IA-1 to indicate the total acreage of the lands located within the proposed facility/permit boundary.</i></p> <p>Figure IA-1 has been revised to include a note to indicate the total acreage of the lands located within the facility boundary is 602.52 acres. Upon further review of Part IA, Legal Description, we discovered that although Part IA3, Permit Boundary Metes and Bounds Legal Description is the most current; the exhibit provided in Part IA4, Permit Boundary Metes and Bounds Exhibit is not. Therefore, the most current exhibit for Part IA4 is provided.</p>	<p><u>Figure IA-1</u></p> <p><u>Part IA4</u></p>
<p>3 <i>In accordance with §330.59(d)(2), please revise the property owner affidavits included in Appendix IA5.</i></p>	
<p>1 <i>To specify the City of Edinburg, instead of the individuals, as the property owner and revise the rest of the affidavits accordingly.</i></p> <p>The language within Part IA5, Property Owner Affidavit has been revised to make clearer the real property is owned by the City of Edinburg. The Property Owner Affidavit has been signed by Richard M. Hinojosa, the City Manager, as authorized signatory for City of Edinburg and notarized to replace existing contents of Part IA5.</p>	<p><u>Part IA5</u></p>
<p>2 <i>To clearly state that the City of Edinburg is the owner of all of the lands located within the proposed facility/permit boundary depicted in Figures I-5 and IA-5.</i></p> <p>Figure I-5 has been revised to include a note stating, "The City of Edinburg is the owner of all of the lands located within the permit boundary." There is not a Figure IA-5 as referenced in this comment. However in response to Letter NOD Comment 2, Part IA5 has been revised to clarify that the real property is owned by the City of Edinburg.</p>	<p><u>Figure I-5</u></p>
<p>4 <i>Figure IIB5-5 of Appendix IIC appears to show that the existing facility is located in the 100-year floodplain (Zone AE).</i></p>	
<p>a <i>Please provide floodplain statement to clarify whether parts of the landfill is located within Zone AE; and, if the landfill is not in the 100-year floodplain Zone AE, please revise the application to include explanation and documentation.</i></p> <p>Part II §2.8, Floodplains has been revised to clarify the floodplain locations evaluated and to demonstrate compliance with each applicable requirement of 30</p>	<p><u>Figures IIC-1</u> <u>IIC-2</u> <u>IIC-3</u></p> <p><u>Parts</u></p>

<p>TAC §§330.63(c)(2), 330.307(b), and 330.547. Additional sections included in Part II §2.8, Floodplains are:</p> <ul style="list-style-type: none"> <li>• §2.8.1 Location</li> <li>• §2.8.2 Data Source</li> <li>• §2.8.3 Floodplain Evaluation</li> <li>• §2.8.4 Construction Approval</li> </ul> <p>Part IIC, Floodplains has been reorganized to include the following supporting documentation:</p> <ul style="list-style-type: none"> <li>• Figure IIC-1 FEMA Flood Insurance Rate Map</li> <li>• Figure IIC-2 Revised FIRM to Reflect LOMR</li> <li>• Figure IIC-3 FEMA Q3 Flood Data</li> <li>• IIC1 Floodplain Evaluation for TCEQ Permit MSW-956B             <ul style="list-style-type: none"> <li>○ IIC1-1 Floodplain Correspondence for TCEQ Permit MSW-956B</li> <li>○ IIC1-2 Floodplain Location Restriction Certification for TCEQ Permit MSW-956B</li> </ul> </li> <li>• IIC2 Floodplain Evaluation for TCEQ Permit MSW-956C Expansion Area             <ul style="list-style-type: none"> <li>○ IIC2-1 FEMA CLOMR-F Request</li> <li>○ IIC2-2 FEMA Response to CLOMR-F Request</li> <li>○ IIC2-3 Community Floodplain Management Review and Approval</li> </ul> </li> </ul> <p>In addition, Part III2 §6.0, Floodplain Evaluation has been revised to include corresponding discussions to Part II §2.8, Floodplains and references to Part IIC, Floodplains.</p> <p>The property within the existing facility TCEQ Permit MSW-956B has been previously certified not to violate floodplain restrictions as demonstrated in supporting documentation provided in Part IIC1, Floodplain Evaluation for TCEQ Permit MSW-956B. Therefore, the property under evaluation is the expansion area to be included in TCEQ Permit MSW-956C where the facility's northern boundary extends into two small unnamed ponding areas designated as a 100-yr flood zone without floodways.</p> <p>As demonstrated in Part IIC2-1, FEMA CLOMR-F Request, construction of the facility's perimeter berm and storm water management structures—placement of fill in the 100-yr flood zone without floodways—will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. FEMA's Response to CLOMR-F Request, included in Part IIC2-2, states that, based on FEMA's evaluation, no action is required by FEMA for the proposed fill at the facility because the proposed development does not encroach on a FEMA designated floodway and no buildings are anticipated to be constructed on the site. Construction of the facility's perimeter berm was approved by the City of Edinburg Director of Public Works as documented in Part IIC2-3, Community Floodplain Management Review and Approval; therefore, no further action is required.</p> <p>Part IIC2-1, FEMA CLOMR-F Request Figure 5 referenced in this comment depicts both the effective FIRM and FEMA Quality Level 3 (Q3) Flood Data. The effective FIRM, panel number 480334 0325D dated June 6, 2000, has not been revised to reflect Letter of Map Revision (LOMR) case number 01-06-1095P dated May 17, 2001 whereas the FEMA Quality Level 3 (Q3) Flood Data has been verified by FEMA to be the most current SFHA delineations available. To better</p>	<p>IIC1-1                  IIC1-2                  IIC2-1                  IIC2-2                  IIC2-3                  II §2.8                  II §2.8.1                  II §2.8.2                  II §2.8.3                  II §2.8.4                  III2 §6.0                  III2 §6.1                  III2 §6.2                  III2 §6.3                  III2 §6.4</p>
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	clarify the SFHA delineations evaluated for the expansion area for TCEQ Permit MSW-956C, Figures IIC-1, IIC-2, and IIC-3 have been added to depict the facility boundary on the effective FIRM, FIRM revised by a LOMR used to for the floodplain evaluation for TCEQ Permit MSW-956B, and the FEMA Q3 Flood Data used for the floodplain evaluation for TCEQ Permit MSW-956C, respectively.	
b	<p><i>Please revise Section 2.8 and other relevant portions of the application (for example, Part III) to include discussions and supporting documents to demonstrate compliance with each applicable requirement of §330.547, §330.63(c)(2) (in Part III), and Subchapter G (in Part III).</i></p> <p>In response to Letter NOD Comment 4a, Part II §2.8, Floodplains, Part IIC, Floodplains, and Part III2 §6.0, Floodplain Evaluation has been revised to clarify the floodplain locations evaluated and to demonstrate compliance with each applicable requirement of 30 TAC §§330.63(c)(2), 330.307(b), and 330.547. No further revisions have been made in response to this comment.</p>	
c	<p><i>Please address the same concerns related to Zone A for the lateral expansion areas.</i></p> <p>In response to Letter NOD Comment 4a, Part II §2.8, Floodplains, Part IIC, Floodplains, and Part III2 §6.0, Floodplain Evaluation has been revised to clarify the floodplain locations evaluated. Part IIC2-1, FEMA CLOMR-F Request evaluates two small unnamed ponding areas designated as a 100-yr flood zone without floodways that extend into the facility's northern boundary. No further revisions have been made in response to this comment.</p>	
d	<p><i>Please specify the 100-year flood elevations (Zone AE and A) and explain how they are determined.</i></p> <p>In response to Letter NOD Comment 4a, Part II §2.8.3, Floodplain Evaluation was added to discuss the use of FEMA's Q3 Flood Data Zone A delineation to determine a 100-year base flood elevation (BFE) of 86 feet above mean sea level (ft-msl) for the two small unnamed ponding areas designated (SFHA) Zone A without floodways using contour interpolation as described in FEMA's guide, Managing Floodplain Development in Approximate Zone A Areas. No revisions have been made in response to this comment.</p>	
5	<p><i>Section 3.3.2 proposes incremental installation of fence; please either remove this provision or include a detailed implementation plan to ensure compliance with §330.131, §330.223(c) and other applicable requirements on access control (please update Parts III and IV as necessary). Please revise Figure II-17 or another map/plan to show locations (and types) of the existing and proposed fencing/access control features that are required by §330.61(d)(6) and discussed in Section 3.3.2.</i></p> <p>Part II §3.3.2, Fencing has been revised to demonstrate access to the facility is controlled by a perimeter fence, a composite of either a four-foot barbed wire fence or a six-foot steel-link mesh fence, currently installed around contiguous properties owned by the City. The perimeter fence encompasses the facility permit boundary as well as the Type IV Landfill TCEQ Permit MSW-2302, landfill facilities to the south, and additional City owned properties to the east. Language of incremental installation of fence has been removed. Figure II-16, Facility Entrance Plan has been revised to include the perimeter fence on both the facility entrance plan and the key map to show the perimeter fence encompasses contiguous properties owned by the City. Also revised are Part III1 §1.1, Facility Access and Part IV §4.5, Access Control.</p>	<p><u>Figure</u> II-16</p> <p><u>Parts</u> II §3.3.2 III1 §1.1 IV §4.5</p>
6	<p><i>Part II, Appendix E contains wildlife protective measures agreed on (or discussed) between the permittee and the relevant governmental agencies (the U.S. Fish and Wildlife Services, and the Texas Parks and Wildlife Department). In accordance</i></p>	<p><u>Part</u> III1 §1.3</p>

	<p><i>with §330.63(b)(5), please revise Section 1.3 to be specific about how the facility will be developed/constructed to implement the agreed measures.</i></p> <p>Part III1 §1.3, Endangered Species has been revised to include language corresponding to Part IIE2-3, TPWD Response to Recommendations on how the facility will be designed to protect endangered species in accordance with 30 TAC §330.63(b)(5).</p>	
7	<p><i>This application proposes to use perimeter fence as the primary access control measure. In accordance with §330.63(b)(1) and §330.131, please revise Section 1.1 of Attachment 1 to describe the type, height, and location of the perimeter fence and refer to a figure that shows the fence.</i></p> <p>Part III1 §1.1, Facility Access has been revised in response to Letter NOD Comment 5 to describe the type, height, and location of the perimeter fence and refer to a figure that shows the fence in accordance to 30 TAC §§330.63(b)(1) and 330.131. No revisions have been made in response to this comment.</p>	
8	<p><i>The permit boundary for MSW 956C appears to be portrayed differently in different portions of the application (for example Figure III1-2, Figure I-1, III2-1, and III2-2). If the MSW 956C permit boundary is intended to encompass existing, lateral expansion, Landfill Facilities, and the Type IV MSW 2302 site, please revise the entire application accordingly and provide all applicable information required by the rule (for example, but not limited to, legal description and total acreage). Otherwise, please revise the text and figures to clearly distinguish between the MSW 956C permit boundary and MSW 2302 permit boundary; if color coding is used in figures (for example, in permit boundary legends), please ensure compliance with §330.57(h)(2). Regardless of how the two landfills are portrayed, please ensure the areas outside the MSW 956C permit boundary as shown in Figure III2-2 are consistent with the currently authorized/existing conditions (including the locations of the gatehouse/scale, processing/storage areas, Landfill Facilities area, roads, fence, area shapes/limits).</i></p> <p>The permit boundary for TCEQ MSW-956C depicted in Part IA4, Permit Boundary Metes and Bounds Exhibit is consistently represented throughout the application and encompasses the existing and the lateral expansion of the landfill facility. The permit boundary for TCEQ MSW-956C does not encompass Type IV TCEQ Permit MSW-2302 property nor the landfill facilities area.</p> <p>To ensure compliance with 30 TAC §330.57(h)(2), permit boundary line types in Figures I-1 through I-5 have been revised to clearly distinguish between the existing permit boundary for MSW-956B, the permit boundary including lateral expansion for MSW-956C, the permit boundary of adjacent MSW-2302, and landfill facilities. Figure I-6 has been removed in response to Informal NOD Comment 6.</p> <p>In addition, the permit boundary for MSW-956B has been removed in Figure II-6 and the line type used for MSW-2302 permit boundary and the landfill facilities boundary has been revised in Figures II-11, III1-2, and III3-1.</p> <p>The areas outside the MSW-956C permit boundary as shown in Figure III1-2 are consistent with the existing conditions. In response to Letter NOD Comment 5, Figure II-16 has been revised to include the perimeter fence on both the facility entrance plan and the key map to show the perimeter fence encompasses contiguous properties owned by the City.</p>	<p><u>Figures</u>                  I-1                  I-2                  I-3                  I-4                  I-5  <del>I-6</del>                  II-6                  II-11                  III1-2                  III3-1</p>
9	<p><i>Please revise Figure III1-1 of Attachment 1 to illustrate the flow of unauthorized/prohibited wastes discovered by the staff stationed at the working face(s) as required by §330.133(a) and (b).</i></p> <p>Figure III1-1, Waste Movement Flow Diagram has been revised as requested.</p>	<p><u>Figure</u>                  III1-1</p>

