

Remedial Standards Stakeholder Committee

Meeting summary for June 10, 2014 with external stakeholders

1pm in Public Hearing Room (PHR) of 401 East State Street

Attendees: see attached list

T. Sugihara (TS) welcomed the audience of 19 external stakeholders plus 3 additional external stakeholder via Go-To-Meeting as well as 14 New Jersey Department of Environmental Protection (Department) personnel. In order to accommodate scheduling limitations, the Status of Issues Under Review by the Department is to be done first. Administrative topics and the presentations on the vapor intrusion pathway standards and the dioxin standards will follow.

Status of Issues Under Review by the Department:

1. David Haymes (DH) was introduced to address the question from stakeholders regarding holding small group meetings within the standards committee in order to more intensively investigate technical issues that they feel are important to the standards process. DH stated that upper management does not want to delay the process we are currently following by breaking up into smaller committees. He said that Department would be willing to entertain topics brought up by stakeholders after the pathway meetings are completed and the proposed standards presented and discussed.

The concern was expressed that the time allowed for feedback at these monthly meetings was limited. Could written comments be submitted to Department to allow for more thorough consideration of the issues? Because this input could change the direction of the standards development, an opportunity to provide feedback prior to September is appropriate. DH indicated the submission of items to be discussed would be acceptable. Note: There was a subsequent clarification email from DH on this matter in response to concerns voiced by the external stakeholders to the Department following the meeting.

2. On other continuing issues, the Department's justification of its total versus individual related compounds approach will be presented at the next meeting.

3. A presentation is also being prepared to raise the issue of mutagenic mode of action for consideration by upper management.

4. Allan Motter (AM) was then introduced to cover a prior stakeholder question regarding the overlap of the VI and inhalation pathways. The presentation indicated the two pathways address different/distinct environments. The vapor intrusion (VI) pathway focuses on the indoor environment and employs a model where the contamination originates in ground water and culminates in a direct vapor measurement of sub-slab and indoor environments. The inhalation

pathway assesses both volatile and particulate forms of contamination in outdoor air that originate from a soil source. Both approaches are consistent with the United States Environmental Protection Agency (USEPA) including the USEPA reasonable maximum exposure assumptions.

Lisa Campe (LC), LSRPA stated that the discussion didn't really address her point, which is that it's not realistic to assume 24 hours per day for outdoor exposure, and that presence of a contaminant does not make risk, but actual exposure does. USEPA uses risk based concentrations for screening levels at the risk assessment stage, and as a starting point to later refine standards. So USEPA uses their numbers as triggers and input to their conceptual site model, not as standards. Why can't the Department consider doing it that way?

AM: The model does, in fact, take into consideration a decreasing trend in contaminant levels over time. Also, as per USEPA Region 2, the USEPA does take the inhalation pathway into account, but it usually is not the driving factor.

LC stated that information still doesn't negate the point of using the numbers as a trigger versus as a standard.

TS responded that under the Brownfield and Contaminated Sites Act, the Department is charged with developing standards for hazardous substances in a specified manner. As such the development of triggers instead of standards is not an option the Department can consider.

5. Relative to the topic of using triggers for initiating vapor intrusion investigations, the Department inquiries indicated neither the Department nor the Interstate Technology and Regulatory Council (ITRC) vapor intrusion teams were considering developing soil triggers in the foreseeable future.

6. Nick DeRose (ND) raised a question at the last meeting regarding addressing volatile discharges. Because ND was not able to attend this meeting, the Department contacted him to clarify and discuss his initial inquiry. ND was concerned about the ability to reflect actual volatile discharge conditions from the perspective of depth versus a model assumed distribution. The Department response is that this capability exists already through the alternative remediation standard process.

7. Swati Toppin (ST) responded to the request from the last meeting to address variations in contaminant depth by adding columns to the standards table to reflect specific scenarios. This option was evaluated by the Department, but was decided against. The option of getting site-specific alternative remediation standards always exists, but to do so in a table format would be cumbersome and ultimately incomplete. Other potential factors besides depth would not be similarly addressed.

This concluded the section on the Status of Issues the Department is Reviewing.

TS asked for comments on the May 13, 2014 meeting summary which had been sent out to all via email. There were none and the meeting summary will be posted online as final and will also serve as the review of the previous meeting.

TS indicated that following the Department's technical presentations including review of the proposed standards, a technical exchange was being envisioned. However, knowing the topics the external stakeholders want to address and the process to do that would be a vital first step. To date the Department has not received any input. Steve Posten (SP), LSRPA said that a topics list has been initiated for submission to the Department.

TS indicated the desire to release all the equations and all the inputs for stakeholder review in early July 2014. TS surfaced the idea to cancel the July 8, 2014 scheduled meeting to allow extra time for stakeholders to evaluate and discuss the numbers. The August 12, 2014 meeting would be in a "to be determined" format pending stakeholder input that would have to be provided no later than one week prior to the meeting. A poll indicated this was unanimously acceptable.

TS further indicated that for subsequent meetings, suggestions for other topics to be covered are still being requested, but in the absence of input, tentatively the Department was planning on a technical exchange meeting in September followed by presentation of proposed rule language. It was noted the schedule would be dependent on the input received from the external stakeholders and the time to conclude the various phases.

