

March 29, 2006
Drinking Water Quality Institute
Treatment Subcommittee

Present from NJDEP: Eileen Murphy, Sue Shannon, Diane Pupa
Teleconference: Carol Storms, Paul LaPierre

The group provided input on the interim report from Black & Veach, a literature review on drinking water treatment options for ground water systems with contamination by unregulated organic chemicals.

Removal efficiencies should be discussed in more detail. How do we rectify poor removal efficiencies with multiple contaminants for removal (i.e., MTBE plus semi-volatiles).

Issues that need more attention in the report:

- Physical logistics for ground water systems such as space – what are the space constraints with the various technologies discussed?
- Economics
 - Energy use especially if several treatment systems are needed in sequence (pressure gradient upkeep, etc.)
 - Space requirements – variable contact times – holding tanks and process equipment.
 - Multiple remote sources and/or variable source background quality require multiple treatment systems/units.
- Engineering requirements
- How to measure removal efficiencies?

How do existing regulations impact a system's ability to do this? Describe constraints of multiple regulations (especially oxidative processes)

- Discuss disposal issues (will treatment produce a waste stream?) Will treatment produce unanticipated chemical reactions and/or (harmful) by products.
- Combined treatment processes need further review. What is a desirable order of treatment when combined systems are used.
- Impact of inserting treatment process into an existing treatment regimen.