10	<p><i>Attachments 2 and 7 do not appear to contain design information relating to the add-on berms and downchutes for final cover. In accordance with §330.305 and §330.457(e), please revise the application at pertinent locations to add the information (design/sizing, materials, construction, and figures).</i></p> <p>Part III2 §2.3.2, Add-on Berms and Part III2 §2.3.3, Downchutes both provide design information relating to the add-on berms and downchutes for final cover. Part III2A, Detailed Drainage Calculations Table 3, Channel Hydraulic Calculations provides sizing for both the add-on berm and downchutes. In addition, add-on berm details are provided on Figures III2-3 and III7-3 and downchute details are provided on Figure III2-4. No revisions have been made in response to this comment.</p>	
11	<p><i>The application is not clear about how the existing facility has been or will be protected from the 100-year flood (Zone AE). Please revise Attachment 2 and other pertinent portions of the application to include information on the 100-year flood protection levee as required by §330.547(c), §330.63(c)(2) and §330.307. If applicable, please identify the existing or proposed feature that is intended to serve as the 100-year flood protection levee and provide the aforementioned information.</i></p> <p>In response to Letter NOD Comment 4a, Part II §2.8, Floodplains, Part IIC, Floodplains, and Part III2 §6.0, Floodplain Evaluation has been revised to clarify the floodplain locations evaluated and to demonstrate compliance with each applicable requirement of 30 TAC §§330.63(c)(2), 330.307(b), and 330.547. The property within the existing facility TCEQ Permit MSW-956B has been previously certified not to violate floodplain restrictions as demonstrated in supporting documentation provided in Part IIC1, Floodplain Evaluation for TCEQ Permit MSW-956B. Therefore, the property under evaluation is the expansion area to be included in TCEQ Permit MSW-956C where the facility's northern boundary extends into two small unnamed ponding areas designated as a 100-yr flood zone without floodways. As demonstrated in Part IIC2-1, FEMA CLOMR-F Request, construction of the facility's perimeter berm is the proposed feature intended to serve as the 100-year flood protection levee. No revisions have been made in response to this comment.</p>	
12	<p><i>Please revise Attachment 2 and other pertinent portions of the application to discuss how the storage/processing units/areas will comply with floodplain location restrictions of §330.547(c).</i></p> <p>In response to Letter NOD Comment 4a, Part II §2.8, Floodplains, Part IIC, Floodplains, and Part III2 §6.0, Floodplain Evaluation has been revised to clarify the floodplain locations evaluated and to demonstrate compliance with each applicable requirement of 30 TAC §§330.63(c)(2), 330.307(b), and 330.547. No revisions have been made in response to this comment.</p>	
13	<p><i>Section 7.0 of Attachment 2 discusses use of alternative synthetic grass as final cover. Please know ClosureTurf or similar system as alternative final cover for landfills is not an approved final cover in Texas. Please remove this proposed final cover option from this section and other portions of this application (including, but not limited to, Attachment 7).</i></p> <p>A meeting with the Waste Permits Division of TCEQ was held on September 26, 2014 where the use of an alternative synthetic grass final cover was discussed. It was noted that synthetic grass has not been approved by TCEQ for use in the final cover but may be evaluated if included in the permit amendment application.</p> <p>Part III7B, Alternative Synthetic Grass Final Cover Demonstration shows that the use of an alternative synthetic grass final cover provides superior infiltration and protection from wind and water erosion in comparison to the conventional composite final cover defined in 30 TAC §330.457(a). ClosureTurf® has calculated leakage rates approximately 1/5th that of the conventional composite final cover,</p>	

	<p>can withstand wind speeds greater than 150 mph, reduced soil loss, and offers other advantages over the conventional composite final cover including stability, landfill gas, settlement, longevity, and maintenance. Documented testing and evaluations on the longevity of the ClosureTurf® system may be provided upon request.</p> <p>Please provide specific technical reasons for rejecting the ClosureTurf® system or similar system as an alternative final cover. No revisions have been made in response to this comment.</p>	
14	<p><i>Rule §330.305(a) states, "Existing or permitted drainage patterns must not be adversely altered." A comparison between Figures III2-1 and III-2-2 of Attachment 2 indicates that there are offsite discharge at CP-3 and CP-9 under the pre-development conditions, and there will be no offsite discharge at the same points under post-development conditions. Please revise Attachment 2 at a pertinent location to explain why this change is not an adverse impact on the drainage pattern per §330.305(a). Please also explain the accumulations of discharge from CP7 and revise the figure as necessary.</i></p> <p>Part III2 §2.2, Drainage Pattern Analyses has been revised to include further discussion on discharge points CP-3 and CP-9 and why drainage patterns are not adversely altered in accordance to 30 TAC §330.305(a).</p>	Part III2 §2.2
15	<p><i>Rules §330.207, §330.305(c) and (e) require collection/containment/proper management of contaminated water; per §330.3(36), precipitation/surface runoff that has come into contact with the wastes at the working face is contaminated water. The active face berm sizing included in Appendix III-2B is for a maximum working face area of 30,000 sf; the maximum working face proposed in Section 4.6.1.1 of Part IV, Site Operating Plan (SOP) is 80,000 sf. To demonstrate compliance with the applicable requirements, please revise Appendix III-2B to include working face plan view and berm sizing in accordance with the working face dimensions specified in the SOP.</i></p> <p>Part III2B, Active Face Berm Sizing has been revised to include Figures 5 - 8, Berm Height vs. Berm Length for Various Setbacks for 50,000, 60,000, 70,000, and 80,000 sf respectively.</p>	Part III2B
16	<p><i>Section 1.3 of Attachment 3 states that the elevation of deepest excavation (EDE) is 70 ft-msl. In accordance with §330.63(d)(4)(C), please revise this section to specify the locations where the EDE(s) occur (or refer to where this information is contained). Please ensure that the EDE related information listed on page 12 of Part I is consistent with this section. Please revise Figures III3-2A and III3-2B to specify the EDE and the locations where the EDE occurs.</i></p> <p>Part III3 §1.3, Landfill Unit Elevations has been revised to include statement, "The elevation of deepest excavation (EDE) for the facility is 70 ft-msl located at the bottom of leachate collection sumps for each cell within Units 6, 7, and 8 as depicted on Figures III3-2A and III3-2B, Subgrade Layout Plan. In addition, the notes on Figures III3-2A and III3-2B have been revised to clarify the locations of the EDE.</p>	Figures III3-2A III3-2B
17	<p><i>In accordance with §330.63(e)(5), please revise Section 2.1 of Attachment 3 to list the maximum settlement and revise other portions of the application as necessary.</i></p> <p>Part III3 §2.1, Settlement Analysis references Part III3B-1, Settlement Analysis. Part III3B-1 §6.0, Conclusions includes a table demonstrating the post-settlement floor grades maintain positive drainage with a minimum slope of 0.6% and indicating an approximate maximum settlement of 4.4 ft. No revisions have been made in response to this comment.</p>	
18	<p><i>To demonstrate compliance with §330.333(d), please revise Section 4.0 of Attachment 3 to specify the maximum leachate depth in the sumps, leachate depth</i></p>	Part



	<p><i>determination/monitoring provisions/schedule, and pump start/shutdown mechanism, and leachate depths at which the pumping starts and stops.</i></p> <p>Part III3 §4.3.10, Leachate Collection Sump Capacity refers to Part III3D-4, Leachate Collection Sump Capacity. Part III3D-4 has been revised to add the start/stop elevations of the transducers and control panel for the pump and leachate elevations within the sump. In addition, the sump capacities and cycles have been updated to correspond to transducer start/stop levels.</p>	III3D-4
19	<p><i>In accordance with §330.331(a)(2), please revise Section 4.3.2 of Attachment 3 to clarify whether the maximum (peak) leachate depth/head over the liner are not greater than the thickness of geocomposite drainage layer under the expected field conditions. If the maximum (peak) leachate depth/head over the liner are greater than the thickness of geocomposite drainage layer, please clarify how the design still meets §330.331(a)(2) and revise the application as necessary. Please ensure that the leachate flow conditions in the drainage layer is properly considered in the slope stability analysis.</i></p> <p>The design methods presented in Part III3D-1, HELP Model Evaluation, §5.0 References, Reference 2, (Giroud, J.P., Zornberg, J.G., and Zhao, A., "Hydraulic Design of Geosynthetics and Granular Liquid Collection Layers", Geosynthetics International, Vol. 7, Nos. 4-6, pp. 285-380, 2000), include the "thickness approach" and the "hydraulic characteristic approach". The "thickness approach" is used when the liquid collection layer has been selected and the task of the design engineer is to check that the maximum liquid thickness is less than the allowable value. In the case of a permit application, the specific liquid collection layer material has not been selected and the task of the design engineer is to specify the hydraulic characteristics of the liquid collection layer that meet the required flow capacity, i.e. the hydraulic transmissivity required to maintain a liquid level above the liner that is less than the thickness of the geocomposite drainage layer. This is referred to as the "hydraulic characteristic approach". While the thickness of the liquid is not computed, calculating the required hydraulic transmissivity using the hydraulic characteristic approach assures that the liquid depth over the liner is less than the thickness of the geocomposite. The required transmissivity of each geocomposite (e.g. in the leachate collection and final cover systems) was calculated using the hydraulic characteristic approach; therefore, 30 TAC §330.331(a)(2) is met and the conditions in the drainage layer is properly considered in the stability analyses. No revisions have been made in response to this comment.</p>	
20	<p><i>Please revise Section 5.0 of Attachment 3 and other pertinent locations in the application to address compliance with ballasting evaluation report requirements of §330.337(j). If the relevant information is contained in other portions of the application, please revise Section 5.0 to include a reference.</i></p> <p>Part III3F §8.3, Ballast Evaluation Report addresses all the requirements of 30 TAC §330.337(j). Part III3 §5.1, Ballast has been revised to include a reference to Part III3F §8.3, Ballast Evaluation Report.</p>	Part III3 §5.1
21	<p><i>In order to demonstrate compliance with §330.333, please revise Figure III3-9A of Attachment 3 to identify the locations of the sumps.</i></p> <p>Figure III3-9A has been revised as requested.</p>	Figure III3-9A
22	<p><i>Growth rate R was given a value of 1.02 for site life calculation on page III3A-2-1 of Appendix III3A-2 (given the calculation result, the R value might be a typographic error); please clarify the value used in the actual calculation, and revise the site life calculation and other portions of the application as necessary.</i></p> <p>The growth rate value of 1.02 shown for R on page III3A-2-1 of Part III3A-2, Site Life Calculations is a result of rounding because of the number of decimal digits displayed within the cell on the spreadsheet. The growth rate used for the</p>	Part III3A-2 §5.0

	calculation is 1.75% (i.e. 1.0175). Part III3A-2 §5.0, Calculations has been revised to show a growth rate value of 1.0175.	
23	<p><i>The sufficient ballast calculations included in Appendix III3E-1 of Attachment 3 seem to be for the proposed Unit 7 only. Please revise this appendix to clarify whether the points evaluated are representative of the worst-case locations in Unit 7. Please clarify whether any other areas will need ballast and revise the application to comply with requirements of 330.337(f).</i></p> <p>Part III3E-1, Sufficient Ballast Calculations has been revised to include example ballast calculations for lateral expansion Unit 8 and remaining cell construction in Unit 6. In addition, language has been added to §4.0, Calculations and Results to state the evaluation points provided represent the worse-case locations for each unit cell.</p>	Part III3E-1
24	<p><i>Per §305.70(j)(12), changes in the landfill development sequence require a permit modification. Please explain the meaning of "in any sequence for operational flexibility" used in Section 2.0 of Attachment 7 and revise the section for clarity and consistency with §305.70(j)(12).</i></p> <p>Part III7 §2.0, Closure has been revised by removal of language "where landfill units may be incrementally constructed wholly or partially in any sequence for operational feasibility."</p>	Part III7 §2.0
25	<p><i>To comply with §330.457(e)(3), please revise Section 2.2.1 of Attachment 7 to provide the actual numerical estimate of the maximum inventory of wastes (typically defined as the total volume of waste and daily cover) ever on-site over the active life of the landfill facility.</i></p> <p>Part III7 §2.2.1, Facility Units has been revised to include the actual numerical estimate of the maximum inventory of wastes.</p>	Part III7 §2.2.1
26	<p><i>The landfill facility represented in this amendment application comprises of only one landfill unit as defined by §330.3(90); please revise Sections 2.3 and 2.4 of Attachment 7 to properly address the requirements of §330.457 and §330.461. Please note that while final cover installation in installments is allowed, commencement of post-closure care period is only allowed after closing the entire unit in accordance with §330.463(b)(1). Please revise the information entered into Appendix III7C, TCEQ Closure Plan Form as necessary.</i></p> <p>According to 30 TAC §330.3(90), a municipal solid waste landfill unit is a discrete area of land or an excavation that receives household waste. Part I §2.1.1, Permit History outlines the use of the term unit to identify discrete areas of land for municipal solid waste disposal. It is agreed that this permit amendment application combines contiguous units into one unit because of a shared final cover system that is not discrete for each individual unit. The City would like to continue the use of the term "unit" for the phases of landfill development because it is the naming convention used throughout the facility's operating history, reports have been submitted for previously constructed unit cells, and to do otherwise will create more confusion.</p> <p>To remedy the any confusion in addressing the requirements of 30 TAC §§330.457 and 330.461, Part III7 §2.0, Closure has been revised to include statement, "Waste disposal areas designated as units in this application do not have discrete individual final cover systems but share one final cover; therefore, for the purposes of closure, they will be collectively referred to as the MSW landfill unit." The use of the term unit and areas have been evaluated and revised appropriately within Part III7 §2.0, Closure.</p> <p>Part III7C §IIA, Facility Units has been revised to include statement, "Note the contiguous waste disposal areas designated as units in this application collectively share one final cover system and comprise a single landfill unit". Throughout Part</p>	Parts III7 §2.0 III7C

