

CIVIL/SANITARY/ENVIRONMENTAL ENGINEERS

SOLID WASTE MANAGEMENT

**Municipal
Services**

**Engineering
Company, P.A.**

SITE PLANNING/SUBDIVISIONS

SUBSURFACE UTILITY ENGINEERING (SUE)

December 10, 2012

John Murray, P.E.
Regional Engineer
NCDENR – Solid Waste Section
610 E. Center Ave., Ste. 301
Mooresville, NC 28115

DIN 18443 Rec.- 1/04/2013 Scanned
2/11/2013 JM

Re: Permit to Construct Phase 5
Iredell County Municipal Solid Waste Landfill Facility
Permit No. 4903MSWLF-1993

Dear Mr. Murray:

In response to your comment letter *Via Electronic Mail* dated November 20, 2012, we submit the following:

Response to DWM Comment Number 1:

We have added "Section 9.0 Deeds" to the text, to accommodate your request for the deeds.

Response to DWM Comment Number 2: (Engineering Plans)

The Phases have been added to Sheet 16 of 18 as requested.

Response to DWM Comment Number 3: (Engineering Plans)

The detail has been revised on Sheet 18 of 18 as requested.

Response to DWM Comment Number 4:

The 6" rip rap has been reduced to just around the extension of the riser pipe where it has one inch holes and just above mid way of the pipe. The maxim height of waste above any sump in Phase 5 is 47 ft. which is much less than the other pipe in the system. The rip rap that is above the spring line will have no affect on the pipe because it is not over the pipe. However, the worse that can happen is a penetration of the pipe and this will have no affect on the function of the pipe.

The rip rap will be hand placed so that it will not be dumped onto the liner. Additional protection has been place under the entire sump area. The additional protection consists of three layers of the 8 ounce non-woven fabric that is used for wrapping the other stone. Consequently, the liner is protected by the fabric surrounding the geocomposite which is also 8 ounce, the fabric surrounding the sump and the three layers of additional fabric.

This is shown in detail on the plans.

Response to DWM Comment Number 5: (Engineering Plans)

As requested, Sheet 18A has been added to detail the force main location in plan and profile views. We have also shown the location of the proposed underground electrical lines on this sheet.

Response to DWM Comment Number 6:

The camera can be driven thru the sump into the leachate line. The jet cleaning can also be driven into the leachate line from the sump as the sump is being cleaned. The reason is to be able to clean out the sediment and/or solids build up that has been washed from the upper sides to the sump where it can be pumped out with a vacuum truck and disposed in the landfill.

If a pump gets lodge in the sump for any reason and can't be removed thru the riser pipe, the sump area will have to be excavated and the pipe cut open to free the pump so that it can be maintained. The pump does not have enough line length, electrical or piping, to allow it to make its way to the reducer or the leachate line.

Response to DWM Comment Number 7: (Engineering Plans)

We have added the "Tie-In to Existing Liner Detail" to Sheet 17 of 18 to help clarify the connection process.

Response to DWM Comment Number 8: (Text-Page 209)

The text has been revised as requested.

Response to DWM Comment Number 9: (Text Page 320)

The text has been revised as requested.

Response to DWM Comment Number 10: (Text Page 324)

The text has been revised as requested.

Response to DWM Comment Number 11:

The text has been revised as requested.

Please find enclosed one (1) hard copy of the revised drawings and text. If you have any questions or need additional information please don't hesitate to give us a call.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., PA



Lisa H. Crawford
Designer

Enclosures