

**Meeting Minutes
Cleanup Standards Scientific Advisory Board
Rachel Carson State Office Building – Room 105
October 29, 2019**

CSSAB Members Present:

Chuck Campbell, Chairman	Michael Meloy
Joel Bolstein	Craig Robertson
James Connor (via telephone)	Mark Urbassik (via telephone)
Colleen Costello	Don Wagner
Annette Guiseppi-Elie (via telephone)	

Department of Environmental Protection (DEP) Staff Present:

Neil Bakshi	Mike Maddigan
Abbey Cadden	Lee McDonnell
Troy Conrad	Frank Nemec
Ashley Gatto	Robert Schena
Kim Hoover	Brie Sterling

Others Present:

Brian Hilliard – Lehigh Consulting
Kay Linnell - Langan

Open Meeting

Mr. Chuck Campbell, Chairman of the Cleanup Standards Scientific Advisory Board (CSSAB), called the meeting to order at 0940. Around the room introductions proceeded.

The draft meeting minutes of the June 12, 2019 CSSAB meeting were approved unanimously with one revision. On page 5 of the draft minutes, first bullet, the last sentence is to be revised to state “The Board explained that they would prefer not to add total PCBs-~~soil~~ values to Tables 1, 3A, and 3B, but if DEP decides to go forward with this addition, they suggested that DEP retain ~~all the~~ numeric values for all the individual Aroclors in these tables as well.” Additionally, Mr. Craig Robertson inquired whether DEP’s capping guidance addendum to TGM has been published draft for public comment. Mr. Mike Maddigan reported that the addendum is expected to be published in proposed form shortly, but no specific publication date has been set.

Administrative issues: None reported.

Membership update: Mr. Lee McDonnell reviewed Board member status. The five Secretarial Appointment members of CSSAB (Mr. Joel Bolstein, Ms. Colleen Costello, Ms. Annette Guiseppi-Elie, Mr. Michael Meloy, and Mr. Craig Robertson) have had their terms of

membership renewed through 5/31/2023. Re-appointment letters have not yet been received by any of these members so Mr. Maddigan stated he would investigate this and will ensure these letters get mailed out. The terms of CSSAB Chairman Campbell, Ms. Tina Serafini, and Mr. Mark Urbassik remain expired. Mr. McDonnell suggested that members with expired terms should again reach out to their respective appointing bodies for re-appointment updates. In addition, there are currently two vacancies on the Board: A House Minority appointment and a Senate Minority appointment.

Land Recycling Program (LRP) Update

Personnel update: Mr. McDonnell reviewed updates to Bureau personnel. Krishnan Ramamurthy has been named Deputy Secretary of Waste, Air, Radiation, and Remediation. In the Division of Cleanup Standards, John Gross has been named Program Support Group Manager. Additionally, interviews for the vacant Environmental Chemist 2 position will soon be conducted. Finally, Rod Nesmith was named Regional Director for the Southcentral Regional Office (SCRO), and Pam Trowbridge is the new LRP Section Chief in SCRO.

Funding Update: Mr. McDonnell gave an update on the status of the Hazardous Sites Cleanup Fund (HSCF) which funds the operating budget of the Bureau of Environmental Cleanup & Brownfields (BECB). Funding for full operation of the program is likely available through June 2021. The ~~Department Agency~~ is continuing to explore possible funding sources for beyond this date.

Per- and Polyfluoroalkyl Substances (PFAS) Action Team update from Mr. McDonnell: Since the June 2019 CSSAB meeting, no new developments to report. The ~~Department Agency~~ is continuing sampling activities at several PFAS-affected sites located in the Southeast region of the state. Work at each of the sites is detailed on DEP's Safe Drinking Water Program website.

New Rulemaking Timeline: Mr. McDonnell reported that DEP is planning to submit the Chapter 250 regulation package to the Environmental Quality Board (EQB) for their November 19, 2019 meeting. Subsequently, DEP is planning on publishing the draft regulation package in January 2020 with a 60-day public comment period. The final publication of the rulemaking is scheduled for February 2021.

Mr. McDonnell issued a progress report regarding the number of sites entering the LRP and sites completing the Act 2 process. From 10/1/2018 through 3/31/2019, LRP staff received 121 new Notices of Intent to Remediate and approved a total of 187 site work projects. Through March 2019, a total of 6,984 sites have completed the Act 2 process, and 1,562 sites remain in progress. Mr. Bolstein inquired whether Remedial Action Completion Reports (RACR) are included within these site numbers. Mr. McDonnell stated that he would re-check the statistics to determine if RACRs are included.