	III7C, TCEQ Closure Plan Form revisions have been made clarifying the use of landfill unit and processing areas.	
27	<i>Please explain the assumption of 18-in head for conventional cover leakage calculation in Appendix AA of Attachment 7 and, if necessary, revise the calculations.</i>	<u>Part</u> III7AA
	Part III7AA, Infiltration Rate Comparison - GCL Alternative Final Cover has been revised by correcting the text to state that head over the conventional final cover system of 0.2 inches was used in the calculation. Because a 0.2-inch head was used in the calculations, the conclusions of the analysis are unchanged.	
28	<i>Rule §330.339 includes specifications for the soil liner and requires that all quality control testing be completed before completion of the liner construction. Please revise Section 2.3.3 on page III7D1-8 to include repair/reconstruction measures for areas that fail the hydraulic conductivity test and other laboratory tests.</i>	<u>Part</u> III7D-1 §3.3.3
	Part III7D-1 §3.3.3 Failure Repairs has been revised to include failure repair measures for areas that fail the hydraulic conductivity test.	
29	<i>Section 5.0 of Appendix III7D-1 states that smooth LLDPE may be used as an option on upper portion of the final cover; use of smooth LLDPE seems to be inconsistent with the stability analysis condition described in Appendix III3B-2E-1 of Attachment 3. Please revise the application for consistency.</i>	<u>Part</u> III7D-1 §5.0
	Part III7D-1 §5.0, Geomembrane Liner has been revised by removing the smooth LLDPE option.	
30	<i>Please revise Section 5.1.2 of Appendix III7D-1 by removing "either at the manufacturing facility or" and adding a statement that the conformance tests will be performed by a third-party laboratory.</i>	<u>Part</u> III7D-1 §5.1.2
	Part III7D-1 §5.1.2, Conformance Testing has been revised by adding, the test samples shall be conformance tested by a third-party laboratory..."	
31	<i>Please revise Section 6.0 of Appendix III7D-1 to be consistent with the drainage geocomposite testing and other QA/QC measures contained in the TCEQ's Guidance for Liner Construction and Testing for a Municipal Solid Waste Landfill posted at <a href="https://www.tceq.texas.gov/waste_permits/msw_permits/msw_liners_covers.html">https://www.tceq.texas.gov/waste_permits/msw_permits/msw_liners_covers.html</a></i>	<u>Table</u> III7D-1-6
	Appendix III7D-1, Table III7D-1-6 has been revised to reflect the testing requirements listed in TCEQ Guidance Document RG-534 dated September 2017.	
32	<i>Please revise Section 1.0 of Attachment 8 by removing all references to §330.463(a) regarding maintenance and reorganize Section 1.0 to address each requirement listed under §330.463(b).</i>	<u>Parts</u> III8 §1.1 III8 §1.2 III8 §1.2.1 III8 §1.2.2 III8 §1.2.3 III8 §1.2.4 III8 §1.2.6 III8 §1.3 III8 §1.4 III8 §1.4.1 III8 §1.4.2 III8 §1.4.3 III8 §1.4.4
	Part III8 §1.0 has been revised by removing all references to 30 TAC §330.463(a) and is reorganized to address each requirement listed under 30 TAC §330.463(b) as follows:  §330.463(b)(1) - §1.1, Post-Closure Care Period §330.463(b)(1)(A) - §1.2.1, Right of Entry and Rights-of-way; §1.2.2, Final Cover; & §1.2.3 Drainage Control System §330.463(b)(1)(B) - §1.2.4, Leachate Collection and Removal System §330.463(b)(1)(C) - §1.3.1, Groundwater Monitoring System §330.463(b)(1)(D) - §1.3.2, Gas Monitoring System §330.463(b)(2)(A) - included in §1.1, Post-Closure Period §330.463(b)(2)(B) - included in §1.1, Post-Closure Period §330.463(b)(3) - §1.4, Documentation and Record Keeping §330.463(b)(3)(A) - §1.4.1, Description of Monitoring and Maintenance Activities §330.463(b)(3)(B) - §1.4.2, Post-Closure Care Responsibility §330.463(b)(3)(C) - §1.4.3, Post-Closure Planned Uses §330.463(b)(3)(D) - §1.4.4, Post-Closure Care Cost Estim	

33	<p><i>Please revise Section 1.0 to state that the post-closure care activities will follow the measures and conditions specified in Appendix III8A, TCEQ Post Closure Care Plan Form.</i></p> <p>Part III8 §1.0 has been revised to include statement, "Post-closure care activities will follow the measures and conditions specified in Part III8A, TCEQ Post Closure Care Plan Form."</p>	<p><u>Parts</u>                  III8 §1.0</p>
34	<p><i>Please revise Attachment 9 to remove contents that are contrary to or inconsistent with requirements of §305.70(j)(30).</i></p> <p>Part III9, Closure and Post-Closure Care Cost Estimates is consistent with requirements of 30 TAC §§330.503 &amp;330.507 referenced in 30 TAC §330.305(j)(30). Part III9 §Executive Summary, §1.1.2 Closure Cost Reduction, and §2.1.2 Reduction in Post-Closure Care Cost Estimate have been revised to include reference to 30 TAC §330.305(j)(30).</p>	<p><u>Parts</u>                  III9 §ES                  III9 §1.1.2                  III9 §2.1.2</p>
35	<p><i>In accordance with §330.125, please revise Section 1.1.1 to specify that the operating records will be properly stored within the MSW 956C permit boundary or to propose alternate storage location.</i></p> <p>Part IV §1.1.1, Permit and Plans has been revised to specify that the SOR will be properly stored at the Jasman Road Complex, the landfill facilities serving both Type I and Type IV landfills as depicted on Figure II-16, Facility Entrance Plan.</p>	<p><u>Parts</u>                  IV §1.1.1</p>
36	<p><i>Please revise Section 4.5 to comply with §330.223(c) for access control. Please explain how the incremental installation of the fence would meet the requirements of §§330.223(a) and (c); or remove the incremental installation provision.</i></p> <p>Part IV §4.5, Access Control has been revised in response to Letter NOD Comment 5 removing language of incremental installation of fence. No revisions have been made in response to this comment.</p>	
37	<p><i>Rule 330.133 states, "The unloading of solid waste must be confined to as small an area as practical. The maximum size of the unloading area must be specified in the site operating plan." Section 4.6.1.1 specifies the maximum working face at "80,000 square feet (e.g., 400 feet by 200 feet)". The working face size will have impact on many aspects of the landfill performance (for example, Section 4.15 requires minimizing work face for disease vector control.) To demonstrate compliance with the rule, please justify the specified working face size or reduce the size as appropriate.</i></p> <p>The maximum size of the working face is 400 ft by 200 ft for considerations of anticipated waste gate rates, amount of equipment, waste compaction, and health and safety concerns for the operators. Although a maximum of 80,000 sqft is given for the working face, the actual the size of working face will be minimized for disease vector control but also be appropriately sized to daily waste gate rates for effective and safe operations. No revisions have been made in response to comment.</p>	
38	<p><i>Please revise Section 4.6 and other portions of the SOP to ensure that the storage/processing activities comply with applicable requirements of Chapter 330, Subchapter E.</i></p> <p>Part IV §4.6.1.6 Reusable Materials Storage, Part IV §4.6.1.7 Large Item Salvage, Part IV §4.6.1.8 Tire Area, and Part IV §4.26 Liquid Waste Stabilization have been revised to ensure that the storage/processing activities comply with applicable requirements of Chapter 330, Subchapter E.</p>	<p><u>Parts</u>                  IV §4.6.1.6                  IV §4.6.1.7                  IV §4.6.1.8                  IV §4.26</p>
39	<p><i>Rule 330.145 states, "On days when the facility is in operation, the owner or operator shall be responsible for at least once per day cleanup of waste materials spilled along and within the right-of-way of public access roads serving the facility for a distance of two miles in either direction from any entrances used for the delivery of waste to the facility." Section 4.12 identifies FM 2812 for road cleanup. In compliance with the rule, please clarify whether any other public access roads</i></p>	<p><u>Part</u>                  IV §4.12</p>

	<p><i>specified in Section 2.4.1.1.1 of Part II are also within the 2-mile distance from the entrance; and revise this section as necessary.</i></p> <p>Part IV §4.12, Materials Along Route to Site has been revised to include US Hwy 281 in addition to FM 2812 and Jasman Road to correspond to Part II §2.4.1.1.1, Access Road Availability.</p>	
40	<p><i>Part II, Appendix E contains wildlife protective measures agreed (or discussed) on between the permittee and the relevant governmental agencies (the U.S. Fish and Wildlife Services, and the Texas Parks and Wildlife Department). In accordance with §330.157, please revise Section 4.18 to be specific about how the facility personnel will act in daily operations to implement the agreed measures.</i></p> <p>Part IV §4.18 has been revised to include language corresponding to Part IIIE2-3, TPWD Response to Recommendations on how the facility personnel will act in daily operations to implement the agreed measures to protect endangered species in accordance with 30 TAC §330.157.</p>	Part IV §4.18
41	<p><i>To comply with §330.163, please revise Section 4.21 to specify typical thicknesses of waste compaction lift and daily lift, and the minimal passages of the specified compaction equipment.</i></p> <p>Part IV §4.21, Waste Compaction has been revised to comply with 30 TAC §330.163 by adding language specifying effective waste compaction lift thickness and number of passes and a typical daily lift thickness.</p>	Part IV §4.21
42	<p><i>Please revise Section 4.22.3.4 to specify that the contaminated soil to be used as ADC materials will also meet the restrictions under §330.165(d)(4)(A) and §330.165(d)(4)(B).</i></p> <p>Part IV §4.22.3.4, Contaminated Soil has been revised as requested.</p>	Part IV §4.22.3.4
43	<p><i>Please revise Section 4.23.1 to specify the time limit by which the ponded water will be removed and the problem area be corrected to meet the requirements of §330.167.</i></p> <p>Part IV §4.23.1, Ponding Prevention Plan has been revised as requested.</p>	Part IV §4.23.1
44	<p><i>Section 4.26 includes brief discussions about Liquid Waste Stabilization Area. Please revise the SOP by adding an appendix to include detailed information about the design, installation, operation, and decommissioning of the liquid waste solidification facility. Please ensure compliance with all applicable requirements (including, but not limited to, Chapter 330, Subchapter E). Please ensure the entire application is updated to accommodate this addition.</i></p> <p>Part IVI, Liquid Waste Solidification Plan has been added to Part IV, Site Operation Plan and includes detailed information about the design, installation, operation, and decommissioning of the liquid waste solidification basins as requested.</p>	Parts IV §4.26 IVI
45	<p><i>Section 4.28 states that facility generated wastewaters will be managed in accordance with Section 4.29. Please identify sources of the wastewaters in addition to the active face and leachate collection sumps; and, if necessary, revise Section 4.29 to address the management of wastewaters from these sources.</i></p> <p>Part IV §4.28, Facility Generated Waste has been revised to include sources of wastewater generation. Part IV §4.29, Contaminated Water Management has been revised and §4.29.1 Contaminated Water, §4.29.2 Leachate, and §4.29.3 Cleaning and Washing of Equipment has been added to address management of wastewater from these sources.</p>	Part IV §4.28 IV §4.29 IV §4.29.1 IV §4.29.2 IV §4.29.3
46	<p><i>The contaminated water management measures included in Section 4.29 do not appear to pertain to leachate collected in the landfill sumps. Please revise this section to clarify whether the management measures apply to leachate collected in the sumps. Please also revise Section 4.29 and other pertinent portions of the application to provide sufficient information on leachate removal and disposal to ensure compliance with §330.331, §330.333, and §330.207. If applicable, please revise Attachments 7 (Closure Plan), 8 (Post-closure Care Plan), and 9 (Closure</i></p>	

