



North Carolina Department of Environment and Natural Resources
Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

Solid Waste Section

January 06, 2012

Mr. Tim Rogers
Solid Waste Director
460 B South Landfill Road
Dudley, NC 28333

Re: Additional Comments on Permit Application for Continued Operation (Application)
Wayne County Construction and Demolition Debris Landfill (C&DLF)
Wayne County, North Carolina
Permit No. 96-01, Document ID No. (Doc ID) 15795

Dear Mr. Rogers:

On December 13, 2011, the Division of Waste Management (DWM), Solid Waste Section received the letter dated December 12, 2011 and the revised Application (Doc ID 15764), submitted by Municipal Engineering Services Co., Inc. (MESCO), on behalf of Wayne County, to respond the DWM's comments (Doc ID 11748) dated October 08, 2010. The Solid Waste Section conducted a review on the revised Application and has additional comments on the new submittal. Your responses to the following comments will expedite the review of the Application:

Section 1 – Operation Plan

1. (Section 1.3) According to the revised “Groundwater and Surface Water Sampling and Analysis Plan (Doc ID 13923) date May 10, 2011, there are eleven (11) monitoring wells – MW-1 through MW-11 will be sampled semiannually. Therefore, in the subsection -“Water Quality Monitoring Summary” please revise the following information accordingly:
 - i. The number of well needs to be changed to 11 from 9 and the wells MW-9 & MW-11 needs to add to the last sentence in the 3rd paragraph on Page 11.
 - ii. The wells MW-9, MW-10, & MW-11 needs to add to the first sentence in the “Assessment Monitoring” (2rd paragraph on Page 12).

Section 2 – Closure Plan

2. (Section 2.5) Because the plan proposes a gas vent system including installation of 18 new gas vents and conversion of the existing gas wells to gas vents to emit landfill gas after the landfill is closed. In consistent with cost estimates and closure plan drawings, this section needs to add back the specifications of “Gas Venting System” consisting of the trenching,

NCDOT No. 5 stones, and geotextile around the perforated collection piping which were described in the Permit Application dated August 202010.

Section 3 Post-Closure Plan

3. The LFGCCs as-built drawing is not included in the Appendix A of the permit application. Please provide the LFGCCs as-built drawing completed and sealed by John H. Thompson, NC P.L.S # 3770 on December 18, 2002 (Project # 02-021).
4. According to the revised "Groundwater and Surface Water Sampling and Analysis Plan (Doc ID 13923) date May 10, 2011, there are eleven (11) monitoring wells –MW-1 through MW-11 will be sampled semiannually. Therefore, the number of well in the cost item 1 needs to be changed to 11 from 9.

Appendix A - Figures

5. (Drawing No. F1/Sheet 3 of 9) The tabulated data of gross capacity is not consistent with the amount stated in the Facility Plan (refer the Comment No. 8). Please make necessary correction.

Appendix E – Written Facility Plan

6. To avoid any misunderstand and confusion, please describe the annual disposal rate in the unit of tons per year in addition to the cubic yards per year for the C&DLF in the Facility Plan.
7. Please describe the service area – Wayne County only in the Facility Plan.
8. (General , on Page 46) Total gross capacity for the C&DLF unit is defined as the volume measured from the bottom of C&D waste (the top of the cover system of the closed MSWLF) through the top of final cover of the C&DLF. Therefore, the total gross capacity will be the air space plus the volume of the final cover system. However, there are three different gross capacity values present in the Facility Report as shown below:
 - 2,096,863 CY (=636,858 +1,460,005), the total gross capacity (tabulated data) of the C&DLF in the Drawing No. F1/ Sheet 3 of 9.
 - 2,731,918 CY, the 1997 approved total gross capacity of 2,731,918 CY (Third paragraph on Page 46).
 - 2,292, 883 CY (=1,397,891 CY [Phases 2 through 7] + 636,858 CY [Phase 1, Drawing No. F1/ Sheet 3 of 9] + 258,134 CY [Final Cover System: 4 feet thick over 40 acres]), on Page 46.

