

John Strang - BCO Hill Site - well decommissioning

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To: "Strang, John" <jrstrang@gw.dec.state.ny.us>
Date: 11/7/2012 8:06 AM
Subject: BCO Hill Site - well decommissioning
CC: "Joe Bianchi" <jbian@amphenol-aa.com>, "Chris Doroski" <cmd16@health.st...>
Attachments: Table 1 - well abandonment list.pdf; Hill site well location map.pdf

John,

As we discussed last week during our meeting on October 25, 2012, Amphenol proposes to decommission several ground water monitoring wells at the BCO Hill Site (Site # 413003). The following is our proposed plan for completing this effort.

Figure 1 (attached) illustrates the location of groundwater monitoring wells at the site. The wells proposed for decommissioning are located within the disposal area or hydraulically cross gradient from the disposal area and not part of the quarterly or annual monitoring program.

As documented in the Record of Decision (ROD), drilling logs indicate the subsurface is largely composed of glacial till that contains horizons of poorly sorted silt, sand and gravel. The till is underlain by siltstone and shale bedrock. Ground water occurs in three different overburden stratigraphic units and the bedrock. An unconfined (water table) aquifer occurs approximately 10 to 15 feet below ground level. An intermediate water bearing horizon in the unconsolidated zone (referred to as the intermediate overburden) is present between 25 and 50 feet beneath the surface. A deep water bearing unit is present in the unconsolidated zone (deep overburden) immediately above the bedrock between 45 and 90 feet below the surface. Groundwater in the intermediate and deep overburden is under semi-confined conditions. Ground water is also present in the bedrock unit.

Table 1 provides a summary of the wells proposed for decommissioning. Wells are between 20 and 85 deep and installed in either the shallow water table or deep, semi-confined, overburden water bearing unit. They are 2-inch I.D. and are constructed of PVC casing attached to slotted PVC well screen. All were installed in boreholes completed by hollow-stem auger drill methods. Either select sand pack was installed in the screen interval or the granular formation was allowed to collapse to 2 feet above the top of the screen. The wells were then grouted to the surface using a mixture of 90% Portland cement and 10% bentonite.

Monitoring wells proposed for decommissioning were recently inspected which revealed all wells are intact and their respective inner casings secure. All wells are equipped with protective steel casings anchored by a cement pad. None of the wells proposed for decommissioning are part of the BCO Hill site ground water monitoring program.

Based on the hydrogeology of the site, the depth of the wells and recent well inspections indicating that well casing seals are not compromised, we propose to decommission the monitoring wells using both over-drilling and by in-place grouting consistent with the procedures defined in section 2 and section 6 of the "Ground Water Monitoring Well Decommissioning Procedures; NYSDEC; August 2009 as follows:

- Wells 22 and 30 by over-drilling and removal well casing and screens followed by fully grouting of the resulting borehole
- Well 19, B-1, B-12 and B-13 by grouting in place. Protective casings will be removed subsequent to a

minimum of 24-hours of grout curing.

Following completion of the well decommissioning, a report will be submitted, summarizing the work efforts and providing completed Monitoring Well Field Inspection Logs (Figure 1; NYSDEC guidance) and Well Decommissioning Record (Figure 3; NYSDEC guidance).

We are planning on beginning this work on Monday 11/12/ 12. Should you have any questions regarding the proposed well decommissioning at the Boiler Room site, please do not hesitate to contact our offices.

Respectively,
Jim

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9/27/09

MONITORING WELL LOCATION MAP



DEEP OVERBURDEN
MONITORING WELL LOC.



Table 1.

Table 1

Monitoring Well Abandonment Specifications
Amphenol - Hill Site

Well ID	Well Material	Well Dia (inches)	Depth	Unit screened
19	PVC	2	36	Shallow Overburden
22	PVC	2	84	Deep Overburden
30	PVC	2	45	Deep Overburden
B-01	PVC	2	19	Shallow Overburden
B-12	PVC	2	20	Shallow Overburden
B-13	PVC	2	14	Shallow Overburden