	<p><i>and Post-Closure Cost Estimates) to cover aspects related to leachate removal, storage, and disposal.</i></p> <p>In response to Letter NOD Comment 45, Part IV §4.29.2 Leachate has been added to include discussions regarding leachate management. Part III3 §3.0, Liner Design Criteria, and Part III3 §4.0, Leachate Collection and Removal System address the requirements of 30 TAC §§330.331 and 330.333 while Part IV §4.29, Contaminated Water Management addresses all applicable requirements of 30 TAC §330.207.</p> <p>Part III7, Closure Plan does not address leachate removal, storage, and disposal for it is addressed in Part III3, Waste Management Unit Design; Part III8, Post-Closure Care Plan addresses inspection activity and correction of problems of the Leachate Collection and Removal System; and Part III9, Closure and Post-Closure Care Cost Estimates address costs associated with leachate management; therefore no revisions to the Part III7, Part III8, and Part III9 have been made in response to this comment.</p>	
47	<p><i>Sections 4.29 and 4.23.1 state that the contaminated water contained at the working face will be pumped out. To meet the requirements of §330.167, please prescribe the time the contaminated water will be removed.</i></p> <p>In response to Letter NOD Comment 43, Part IV §4.23.1, Ponding Prevention Plan has been revised; and in response to Letter NOD Comment 45, Part IV §4.29.1 Contaminated Water has been added – both prescribing the time the contaminated water will be removed to meet the requirements of 30 TAC §330.167. No revisions have been made in response to this comment.</p>	
48	<p><i>Section 4.29 states that contaminated water will be discharged into a public sewer system. Please address requirements (discharge into a treatment facility) of §330.207(f) as appropriate.</i></p> <p>Language already included in Part IV §4.29, Contaminated Water Management addressing the requirements of 30 TAC §330.207(f) is "The facility will ensure that wastewater discharged to a treatment facility permitted under Chapter 26 of the Texas Water Code will not interfere with or pass-through the treatment facility processes or operations, including its sludge processes, use or disposal, or otherwise be inconsistent with prohibited discharge standards including 40 CFR Part 403 (Pretreatment Regulations)." No revisions have been made in response to this comment.</p>	
49	<p><i>Rule §330.207(e) states, "Off-site discharge of contaminated waters shall be made only after approval under the Texas Pollutant Discharge Elimination System authority." Please revise Section 4.29 in accordance with §330.207(e).</i></p> <p>Part IV §4.29, Contaminated Water Management has been revised to include language "Off-site discharge of contaminated waters shall be made only after approval under the Texas Pollutant Discharge Elimination System authority." in accordance with 30 TAC §330.207(e).</p>	Part IV §4.29
50	<p><i>Please revise Section 4.30 to address rule posting requirement under §330.213(a). Please also revise this section to specify the use of leak-proof containers to maintain sanitary condition per §330.211 and §330.213(a).</i></p> <p>Part IV §4.30, Citizen's Collection has been revised to include "Roll-off containers shall be leak-proof to maintain sanitary conditions per 30 TAC §330.211." The rule posting requirement under 30 TAC §330.213(a) has been addressed within Part IV §4.30, Citizen's Collection with statement, "Rules for waste disposal and prohibited waste will be prominently displayed on signs at the site entrance."</p>	Part IV §4.30
51	<p><i>Please revise Appendix IVH and other pertinent locations in the SOP to address the requirement of §330.171(b)(2)(C) pertaining to personnel protection equipment for operating personnel and onsite emergency equipment for each special waste stream.</i></p>	

	Part IVH §2.2.3, Handling Procedures includes language addressing the requirements of 30 TAC §330.171(b)(2)(C). No revisions have been made in response to this comment.	
52	<p><i>Please revise Appendix IVG to adequately address the requirements of §330.171(c)(3)(A) for notification of initial and additional disposal area designation for regulated asbestos containing material (RACM).</i></p> <p>Part IVG, Regulated Asbestos Containing Material Handling Plan has been revised to address the requirements of 30 TAC §§330.171(c)(3), 330.171(c)(3)(A), 330.171(c)(3)(B) &amp; 330.171(c)(3)(I) by adding §1.0, Authorization.</p>	Part IVG §1.0
53	<p><i>Please revise Appendix IVG to sequentially and adequately address the requirements of §330.171(c)(3)(B) through §330.171(c)(3)(I) regarding proper management of RACM.</i></p> <p>Part IVG, Regulated Asbestos Containing Material Handling Plan has been reorganized and revised to adequately address the requirements of 30 TAC §330.171(c)(3)(B) - (I). Although not sequential, TAC rule references have been added to section headings as follows:                  §330.171(c)(3)(B) - §1.0, Authorization &amp; §3.2, Log or Site Map                  §330.171(c)(3)(C) - §3.4, Deed Recordation                  §330.171(c)(3)(D) - §2.1, Notification of Delivery and Load Receipt                  §330.171(c)(3)(E) - §2.4, Unloading Methods                  §330.171(c)(3)(F) - §2.3, Disposal Location                  §330.171(c)(3)(G) - §2.4, Unloading Methods &amp; §2.5, Cover Placement                  §330.171(c)(3)(H) - §6.0, Contingency Plan                  §330.171(c)(3)(I) - §1.0, Authorization</p>	Parts IVG §1.0 IVG §2.1 IVG §2.3 IVG §2.4 IVG §2.5 IVG §3.2 IVG §3.4 IVG §6.0
54	<p><i>Part III, Attachment 4 (Geology Report) indicates that it is prepared and signed by a qualified groundwater scientist, which is indicated as Mr. Chad Ireland, P.E. Please demonstrate Mr. Ireland's qualifications in groundwater hydrology and related fields per 30 TAC §330.3(120) that would allow for him to be accepted as the geologist/groundwater scientist of record to comply with 30 TAC §330.63(e).</i></p> <p>Mr. Chad Ireland, PE is a qualified groundwater scientist of record per 30 TAC §330.3(120) to comply with 30 TAC §330.63(e). He is a licensed professional engineer in the State of Texas who has received a Bachelor of Science in Geological Engineering from an accredited university program at the University of Missouri - Rolla and is registered through the Texas Board of Professional Engineers as competent to practice engineering in both areas of geological and civil. A Memorandum of Understanding (MOU) between the Texas Board of Professional Engineers (TBPE) and the Texas Board of Professional Geoscientists (TBPG) dated August 6, 2008 states that both professional engineers and professional geoscientists licensed in Texas may perform, and certify by signature and seal, any work for which they are qualified and authorized to do under their respective Acts. In addition, Chad Ireland is qualified to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action because of education and he has sufficient training in groundwater hydrology and related fields from performing work on multiple projects under the direct supervision of Jay A. Winters, PG including geotechnical investigations, groundwater monitoring, contaminate source demonstrations, and remediation. Furthermore, Chad Ireland has authored and certified by signature and seal groundwater monitoring reports, verification reports, and alternate source demonstrations as well as a remediation plan, all accepted and approved by the TCEQ. No revisions have been made in response to this comment.</p>	
55	<p><i>Please include a topographic map meeting the requirements of 30 TAC §330.63(f)(1) in Part III, Attachment 5, Appendix B (Groundwater Sampling and Analysis Plan).</i></p> <p>Figure III5B-1, Groundwater Monitoring System Plan has been added to Part III5B, Groundwater Sampling and Analysis Plan as requested.</p>	Figure III5B-1

56	<i>Please clarify in Section 3.6.2 of Part III, Attachment 5, Appendix B that the well can be returned to detection monitoring after two consecutive sampling events if Assessment Monitoring Constituents are at or below the established background limits per 30 TAC §330.409(e).</i>	Part III §3.6.2
	Part III §3.6.2, Alternate Source Demonstration has been revised to include, "If a successful ASD is made, the City shall continue monitoring in accordance with the Assessment Monitoring Program and may return to detection monitoring after two consecutive sampling events if the Assessment Monitoring Constituents are at or below established background concentrations."	



## RESPONSE TO INFORMAL NOTICE OF DEFICIENCY COMMENTS

Comments and Reponses	Revisions
<p>1 <i>The latitude and longitude listed on page 2 are different than those provided on page 3 of the Part I form. Please explain the discrepancy and revise the application to provide consistent longitudinal and latitudinal geographic coordinates of the facility per 30 TAC Section (§)330.59(b)(3).</i></p> <p>The coordinates given on the Part I Form were those reported in the application for TCEQ Permit MSW-956B. The coordinates given in the Part I text and Figure I-1 were assumed from old permit drawing files. Naismith Engineering, Inc. performed the surveying work for the application and concurs that the correct geodetic coordinates are N 26° 23' 53.66", W 98° 07' 48.22". Therefore Part I Form, Part I §1.2.3 Geographic Coordinates, and Figure I-1 have been revised accordingly.</p>	<p><u>Parts</u> I Form I §1.2.3</p> <p><u>Figures</u> I-1</p>
<p>2 <i>Page 2 indicates that the location of benchmark is shown in Figure I-1, which has a small scale. If the benchmark is used to represent the latitude and longitude required by §330.59(c), please revise a figure of larger scale (for example, Figure I-6) to identify the benchmark location. Please also revise the same figure to list the elevation and identify the reference benchmark in accordance with §330.143(b)(8).</i></p> <p>In response to Informal NOD Comment 6, Figure I-6 has been removed. Figure I-1, Facility Location Map has been revised to include the the correct geodetic coordinates provided in response to Informal NOD Comment 1 and the elevation of the benchmark. A reference benchmark is not included because the site benchmark monument, established for TCEQ Permit MSW-956B, is set at 84.85 ft-msl.</p>	<p><u>Figure</u> I-1</p>
<p>3 <i>The table on page 12 contains information that is not required by the rule for inclusion in Part I; please either remove this type of information from the table or make sure it is consistent with the same information contained in other portions of the application.</i></p> <p>Part I §2.2, Disposal Volume and Rates as well as Part I Table I-6, Permit Condition Comparison have been revised to be consistent with Part III3A-2, Site Life Calculations; the remaining airspace is corrected to 76,304,934 cy.</p>	<p><u>Part</u> I §2.2</p> <p><u>Table</u> I-6</p>
<p>4 <i>Section 2.3 on page 12 is dedicated to demonstrate compliance with §305.45(a)(8)(B)(ii), but the information provided does not meet the requirements. Please provide the information required by §305.45(a)(8)(B)(ii).</i></p> <p>Part I §2.3, Properties of Waste demonstrates compliance and meets the requirements of 30 TAC §305.45(a)(8)(B)(ii) because it references Part II, Waste Acceptance Plan in that wastes accepted for disposal will not have constituents or characteristics that will negatively impact or influence the design and operation of the facility. Justification is as follows:</p> <ul style="list-style-type: none"> <li>30 TAC §305.45(a)(8)(B)(ii) requires that a supplementary technical report must include for each place of disposal the chemical, physical, thermal, organic, bacteriological, or radiological properties or characteristics of defined waste, as applicable, described in enough detail to allow evaluation of the water and environmental quality considerations involved.</li> <li>The TCEQ, delegated RCRA authority by the SWDA, has adopted rules promulgated in the TAC to implement the minimum national technical standards established under EPA's RCRA Subtitle D for the design and operation of a MSW disposal facility including waste acceptance criteria.</li> <li>According to TCEQ's adopted rules promulgated in the TAC, a Type I MSW facility meeting the requirements of 30 TAC §330.5(a) may accept municipal solid waste defined by 30 TAC §330.3(88), and may also receive special waste defined by 30 TAC §330.3(148), including Class 1 industrial solid waste classified by 30 TAC §335 Subchapter R and hazardous waste also classified</li> </ul>	

