

Municipal Solid Waste Permit Amendment No. 1848A  
 Beck Landfill  
 Third Notice of Technical Deficiency

NOD ID	MRI ID	App. Part	Citation	Location	NOD Description	Response
1	12	General	330.57(d)	Parts I through IV	It appears there are changes to the narrative text that are not marked. Provide marked copies of all pages where changes have been made.	
2	12	General	330.57(d)	Part I Form	Revise Figure I-5 to show all easements within the proposed facility boundary. Figure 2-6, Adjacent Utilities & Structures Within 500 Feet, shows sewer line easements not shown on Figure I-5.	The second sewer line shown on Figure 2-6 appears on the City of Schertz GIS system, but there is not an easement recorded for it. We have added the approximate location of the line on Figure I-5, as requested.
3	22	General	330.57(g)(3)	Parts I through IV	Revise the application master table of contents to be consistent with the appendix structure in Part III, Attachment E, and as needed for other parts of the application.	A revised copy of the Table of Contents is included with this submittal.
4	24	General	330.57(g)(5)	Parts I through IV	Some pages in the application are lacking page numbers and revision dates. Provide a page number and revision date on all pages in the application, using a consistent numbering system that includes attachment identifier.  Ensure all cross references to figures, tables, etc. in other parts of the application specify which part and attachment.	Page numbers were added to some sections in Part II and cross-references were corrected in Part II.
5	70	Part I	330.59(b)(1); 305.45(a)(1)	Form 0650, Section 12	Provide sealed survey drawing showing the location of the facility permanent benchmark.	The benchmark has been added to Figure I-5.
6	148	Part II	330.61(j)(1)	Part II, Attachment G	Provide page numbers in Part II.	Page numbers were added to portions of Part II.
7	148	Part II	330.61(j)(3)	Part II, Attachment G	Provide larger-scale seismic impact zone map in Part II, Attachment G, and in Part III, Attachment E, showing landfill location. Spell out the complete internet source address (URL) in the caption to the drawing.	Figures E-8 and E-9 are provided in Part III, Attachment E to address this comment. Figure E-8 has also been included in Part II, Attachment G.

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8	296	Part III	330.305(e)	Appendix C1-E and C1-F	<p>a) Explain if the provided worst-case velocities are non-erodible, and are calculated for the proposed construction material for the perimeter berms, side slope benches, top deck benches and for down chutes. Also, specify construction materials for proposed drainage structures, including for erosion control matting, as indicated in the application.</p> <p>b) Provide for the fate of stormwater and sediment during interim phases of landfill operation (See Section 2.2 of RG-417: <a href="https://www.tceq.texas.gov/downloads/permitting/waste-permits/publications/rg-417.pdf">https://www.tceq.texas.gov/downloads/permitting/waste-permits/publications/rg-417.pdf</a>)</p>	<p>a) Table 8-6 from the USDA Part 654 Stream Restoration Design National Engineering Handbook has been added to Appendix C1-E to provide maximum allowable velocities for grass-lined channels. A discussion was also added to Appendix C1-E to demonstrate that the maximum calculated velocities are below the permissible limit.</p> <p>b) Removed sediment will be re-used as daily or intermediate cover and clean stormwater will be discharged in accordance with the site stormwater permit. These provisions have been added to Appendix C1-F.</p>
9	298	Part III	330.305(e)	Appendix C1-F	<p>a) Revise Appendix C1-G to provide cross-sections with an engineering scale for temporary berms/benches on the slopes, letdowns, perimeter berms, and detention pond/sedimentation basin for the interim phase of landfill operation. Also, indicate dimensions and construction specifications on the drawing for each of the cross sections.</p> <p>b) Include information used in the application for soil loss calculations in Natural Resource Conservation Service of the United States Department of Agriculture's Universal Soil Loss Equation.</p>	<p>a) The dimensions of the temporary berms and downchutes are described in Appendix C1-G. They will be installed based on site conditions and can be constructed of various materials, so we did prepare details for them.</p> <p>b) The data used in the USLE calculation is shown on Page C1-G-2.</p>

