

Cleanup Standards Scientific Advisory Board Meeting Minutes
September 24, 2004

CSSAB Members Present:

Kevin Reinert	Mark Urbassik
Craig Robertson	Ronald Buchanan
Annette Guiseppi-Elie	Thomas Yohe
	William Dreibelbis
Donald Goodman	Ronald Neufeld

Environmental Protection Staff Present:

Thomas Fidler	David Hess
James Shaw	Samuel Fang
Randy Roush	Pamela Trowbridge
Thomas Leaver	Kurt Klappkowski
Thomas Mellott	

Guests Present:

Kenneth Okorn - Earth Tech
Michael Meloy - Manko, Gold, Katcher & Fox
Sean Damon - Langan Engineering
Tim Wolfson - Babst Calland
Brian Magee – AMEC Earth and Environmental
John Clarke - PennDot
Joe Reinhart - Babst Calland
Kathy Zvarick – Environmental Standards Inc.
Matt Blanchard – Earth Tech
Craig Shamory – PPL Services Corp
Barbara Hall – Severn Trent Labs
Harris Brody - Accredited Environmental Technologies
Chuck Campbell - Science Applications International Corp.
Jeff Goudsward – Penn Environmental & Remediation

The meeting was called to order at 9:30a.m. A motion to approve the minutes of the May 2004 meeting was seconded and approved. Kevin Reinert, Chairperson, asked Dave Hess what Board meeting dates for 2005 were critical to DEP. Dave said two meetings, May and November, should be sufficient for 2005. Kevin asked Dave to follow-up with scheduling meetings in May and November of 2005. Kevin stated that there were some issues to be handled by the Risk Assessment Subcommittee that would be coming out hopefully by the end of the year. Kevin said the Vapor Intrusion Subcommittee will be making a formal report by December of this year, but additional data will be collected over the next year that the Board may look at. Scott Pachnick, DEP

Legislative Liaison office, discussed vacant member appointments. Three appointments are now pending through the legislature, but there have been no appointments to date. The DEP Legislative Liaison office has instituted guidance on filling advisory Board vacancies department wide and it is hoped that using such guidance will provide more timely appointments in the future.

Kevin Reinert presented the report from the Risk Assessment Subcommittee and thanked the members of the Subcommittee. He also asked for other interested persons to be members of the Subcommittee. The Subcommittee was tasked to address secondary *maximum contaminant levels* (SMCLs) and develop the MSC for resorcinol. Dave Hess mentioned that Pennsylvania was running into some issues with taste and odor in groundwater. The Department has interpreted the statute to mean that both primary and secondary MCLs were by default the Statewide health standard MSC. In addition, SMCLs are referred to under the site-specific standard Section 250.403(c) as being applicable at the point of use. Dave Hess stated the difference that would be proposed now is that the Department wants to incorporate all the secondary parameters whether or not they were concentration specific or not, like color or odor. Kevin said if a taste and odor problem is attributable to a release on the site then that should be addressed. Annette Guiseppi-Elie brought up the point that the other numbers under Act 2 are risk based and the numbers for SMCLs are not, therefore, the Agency would have to address them as policy rather than regulation. Some of the SMCLs are listed as a breakout table as part of the Groundwater Table. Some have said the SMCLs can't be *medium specific concentrations* (MSCs) or they would be in the Table, others have said they are in fact MSCs and are just in a separate Table and that's the issue that needs to be resolved. Dave Hess explained that DEP could strip the new language out and clarify how the older language was to be applied in guidance and share that with the Board. A discussion occurred concerning historical considerations for SMCLs and how they should or should not be included. It was discussed that SMCLs are important but not risk based and can impact the quality of groundwater but would not be considered an MSC. Thomas Yohe made a motion to delete the reference to SMCLs as a regulation and to refer to them in guidance. It was amended to recommend to the Department to do so under the site-specific standard as well. Annette seconded this motion, and the motion was carried.

There is concern within the state that a formal MSC for resorcinol should be put together. The Risk Assessment Subcommittee has worked on resorcinol and a range for the resorcinol reference dose (RfD) of .5 to 2.0 mg/kg/day could be derived based on a range-finding study on resorcinol. This range-finding study helped to set the doses for the two-generation (2G) chronic study, and the report for that study is expected to be available in Spring 2005. TERA will have a meeting in Harrisburg on November 17-18 to discuss the current data on resorcinol. This will precede the report of the 2G drinking water study in rats. Kevin stated that if the Board would accept an RfD of 0.5 mg/kg/day, which is on the low end of the range, the MSCs would be very similar to that of methanol, because oral RfD for methanol is 0.5 mg/kg/day also. Based on this Kevin explained that the soil direct contact numeric values for resorcinol would be 110,000 mg/kg for residential and 190,000 mg/kg for nonresidential. The soil-to-groundwater numeric values would be 250 mg/kg for residential and 700 mg/kg for nonresidential. The groundwater MSCs for resorcinol would be 18 mg/L for residential and 51 mg/L for nonresidential. If the 2G study would come out less toxic for resorcinol, these numbers

would be even higher. The Risk Assessment Subcommittee had some questions concerning the range-finding study and the 2G study. Brian Magee from AMEC was present in the meeting to address these questions. He indicated that WIL Research Laboratories, Inc. was doing the 2G study and the doses applied in the study were 120 , 360 , 1000 and 3000 mg/L. Kevin summarized that the study was being run at a higher level. He indicated that the 360 mg/L level and higher could be the NOELs ,which provides support to what the Subcommittee was saying regarding the resorcinol RfD of 0.5 mg/kg/day calculated based on the current data. Kevin said the next call of the Subcommittee would probably be after the TERA meeting in November but before the next Board meeting. A written Risk Assessment Subcommittee report on the resorcinol RfD and MSCs will be available in December 2004 for the Board review.

