



July 15, 2011

Ms Shirley Carlson
Shorewood Queensway Dry Cleaners (Shiridon, Inc.)
4300 North Oakland Avenue
Shorewood WI 53211

Subject: Vapor Intrusion Assessment Status Report Shorewood Queensway Dry Cleaners
4300 North Oakland Avenue Shorewood, WI

FID: 241094590
BRRTS: 02-41-552089

Dear Ms Carlson:

The Wisconsin Department of Natural Resources ("the Department") has reviewed the Vapor Intrusion Assessment Status Report submitted by Enviroforensics on June 14, 2011. In order to further evaluate the extent of vapor intrusion for the protection of health and the environment for the buildings/properties affected by the release of tetrachloroethylene (PCE) into the subsurface, the following additional measures should be conducted:

1. Indoor air testing in the basement and 1st floor for the building located at 1808 East Marion Street. This is based on the nearby soil gas results (see enclosed Figure 4) for SG-10 (PCE = 496,000 ug/m³ and TCE = 41,400 ug/m³) and SG-9 (PCE = 267,000 ug/m³ and TCE = 1,450 ug/m³). Target soil-gas screening-levels for PCE = 410 ug/m³ and TCE = 1,200 ug/m³. Although the sub-slab results indicated PCE and TCE are below the residential sub-slab concentration values (see Figure 5), vapor intrusion could be occurring through the basement walls via the soil pathway and needs to be evaluated.
2. Indoor air testing on the second floor of the building located at 4320 North Oakland Avenue must be conducted based on the sub-slab vapor analysis (see Figure 6) for SSV-2 (PCE = 4,100 ug/m³). Target sub-slab gas concentration for PCE = 210 ug/m³.
3. An additional sub-slab vapor sample should be collected from SSV-3 to account for potential temporal variations in sub-slab vapor quality beneath the 4320 North Oakland Avenue space.

Temporary Soil Vapor Mitigation System

A temporary soil vapor mitigation system (e.g. a sub-slab depressurization system) is to be designed and installed for the businesses located at 4312, 4314, and 4316 North Oakland Avenue with Departmental approval before installation. This is based on the results of the sub-slab vapor evaluation for these three businesses and the businesses at 4320-4322 North Oakland Avenue. The sample points exceeded the target sub-slab gas concentration values as follows (see enclosed map Figure 6 for locations):

SSV-1	TCE = 866,600 ug/m ³	Target = 210 ug/m ³
	PCE = 15,100 ug/m ³	Target = 610 ug/m ³
SSV-2	TCE = 4,100 ug/m ³	Target = 210 ug/m ³
	PCE = 146 ug/m ³	Target = 610 ug/m ³
SSV-3	PCE = <188 ug/m ³	Target = 210 ug/m ³
	TCE = n/a	Target = 610 ug/m ³

Due to the presence of multiple multilevel, residential structures in the vicinity of the site, the design of the mitigation system should incorporate a schedule for exhaust sampling and analysis. A contingency for the modification of exhaust stack height or placement, or exhaust treatment should also be included if the results of initial testing indicate that it is necessary.

Please note that it is the Department's position that "*Sub-slab depressurization systems are not remediation systems and should not be considered as a remedial action that adequately addresses the source of the vapor intrusion pathway*" [Wisconsin PUB-RR-800 (pg 17, 3rd P)]. By design, sub-slab depressurization systems are intended to create a relative negative pressure in the space between the concrete floor and the underlying materials with a plumbed fan or blower. Although vapor-phase carbon treatment may be necessary on system effluent stacks for aesthetic purposes in this scenario, sub-slab depressurization systems do not physically remove significant contaminant mass. As such, it is the Department's objective that one or more sub-slab depressurization systems installed at the site would be an interim action only to eliminate the threat of vapor intrusion while a final remedy and closure approach is developed.

The Department appreciates the actions you have taken to investigate and remediate the contamination at this site. If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. ~~Future correspondence should be sent directly to the Remediation and Redevelopment Program Assistant Vicky Stovall (414-263-8688) at the above address.~~

Sincerely,



John J. Hnat, P.G., C.P.G.
Project Manager/Hydrogeologist
Southeast Region
Remediation and Redevelopment

C: Jeff Carnahan, Enviroforensics
William J. Mulligan, Esq., Davis & Kuelthau
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