It was stressed that the pathway presentations would emphasize how to calculate the final standards rather than what values the standards will be.

Diane Groth (DG) presented the vapor intrusion pathway proposed standards to include discussions of the equations and inputs used to develop them. The central concept was the proposal to use indoor air screening levels as the proposed standards because ultimately that is what is used to remediate vapor intrusion concerns. Employed toxicity factors and potential application of mutagenic mode of action were among the topics covered. This was followed by a question and answer session.

Questions were raised that identified the following topics or concerns:

1. How many compounds are affected by the route to route extrapolation?

Around 5 compounds, but it is believed to include bromoform and bromodichloromethane. The external stakeholders will be receiving the specific toxicity information for the proposed standards shortly.

2. Is there something wrong with the guidance that is forcing DEP to make screening levels go to standards?

There is nothing wrong with the guidance and screening levels. This effort will promulgate the indoor air values as the standards and the target remedial values for indoor air.

3. If we are using the line of evidence approach for decisions and know it's a complete pathway requiring remediation, why do we need indoor air standards? There may be a negative repercussion of promulgating standards regarding background threshold development. And also, vapor intrusion is a complex pathway with lots of variables at each site; instead of chasing a standard, perhaps it would be a better use of resources to devote time elsewhere.

First of all we need to separate the proposed standards from the compliance issues. The statute states that the Department must promulgate standards for vapor intrusion, so we are required by rule to do this.

4. The use of more recent California EPA toxicity information over IRIS was raised relative to ethylbenzene.

The Department is proposing to follow the established hierarchy and the options contained therein. In the absence of carcinogenic toxicity data in IRIS, the Department considered other available information. In terms of ethyl benzene, the IRIS review did not consider the more recent study used by California EPA. This was taken into consideration by the Department.

5. Will the Department be using a reporting limit adjustment?

The higher of the health based standard and the reporting limit will become the standard.

6. Was your mutagenic mode of action slide the wrong equation?

The generic equation, not to be used for all compounds, was shown. Vinyl chloride has a separate equation based on chemical specific information. Trichloroethylene uses the mutagenic equation only for the kidney effects and not lymphoma or liver effects. It was again noted the use of mutagenic mode of action remains under Department evaluation.

7. The issue of reporting levels being using 0.2 ppbv was raised. It was acknowledged that the reporting limit is likely less than the proposed health based standard as indicated by the current indoor air screening levels.

Laboratories can achieve the lower reporting limit and get closer to the health based standards so that is the basis of proposing the use of 0.2 ppbv. In readopting the Technical Requirements for Site Remediation, it was proposed that all indoor air sampling use low level TO-15 method. TO-15 methods are acceptable for use provided they can achieve the reporting limits.

8. Historically, numbers are published because guidance was needed; now we are promulgating standards. Any thought to reopen the calculation of numbers, even if they continue as screening levels?

This effort is just for the indoor air standards. The Department will modify the remaining screening levels later as needed. The expected adjustments to be made are not available at this time.

9. Rapid action levels are a regulated level of required action; we need to be careful not to jump in to try to address background levels.

Background levels and compliance are addressed through the guidance. This effort again only addresses the indoor air standards not the other screening levels.

Anne Hayton presented the history and development of the proposed dioxin standard to include the equations and the non-carcinogenic ingestion/dermal pathway based toxicity. This was followed by a question and answer session.

Questions were raised that identified the following topics or concerns:

1. Why is the dioxin standard based on non-cancer only and why move forward at this time?

It's based on the hierarchy the Department is using, where it is categorized as a Tier I toxicity value, which is only for a non-cancer health end point right now. There may be a cancer health end point toxicity factor available in the future, based on the completion of the USEPA Dioxin Reassessment Project.

Moving forward now in part recognizes the need for a remediation goal as the proposed value has been employed already as guidance. For now continuity and remedial progress are best maintained by proposing the non-cancer health based endpoint value.

Meeting adjourned at 2:59 PM and GoTo connection ended.

The next meeting is Tuesday, August 12, 2014 2014 at 1:00 PM in the Public Hearing Room of 401 East State Street, Trenton, New Jersey.

6/10/2014 External Stakeholder Meeting Attendees:

LSRPA

Lisa Campe
Scott Drew
Rodger Ferguson
Kevin Long
Steve Posten

AEG

Theodoros Toskos
Niall Henshaw

Municipalities/County Planner

Joe Baladi

Environmental/EJ

Joann Held

RIN

Steve Chranowski
Rayna Laiosa
Ashley Bell
Maria Kouris
Robin Austermann

CIANJ

Rose DeLorenzo
Peter Jaran (Go-To Meeting)
Jennifer Solewski

NJBIA

Sara Bluhm
Sharon McSwieney

NJBA

Neil Rivers
Elizabeth George-Cheniara (Go-To Meeting)

Fuel Merchants NJ

John Donohue (Go-To Meeting)

NJDEP and Associated Personnel

Teruo Sugihara

Barry Frasco

Swati Toppin

Diane Groth

John Ruhl

Linda Cullen

Allan Motter

Dave Barskey

Anne Hayton

Kathleen Kunze

Nancy Hamill

David Haymes

Yin Zhou

Ann Charles