John P. Cahill
Commissioner

**New York State Department of Environmental Conservation**
**Division of Environmental Remediation, Room 260B**
50 Wolf Road, Albany, New York 12233-7010
**Phone:** (518) 457-5861 • **FAX:** (518) 485-8404
**Website:** www.dec.state.ny.us

**To:** Ioana Munteanu, Region 2
**From:** Jim Harrington, Technology Section
**Subject:** Millenium Realty ( Brooklyn Commons) Sampling and Analysis Plan
**Date:** April 24, 2000

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Gardiner Cross and I have reviewed the Sampling and Analysis Plan for the Brooklyn Commons VCP submitted on March 31, 2000. For the most part, the plan generally includes what was agreed to in the technical meeting held March 16, 2000. We do have the following comments.

1. The proposal calls for compositing samples from every split spoon for each boring. We had significant discussion during the meeting on this topic. While we agree that discrete analysis of every split spoon is unwarranted and excessively costly, compositing is unacceptable because it dilution of the contaminated zone with the clean zone. We recommend analysis of two discrete samples per boring, selected in the field by screening and consensus between the sponsors on-site representative and the DEC representative.

2 * boring

2. Section 2.1.1 Midway through the first paragraph, the text states: "If residual coal tar is encountered, then the boring will be terminated to ensure that druilling opeations will not result in further downward migration of residual coal tar." For clarity, this should be revised to read "If residual coal tar is encountered, then the boring will be terminated AT THE HOLDER BOTTOM to ensure that drilling opeations will not result in downward migration of residual coal tar OUT OF THE HOLDER. If we terminate the boring immediately, we won't get a good idea of how deep the holder is, how deep the tar is or what kind of fill materials are present.

3. Section 2.1.2 states: "Monitoring wells MW-2, MW-3, and MW-4 are intended to provide product accumulation information near each of the gas holders. In addition the three gas holder wells will be monitored for the presence of non-aqueous phase liquid (NAPL) which may be present within or may have migrated from the gas holders." However, these monitoring wells are not shown within the holders. The original discussion involved a well in each holder as well as one well outside of the holder in the vicinity of the holder. We are not so interested in measuring dissolved phase inside the

holder but determining if mobile tars exist inside the holder.

4. Section 2.1.5 is ambiguous. The lead sentence refers to two investigative borings in the northwest portion of the site, but references location numbers DP-11 through DP-14 ( four locations) for them. Figure 3 also shows four locations, and that is the number we agreed on in the technical meeting.

5. As discussed during the technical meeting, we recommend that stainless steel bailers be used for DNAPL bearing wells due to adhesion to the well casing, while disposable plastic bailers can be used for dissolved phase samples. The principal value of the stainless steel bailer is its weight, and thus the ability to unambiguously determine when you have reached bottom. The SAP document has this recommendation reversed.

6. Our recommendation relative to not approving the SAP until aVCP application is submitted stands.

If there are any questions, please do not hesitate to ask Gardiner or myself.

cc Tom Lang
Jim Van Hoesen