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10	299	Part III	330.305(f)(1) and (2)	Attachment C1	<p>a) Include software outcome summary (e.g., Flowmaster, HEC-RAS) to support the final design outcome in the application for estimated peak flow calculations for various drainage areas.</p> <p>b) Discuss if Rational Method outcome was taken into account while using the software (Flowmaster) for structural designs in each case.</p> <p>c) Provide correct page number on pages in Appendix C1-C.</p>	<p>a) The HEC-HMS outputs for the existing condition are included on Paged C1-B19 and C1-B20. The proposed drainage condition outputs are shown on Pages C1-C14 and C1-C15. A comparison of the flows is included on Page C1-8.</p> <p>b) The Rational Method was used to size the drainage control features such as the perimeter berms, downchutes, and intermediate cover drainage controls. The Rational Method calculations for these features are included in Appendices C1-D, C1-E, and C1-G.</p> <p>c) The page numbers in Section C1-C have been corrected.</p>
11	302	Part III	330.305(g)	Attachment D6, Section 2.2	<p>a) Revise Figure D-6A to provide cross sections with an engineering scale, indicating one foot of freeboard for the containment berms.</p> <p>b) Identify locations on a site layout plan for temporary and permanent containment berms.</p> <p>c) Explain how the collected contaminated water will be disposed offsite.</p>	<p>a) A typical berm cross-section with an engineering scale has been added to Figure D-6A. The required minimum freeboard has been called out on this detail and on the other cross-section.</p> <p>b) Temporary berms will be placed around the active area and will be relocated as the active area moves. There are no permanent locations for these berms.</p> <p>c) Section 2.3 states that the contaminated water will be transported to an offsite wastewater treatment plant for disposal in accordance with 330.207.</p>

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12	306	Part III	330.63(c)(1)(B)	Appendix C1-D	<p>a) Address the rule requirements by providing velocities along the entire length of the perimeter berms for different cross sections.</p> <p>b) Provide cross sections for each of the perimeter berms along the entire length.</p> <p>c) Provide discharge velocities for each outfall points for 25-year 24-hour rainfall event, and revise Notes provided on Drawings C1-1 and C1-2.</p>	<p>a) The cross-section of the perimeter berms is constant along the entire length and the same for each berm. The table on Figure C1-2A has been modified to show the peak velocity for each berm.</p> <p>b) The cross-section of the perimeter berms is constant along the entire length. A typical cross-section is included on Figure C1-2A.</p> <p>c) The 25 year velocities have been updated with the flow velocity in the creek from a 25 year HEC-RAS model. All three areas are inundated during a 25 year event.</p>
13	311	Part III	330.63(c)(1)(D)(ii) and (iii)	Appendix C1-B and Appendix C1-C	<p>a) Provide hydraulic calculations and cross sections for all the proposed ponds, including for their inlet and outlet design.</p> <p>b) Provide calculations for discharge velocity for each of the ponds, and demonstrate that the existing drainage patterns will not be adversely altered.</p> <p>c) Identify with proper identification (e.g., DP-1, DP-2, DP-3, etc.) locations of ponds on the site layout plan.</p>	<p>There is only one proposed stormwater control pond (south of the landfill). The cross-sections and other design information for the pond are included on Figure C3-1 and in Appendix C1-C. The pond discharges only engage in a 25-year or greater storm event and the surrounding area will be inundated during this level of event. We have provided gabion mattresses to armor the pond embankment below the discharge point, but the discharge will flow into an inundated portion of the site and there will be no effects from the outlet velocity. The peak velocity calculations for each outlet for the pond are now shown on Page C1-C12.</p>

