TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 1, 2014

Mr. Ernest Kaufmann
President and Manager
130 Environmental Park, LLC
130 Riverstone Terrace, Suite 103
Canton, GA 30114

Re: 130 Environmental Park – Caldwell County
Municipal Solid Waste (MSW) – Permit Application No. 2383
Consolidated Permit Application – Notice of Deficiency (NOD)
Tracking Nos. 17458939 (18347603) CN604375972/RN106897036

Dear Mr. Kaufmann:

The MSW Permits Section has completed the review of your response, dated June 27, 2014, to our NOD letter dated May 6, 2014. The response was prepared by Biggs & Mathews Environmental on your behalf. Additional information must be presented to demonstrate compliance with Title 30 Texas Administrative Code (30 TAC) Chapter 305 and Chapter 330. The information requested below is necessary for a complete application and must be addressed before further technical review. Comments are mine except those noted from the geologist, Arten Avakian, P.G. When making revisions to maps, drawings, and figures which are replicated throughout the application, each map, drawing, and figure needs to be revised throughout the application.

Part II (Arten Avakian, P.G.)

1. Please address the following items regarding Drawings IIA.9 (Geologic Vicinity Map) and IIA.9A (Geologic Vicinity Map Legend):

    a. On Drawing IIA.9, add a "Pami" (Midway Group strata) label to the outcrop of Midway at the site, to make it clear to readers that although it was not labeled on the source map, it is an outcrop of Midway.

    b. On Drawing IIA.9A, include an explanation of fault symbols in the legend.

    c. Provide sharper reproductions of the explanations of map units in Drawing IIA.9A. The existing drawing is barely legible and may become illegible if copied.

Part III, Attachment C – Facility Surface Water Drainage Report

2. As noted in comment 17b of the May 6, 2014, NOD letter, a demonstration of no adverse change to drainage patterns, required by 30 TAC §330.305(a) and 30 TAC 330.63(c)(1)(C), is summarized in Appendix C1-A. The evaluation identifies 12 comparison points: CP1 and CP5 through CP8, which are permit boundary discharge points; CP2 through CP4, which are permit boundary influent points; and CP9 through CP12, which are property boundary discharge points. Discharge rates at CP7 and CP8 (on the permit boundary) indicate reductions of 42% and 12% respectively between the pre- and post-development conditions, by the time

discharges leave the property boundary, values do not change significantly (no more than 1.2%). It appears that drainage pattern changes are limited to property owned by you; however, the requirement that drainage patterns not be altered at the permit boundary is not met where alterations are mitigated on off-site property. As required under 30 TAC §330.67, please provide documentation to show that the applicant owns or controls the property at the CP9 through CP12 discharge points and will continue to maintain control for the life of the facility.

3. Comment 19 of the May 6, 2014, NOD letter requested design drawings for energy dissipators at the bottom of chutes or an explanation of why dissipators will not be needed in accordance with 30 TAC §330.63(c)(1)(B). The response indicates that these are now provided in Attachment C3. It is not clear which changes to Attachment C3 address this concern. Please explain with greater detail how changes within Attachment C3 address the comment.

4. Comment 20e of the May 6, 2014, NOD letter noted that, while information provided in the application demonstrates that waste units will not be located within the 100-year floodplain, there are two entrance roads that would cross floodplain. The comment requested, in accordance with 30 TAC §330.63(c)(2)(D)(ii), a demonstration that the proposed construction has a floodplain development permit from the city, county, or other agency with jurisdiction over the proposed improvements. The response indicates that you have begun preliminary platting with Caldwell County, will obtain all local permits and authorizations, and will provide them when obtained. We await documentation of those authorizations in accordance with the cited rule.

Part III, Attachment D – Waste Management Unit Design

5. Comment 29b of the May 6, 2014, NOD letter asked for an explanation of why the protective cover layer of the liner system was modeled in Hydrologic Evaluation of Landfill Performance (HELP) as 0.08 feet of barrier soil and 1.92 feet of vertical percolation, as presented in Appendix D6-B. The response expands Appendix D6-B to indicate that the top one inch of the protective cover was modeled as a barrier layer (to simulate a material that drains vertically as saturated flow) because the HELP model will not allow a vertical percolation layer to immediately underlie a lateral drainage layer. Based on the HELP model run printout, the top 0.08 feet (1 inch) of protective cover is modeled with a hydraulic conductivity of 10^{-6} cm/sec while the remaining 1.92 feet (23 inches) of protective cover is modeled with a hydraulic conductivity of 10^{-3} cm/sec. Please explain how the values for hydraulic conductivity were chosen for the two modeled layers of the protective cover and why they are not equal. Also please note that in the referenced paragraph, the thickness of the bottom layer of the protective cover indicates that it is 1.92 ft (*11* inches). Please correct this typographical error.

