



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

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

November 8, 2011

Mr. J.W. (Billy) Dunham
Craven Ag Service
2115 W. Highway 55
New Bern, NC 28562

Re: Application for permit, Craven Ag Service Compost Facility, Craven County

Dear Mr. Dunham:

The North Carolina Solid Waste Section has completed review of your application for permit of the above referenced facility, submitted in July 2011 by your consultants, Gary MacConnell and A.R. Rubin. The following comments should be addressed to complete the application process:

1. Please change Craven Ag Services, LLC to Craven Ag Service, Inc. The Secretary of State's office does not have a listing for Craven Ag Service, LLC.
2. The application should be signed and stamped by a NC registered PE.
3. The application is incomplete in that it is missing all attachments. The zoning letter has not been provided.
4. The two separate sectioned reports should be combined to one.
5. Please provide a copy of the FEMA floodplain map, with the composting site area marked on the copy.
6. Note – The property line setbacks for Area 3 as shown on the site Plan drawing are OK, meeting the 100 foot setback requirement. Future Area 2, as shown on this drawing, does not meet the required 100 foot setback to the property line.
7. Address compliance with the soil texture, depth to seasonal high water table, and pad requirements of 1404(a)(10). How will the area be constructed to meet the requirements? Describe test pad construction and QA/QC testing. Groundwater monitoring for the operation will be required if the soil texture, as required in (B), is reconstructed.
8. Where is the nearest residence to the compost area, and what is the distance to the residence?
9. Are there any wells on the facility property?
10. The Solid Waste Section has concerns that the facility property may contain wetlands. Please provide information regarding the possibility of wetlands on the property.
11. Section G.7 – Please correct facility name, Stanley Environmental Compost Facility.
12. The list of wastes and compost feedstocks should be consistent throughout report – some lists don't include manure, shavings and animal waste from local livestock trailer wash,

- seafood processing waste (be more specific), tobacco dust, and wood ash and coal ash. Include in the list each specific vegetative agricultural/agribusiness waste.
13. Section 1.0 and 1.1 - What is the concrete bunker mixing pad? Describe the mixing bin. How is the mixing area arranged? Provide a sketch or drawing of the mixing area. Section 1.2 – Describe the initial receiving bay.
 14. Section 1.4 – Please provide more information on the sentence, “Feedstock mixing and blending shall be done on the concrete pad in the final phase, but on the compacted soil pad initially.” Is there a concrete pad proposed?
 15. How will unacceptable wastes found in the materials be handled, stored, and disposed?
 16. How will materials be measured onsite? Will wood or other materials be ground before composting? If yes, provide information.
 17. Section 1.1 - How will dry non-composted materials be kept dry before mixing? How will dewatered septage and FOG be stored before mixing? Show storage area on drawing. Provide more information on number and sizes of storage containers for each material. How will wet and dry compost materials be stored after closing for the day?
 18. Will the facility continue to accept feedstocks during inclement weather? If so, how will they be stored?
 19. Section 1.4 – The curing area is referred to as Area 4, but this should be Area 3.
 20. Temperature testing should be every 25 feet, instead of 20, 40, 60, and 80% of length.
 21. Text should state what the steps are if the required temperatures are not met for any of the testing times during the 15 day PFRP time period.
 22. Section G8 – If the tested fecal coliform fails, the compost should repeat the 131°F/ 15 day cycle, instead of up to 131°F/ 15 days.
 23. Section 2.0 – The hours of operation should be consistent with hours listed on page 2.
 24. Section 2.6.1 – Please change “should” to “will.”
 25. Section 2.6.3 – Leachate should not pool on the pads and windrow areas.
 26. Section 3.2 – Please confirm that the thermometer will be used in the operation.
 27. Section 5.2 – Please change “should” to “will.”
 28. Table 2 – The test method for foreign matter should list subparagraph (5). The test method for nitrogen, phosphorus, and potassium should be corrected.
 29. Please provide the information requested in .1405 (b)(1) (drawing or photo), (2) (zoning letter), and (4)(B) (soil evaluation). A copy of the soil evaluation used for the land application permit on this property should be sufficient for (4)(B).
 30. The existing land application permit does not approve the application of composting process water or leachate. A new permit to land apply on separate parcels would be required. Land application of Class B compost will require approval by the Solid Waste Section.
 31. Please describe how the age of compost (and 15 day requirement) is tracked for the various mixed compost batches.
 32. Please provide the process flow diagram, in accordance with Rule .1405(b)(7).
 33. Section 3 should list all equipment used for the composting operation.
 34. The application lists different time periods for compost time - 60 days, 21 days, 60 to 120 days, and 45 to 60 days. Also, the application lists different time periods for curing – between 120 and 270 days, between 2 and 3 months, 30 days, and 90 days. The time listed for composting and for curing should be consistent throughout the application.

35. The recommended width of bucket loader turned windrows is 10 to 15 feet.
36. Section 1.5 – How will C:N be measured, how often?
37. How will porosity be tested? How often will porosity and moisture content be tested?
38. What is the frequency of turning in Area 2 and Area 3?
39. In describing the design of the facility, include a description of the air emission and control technologies, addressing how odors and fugitive dust/particulates are controlled.
40. What is the maximum volume of onsite storage of materials in each area? What is the maximum total volume of materials onsite at any time?
41. Describe labels or information sheets provided with compost distribution in accordance with .1407(g).
42. Provide engineering plans and specifications in accordance with .1405(b)(9).
43. Address personnel training.
44. Provide a quality assurance plan, as described in 1405(c)(3).
45. Provide the fact sheet and process flow diagram, in accordance with 1405(c)(4).
46. Section 1.0 and 1.1 – Please provide more information on the infiltration basin. The text also referred to this basin as a wetland cell, which means it would have discharge; please clarify. Will runoff be allowed to infiltrate the ground surface? Will Areas 1, 2, and 3 be sloped to the surface water basin? Provide calculations to show that is sized to collect the runoff from a 25 year 24 hour storm. How will run-off be collected and returned to the composting area? Will the pond be lined? What is considered “clean” run-off?
47. Please provide a signed copy of the application for sedimentation and erosion control permit.
48. Drawings:
 - a. Site Plan drawing – Include Zone AE and Zone X in Legend.
 - b. Please remove “fill area” and “to be filled” from the drawing, unless a permit will be obtained to fill in the floodplain area.
 - c. The floodplain area is shown crossing into compost areas 3 and 4, please correct.
 - d. Site layout drawing – Please label/identify the boundaries of the compacted ash pad.
 - e. Show storage areas for each type of compost material before mixing.
 - f. Show any concrete areas such as the concrete bunker mixing pad. Show details of the mixing area.
 - g. Show access roads and details on traffic patterns.
 - h. Drawings do not show the surface water retention pond.
 - i. Drawings should provide existing contour elevation numbers. Provide proposed contours.
 - j. Please show benchmark(s) on site plan drawings.
49. Section G.11 – Typo - “present escape of odor.”

Please provide one paper copy and one electronic (pdf) copy, including drawings, of the revised application.

Mr. Billy Dunham
November 3, 2011
Page 4

If you have any questions on the above comments, please contact me at (919) 707-8255 or by email at donna.wilson@ncdenr.gov .

Sincerely,

A handwritten signature in black ink that reads "Donna J. Wilson". The signature is written in a cursive style with a large initial "D".

Donna J. Wilson
Environmental Engineer
Solid Waste Section

Enclosure

cc: Gary MacConnell, PE
A. R. Rubin