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14	313	Part III	330.63(c)(1)(D)(iv)	Appendix C1-D and C1-E	<p>a) Revise drawings to provide all the dimensions per an engineering scale pursuant to 30 TAC 330.57(h).</p> <p>b) Ensure structural design and their cross-sectional details are provided for the proposed ponds, berm/benches on slopes, chutes, perimeter berms, intersections of chutes and berms, toe of the chutes, etc. You may identify page numbers for provided cross-sectional details for each of them.</p>	<p>a) Drawings C3-2 and C3-2A have been revised and engineering scales added where appropriate.</p> <p>b) The details for each feature are located as shown below:  Ponds-Figure C3-1  Benches-Figure C3-2  Chutes-Figure C3-2  Intersection Chute/Berm-Figure C3-2A  Toe of Benches-Figure C3-2  Toe of Downchutes - Figure C3-2B</p>
15	316	Part III	330.63(c)(2)(C)	Attachment C2	<p>a) Provide information detailing the specific flooding levels and other events due to rainfall that impact the flood protection of the facility. You may identify section and page number, if the information is provided.</p> <p>b) Match colors, thicknesses, spaces between broken lines for the provided legend information for the permit boundary, waste footprint, and for 100-yr floodplain affected areas on Figure C2-1.</p>	<p>A table has been added to Attachment C2 providing the 100 year floodplain elevation and existing berm height along the entire length of the existing perimeter berm. The design elevation at each point for the proposed additional soil berm is also included. The permit boundary line type was corrected in the legend on Figure C2-1. The remaining features and the legend information are from the published FEMA map and are not editable.</p>
16	318	Part III	301.33(a)(1)	Part III- Attachment D, Figure D-2, and Attachment C2	<p>Include relevant responses/descriptions in the appropriate narrative section of the application materials, including the first notice of technical deficiency (NOD) response provided for Comment #T41.</p>	<p>A discussion related to compliance with Chapter 301 has been added to Attachment C2.</p>
17	335	Part III	330.63(c)(2)(D)	Attachment C2	<p>Provide a letter of Map Revision (LOMR) from FEMA.</p>	<p>A discussion related to compliance with Chapter 301 has been added to Attachment C2.</p>

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18	335	Part III	330.63(c)(2)(D)	Attachment C2	Explain why the detention pond construction proposed in the floodway does not require Corps of Engineers Section 404 Specification of Disposal Sites for Dredged or Fill Material permit.	The following justification has been added to Attachment C2. Since the pond will be located within the floodplain and floodway of Cibolo Creek, the proposed location was evaluated by Power Engineers, Inc. to determine if any Waters of the U.S. (WOTUS) would be impacted by the construction. Attachment K in Part II of this amendment application includes the wetlands report and WOTUS evaluation. As shown on Figure 3 in Attachment K, no WOTUS features are present in the location of the existing sedimentation pond/proposed detention pond. Therefore, a U.S. Army Corps of Engineers permit is not required under Section 404 of the Clean Water Act.
19	356	Part III	330.63(d)(4)(F)	Attachment D3	Extend final cover to the perimeter of the below-grade waste.	Figure D3.2 has been revised to show the final cover covering the proposed soil berm and extending beyond the lateral edge of the below-grade waste.
20	474	Part III	330.63(e)	Attachment E	Correct section, figure, and table numbering in text. Update references to figures and tables. Revise table of contents to be consistent with attachment structure, and list figures, tables, and appendices.	Updated sections, figures, table numbering and include Table of Contents updates consistent with the attachment structure.
21	474	Part III	330.63(e)	Attachment E	Revise appendix titles, references in text, and tables of contents for consistency.	Complete
22	474	Part III	330.63(e)	Attachment E	Revise reference to prior documents to reference their locations in the appendices to Attachment E.	Complete

