Subject: Re: comments for C&D Landfill 74-07
From: "David Garrett, P.G., P.E." <davidgarrettpgpe@mindspring.com>
Date: Thu, 23 Apr 2009 15:31:26 -0400 (GMT-04:00)
To: Donna Wilson <Donna.Wilson@ncmail.net>, David Garrett <david_garrett_pg@mindspring.com>, Judson Whitehurst <ejerecycle@yahoo.com>, Wayne Bell <gwbell32@yahoo.com>, Ed Mussler <ed.mussler@ncmail.net>, John Tucker <johnak@johntuckerpe.com>

Please see attached response to Item #7. THanks.

-----Original Message-----

From: Donna Wilson <Donna.Wilson@ncmail.net>
Sent: Apr 16, 2009 5:56 PM
To: David Garrett <david_garrett_pg@mindspring.com>, Judson Whitehurst <ejerecycle@yahoo.com>, Wayne Bell <gwbell32@yahoo.com>, Ed Mussler <ed.mussler@ncmail.net>, John Tucker <johnak@johntuckerpe.com>
Subject: comments for C&D Landfill 74-07

Dave - I've reviewed the responses to comments submitted on April 3 on CD, April 6 by email, April 9 by email (wetlands 2001 from Duncan Parnell), and April 9 by email (wetlands information from John Tucker). Please address the following comments:

1. Of the nine land deeds submitted, one deed appears to be for the Phase 1 property, and one appears to be for the entrance parcel/transfer station, but the other 7 deeds appear to be unrelated to the landfill. Please clarify. Please provide the land deed to the Phase 2 property. I believe it is most likely Deed book 1105, page 306.
2. The Phase 1 property, the Phase 2 property, and the added buffers on the east and west sides of Phase 2 must be recombined to one landowner, and one parcel. Please provide a copy of the two land deeds for the recombination property on the east and west sides of Phase 2, in which the property is combined with the Phase 2 property, and a copy of the recombination map recorded at the register of deeds for the recombined property. Phase 1 and Phase 2 property must also be combined because otherwise there must be a 200 foot buffer from the Phase 2 disposal area to the Phase 1 property line. The drawing submitted, adding the buffers to the east and west of Phase 2, was not signed by the surveyor.
3. Please show the direction of stormwater flow around the landfill base for Phase 2.
4. The drawing showing the location of the 0.05 acre wetland area in Phase 2B appears to locate the wetland area further north in the Phase than it is represented on the wetlands drawings. Refer also to drawing S4 from Nov. 2008.
5. Please provide revised engineering drawings – electronic copy and one paper copy (half size will be OK). The drawings submitted April 3 were missing drawings E3, EC2, X1, X2, X3, X4, and MP1. I haven't received the half size drawings as noted in the last response to comments.
6. Please provide page 3 of 4 and page 4 of 4 for the wetlands delineation maps that apply to the 2008 reevaluation boxed area. The drawings submitted on April 3 apply to the 2003 wetlands determination.
7. Revised page Section 5.5.4, Page 8 was not included in the last submittal, as the response to comments indicated. The previous comment is - Section 5.5.4 – The soil volume calculation and landfill capacity numbers listed are not consistent with the numbers listed in Appendix 2; please clarify.

Thanks, Donna

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Donna J. Wilson
Environmental Engineer

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CDLF Application_Section 5.5.4_page 8.pdf	**Content-Type:** application/pdf **Content-Encoding:** base64

5.5.4 Required Soil Volume Calculations

A soil volume analysis performed in part using AutoCAD Digital Terrain Model (DTM) methods is presented in Appendix 2. The following summary is based on an estimated footprint size of approximately 25 acres – the actual combined area of Phase 1 and Phase 2A is 23 acres. This analysis does not represent an actual earthwork balance. The intent of this calculation is to show the required soil quantities (in approximate terms) – the use of overstated quantities is conservative. Ample soil resources are on-hand in the adjacent soil borrow pit.

Total Airspace (includes 3' final cover thickness)	1,046,156 cy
Final Cover Required (25.27 ac. x 43,560 x 3' /27 x 1.1 x 1.15)	96,700 cy*
Net Airspace (total minus final cover)	949,456 cy
Intermediate Cover (assume 30% soil)	284,837 cy**
Base Fill Volume (fill depth varies up to 4 feet)	84,285 cy
Required Soil Balance (from adjacent borrow pit)	**465,822 cy**

*Use a slope factor of 1.1 (increases volume determined from planimetric area) and a 15 percent shrinkage factor from borrow site to field placement (compaction)

**Available cover soils are sand, expect relatively high soil loss into voids