The Attainment Subcommittee chair, Mark Mummert, discussed the July Subcommittee meeting. Concerning separate phase liquids, some people on the Subcommittee conference call were concerned about the way the amount of separate phase liquids (SPL, a.k.a. nonaqueous phase liquids) is calculated and the requirements put on Act 2 sites for cleaning up SPLs. It was expressed that clear guidance, where a number can be set for cleanup to get closure, is needed. The Subcommittee then discussed what is needed to remove SPL. Others are also working on guidance documents on SPL so the Subcommittee plans to wait to see what some others do before setting up our own procedures. The Subcommittee wants to avoid what would be a site-specific type analysis and cleanup for every SPL site and not to dictate if there is a simpler way to do the cleanup. Dave Hess asked if the risk is based on the toxicity of the substance or the ability to remove the substance. Mark replied that it would be some of both and that some of the risk is the potential to migrate. Tom Fidler said he wanted some expertise in reviewing the process and recommendation on how best to incorporate either within the Department's Technical Guidance Manual or within any aspect of the program. Tom mentioned that he would like to hear from the Board on how they believe the Program should be proceeding regarding SPL. Tom stated that the question on SPL becomes whether the material needs to be removed based upon risk that may be posed by migration or if you do chose to remove it what the feasibility is to remove it. Under the site-specific standard we have not come up with a method to better evaluate whether in fact an adequate removal has been achieved on site. Tom said this is basically necessary to do under site-specific only if modeling shows an unacceptable exposure.

The Vapor Intrusion Subcommittee reported next. The Subcommittee is examining the need for sampling in various situations. First, whether seasonal sampling is preferred over other approaches, secondly, the need for sampling in unoccupied buildings or buildings with positive pressure design. Next the Subcommittee discussed the issues of practical quantitation limits (PQLs) for vapor sample analysis. Annette Guiseppi-Elie suggested that establishing another table for PQLs within the guidance may not be advisable. There was consideration given to have labs submit calibration data in lieu of establishing PQLs in guidance. Annette expressed concern over the volume of reporting this represented and asked if it could be given to the Department electronically. Dave Hess said yes. The Subcommittee also looked at the issue of de minimis levels in the media less than 5 feet, as a way of screening out of the current vapor intrusion guidance process. The members were unable to come up with screening values. Instead, the Department will compile data on sites and present to the Subcommittee so as to allow

for empirical analysis of de minimis levels at some future date. Kevin stated that the Subcommittee would present to the Board a summary of the Subcommittee's analysis and conclusions in December.

Dave Hess discussed an idea of establishing qualifications of persons submitting reports under the program. He explained that currently the only consideration given is to persons having professional license in Pennsylvania. Professional licenses are available for the engineering and geology professions which are applicable to engineering design work and site characterization and interpretation respectively. Dave stated that since the professional geologist licenses are made based on general qualification in the field and not specific to environmental qualification, it may be appropriate to have additional required qualification for this specialized work. One of the ideas the Department is considering is promoting the completing of ASTM phase I and II environmental assessment training. In addition, the Department is considering membership in professional organizations for engineers and geologists. The discussion that followed did not favor imposing requirements on these professions beyond that required for licensing. Dave Hess stated that some required reports in the program are best prepared by persons with qualifications other than engineering or geology. An example of this is risk assessment report preparation. Dave stated that it may be appropriate for the Department to acknowledge membership in good standing in some associations, representing in part, documentation of qualifications to prepare such a report. He stated as an example that membership to the American Board of Industrial Hygiene required professional qualifications and testing. Mark Mummert agreed that such qualifications may have merit for those preparing risk assessments. There was discussion of the broad range of minimum qualifications of various associations and the caution needed in accepting memberships in general. Dave Hess said the Department may look at these associations individually and may also consider having individual qualifications of preparers to be submitted with the associated reports. Beyond the reports submitted by licensed professionals, some form of qualification must be established for preparers of other reports, including risk assessment, vapor intrusion, and ecological assessment.

Dave Hess discussed proposed changes to the Chapter 250 regulation. He said that most of what is included in the current draft has been presented to the Board in previous meetings. By the December meeting, the Board will be asked to formally provide a recommendation of the draft regulation amendment. Two areas in the draft that have not been discussed with the Board were presented by Kurt Klapkowski, DEP Regulatory Counsel. First, the Department is considering fee increases for submissions of reports. This is being proposed in this amendment. A ten-fold increase (with the exception of small sites) is being considered. Increases will also be tied to the *consumer price index* (CPI). Secondly, the Department is examining the relationship between §91.33 requirement for reporting of releases (affecting the waters of the Commonwealth) and reporting under Act 2. There may be cases where reporting under Act 2 could satisfy or take the place of the §91.33 requirements. The proposed amendment opens this issue for public comment.

In public comment, Kathleen Zvarick, of Environmental Standards, Valley Forge, stated that most formal certifications (PE, PG, CIH, etc.) have testing requirements that are, at the most, 10% related to risk assessment and so they will not make for a reasonable means of assessing a risk assessors ability. Reliance on these types of

certifications will likely result in the disapproval of experienced risk assessors. She encouraged DEP, instead, to base Department requirements for risk assessors on references, past DEP submittals, years of experience, education, attendance at DEP training sessions, etc. There was also public comment and discussion as to concerns over extended application of deed acknowledgements as proposed in the draft regulations. It was advised that the Department consult real estate lawyers to better understand these concerns.

The meeting adjourned at 2:15pm.