	<p>by 30 TAC §335 Subchapter R from conditionally exempt small quantity generators subject to the limitations in 30 TAC §§330.15, 330.171, and 330.173.</p> <p>If a Type I MSW facility is designed and operated in accordance to applicable local, state, and federal regulations and only disposes waste the facility is authorized by regulation to accept; then the requirement to provide the chemical, physical, thermal, organic, bacteriological, or radiological properties or characteristics of each waste is not applicable; because, involved water and environmental quality considerations have already been evaluated for the defined waste to be accepted by the facility for disposal. No revisions have been made in response to this comment.</p>	
5	<p><i>In accordance with §330.57(h)(5)(C), please add legends to Figure I-4 to identify land use for areas not covered by the existing land use legends. To comply with §330.61(g), please add legends to Figure II-4 to identify land use for areas not covered by the existing land use legends; please distinguish between actual land use and planned land use. If a land use listed in §330.61(g) but does not exist within the 1-mile distance (for example, cemeteries, pond or lakes), please revise this figure to indicate its nonexistence.</i></p> <p>Figures I-4 and II-4, Land Use has been revised by the addition of legend for agricultural / pastureland / open and a note stating, "Land use presented is actual land use based of field inventories performed on October 2016 and review of Google Earth imagery. Land use presented is not planned land use as depicted on Figure II-5, Zoning Map." Note 1 on Figure II-4, Land Use states, "no ponds and lakes, hospitals, or historic sites are located within 1 mile."</p>	<p><u>Figures</u> I-4 II-4</p>
6	<p><i>Some information included in Part I is not required by the rule for inclusion in Part I; for example, Figure I-6, Facility Layout Map is not a required piece of information for Part I. Please either remove this type of information or ensure its consistency with the information contained in other parts of the application (for example, contents of Figure I-6 should be consistent with those of Figure II-17, Facility Layout Plan).</i></p> <p>Figure I-6 has been removed in response to this comment. In addition, Table I-1, Maps has been revised to exclude Figure I-6.</p>	<p><u>Figure</u> I-6  <u>Table</u> I-1</p>
7	<p><i>The remaining disposal capacity stated in Section 1.4 (76,304,934 CY) is different than the table on page 12 of Part I (81,562,465 CY). Please explain the discrepancy and revise the application for clarity/consistency.</i></p> <p>In response to Informal NOD Comment 3, Part I Table I-6, Permit Condition Comparison has been revised to be consistent with Part III3A-1, Volume Calculations. No revisions have been made in response to this comment.</p>	
8	<p><i>This permit amendment MSW 956C, if approved, will replace the current permit MSW 956B; important information about the current authorization (for example, but not limited to, floodplain development approvals and installed liners), if it is still valid and applicable, should be carried over into MSW 956C.</i></p> <p>Pertinent information about the current authorization under TCEQ Permit MSW-956B has been be carried over into TCEQ Permit MSW-956C. Part I Table I-5, Permits, Registrations, or Other Authorizations lists active authorizations. Part I §2.0, Supplementary Technical Report details the permit history, waste disposal units, and provides a comparison between MSW-956B and MSW-956C. Part IIC, Flood Plains has been revised to include floodplain development approval for TCEQ Permit MSW-956B in response to Letter NOD Comment 4a. No revisions have been made in response to this comment.</p>	
9	<p><i>Section 2.0 is titled Existing Conditions Summary without specific rule citation. Section 2.2, Land Use Compatibility, is dedicated to §330.61(a) (Existing Conditions Summary). Please change the titles to match their intended rule citations. Please</i></p>	

	<p><i>revise Section 2.2.1 and other pertinent sections to include proposed/expected conditions and to demonstrate compliance with each requirement of §330.61(h) in the same sequence as they appear in the rule.</i></p> <p>Part II is organized into subdivisions: waste acceptance plan, existing conditions summary, and facility layout plan. Although 30 TAC §330.61(a) is titled existing conditions summary, the rule addresses any site-specific conditions that require special design considerations and possible mitigation of conditions identified in 30 TAC §330.61(h) - (o). Therefore Part II §2.0, Existing Conditions is a report section whereas Part II §2.2, Land Use Compatibility cites 30 TAC §330.61(a) as a reference because the rule addresses the compatibility of land use. The section also references all the sections within the report that addresses the components of 30 TAC §330.61(h) - (o).</p> <p>To have the titles match rule citation, reference a rule citation under the header title, or be presented in the same sequence of rule is not a requirement; only the contents of a report are required by rule. The reference rule citation under the heading is included in consideration for both those developing the application and those reviewing. Another consideration employed in developing the application is that it has been organized, for the most part, to line up with the order presented in the TCEQ's permit application checklist. The checklist submitted with the permit application references the report within the application and applicable part, and references both the report section and page number. To demonstrate compliance with each requirement of 30 TAC §330.61(h), Part II Report address the rule with the following sections as referenced on the submitted checklist:</p> <ul style="list-style-type: none"> <li>• 30 TAC §330.61(h) – §2.2.1, Impact on Surrounding Cities, Communities, Group of Property Owners, or Individuals</li> <li>• 30 TAC §330.61(h) – §2.2.2, Compatibility with Surrounding Land Use, Zoning, Community Growth Patterns</li> <li>• 30 TAC §330.61(h)(1) – §2.3.2, Zoning Map</li> <li>• 30 TAC §330.61(h)(2) – §2.3.4, Character of Surrounding Land Use</li> <li>• 30 TAC §330.61(h)(3) – §2.3.5, Growth Trends</li> <li>• 30 TAC §330.61(h)(4) – §2.3.6, Proximately to Residents and Other Uses</li> </ul> <p>No revisions have been made in response to this comment.</p>	
10	<p><i>Please revise Section 3.1.2 to ensure a 125-foot buffer zone on the south side of Unit 7 (the portion not bordering the adjacent Type IV landfill) or provide the specific engineered design meeting the requirements of §330.543(b)(3)(B). Please also address the same deficiency related Unit 8 option for the existing pre-Sub D area.</i></p> <p>Part II §3.1.2.2, Alternate to Buffer Zone Requirements adequately addresses the requirements of 30 TAC §330.543(b)(3)(B). The reasons presented for the alternate buffer zone along the southern boundary of Unit 7 and the Unit 8 option are: it is most feasible to maintain a 100-foot buffer zone because construction and waste filling operations will be aligned with Unit 6, the City owns the adjacent property to the facility, and the facility currently shares a perimeter access road with the Type IV landfill providing ready access for emergency response, maintenance, and monitoring, as well as sufficient distance to meet the drainage and sediment control requirements applicable to the facility. To address the requirements of 30 TAC §330.543(b)(3)(B), Part II §3.1.2.2, Alternate to Buffer Zone Requirements also states that visual screening of solid waste disposal activities and control of odors and windblown waste of a 100-foot buffer zone will be equivalent to that of the prescribed standard.</p> <p>A meeting with the Waste Permits Division of TCEQ was held on September 26, 2014 where the 100-foot buffer zone alternate was discussed. When presented with</p>	

	the use of a 100-foot buffer zone along the southern permit boundary, there was TCEQ concurrence. No revisions have been made in response to this comment.	
11	<p><i>Section 3.7 divides the entire landfill into four units, Units 5, 6, 7, and 8 (Unit 8 will be at area of pre-Sub D Units 1, 2, 3, and 4). To be consistent with §330.3(90) and to avoid confusion, please use another term to identify the disposal areas/different development phases (for example, Phases 5, 6, 7, and 8). Please revise the entire application accordingly.</i></p> <p>As discussed in response to Letter NOD Comment 26, the City would like to continue the use of the term "unit" for the phases of landfill development because it is the naming convention used throughout the facility's operating history, reports have been submitted for previously constructed unit cells, and to do otherwise will create more confusion. No revisions have been made in response to this comment.</p>	
12	<p><i>Figure II-5 shows zoning for the project area. Comparing with the legends, some areas seem to be mistakenly colored (for example, Baker's Subdivision is marked as Agricultural Use). Please ensure that zoning types for all areas are correctly marked.</i></p> <p>As discussed in response to Informal NOD Comment 5, Figure II-5, Zoning Map presents planned land use and does not represent actual land use as evidenced in Baker's Subdivision where the zoning map shows the land use as agricultural, but a field inventory shows the existence of Hidalgo County Jail, Segova State Prison, and Lopez Correctional Facility. No revisions have been made in response to this comment.</p>	
13	<p><i>By visual comparisons, it appears that the land uses at many areas in Figure II-4 do not match their zonings shown in Figure II-5. Portions of the facility expansion area are marked as Industrial Use in Figure II-4 but are identified in Figure II-5 as City Owned Property Annexed and no zoning is specified. Please explain how to correctly interpret the two maps, clarify whether the proposed expansion meets the zoning code, and revise the figures as appropriate.</i></p> <p>As addressed in response to Informal NOD Comments 5 and 12, actual land use may not directly correlate to the zoning map. Figure II-5, Zoning Map has been revised to change properties identified as City Owned Property Annexed to Industrial because City Council approved the rezoning of annexed properties on October 3, 2017. Documentation from the Director of Planning and Zoning will be made available upon request. The proposed expansion meets the zoning code.</p>	Figure II-5
14	<p><i>Figure II-17 and many other figures in Part II show surface drainage flow directions in the perimeter channels. Flow discharge directions and exit features seem to be missing at some locations (for example, discharge near/into Pond W2 and Pond W6). Please revise the figures as necessary.</i></p> <p>Part II Figures have been revised to add flow arrows for three culverts to show discharge into ponds. Additional drawings in the application have been revised for consistency.</p>	<p>Figures II-17                  II-18A                  II-18B                  II-19                  II-20A                  II-20B                  II-20C                  II-20D1                  II-20D2                  II-20E                  III1-2                  III2-2                  III2-6                  III2-7                  III2A-2                  III2F-1                  III3-1</p>

		III3-2A III3-2B III3-3 III3-4A III3-5A III3-5B III3-6A III3-6B III3-9A III3A-1-1 III3A-1-2 III3A-1-3 III3A-1-4 III3A-1-5 III3B-1-1 III3B-1-2 III3B-2A-1 III3B-2C-1 III3B-2D-1 III3B-2D-2 III3B-3A-1 III3B-3A-2 III3B-3A-3 III3B-3B-1 III3B-3C-1 III3B-3C-2 III3D-1-1 III3E-1-1 III3E-1-2 III3E-2A-1 III5-1 III6-1 III6-4 III7-1 III7-2A III7-4
15	<p><i>The three flow direction legends on Figure II-19 are all dedicated for perimeter channel flows, while two of them are used to identify non-perimeter channel flows. Please revise the figure as necessary.</i></p> <p>Figures II-19, III3-3, and III7-1 have been revised to correct legend labels for add-on berm and downchute.</p>	<p><u>Figures</u>                  II-19                  III3-3                  III7-1</p>
16	<p><i>Appendix IIE2-3 is titled TPWD Response to Recommendations. Please include in this appendix a copy of the TPWD response and revise other portions of the application as necessary.</i></p> <p>A copy of the TPWD response has been included in Part IIE2-3, TPWD Response to Recommendations.</p>	<p><u>Part</u>                  IIE2-3</p>
17	<p><i>Given the numerous appendixes for Part III, please consider using tabs for the appendixes in accordance with §330.57(g)(7).</i></p> <p>Appendix tabs have been created in accordance with 30 TAC §330.57(g)(7).</p>	<p>Appendix                  Tabs</p>
18	<p><i>Please revise Part III to include a detailed work plan for implementing the Unit 8 option for the existing pre-Sub D area and update other portions of the application</i></p>	<p><u>Part</u></p>

