



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 POST OFFICE SQUARE
BOSTON, MA 02109-3912

May 14, 2012

Bruce Thompson
de maximis, inc
200 Day Hill Road
Windsor, CT 06095

RE: Vapor Intrusion Study Approval
Solvents Recovery Service of New England, Inc (SRSNE)

Dear Mr. Thompson,

On January 19, 2011, EPA approved the findings of the vapor intrusion study that was performed by the Settling Defendants pursuant to section V.C.1.k of the RD/RA SOW, effective March 26, 2009, on the condition that two additional rounds of data confirmed those findings. The purpose of the study was to evaluate the potential for vapor intrusion across the SRSNE-related groundwater plume, with particular attention being given to occupied commercial buildings on Queen Street that are adjacent to the site.

EPA has reviewed the results of the additional sampling, as presented in technical memoranda dated June 6, 2011, and December 2, 2011. EPA has also evaluated the data taking into account recent changes in toxicity for TCE, PCE and vinyl chloride (see enclosed), and has made the determination that the Settling Defendants have satisfied the conditions of approval. No further sampling of subslab soil gas and indoor air is required at this time. These wells will remain in the groundwater monitoring network and site conditions will be re-evaluated during five-year reviews.

I can be reached at 617-918-1348, should you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Karen Lumino".

Karen Lumino, RPM
ME/VT/CT Superfund Section

Enclosure

cc: Gretchen Muench, EPA
Ruthann Sherman, EPA
Tom RisCassi, CTDEP

Evaluation of SRSNE Groundwater Screening Data
May 2012

EPA performed an in-house evaluation of data collected for the vapor intrusion study at SRSNE, taking into account the recent changes in toxicity for TCE, PCE and vinyl chloride. An assessment of each follows.

Wells within 100 feet of commercial buildings on Queen Street

- MW-501C Four rounds (Feb & May 2010, Mar & Sept 2011) either detected below screening levels or NDs for TCE, PCE and vinyl chloride with a detection limit of 0.5 µg/L
- MW-903S Four rounds (Feb & May 2010, Mar & Sept 2011) either detected below screening levels or NDs for TCE, PCE and vinyl chloride with a detection limit of 0.5 µg/L
- MW-904S Four rounds (Feb & May 2010, Mar & Sept 2011) either detected below screening levels or NDs for TCE, PCE and vinyl chloride with a detection limit of 0.5 µg/L, except for one TCE detection at 0.2 µg/L (May 2010 round)
- MW-910S Three rounds (June 2010, Mar & Sept 2011). For 2010 sampling round, PCE detected at 0.22 µg/L, below screening level; TCE detected at 1.6 µg/L, above cancer screening level of 1.02 µg/L and non-cancer screening level of 0.5 µg/L for HI of 0.1 for resident. This TCE detection is below non-cancer screening level of 4.96 µg/L for HI of 1 for resident and below all commercial/industrial screening levels. NDs for TCE, PCE, and vinyl chloride in 2011 sampling results.

Based on this screening assessment, MW-910S is the only well within the 100-ft boundary where one TCE detection is slightly above residential screening levels but below commercial/industrial screening levels. Even though the detection exceeds screening levels, if a VI risk assessment is done based on this detection for a resident, the VI risk results would be 1.6E-6 and HI of 0.32. This is within the acceptable risk requirement.

Wells greater than 100 feet from commercial buildings on Queen Street

- P-101C Three rounds (Mar, May & Sept 2011). NDs for PCE with detection limit of 0.5 µg/L. TCE was detected at 0.15 µg/L - 0.32 µg/L, below residential screening levels. Vinyl chloride was detected at 13 µg/L - 18 µg/L, exceeding residential screening level of 0.15 µg/L and commercial/industrial screening level of 2.54 µg/L (based on target cancer risk of 1E-6). Benzene was detected at 3 µg/L - 4.9 µg/L, below the commercial/industrial screening level of 6.9 µg/L based on target cancer risk of 1E-6 but exceeds the residential screening level of 1.36 µg/L for target cancer risk of 1E-6.
- P-102C Four rounds (Feb & May 2010, Mar & Sept 2011). NDs for PCE and vinyl chloride with a detection limit of 0.5 µg/L. One detection of TCE at 1.2 µg/L exceeds residential screening levels.

Wells P-101C and P-102C have detections exceeding screening levels for TCE, benzene and vinyl chloride. TCE exceedances will also result in risks within the acceptable risk range due to the low levels detected. The maximum detected level of 4.9 µg/L for benzene would result in residential risks within the acceptable risk range due to low levels detected. The maximum detected level of 18 µg/L for vinyl chloride would result in 1.2E-4 risk for residential exposure or 7.1E-6 for commercial/industrial exposure. The detection limit of 0.5 µg/L for vinyl chloride exceeds the 10E-6 risk screening level of 0.15 µg/L; detection limit of 0.5 µg/L is about 3.3E-6 risk. So for all those vinyl chloride NDs at detection limit of 0.5 µg/L, it can be conservatively assumed that the cancer risk would be at about 3.3E-6.