

**Vapor Intrusion Subcommittee of the Cleanup Standards Scientific Advisory Board
Meeting Minutes June 21, 2004**

The Vapor Intrusion Subcommittee held a conference call on Monday June 21,2004 at 9:00 a.m. in the Rachael Carson State Office Building (PADEP) in Harrisburg. The following subcommittee members that were present for the conference call:

Annette Guiseppi-Elie	Dupont
Bruce Fishman	RBR Consulting Inc.
Charles Campbell	Science Applications International Corporation
Kevin Reinert	Rohm and Haas Company
Gina Plantz	Severn Trent Laboratories
Robert McGlade	Weston Solutions
Nick Palczuk	Weston Solutions
John Twardowski	DEP
Ted Loy	DEP
James Shaw	DEP
Sam Fang	DEP
Randy Roush	DEP
Cydney Faul-Halsor	DEP

Vapor PQLs/RLs

A list of air PQLs/RLs for compounds on the TO-15 and TO-14 list were provided by Gina Plantz and Barb Hall for review and discussion. Gina Plantz indicated that the PQLs/RLs were the lowest point on a calibration curve, running the appropriate calibration standard. The RLs are basically PQLs and are lab specific with some deviation from lab to lab. Jim Shaw explained how PQLs are defined under Act 2 with a relative standard deviation of less than 30%. Kevin Reinert suggested that it would be difficult to publish a list of PQLs, however it may be better to publish a relative list of PQLs noting the Act 2 regulation.

- Jim Shaw indicated that he would do a brief write up on PQLs with respect to the definition in the Act 2 regulation.

Groundwater/Indoor Air Site Data

Site data was provided by Robert McGlade (Weston Solutions) as a result from an email broadcast requesting groundwater/soil contamination less than 5 feet vertically from a receptor in conjunction with collecting soil-gas/indoor air samples. Data was distributed

to the members for review. Mr. McGlade gave a summary of the site characterization data and how the indoor air sampling was conducted at 104 residences. Some of the residences had basement sumps that have water part of the year. He indicated that soil-gas sampling was not an option due to the nature of shallow groundwater. The members asked if it were possible to separate when groundwater levels would be below the sumps (when dry), and correlate that to the indoor air sampling data. Mr. McGlade indicated that he would take a closer look at the data and see if he could make a determination. Mr. McGlade offered to give a presentation of the data at future subcommittee.

Tobyhanna Data

The Tobyhanna project manager provided data from the Tobyhanna site to R. Roush for distribution to the members. R. Roush gave a brief summary of the site characterization data with respect to groundwater and soil-gas/indoor air sampling. R. Roush indicated that this case does not help with the de minimis issue, because the groundwater is 28 feet below the building. He noted that there was an interesting observation that there were more PCE detects in the indoor air sampling during the June sampling event compared to the February sampling event. The soil-gas data was rather consistent between the two sampling events in June and February. Cydney Faul-Halsor mentioned that there were on-site and off-site analysis conducted for both indoor air and soil-gas and that the building was slab on grade construction with 4 feet of modified stone underlying it in some areas. Bruce Fishman asked if the indoor air and soil-gas data could undergo a statistical analysis to determine if it is significantly different.

- Sam Fang will conduct a statistical analysis of the data that R. Roush will provide to him.

De Minimis Issue

After reviewing the site characterization data from the site cases that were presented, it was decided by the members that there is a need for more data to make a determination. Kevin Reinert asked if another email broadcast could be sent out again to gather more site information.

- R. Roush will coordinate with Dave Hess to send out an email broadcast to the large client database again requesting groundwater/soil contamination less than 5 feet in conjunction with soil-gas and indoor air sampling.

Positive Pressure Mitigation

In the last conference call, the question was raised regarding the effectiveness in applying positive pressure to a building to eliminate the vapor intrusion pathway. Sam Fang contacted William Dreibelbis to see if he had any data that indicated that this mitigation

measure would eliminate radon exposures. William Dreibelbis email response indicates that there is no practical way to assure such a system operates properly for any extended period of time. Operating a system like that would be expensive as a stand-alone measure from an energy conservation standpoint and would not eliminate the vapor pathway but reduce exposure.

NYDEC Decision Matrix

Annette Guiseppi-Elie sent the NYDEC Decision Matrix to members for review and discussion. Annette indicated that the matrix is really driven by sampling and looking for outdoor triggers before going inside to conduct air sampling. It requires a sample to be collected from the basement and one in the living quarters. The matrix does use the 0.01 attenuation factor and is consistent with our guidance document.

Annette mentioned that EPA is compiling a large set of indoor air data from sites, however this has not been released to the public. The Endicott data may be available on-line.

- Annette will send out information so that members can get Endicott data, if possible.

Comments from members on Seasonal Considerations for Collecting Indoor Air and Soil Gas Samples

Kevin Reinert indicated that before the document (authored by C. Campbell) could be finalized, that additional data was needed (e.g., determination of why Tobyhanna data does not fit the seasonal sampling paradigm).

The next call has been tentatively scheduled for August 4th with the subcommittee meeting in person in September.

The call ended at 10:12 AM

- Indicates Action Item

R. Roush
22 June 2004