	<p><i>as necessary. Please ensure to address applicable requirements under Subchapter N, Landfill Mining.</i></p> <p>30 TAC §330.3(77) defines landfill mining as "the physical procedures associated with the excavation of buried municipal solid waste and processing of the material to recover material for beneficial use." Implementing the Unit 8 option for the existing Pre-Subtitle D area includes the relocation of the existing waste into a Subtitle D unit and will not implement the processing of the material to recover material for beneficial use; therefore 30 TAC §330 Subchapter N, Landfill Mining does not apply. However, Part IV §4.31, Waste Relocation has been added to include any additional operational requirements for the relocation of Pre-Subtitle D waste into Subtitle D Units.</p>	IV §4.31
19	<p><i>Section 1.0 introduces the Site Development Plan (SDP) in terms of Part III1 through Part III9, which do not match the actual titles used for each attachment in the SDP. Please revise the SDP for consistency.</i></p> <p>Part III, Site Development Plan has been revised to directly correlate to the attachment titles.</p>	Part III
20	<p><i>Please revise Figure III1-1 of Attachment 1 to illustrate the flow of authorized/prohibited wastes discovered by the staff stationed at the working face(s) as required by §330.133(a) and (b).</i></p> <p>Figure III1-1, Waste Movement Flow Diagram has been revised as requested.</p>	
21	<p><i>Please revise Figure III1-1 of Attachment 1 to add a note to clarify that acceptance and disposal of C&amp;D waste at the adjacent Type IV landfill is not covered by MSW Permit No. 956C.</i></p> <p>Figure III1-1 has been revised to add a note "Acceptance and disposal of C&amp;D waste at the adjacent Type IV landfill is not covered by TCEQ Permit MSW-956C."</p>	Figure III1-1
22	<p><i>Please revise Section 2.3 of Attachment 2 to identify where in the application the design information for each drainage feature is located.</i></p> <p>Part III2 §2.3, Stormwater Collection, Drainage, and Detention Structures has been revised to indicate the location of the design information for each drainage feature as follows:                  Part III2 §2.3.1, Perimeter Channels - Figures III2-2, III2-3, III2-9, and III2-10                  Part III2 §2.3.2, Add-on Berms - Figures III2-2, and III2-3                  Part III2 §2.3.3, Downchutes - Figures III2-2, III2-4, and III2-11 through III2-13                  Part III2 §2.3.4, Culverts - Figures III2-2, and III2-5                  Part III2 §2.3.5, Stormwater Ponds - Figures III2-2, III2-6 through III2-8</p>	Parts III2 §2.3.4 III2 §2.3.5
23	<p><i>Section 6.3 of Attachment 2 states that the perimeter berm encompassing the entire waste footprint will protect against the 100-year design flood. The landfill toe berm is identified as perimeter berm (for example, in Figure III3-4B) and as landfill perimeter berm (for example, Figure IIB5-4); the access road is also identified as perimeter berm (for example, Figure IIB5-4). In accordance with §330.57(d), please revise the application (text and figures) to accurately and consistently name and illustrate these</i></p> <p><i>Section 1.0 of Attachment 2 states that the landfill will be encompassed with a perimeter berm along the entire permit boundary. Please revise Figure III2-3 (Detail 2) to identify the perimeter berm and the access road; and revise Attachment 2 to include information (text and figures) on the perimeter berm (design, materials, construction, maintenance, and approvals if applicable).</i></p> <p>A facility perimeter berm shall be constructed along the entire permit boundary and a landfill perimeter berm around the entire waste footprint; in between the two perimeter berms are features such as perimeter channels and stormwater ponds. The access roads, as depicted on Figure III2-2, Post-Development Drainage Plan are located on either the facility perimeter berm or adjacent to a stormwater pond. Figures within Part IIC2-1, FEMA CLOMR-F Request are submittals that have been previously reviewed and approved; therefore, they cannot be changed. Figure III2-3</p>	Figure III2-3

	<p>Detail 2, Perimeter Ditch has been revised to add a call-out to landfill perimeter berm; however, to call out the road location and facility perimeter berm would be erroneous on this detail because their respective locations to the landfill perimeter berm changes as depicted on Figure III2-2, Post-Development Drainage Plan. The intent of Figure III2-3 Detail 2, Perimeter Ditch is to provide the geometric dimensions of the perimeter drainage ditch. A note has been added to Figure III2-3, Post-Development Drainage Plan stating the landfill perimeter berm will be constructed of compacted on-site soils.</p>	
24	<p><i>Section 2.3.5 of Attachment 2 indicates that the storm water ponds will be lined with 60-mil HDPE. Please revise this section to clarify whether the HDPE liner in the ponds will undergo hydrostatic uplift pressure from groundwater and, if necessary, to refer to the necessary countermeasures included in this application (if relevant information is not contained, please revise the application to add such information).</i></p> <p>Part III2 §2.3.5, Stormwater Ponds has been revised to include statement, "Hydrostatic uplift of the stormwater pond liner is not anticipated because it is above seasonal high groundwater levels."</p>	<p><u>Part</u>                  III2 §2.3.5</p>
25	<p><i>Please revise Section 2.3.5 of Attachment 2 to discuss how Ponds W7 and E3 will be operated (including when and how the ponds will be filled and emptied).</i></p> <p>Part III2 §2.3.5, Stormwater Ponds has been revised to address the operation of Pond W7. Additionally, to assist the stormwater management in the east ponds, Pond E3 will be interconnected to Ponds E1, E2, and E4 via equalization pipes. The associated east pond water surface design has been updated in Part III, §2.3.5, Part III2A, Table 2D, Table 2E (deleted), and Figure III2-8.</p>	<p><u>Parts</u>                  III2 §2.3.5</p> <p><u>Tables</u>                  III2D  <del>III2E</del></p>
26	<p><i>The last sentence in Section 2.3.5 of Attachment 2 states, "the weather conditions combined with the pond system design will ensure adequate storage and evaporation capacity at the site." Please provide necessary calculations (and operation measures) to support this statement (may include the use of Ponds W7 and E3 in emergency situations). Please discuss the measures to be taken when the expected evaporation does not materialize.</i></p> <p>Part III2G, Long-Term Pond Storage Capacity Analysis was added to demonstrate that the designed ponds will have adequate storage capacity over a long period of time with the consideration of evaporation capacity. Storage capacity of the ponds to retain the runoff from the 25-year 24-hour design storm has been assured in revised Part III2A, Detailed Drainage Calculation; Part III2 §2.3.5, Stormwater Ponds; and Part III2, Table III2-3, Pond Water Elevations for 25-Year, 24-Hour Storm.</p> <p>We don't agree the site design should assume "the expected evaporation does not materialize" since evaporation does occur, and we have made reasonable design assumptions to consider this fact. Rather, the calculations presented in Part III2G, Long-Term Pond Storage Capacity Analysis use over 60 years' weather data from the Texas Water Development Board. We believe these data provide a solid engineering design basis for the calculations presented in Part III2G.</p>	<p><u>Parts</u>                  III2 §2.3.5                  III2A                  III2G</p> <p><u>Table</u>                  III2-3</p>
27	<p><i>In accordance with §330.305(d) for erosion control during all phases of operation, please revise the first sentence in Section 4.4 of Attachment 2 by adding "or that have reached the permitted elevations" after "intermediate cover."</i></p> <p>Part III2 §4.4, Erosion and Sediment Control for Intermediate Cover Areas has been revised by adding, "or that have reached the permitted elevations." at the end of the first sentence.</p>	<p><u>Part</u>                  III2 §4.4</p>
28	<p><i>Please revise Section 4.4 of Attachment 2 to set up a vegetative cover installation schedule and to specify that the 60 percent cover will be established within 180 days from the intermediate cover installation.</i></p> <p>Part III2 §4.4, Erosion and Sediment Control for Intermediate Cover Areas states "temporary erosion and sedimentation controls will be implemented on intermediate cover areas within 180 days after placing intermediate cover, including a vegetative</p>	

	cover of at least 60 percent." thus specifying that the 60 percent vegetative cover will be established within 180 days from the intermediate cover installation. The amount of time to establish 60% vegetative cover is dependent on multiple factors and to set up a vegetative cover installation schedule may be misrepresentative of what is needed at a particular time of year to ensure the establishment of 60% vegetative cover within 180 days of intermediate cover placement. Part III2D, Example BMP Specifications, contains seeding for erosion control. No revisions have been made in response to this comment.	
29	<p><i>Please revise Section 4.4.2.3 of Attachment 2 to remove the sentence that starts with "Other lining materials," or revise the application to include designs for using the other lining materials (or refer to where such design information is included in the application).</i></p> <p>Part III2 §4.4.2.3, Additional Erosion and Sedimentation Control BMPs has been revised to removed sentence, "Other lining materials, such as riprap, gabion baskets, or interlocking concrete blocks, may also be used at the site manager's discretion if adequate hydraulic capacities are provided."</p>	<p><u>Part III2 §4.4.2.3</u></p>
30	<p><i>Please revise the first paragraph in Section 4.5.1 of Attachment 2 to specify the maximum length of uninterrupted flow.</i></p> <p>Part III2 §4.5.1, Erosion and Sedimentation Control Design – Final Cover Areas has been revised to append first sentence by adding, "or a maximum length of uninterrupted flow of 160 feet."</p>	<p><u>Part III2 §4.5.1</u></p>
31	<p><i>Please revise Section 5.0 of Attachment 2 to include proper inspection/repair/replacement measures for the water storage ponds' HDPE liner.</i></p> <p>Part III2 §5.1, Stormwater management System, has been revised to include statement, "Upon completion of sediment removal from lined stormwater ponds, the ponds' HDPE liner will be inspected for damage and, if necessary, repaired in accordance with Part III3F, Liner Quality Control Plan."</p>	<p><u>Part III2 §5.1</u></p>
32	<p><i>Figures III2-6 and III2-7 of Attachment 2 appear to show that the pond levee crest is at the same or higher elevation than the perimeter access road; please clarify whether the landfill toe structure will be eroded/inundated by the storm water collected in the ponds or in the perimeter ditches. Please provide necessary cross-sections with elevations marked, to show the above mentioned features in Attachment 2 and Attachment 3 in accordance with §330.63(d)(4)(E).</i></p> <p>Figures III2-6 and III2-7 has been revised by adding perimeter access road to plan views and the facility perimeter berm, landfill perimeter berm, and access road callouts have been edited accordingly. According to Table III2-3, Pond Water Elevations for 25-Year, 24-Hour Storm, the minimum elevation of the pond levee of the west ponds W1 though W7 is 91.0 ft-msl and the east ponds E1 through E4 94 ft-msl as depicted in profiles within Figures III2-6 and III2-7. Access roads may be constructed at a higher elevation than the minimum elevation of the pond levee. The stormwater ponds will be lined with 60-mil HDPE and the perimeter channels are grass lined; therefore, the landfill perimeter berm will not be eroded. In accordance with Part III2 §5.0, Inspection, Maintenance, and Restoration Plan the City will restore and repair the drainage system in the event of washout or failure. In addition, Figures III3-4A through III3-4D have been revised by appropriately editing the facility perimeter berm, landfill perimeter berm, and access road callouts.</p>	<p><u>Figures III2-6                  III2-7                  III3-4A                  III3-4B                  III3-4C                  III3-4D</u></p>
33	<p><i>Figure III2-8 lists the 25-year 24-hour water surface elevations in the ponds. Please clarify whether the elevations are determined with assumptions of the ponds being empty or partially full (specify) and justify the assumptions.</i></p> <p>Figure III2-8, Drainage Control Details VI - Pond Details has been revised by adding note that 25-year, 24-hour waste surface elevation is based on the pond being empty. In addition, Part III2 §2.3.5, Stormwater Ponds has been revised to address that the ponds have adequate storage capacity to hold the runoff volumes of two consecutive 25-year 24-hour storms as well as to demonstrate the long-term performance of the ponds.</p>	<p><u>Figure III2-8</u></p>



34	<p><i>Please revise Attachment 2 at pertinent location(s) to clarify whether 25-year storm surface runoff and 100-year flood water from outside of the permit boundary will be able enter the ponds; and, if applicable, discuss the impact of the surface influent on the pond functioning.</i></p>	
	<p>Part III2 §2.2.1, Drainage Areas discusses the pre-development and post-development contributing areas for all analysis points evaluated; no 25-year storm surface runoff and 100-year flood water from outside of the permit boundary will be able enter the ponds. In addition, Part III2 §6.0, Floodplain Evaluation has been revised in response to Letter NOD Comment 4 to incorporate revisions made to Part II §2.8, Floodplains. As discussed in Part III2 §6.3, Flood Protection of the Facility the facility perimeter berm encompassing the entire waste footprint will provide a minimum of three feet of freeboard above the 100-year design flood. No revisions have been made in response to this comment.</p>	
35	<p><i>Please revise Section 1.4 and Appendix III3A of Attachment 3 to define "total disposal capacity" and "air space" and, if necessary, revise other portions of the application for consistency.</i></p>	<p><u>Parts</u> III3 §1.4 III3A-1</p>
	<p>Part III3 §1.4, Estimated Rate of Solid Waste Deposition and Operating Life has been revised to define disposal capacity by referencing 30 TAC §330 Subchapter P and airspace by referencing EPA's definition of landfill capacity. In addition, Part III3A-1, Volume Calculations and Part III3A-2, Site Life Calculations have been revised to indicate the terms "disposal capacity" and "airspace" are interchangeable.</p>	<p>§1.0 III3A-2 §2.0</p>
36	<p><i>Please revise Section 2.2 of Attachment 3 to specify (and justify) the minimum acceptable factor of safety selected for the various slopes.</i></p>	<p><u>Part</u> III3 §2.2</p>
	<p>Part III3 §2.2, Stability Analysis has been revised to reference the Corps of Engineers "Design and Construction of Levees" manual (EM 1110-2-1913) for recommended factors of safety for short-term and long-term conditions.</p>	
37	<p><i>Please revise Section 3.0 of Attachment 3 to include liner information for the pre-Sub D areas (constructed liner or in situ materials, and plan view with elevation contours).</i></p>	<p><u>Part</u> III3 §3.0</p>
	<p>Part III3 §3.0, Liner Design Criteria has been revised to include information on Pre-Subtitle D Units 1 - 4. The approximate grades of the Pre-Subtitle D cells are shown on Figure III3B-3A-1, Settlement Analysis Pre-Subtitle D Units 1 – 4 Subgrade Layout.</p>	
38	<p><i>Please explain the meaning and purpose of the top of waste contours in Units 5 and 6 shown in Figures III3A-1-1 and III3A-1-2 and revise Attachment 3 at pertinent locations to discuss the top of waste contours.</i></p>	
	<p>Figures III3A-1 and III3A-2 depict the bottom of waste layouts for the overliner and Unit 8 options whereas Figures III3A-3 through III3A-5 depict the top of waste layout for the standard final cover, alternative, and synthetic grass final cover options. The purpose of the aforementioned figures is to present the surfaces used for comparison determine total disposal capacities in Part III3A-1, Volume Calculations. No revisions have been made in response to this comment.</p>	
39	<p><i>Please revise Attachment 3 by modifying subgrade layout plans (for example, Figures III3-2A and III3-2B) or adding a subgrade layout plan for the existing pre-Sub D units, and Units 5 and 6 (including leachate collection and removal system, if applicable).</i></p>	<p><u>Figures</u> III3-2A III3-2B</p>
	<p>Figures III3-2A and III3-2B, Subgrade Layout Plan have been revised to depict the subgrade for both Units 5 and 6. As discussed in response to Informal NOD Comment 37, Figure III3B-3A-1, Settlement Analysis Pre-Subtitle D Units 1 - 4 Subgrade Layout depicts the subgrade for Pre-Subtitle D Units 1 - 4.</p>	
40	<p><i>Please revise Figure III3-8 of Attachment 3 to specify the seaming requirements of the extra HDPE geomembranes in the sump areas and to mark the maximum</i></p>	

