



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

October 1, 2007

Mr. Jonathan Pfohl, Environmental Specialist
Municipal Engineering Services Company, P.A.
PO Box 97
Garner, NC 27529

RE: Approval of Well Abandonment Procedures
Iredell County Subtitle D Landfill, Phase 4
Iredell County
Permit No. 49-03

Dear Mr. Pfohl:

The Solid Waste Section received your letter dated September 25, 2007, on behalf of Iredell Co., requesting a variance to condition 13, Attachment 3 of the Permit to Construct issued by the Solid Waste Section on July 5, 2007 for Phase 4, Iredell County Subtitle D landfill.

Condition 13, Attachment 3 of the Permit to Construct states:

"Prior to construction of cell(s) all piezometers, ground-water monitoring wells, and borings, located in the proposed cell, shall be properly abandoned by overdrilling first (exception of non-cased borings) and sealed with grout in accordance with 15A NCAC 2C.0113(b)(1), titles "Abandonment of Wells."

Under "Variance Request" (page 4 of your attached letter) you requested the following:

"MESCO requests, on behalf of Iredell County, due to the facts presented herein that a variance/modification of just construction condition 13 of Attachment 3 of the permit to construct be considered. The variance request is two parts, wells that have previously been abandoned correctly and wells that have yet to be abandoned".

The first part of the variance on page 4 of your letter you state (request):
"We request that due to a culmination of site specific extenuating circumstances including practical and financial aspects that all of the wells within the footprint that have yet to be abandoned due so in strict accordance with 15A NCAC 2C .0113(b)(1) without complete overdrilling but with further provisions enacted that will ensure an adequate seal."

You further state under this portion of the variance an alternative abandonment procedure as depicted on page 4 (items 1-8: attached letter for reference).

The SWS has no objection to the abandonment procedures you proposed (as stated on page 4 of the 9/25/07 variance request letter) pertaining to wells to be abandoned inside the footprint area, provided the wells were properly grouted at the time of construction according to 15A NCAC 2C.0108 (c)(6) and well abandonment procedures will be adhered to according to 15A NCAC 02C.0113(b)(1).

The second part of the variance request, pertains to wells that have already been abandoned. On page 5 of the letter you stated: *"We request that all wells that have been previously been properly abandoned prior to issuance of the permit to construct be exempt from the new overdrilling construction condition"*.

The SWS has no objection to this part of the variance, providing the wells, annulus were initially grouted properly during construction [i.e. according to 15A NCAC 2C.0108 (c)(6)] and these same wells were filled with grout during abandonment according to 15A NCAC 02C .0113(b)(1).

In conclusion, please confirm the integrity of well abandonment procedures performed at this site via a geologist, that includes a signed and sealed report by a geologist that includes well abandonment records and procedures used for both types of abandonment techniques according to categories "Unabandoned Wells" and "Previously Abandoned Wells" mentioned in your variance request.

*Please note that future abandonment procedures, in general, for wells, piezometers located within proposed footprint(s) of future unlined landfills at this site and other sites may require more stringent abandonment procedures [i.e. overreaming.(removal of casing, initial grout, and wells screens), and filled with new grout] just prior to phase cell construction.

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Mr. Jonathan Pfohl
Municipal Engineering Services Company, P.A.
Iredell County, MSW, Phase 4
Well Abandonment Variance
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If you have any questions, or wish to schedule a meeting to discuss the items referenced in this letter, please call me at 919-508-8524.

Sincerely,



Brian Wootton
Hydrogeologist
Solid Waste Section

cc:	Ed Mussler, P.E.	Solid Waste Section
	M. Wayne Sullivan, P.E.	MESCO
	Ethan J. Caldwell, P.G.	MESCO
	Larry Frost, P.E.	Solid Waste Section
	Central File	