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23	474	Part III	330.63(e)(2)	Attachment E	Use the version of Figure 3-4 in the response to the first NOD, with the facility location marked, the size of the legend increased for legibility, and the source URL for the map indicated.	Use version from first NOD and included new version. See Figures E-4 and E-9.
24	474	Part III	330.63(e)(3)	Attachment E	Correct the reference to the appendix containing historical groundwater data (Appendix F-2).	Complete
25	474	Part III	330.63(e)(4)	Attachment E, Section 3.1.3	Revise first paragraph of Section 3.1.3 to indicate where the logs and data for the 2020 supplemental borings are presented in the application.	Complete
26	494	Part III	330.63(e)(4)(G)	Attachment E, Section 3.1.4	Revise the geologic cross sections in Appendix E-4 to address the following: a) Add page numbers and figure numbers b) Add horizontal scales c) Add references to locations in the application where logs and subsurface data are documented for the 1985, 1987, and 2020 borings d) Provide the cross sections at a larger scale for legibility e) Add labels to the cross sections identifying the stratigraphic units so they may be distinguished in black-and-white copies f) Show the horizontal elevation reference lines in parts of sections with dark shading g) On cross section through the "FB" borings from 2020, provide complete vertical scale and show the bottoms of borings at their correct total depth elevations h) Provide a marker on logs in each cross section indicating static water elevation i) Provide boring plan inset drawings with legible labeling and oriented with north pointing toward the top of the page j) Provide boring logs for borings C-7, D-7, E-1, and G-2 k) Explain why recent fill (including trash) is shown intercalated with in situ strata (cross sections A-A', E-E', G-G', and FB4-FB8-FB3	Revised cross sections are provided.

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27	506	Part III	330.63(e)(5)(E)	Attachment E	Correct the reference to the appendix containing historical groundwater data (should be Appendix F-2).	Corrected
28	508	Part III	330.63(f)	Attachment F	List Attachment F figures in the table of contents, and reference the figures in the text.	Corrected
29	508	Part III	330.63(f)	Attachment F	Revise table numbers, section references, and appendix references throughout Attachment F to be consistent with document structure.	Corrected
30	508	Part III	330.63(f)	Attachment F	Provide the groundwater gradient map referenced in section 1.1. Correct the reference to the groundwater gradient map in section 1.6 of the Appendix F narrative.	Corrected
31	508	Part III	330.63(f)	Attachment F, Appendix F-2	Provide a caption for Table 2 in section 4.0.	Corrected
32	508	Part III	330.63(f)	Attachment F, Appendix F-2	Provide text to explain the meaning of the phrase "Not Revised During January 2008 Updates" in the heading of section 5.0.	Removed the phrase. This was relic text.
33	508	Part III	330.63(f)	Attachment F, Appendix F-2	Consolidate the two separate tables labeled "Table 3, Background Sampling Parameters" into a single table, or label the second as "Table 3, Background Sampling Parameters (continued).	Consolidated
34	508	Part III	330.63(f)	Attachment F, Appendix F-2	Explain why there are two sets of Well Purging Field Data Collection Forms in Attachment 1 and how they are to be used.	Explanation added to text. There are Purging Forms and Sampling Forms. There is a 24-hour window between purging and sampling and both sets of forms are completed during annual groundwater detection event.
35	556	Part III	330.403(a)	Attachment F	Provide a copy of a State of Texas Well Report for each well at the facility.	Two state well reports were provided and are the only state well reports that were submitted. One well report represents the five piezometers and the other well report represents the five monitor wells.
36	638	Part III	330.421(a)(1)(D)	Attachment F, Section 3.1.4	Provide boring logs for monitor wells, sealed, and dated by a licensed professional geoscientist or engineer who is familiar with the geology of the area, and reference the logs in the text.	The original boring logs for the wells were located and are included with the Attachment.



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37	652	Part III	330.63(g)	Attachment G	Provide a larger scale, legible version of Figure G-1.	Figure G-1 has been replaced with a new figure showing the probe locations.
38	656	Part III	330.371(f)	Attachment G	Revise Figure G-3 to show all of the underground utility easements indicated earlier on Figure 2-6 in Part II.	Additional vents have been shown on Figure G-3 for the 2nd wastewater line.
39	764	Part IV	330.123	Part IV, Section 1.4	Provide language that written notice in the form of a soil liner evaluation report as described in §330.341 for the contingency that soil liner requires certification.	Part IV, Section 1.4 has been revised to state that a SLER will be submitted for any liner constructed in the future.