	<p><i>leachate depth(s) in sumps (the horizontal limits of the extra liner layers should be considered).</i></p> <p>The extra geomembrane for the sump is not a requirement but included as an added layer of protection or rub sheet for the leachate collection sump. Part III3D-4, Leachate Collection Sump Capacity discusses the leachate depth(s) in sumps. Part III3F, Liner Quality Control Plan discusses geomembrane seaming requirements. No revisions have been made in response to this comment.</p>	
41	<p><i>Growth rate R was given a value of 1.02 for site life calculation on page III3A-2-1 of Appendix III3A-2 (given the calculation result, the R value might be a typographic error); please clarify the value used in the actual calculation, and revise the site life calculation and other portions of the application as necessary.</i></p> <p>Comment is the same as Letter NOD Comment 22.</p>	
42	<p><i>Figure III3F-3A and Figure III3F-3B listed in the List of Figures for Attachment 3, Appendix F are missing. Please provide the two missing figures.</i></p> <p>Figures III3F-3A, Seasonal High Groundwater Contours Overliner Option and III3F-3B, Seasonal High Groundwater Contours Unit 8 Option are provided in response to this comment.</p>	<p>Figures                  III3F-3A                  III3F-3B</p>
43	<p><i>Please note that TCEQ's Guidance for Liner Construction and Testing for a Municipal Solid Waste Landfill is now available for review and download at <a href="https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html">https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html</a>. A comparison between the TCEQ guidance and Appendix III3F of Attachment 3 reveals numerous differences; please revise Appendix III3F to be consistent with the TCEQ guidance.</i></p> <p>Part III3F, Liner Quality Control Plan has been revised to be consistent with TCEQ guidance.</p>	<p>Part                  III3F</p>
44	<p><i>Please revise Appendix III3F, Section 8.0 of Attachment 3 to require the use of applicable TCEQ forms (liner and dewatering/ballasting) posted at <a href="https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html">https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html</a>.</i></p> <p>Part III3F §8.0, Documentation and Reporting has been revised to include language, "The use of applicable TCEQ forms is required. Forms for liners and leachate collection systems and forms for excavation dewatering and liner ballast is posted on the TCEQ website."</p>	<p>Part                  III3F §8.0</p>
45	<p><i>Attachment 7 is inconsistent with the types of geocomposite drainage layer used on the sideslopes and the crest. For example, Section 1.2.2 of Attachment 7 and Section 6.0 of Attachment 7, Appendix III7D-1 specify double-sided geocomposite for the final cover drainage layer; and Page III7A-1 of Attachment 7, Appendix A specifies double-sided geocomposite drainage layer for sideslopes and single-sided geocomposite drainage layer for crest area. Please revise Attachment 7 and other portions of the application to be specific and consistent with the final cover drainage layer specifications.</i></p> <p>Part III7A §1.1, Alternate Composite Liner System has been revised to remove single-sided geocomposite drainage layer.</p>	<p>Part                  III7A §1.1</p>
46	<p><i>Please revise Section 2.0 to state that the closure process will follow the procedures listed in Appendix III7C, TCEQ Closure Plan Form.</i></p> <p>Part III7 §2.3, MSW Landfill Unit Closure Implementation has been revised to include, "The closure process will follow the procedures listed in Appendix III7C, TCEQ Closure Plan Form."</p>	<p>Part                  III7 §2.3</p>
47	<p><i>Some of the storage or processing units listed in Section 2.2.2 of Attachment 7 are not shown in or are inconsistent with Figures III1-1 and III1-2 of Part III, Attachment 1. Please revise the application to ensure that all storage/processing and other non-disposal activities are consistently presented throughout the application (text and figures).</i></p>	<p>Figures                  III1-1                  III1-2</p>

	Figure III1-1, Waste Movement Flow Diagram has revised to address mulch and whole tires to be included in the reusable materials waste movement flow and Figure III1-2, Schematic View of Various Waste Disposal, Processing, and Storage Areas has been corrected to include whole tires in call out and a note is added, "Mulch area is currently over Pre-Subtitle D Units 1-4. Storage / processing areas are consistent throughout application.	
48	<i>Please revise Attachment 7 and other pertinent portions of the application to provide information on design and location for the final cover daylight shown in Figure III7-3A or revise the figure to add a reference if the relevant information is included in other portions of the application.</i> Figure III7-3A Detail 4, Final Cover Daylight has been revised to include note, "Spacing of final cover daylight is dependent on the transmissivity of the geocomposite drainage layer used. Please refer to Part III3B-2E-2, Final Cover Drainage Layer Capacity for spacing requirements."	Figure III7-3A
49	<i>The landfill perimeter structures shown in Figures III7-3A and III7-3B are different than the same structures shown in Attachment 3 figures (for example, Figure III3-7). Please revise the application for consistency.</i> Detail 3, Landfill Perimeter in Figures III7-3A and III7-3B have been revised to directly correlate to Detail 3, Landfill Perimeter in Figure III3-7.	Figures III7-3A III7-3B
50	<i>Please revise Section D of the TCEQ Closure Plan Form in Appendix III7C to specify the vegetative cover percentage.</i> Part III7C §III D, Final Cover Vegetation or Other Ground Cover Material has been revised to specify the vegetative cover percentage of 90%.	Part III7C §IIID
51	<i>Please clarify whether at least one series of pre-construction tests will be performed on each "type" of soil and revise the first sentence in the last paragraph on page III7D1-3 of Appendix III7D-1 as appropriate.</i> Part III7D-1 §3.1, Pre-construction Material Evaluation has been revised to state that each soil type will undergo the pre-construction test listed in Table III7D-1-1. The last paragraph in Part III7D-1 §3.1, Pre-construction Material Evaluation has been revised to clarify that each soil type requires a minimum of one series of pre-construction tests.	Part III7D-1 §3.1  Figures III7D-1-1 III7D-1-2
52	<i>Please clarify whether the last sentence in the first paragraph on page III7D1-4 is subject to the condition set in the first sentence in the last paragraph on page III7D1-3 and revise the paragraph as necessary.</i> The last paragraph in Part III7D-1 §3.1, Pre-construction Material Evaluation has been revised to clarify testing requirements. Specifically, that at least one series of pre-construction tests will be performed on each soil type; and that previous test results can only be used if they are on the same soil type from the same borrow source.	Part III7D-1 §3.1
53	<i>Please revise Section 3.2.1 of Appendix III7D1 by specifying the materials to be used for filling.</i> Part III7D-1 §3.2.1, Working Surface Preparation has been revised to include, "filling the depression with additional intermediate cover".	Part III7D-1 §3.2.1
54	<i>Please explain the meaning of "generally" used in the second paragraph on page III7D1-8 and revise the paragraph as necessary.</i> Part III7D-1 §3.3.2, Construction Testing has been revised for clarity and to exclude the use of "generally".	Part III7D-1 §3.3.2
55	<i>Please revise Section 4.0 of Appendix III7D-1 to be consistent with the GCL specifications and QA/QC measures contained in the TCEQ's Guidance for Liner Construction and Testing for a Municipal Solid Waste Landfill posted at <a href="https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html">https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_liners_covers.html</a>.</i>	Part III7D-1 §4.0

	Part III7D-1 §4.0, Geosynthetic Clay Liner has been revised to be consistent with the GCL specifications and QA/QC measures contained in the TCEQ's Guidance for Liner Construction and Testing for a Municipal Solid Waste Landfill.	
56	<i>Appendix III8A is titled TCEQ Post Closure Care Form. Please change the title (appendix list and the appendix cover page) to TCEQ Post Closure Care Plan Form.</i>	<u>Part III8</u>
	The title of Part III8A in Part III8 appendix list and the appendix cover page has been revised to "TCEQ Post Closure Care Plan Form"	
57	<i>Please revise Section 1.0 of Attachment 8 by removing all references to §330.463(a) and reorganize Section 1.0 to address each requirement listed under §330.463(b).</i>	<u>Parts III8 §1.1</u> <u>III8 §1.2</u> <u>III8 §1.2.1</u> <u>III8 §1.2.2</u> <u>III8 §1.2.3</u> <u>III8 §1.2.4</u> <u>III8 §1.2.6</u> <u>III8 §1.3</u> <u>III8 §1.4</u> <u>III8 §1.4.1</u> <u>III8 §1.4.2</u> <u>III8 §1.4.3</u> <u>III8 §1.4.4</u>
	Part III8 §1.0 has been revised by removing all references to 30 TAC §330.463(a) and is reorganized to address each requirement listed under 30 TAC §330.463(b) as follows:  §330.463(b)(1) - §1.1, Post-Closure Period §330.463(b)(1)(A) - §1.2.1, Right of Entry and Rights-of-way; §1.2.2, Final Cover; & §1.2.3 Drainage Control System §330.463(b)(1)(B) - §1.2.4, Leachate Collection and Removal System §330.463(b)(1)(C) - §1.3.1, Groundwater Monitoring System §330.463(b)(1)(D) - §1.3.2, Gas Monitoring System §330.463(b)(2)(A) - included in §1.1, Post-Closure Period §330.463(b)(2)(B) - included in §1.1, Post-Closure Period §330.463(b)(3) - §1.4, Documentation and Record Keeping §330.463(b)(3)(A) - §1.4.1, Description of Monitoring and Maintenance Activities §330.463(b)(3)(B) - §1.4.2, Post-Closure Care Responsibility §330.463(b)(3)(C) - §1.4.3, Post-Closure Planned Uses §330.463(b)(3)(D) - §1.4.4, Post-Closure Care Cost Estimate	
58	<i>Please revise Section 1.0 to state that the post-closure care activities will follow the measures and conditions specified in Appendix III8A, TCEQ Post Closure Care Plan Form.</i>	<u>Part III8 §1.0</u>
	Part III8 §1.0 has been revised to include statement, "Post-closure care activities will follow the measures and conditions specified in Appendix III8A, TCEQ Post Closure Care Plan Form."	
59	<i>Please revise Section 1.5 of Attachment 8 to refer to §330.954(c) for requirements of development over a closed MSW landfill in post-closure care.</i>	<u>Part III8 §1.4.3</u>
	Part III8 §1.0 has been reorganized to address each requirement listed under 30 TAC §330.463(b) in response to Informal NOD Comment 57; therefore, language previously included in §1.5 has been relocated to Part III8 §1.4.3, Post-Closure Planned Uses and has been revised to refer to 30 TAC §330.954(c) for requirements of development over a closed MSW landfill in post-closure care.	
60	<i>Please revise Section 2.0 of Attachment 8 to refer to Appendix III8A, TCEQ Post Closure Care Plan Form.</i>	<u>Part III8 §2.0</u>
	Part III8 §2.0 has been revised to include statement, "Completion of post-closure care will follow the conditions specified in Appendix III8A, TCEQ Post Closure Care Plan Form."	
61	<i>Please revise the last paragraph in Section 1.2 of Attachment 9 by adding "Current Evidence of" in front of "Financial Assurance."</i>	<u>Part III9 §1.2</u>
	Part III9 §1.2, Financial Assurance has been revised by adding "Current Evidence of" in front of "Financial Assurance."	
62	<i>Please revise the last paragraph in Section 2.2 of Attachment 9 by changing "closure" to "post closure care."</i>	<u>Part</u>