For the sake of consistency throughout this permit application, please revise the proposed gross capacity. For example, to minimize revision requirements and keep the approved total gross capacity of 2,731,918 CY, the County may want to change gross capacity of Phase 7 by increasing the side slopes but keeping the final grade to 280 feet amsl so that no new slope stability analysis will be required. The drawings in the Facility Plan need to be updated accordingly. Or, the County may propose the new total gross capacity of 2,292, 883 CY and

revise the data in Drawing No. F1/Sheet 3 of 9. Please clarify and make necessary consistent revision throughout the Facility Plan and drawings.

Appendix F – LCID Written Operation Plan

9. The deed (Doc ID 13595) of the Wayne County Landfill Facility, including the closed MSWLF & C&DLF (96-01) and the subtitle-D MSWLF (96-06) that was provided to the DWM on April 12, 2011 via an e-mail message doesn't include the proposed LCIDLF. Please provide the deed info of the LCDILF.
10. Please provide information to demonstrate that the proposed LCID location meets the siting requirement stated in the Rule .0546(8)(e); for example the boring logs or well completion records adjacent to the proposed landfill.
11. Does this LCIDLF unit include in the originally approved Erosion and Sediment Control Plan (ESCP)? If not, pursuant to the Rule .0564(8)(a) through (d), the County must consult and request the NC Land Quality Section, Division of Land Resources for an approval for a modified ESCP. Please provide a copy of the approval letter and approved ESCP issued by the NC Land Quality Section.
12. Please provide the proposed gross capacity of the landfill including the maximum height of the landfill (above the mean sea level) based on the estimated maximum annual disposal rate will be disposed off at this LCIDLF. "The unknown of the quantity of waste" is not acceptable.
13. Please describe the proposed final side slopes of the LCIDLF, such as 4 (horizontal) to 1 (vertical).
14. Please state the service area of this unit (Wayne County) in the LCIDLF Operation Plan.
15. Since the proposed LCIDLF is located on the upstream / up-slope side of the borrow areas please address the following concerns:
 - i. Please show the buffer zones between the LCIDLF and the adjacent borrow limits (the maximum extent) and show the buffer areas on the facility plan drawing(s). The visible markers used to delineate the buffer zones must be established and constantly maintained on-site. Please add these requirements to the applications (plan and drawings).
 - ii. The operation plan must include a contingency plan to remediate potential surface water and soil contamination resulting from potential leachate outbreaks and to correct problems so that the same kind of problem will not be repeated in the future. Please provide a contingency plan.

On November 1, 2007 The Solid Waste Section approved the Assessment of Corrective Measures for the C&DLF dated August 2007. In the approval letter, the Solid Waste Section requested the County to conduct a public meeting to discuss the assessed corrective measures

with affected and interested parties in compliance with Rule 15A NCAC 13B .1635(d). The copies of documentations of the requested public meeting are not appended in the Corrective Action Plan (CAP) and can't be located in the DWM file system, either. Please submit the copy of the public meeting records including the certification of publication (affidavit) to meet the requirements stated in the Rule 15A NCAC 13B .1635(d).

On October 27, 2010 the Solid Waste Section requested the County to submit an updated CAP to reflect corrections and changes in design presented in the existing CAP (Doc ID 8821) dated October 23, 2009. On November 4, 2010 MESCO on behalf of the County submitted a letter (Doc ID 12097) to officially respond the comments stated in the previously-mentioned letter and agreed to revise the existing CAP. The updated CAP is not available in the DWM file system. Please submit the update CAP.

Please submit the requested documents and timely respond the above-referenced comments which shall be incorporated into the revised Application. One hard copy and an electronic copy for each submittal are required. The Solid Waste Section appreciates your patience, efforts, and cooperation in these matters. If you have any permitting questions, please contact myself at (919) 707-8251.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ming-Tai Chao', written in a cursive style.

Ming-Tai Chao, P.E.
Environmental Engineer II
Permitting Branch, Solid Waste Section

cc:

Wayne Sullivan, MESCO
Dennis Shackelford, DWM
Central File

Ed Mussler, Permitting Branch Supervisor
Wes Hare, DWM