

Bureau of Corrective Actions Remediation/Certification Branch

RECORD OF COMMUNICATION	PHONE/CONFERENCE CALL	MEETING	FIELD/SITE VISIT	OTHER
To: Diane Groth, NJDEP	From: Mary Siders		DATE: 12-4-08	TIME:
SUBJECT: Vapor Intrusion, NJDEP's PCE screening and rapid action levels, and DuPont PCE site				
<p>SUMMARY OF CONVERSATION: Diane Groth (NJDEP) returned my call regarding the approach of the NJDEP to vapor intrusion sites. Specifically, I had asked her about the NJDEP's "screening level" of 1 to 3 µg/m³ for PCE in indoor air (see Table 1 in NJDEP VI guidance, revised March 2007) and the NJDEP's "rapid action level" of 30 µg/m³ for PCE in indoor air (see Table 2 in the same March 2007 guidance).</p> <p>Diane explained that the NJDEP uses the detection limit (1 to 3 µg/m³ for PCE) as their "screening level" for indoor air, although she acknowledged that background was an issue at these concentrations. When I asked her about the NJDEP's "rapid action level" of 30 µg/m³, she said that this was the level at which additional investigation and/or home mitigation would be conducted. She explained that the NJDEP considered that just remediating groundwater would be too slow a remedy for homes with PCE at or above 30 µg/m³.</p> <p>When I asked Diane about the DuPont site, she said that the decision to mitigate all homes in which PCE was detected (i.e., PCE > 1 µg/m³) was basically DuPont's decision. So, it would seem that -- like the Raymark site in CT -- DuPont wanted to limit liability for health-related concerns by mitigating every home overlying the plume.</p>				
<p>CONCLUSIONS, ACTION TAKEN OR REQUIRED: Conclusion: The NJDEP's strategy for vapor intrusion and PCE in residential indoor air is very similar to ours. At NJ sites where vapor intrusion is a potential problem, the NJDEP collects indoor air samples (one per home), and also one subslab sample (which we didn't do). The NJDEP recommends additional investigation and/or home mitigation if indoor air is greater than the rapid action level (RAL) of 30 µg/m³ for PCE. This concentration is virtually identical to the NDEP's health-protective level of 32 µg/m³, which was used to recommend home mitigation if this value was exceeded.</p> <p>Similar to NDEP's strategy, the NJDEP uses a "two-pronged approach" for vapor intrusion sites:</p> <ol style="list-style-type: none"> 1. Home mitigation if the indoor air sample exceeds 30 µg/m³ PCE; this is the immediate action taken to reduce exposure by truncating the exposure pathway. 2. Long-term remediation of groundwater to ultimately reduce or eliminate the source of the vapors. <p>The differences between our approach and NJDEP's approach include:</p> <ol style="list-style-type: none"> 1. NJDEP collects a subslab sample; we haven't, because based on information presented at VI conferences, there is much greater variability in concentrations in the subslab concentrations than in indoor air, which is relatively well-mixed. 2. NJDEP established a "screening level" based on the detection limit; this limit for TO-15 was 3 µg/m³. However, NJDEP doesn't mitigate the home unless PCE concentration exceeds their "rapid action level" of 30 µg/m³. The NDEP has not established a "screening level" value; however, this would effectively be our reporting limit, which averaged 5.6 µg/m³ for indoor air samples from the Maryland Square PCE site. 				