	Part III9 §2.2, Financial Assurance has been revised by changing “closure” to “post closure care.”	III9 §2.2
63	<i>Appendix IVH on the List of Appendices is named Special Waste Handling Plan; the same appendix is named as Special Waste Acceptance Plan (SWAP) in the SOP text and the actual appendix. Deficiency of the same or similar nature exists at other portions of the application (for example, Attachment 3, Appendix III3E in Part III). Please revise the application to ensure that the one application document component is consistently named/titled throughout the application (table of contents, figures, tables, appendix, attachment, and text).</i> Part IV, List of Appendices has been revised to Appendix IVH, Special Waste Acceptance Plan.	Part IV
64	<i>According to Section 2.1 and Table IV-4, the Director of Solid Waste Management will have very limited involvement in managing the daily operation, please revise Section 2.2 to specify that the Site Manager (SM) will hold a Class A license specified under §30.213, and that the SM’s designated alternate will have equivalent qualification as the SM except that a Class A license is not required.</i> Part IV, Table IV-4: Facility Operations, Inspection, and Maintenance List has been revised whereas inspector includes the Director of Solid Waste Management. Current City operational objectives designate the Director of Solid Waste Management as holding a Class A license specified under 30 TAC §30.213.	Table IV-4
65	<i>Section 4.2.4.4 specifies that 2 vehicles per week will be randomly selected for random inspection; please revise this section to specify one random inspection per day.</i> Part IV §4.2.2.4, Random Inspections has been revised to as requested.	Part IV §4.2.2.4
66	<i>Please revise Section 4.6.1.2 by replacing “Appendix IVE” with “Appendix IVG.”</i> Part IV §4.6.1.2, RACM has been revised changing reference from Appendix IVE to Appendix IVG.	Part IV §4.6.1.2
67	<i>Please revise Section 4.10.1 to address protection of the easements shown in Figure IA-1 (see Comment 8 of this letter).</i> Part IV §4.10.1, Easement Protection has been revised adding, "There are currently two pipeline easements depicted on Figure IA1, Land Ownership Record Map and no ROWs within the permit boundary."	Part IV §4.10.1
68	<i>Please explain “reference benchmark monument” used in Section 4.11.9 or delete “reference” as appropriate.</i> Part IV §4.11.9, Permanent Benchmark has been revised removing "reference".	Part IV §4.11.9
69	<i>Section 4.29 states, “Contaminated water and leachate will be pumped...” To avoid confusing with the leachate collected in the landfill bottom sumps, please remove “and leachate” from the quoted sentence.</i> Part IV §4.29.1, Contaminated Water has been added in response to Letter NOD Comment 45 and is revised to include, "Contaminated water will either be allowed to flow into the leachate collection and removal system or any ponded contaminated water will be pumped within seven days of occurrence directly into the leachate force main connected to a public sewer system in accordance with Part III3, Waste Management Unit Design." No further revision in response to this comment.	
70	<i>For acceptance and disposal of wastes regulated by the Railroad Commission of Texas (RRCT), please revise Appendix IVH to refer to and follow the TCEQ guidance (RG-003) Disposal of Special Wastes Associated with the Development of Oil, Gas, and Geothermal Resources, which is posted at <a href="https://www.tceq.texas.gov/publications/rg/rg-003.html">https://www.tceq.texas.gov/publications/rg/rg-003.html</a>.</i> Part IVH §1.1, Objectives of Special Waste Acceptance Plan (SWAP) has been revised to include a list of TCEQ Guidance Documents to be included in revised Part IVH-3, TCEQ Guidance Documents.	Part IVH §1.1 IVH-3

	<p>TCEQ Guidance Documents included in Part IVH-3 for acceptance and disposal of wastes are as follows:</p> <ul style="list-style-type: none"> <li>• RG-003 - Disposal of Special Wastes Associated with the Development of Oil, Gas, and Geothermal Resources</li> <li>• RG-022 - Guidelines for the Classification &amp; Coding of Industrial &amp; Hazardous Waste</li> <li>• RG-029 - Special Waste Regulations in Texas</li> <li>• RG-486 - Disposal of Exempt Waste That Contains Radioactive Material</li> </ul>	
71	<p><i>For acceptance and disposal of wastes containing radioactive substances, please revise Appendix IVH to refer to and follow the TCEQ guidance (RG-486) Disposal of Exempt Waste That Contains Radioactive Material, which is posted at <a href="https://www.tceq.texas.gov/publications/rg/rg-486.html">https://www.tceq.texas.gov/publications/rg/rg-486.html</a>.</i></p> <p>As discussed in response to Informal NOD Comment 70, Part IVH-3, TCEQ Guidance Documents includes RG-486 Disposal of Exempt Waste That Contains Radioactive Material RG-486 - Disposal of Exempt Waste That Contains Radioactive Material. No revisions have been made in response to this comment.</p>	
72	<p><i>Please revise Section 4.0 of Appendix IVH to specify how recent the analytical data has to be in order to qualify as "updated" data.</i></p> <p>Part IVH §4.0, Waste Approval Updates has been revised to include additional language "Updated analytical data for representative samples collected within recent year..."</p>	Part IVH §4.0
73	<p><i>Section 5.2 of Part III, Attachment 3, the dewatering system design proposed to comply with the requirements of 30 TAC §330.337(b)(2) includes an underdrain sump as the final collection point for groundwater removed by the system. Please indicate the final disposition of all water removed by the sump.</i></p> <p>Part III §5.2, Dewatering System has been revised to include language, "removed groundwater will be pumped into adjacent drainage perimeter channel".</p>	Part III §5.2
74	<p><i>On Figures III3-6A and 6B of Attachment 3, please show the locations of the underdrain sumps and any associated discharge piping.</i></p> <p>Figures III3-6A and III3-6B, Underdrain System Layout have been revised to better show the locations of the underdrain sumps. Figure III3-8, Leachate Collection and Removal System and Underdrain Details shows discharge piping associated with the underdrain.</p>	Figures III3-6A III3-6B
75	<p><i>In Sections 2.1 and 4.2 of Part III, Attachment 3, Appendix E-2A (Underdrain seepage calculation) reference is made to Figures III3F-3A and 3B, which are part of Appendix III3F, however the figures were not present in the submittal. Please include the missing figures to allow for review.</i></p> <p>Figures III3F-3A, Seasonal High Groundwater Contours Overliner Option and III3F-3B, Seasonal High Groundwater Contours Unit 8 Option have been provided in response to Informal NOD Comment 42. Part III3E-2A, Underdrain Seepage Calculation has been revised to reference Figure III3E-2A-1, Underdrain Seepage Subgrade Layout and Seasonal High Groundwater Map.</p>	Part III3E-2A
76	<p><i>In Section 5.1 of Part III, Attachment 3, Appendix E-2A, the expected maximum groundwater flow rate into each of the toe-drains is listed, however the maximum flow rate shown appears to be just the maximum value of the listed individual toe-drains and not a compounded value. Please explain why the flow rates of the other 3 toe drains listed would not add to the overall maximum flow rate.</i></p> <p>The purpose of Part III3E-2A, Underdrain Seepage Calculation is to determine the maximum steady-state flow rate of groundwater per unit length of underdrain. This maximum value is subsequently assumed to apply to the entire length of the longest underdrain and used to size the underdrain pipe in Part III3E-2B, Underdrain Pipe Sizing Calculation. This maximum flow is also used to size the sideslope underdrain in Part III3E-2C, Underdrain Geocomposite Calculation. No revisions have been made in response to this comment.</p>	

77	<i>In Section 3.1 of Part III, Attachment 4 the sand fraction range is listed without units for the fractions. Please provide units for the range.</i>	<u>Part III4 §3.1</u>
	The sand fraction range in Part III4 §3.1, Composition is listed without units because they are fractions not needing units whereas "0.4 to greater than 0.6" equates to "40% to greater than 60%". No revision has been made in response to this comment.	
78	<i>On Table III4-4A, the screened interval of several water wells is listed as "NA". Please indicate in the legend what the NA designates and whether this means that there is no screened interval (i.e. open hole construction) or if it in fact means unknown.</i>	<u>Table III4-4A</u>
	Table III4-4A, Water Well Locations within One-Mile-Radius Provided by TWDB has been revised to include in table notes "NA - Not Available"	
79	<i>On Table III4-4B (incorrectly labeled as III-4B) please provide the screened intervals of the water wells provided by RSGCD if known.</i>	<u>Table III4-4B</u>
	Table III4-4B, Water Well Locations within One-Mile-Radius Provided by RSGCD has been revised to correct table title and include in table notes "Screened interval information of water wells are not available."	
80	<i>On Tables III4-5A and 5B, please define the coordinate system used and the units of the elevations and depths as either BGL or MSL.</i>	<u>Tables III4-5A III4-5B</u>
	Tables III4-5A, Coordinates and Elevations of Previously Advanced Borings and III4-5B, Coordinates and Elevations of Borings Advanced in the Expansion Area have been revised to add units to column headers for northing (ft), easting (ft), ground elevation (ft-msl), depth (ft-bgs), and bottom elevation (ft-msl); and include in table notes "Boring coordinates provided in Texas State Plane South Zone NAD83"	
81	<i>On the geologic cross-sections in Part III, Attachment 4, please indicate on the figures which wells or borings have been extrapolated to the line of cross-section and the off-set distance. Please also indicate with dashed lines and question marks all borings/wells that do not terminate in the Stratum III clays and for which the exact depth of the contact between lithologic units is not known, such as on G-7 and B-123.</i>	<u>Figures III4-12A III4-12B III4-12C III4-12D III4-12E III4-12F III4-12G III4-12H</u>
	Figures III4-12A through III4-12H, Boring Location Map and Interpretive Geologic Cross-Sections have been revised to include a table of offset distances of extrapolated borings to the line of cross-section and stratum correlation lines have been adjusted where the exact depth of lithologic units is not known.	
82	<i>On Table III4E2, please define the units of the elevations as MSL as was denoted in Table III4E1.</i>	<u>Tables III4E1 III4E2</u>
	Table III4E2, Historical Groundwater Elevations Piezometers has been revised by defining the units of the elevations as (ft-msl). In addition, the titles of Tables III4E1 and III4E2 have been updated.	
83	<i>On Tables III5-1 and 2, please define the coordinate system used.</i>	<u>Tables III5-1 III5-2</u>
	Tables III5-1, Previously Permitted Groundwater Monitoring Well Network and III5-2, Groundwater Monitoring Well Network have been revised to include in table notes "Coordinates provided in Texas State Plane South Zone NAD83"	
84	<i>Section 2.2.3.2.4 of Part III, Attachment 5 indicates that a few inches of a clean fine sand will be placed on top of the filter pack sand, however Figure III5-2 shows a one-foot thick layer of "sugar sand" above the 20/40 sand filter pack. Please revise the text and figure to indicate the same and correct thickness and descriptors.</i>	<u>Part III5 §2.2.3.2.4</u>
	Part III5, §2.2.3.2.4, Annular Seal has been revised to "one foot of prepackaged clean fine sand" and Figure III5-2, Proposed Monitoring Well Construction Details has been revised to show one-foot thick layer of prepackaged clean fine sand above the 20/40 sand filter pack.	
85	<i>Please clarify the first bullet of Section 3.8 of Part III, Attachment 5, Appendix B regarding statistical exceedances.</i>	<u>Part</u>

	The first bullet of Part III5B §3.8, Annual Assessment Monitoring Report has been revised to include "has occurred in any" ground water monitor well for it is referencing 30 TAC §330.409(k)(1), "a statement whether a statistically significant level above a groundwater protection standard established...has occurred in any well during the previous calendar year period and the status of any statistically significant events."	III5B §3.8
86	<i>In Part III, Attachment 6 (Landfill Gas Management Plan [LGMP]), Table III6-1, please include the gas probes that are currently in use but that will be abandoned during the proposed expansion of the facility.</i> Table III6-1, Permanent Landfill Gas Monitoring Probes has been revised to include existing gas probes that are to be abandoned.	<u>Table III6-1</u>
87	<i>In Section 2.4 of the LGMP, the two criteria requiring notification and corrective actions should be separated with "and/or" and not "and" as is currently stated, which would require both to be true to trigger the actions.</i> Part III6 §2.4, Contingency Plan has been revised to "and/or".	<u>Part III6 §2.4</u>
88	<i>Figure III6-4 shows legend symbols and notes for gas extraction wells, condensate sump, and access riser monitoring port, however these symbols do not show up on the figure itself, please revise.</i> Figure III6-4, Conceptual Landfill Gas Collection and Control System has been revised to include symbols for gas extraction wells, condensate sumps, and access riser monitoring ports on the plan.	<u>Figure III6-4</u>