6. Comment 36 of the May 6, 2014, NOD letter noted that Attachment D7, Section 5.5.4 of the Liner Quality Control Plan (LQCP) included language indicating that the vacuum box pressure will be reduced *to* about three to five inches of mercury (in Hg). The Liner Handbook indicates that three to five in Hg of vacuum should be applied. Text now indicates that "Three to five inches of Hg. should be applied." Please replace "should" with "will," and add "of vacuum" before "will be applied."

7. Comment 37 of the May 6, 2014, NOD letter discussed thickness verification addressed in Section 5.5.5 of the LQCP. The response cover letter indicates that the July 1, 1994 MSW Liner Construction Handbook (Liner Handbook) "is not recognized by the TCEQ as a current design guide." The Liner Handbook was removed from public access primarily because of a need to

update rule references that changed as a result of the Chapter 330 rule re-write in 2006. The document continues to be recognized by the MSW Permit Section and its guidelines continue to be followed. In accordance with the Liner Handbook, please provide for field thickness testing to be performed for each panel. Use a micrometer or calipers and perform one series of five measurements along the leading edge of each panel, with individual measurements no greater than five feet apart. We suggest that for smooth high-density polyethylene (HDPE) geomembrane, the average of the readings should be no less than the nominal thickness of the geomembrane and the minimum reading should be no less than 90% of the nominal thickness. For textured HDPE geomembrane we suggest that the average be no less than 95% of the nominal thickness and the minimum reading should be no less than 85% of nominal thickness. Please delete the first three sentences of Section 5.5.5 and clarify that thickness testing criteria provided in GRI-GM13 are for manufacturer and conformance thickness testing, not for field thickness testing.

Part III, Attachment E – Geology Report (Arten Avakian, P.G.)

8. Please apply the comments earlier in this letter regarding Drawings IIA9 and IIA.9A to Figures E1-1 (Geologic Vicinity Map) and E1-2 (Geologic Vicinity Map Legend). Also, please revise the note on Figure E1-1 to refer to Figure E1-2 (rather than to Drawing IIA.9A).

9. Please update the text in Section 5.6.2 to account for the recently acquired result of 5.90×10^{-8} cm/sec for a sample from Stratum I.

10. Please check the arithmetic mean for Stratum II in Table E-11 for consistency with the text in Section 5.6.2.

11. Please revisit comment 58 in our review letter dated May 6, 2014, and document the lines on Figure E3-10 (structure contour map for the top of Stratum III) along which you measured hydraulic gradient. Please tabulate the gradient values for each line, and the average.

Part III, Attachment F – Groundwater Sampling and Analysis Plan (Arten Avakian, P.G.)

12. Please revisit comment 62 in our review letter dated May 6, 2014, which requested that you revise Section 2.3 of Appendix F2 to indicate that if after 7 days a well has not recovered sufficiently for a complete sample set, a partial set of samples will be collected, in an order dictated by data needs. The response should make it clear that if a well recovers sufficiently for a full set of samples, then a full set of samples should be collected; and that if after allowing 7 days for recovery a well recovers only partially, then a partial set of samples will be collected.

Part III, Attachment G – Landfill Gas Management Plan (Arten Avakian, P.G.)

13. Section 2.7 was revised in response to comment 65 in our review letter dated May 6, 2014, to indicate that the geologic, hydrogeologic, and hydraulic conditions were evaluated to "ensure that the selected monitoring frequency would be sufficient to identify potential landfill gas migration before it can travel a significant distance outside the permit boundary." Please clarify what a "significant distance" is.

Part III, Attachment H – Closure Plan

14. Comment 75 of the May 6, 2014, NOD letter requested that the Closure Plan include provisions for waste storage and processing areas and the Reusable Materials Storage Area. While the response provides the needed information for waste storage and processing areas, it does not appear to address the Reusable Materials Storage Area. Please address closure requirements for the Reusable Materials Storage Area in accordance with 30 TAC §330.459.

Part III, Attachment J – Cost Estimates for Closure and Postclosure Care

15. Comment 77 of the May 6, 2014, NOD letter requested additions to the Closure Cost Estimate in Appendix J1 to address waste storage and processing areas and the Reusable Materials Storage Area in accordance with 30 TAC §330.505. While the response provides the needed information for waste storage and processing areas, it does not appear to address the Reusable Materials Storage Area. Please provide for these costs in the estimate with quantities tied to maximum quantities that may be onsite in these units and for disassembly and disposal of units, as appropriate.

Part IV – Site Operating Plan (SOP)

16. Comment 79 of the May 6, 2014, NOD letter requested a demonstration, in accordance with 30 TAC §330.129, that the largest active face may be covered with 6 inches of soil within one hour. Information regarding round-trip travel time has been deleted from the demonstration and does not appear to have been accounted for in the demonstration. Please provide a demonstration that available equipment will be capable of covering the largest active waste disposal area with soil, from a stockpile up to 2,500 feet away (as indicated in Section 7.1), within one hour.

17. Comment 79 of the May 6, 2014, NOD letter requested an explanation of how the active working face will be limited to the total capacity of the dozer and compactor capacity and the excavator and haul truck capacity, as indicated in the last bulleted item on page IV-26, during operations. This text was deleted in the response, but has been replaced with very similar language. Text implies that the largest active face provided in the Fire Protection Plan could be expanded with the arrival of larger equipment. If this is desired, please provide a description of how operators will make this calculation during waste acceptance and explain how this affects the largest active face, required under 30 TAC §330.113(a) and provided in Section 8.2.

18. Comment 86 of the May 6, 2014, NOD letter requested expansion of subsections of Section 8.25 to ensure that all requirements of 30 TAC §330.203(b) are addressed. These sections have been expanded but some subsections do not appear to address maximum and average lengths of time that wastes will remain on site, maximum and average processing times, and intended destinations. Please provide this information.

19. Comment 89 of the May 6, 2014, NOD letter requested an expansion of Chapter 7 to address the requirements of 30 TAC §330.221 to provide for fire protection, where appropriate, for storage and processing areas. Section 7.1 has been expanded, but does not appear to address the requirement under 30 TAC §330.221(a) that an adequate supply of water under pressure must be available for firefighting purposes. Please provide for this rule.

20. Comment 90 of the May 6, 2014, NOD letter requested text to address applicable subsections of 30 TAC §330.245, regarding ventilation and air pollution control. Section 8.27 has been added to address this rule; however, Section 8.27.1 provides an Odor Management Plan, which is also provided in Section 8.10. The text in 8.27 does not match the information in 8.10 and the second bullet in 8.27 refers to wastes that are prohibited in the Waste Acceptance Plan. Please address these concerns.

The identified items must be satisfactorily addressed prior to our determining the permit application technically complete. It is recommended that the response to this Notice of Deficiency be in the following format to ensure that the response to each and every item of concern is identified.

1) A dated cover letter transmitting the revised application should accompany the revised application.

2) Each item of concern should be addressed in the transmittal letter, and the applicant's response to the item should be immediately following the item of concern.

3) The applicant should indicate where in the revised permit application the revisions have been incorporated by reference to part, section, and page number.

4) An original certification statement with the revision, in accordance with 30 TAC Section §305.44 should be included. The certification statement should indicate the name, title, and address of the responsible official.

Please submit an original and three (3) copies of your application revisions within 30 days of the date of this letter. Your response must be in a form that allows for the replacement of application pages with the revised pages. According to 30 TAC §330.57(g)(6), revisions must have a revision date and note that the sheet is revised in the header or footer of each revised sheet or page. The revised text must also be marked to highlight the revision. Failure to submit a satisfactory response to each of the noted deficiencies may result in the application being returned due to technical deficiencies.

If you have any questions, please contact me at (512) 239-4568. When addressing written correspondence, please use mail code MC 124.

Sincerely,

Steve Odil, P.E.
Municipal Solid Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

SPO/sdm

cc: Mr. Kerry D. Maroney, P.E., Biggs & Mathews, Inc., Wichita Falls