Overview of final revisions to proposed Chapter 250 rulemaking

Mr. Maddigan presented an overview of the proposed final revisions to the Chapter 250 rulemaking.

- Total PCBs & Aroclors: ~~The Board members again explained that they would prefer not to add total PCB values to Tables 1, 3A and 3B, but in light of the DEP's decision to go forward with this addition, they appreciate and concur with DEP's acceptance of the Board's request in the June 12, 2019 meeting to retain numeric values for all individual Aroclors in these tables as well. Mr. Meloy and Mr. Robertson requested DEP clarify that if a remediator seeks relief of liability for PCBs, the analysis can be for total PCBs OR for individual Aroclors. Remediators may likewise select relief of liability for total PCBs OR individual Aroclors after sampling and analyzing for both, if they wish. CSSAB recommended calculating a total PCB-MSC value while also retaining individual Aroclors on the MSC tables rather than removing them. This will provide flexibility at sites where individual Aroclors are characterized rather than total PCBs.~~ For the final Chapter 250 rulemaking, DEP agreed with this recommendation from the Board as it allows for flexibility in characterization and attainment demonstrations. ~~Mr. Meloy and Mr. Robertson requested DEP clarify that if a remediator seeks relief of liability for PCBs, the analysis can be for total PCBs OR for individual Aroclors.~~ There should be no requirement to analyze for total PCBs AND for individual Aroclors. DEP agreed with this request.
- Toxicity Values for Vanadium: The use of the EPA's Provisional Peer-Reviewed Toxicity Value (PPRTV) for vanadium makes its Statewide Health Standard MSC value extremely difficult to attain. Instead, CSSAB recommended the use of the vanadium oral reference dose from EPA's Regional Screening Levels (RSL) table to calculate the vanadium soil MSCs. The Board has stated that the RSL table value for vanadium is based on derived from an the Integrated Risk Information System (IRIS) value for vanadium pentoxide which should therefore rank at the top of the DEP hierarchy of toxicity value sources.

DEP decided to keep the PPRTV value for determination of the MSC for vanadium due to the following: in communication with EPA's RSL team (and with Ms. Guiseppi-Elie of the CSSAB), it was determined that the IRIS-derived vanadium toxicity value provided in the RSL table does not meet the peer-reviewed standards for use in calculating DEP's MSC values in Chapter 250. Also, remediators are still able to use the Background and Site-specific cleanup standards to achieve a relief of liability for vanadium if the Statewide Health Standard is unachievable. Finally, during the development of EPA's IRIS multi-year agenda (released in December 2015), it was determined that an evaluation of the potential toxicity of multiple vanadium-containing compounds, including vanadium pentoxide, was a cross-Agency high priority need. This upcoming EPA evaluation will hopefully provide the guidance DEP needs to determine an alternative toxicity value for vanadium.

In response, Mr. Bolstein suggested that going forward, responsible parties should not conduct sampling for vanadium unless it is a known contaminant of concern on an Act 2 site. Mr. Meloy stated that the ~~naturally-occurring~~ naturally occurring background concentrations of vanadium in soil are much higher ~~that~~ than the current MSCs. This will in turn cause many problems and confusion regarding the current vanadium MSC and its

interaction with the Bureau of Waste Management's Management of Fill Policy. Mr. Meloy also stated that DEP has discretion in applying uncertainty values to IRIS values and PPRTV values and should exercise its discretion in this case. He also stated that if vanadium pentoxide is viewed as a surrogate for vanadium then the PPRTV value should also be treated as a surrogate because it is based on an evaluation of sodium metavanadate. Ms. Guiseppi-Elie stated that the RSL tables are meant for screening and should not be treated as "walk away values". If anyone wants to use the RSL values as "walk away values" then an additional uncertainty factor of 10 should be applied. Mr. Meloy disagreed with this perspective, indicating that screening values presented in the RSL tables were typically used by EPA in a remediation context for deciding as a threshold matter whether further steps are necessary. Ms. Guiseppi-Elie also cautioned against relying on the science in the 1987 IRIS assessment in that it would be different if evaluated today. Ms. Costello offered the CSSABs assistance in establishing a statewide background value for vanadium. Mr. Meloy suggested that the MSC for vanadium be rescinded from the Chapter 250 MSC tables while the Board works with DEP to determine an acceptable cleanup standard. Mr. McDonnell replied that vanadium will remain in the Chapter 250 proposed rulemaking MSC tables pending future review of the compound's toxicity values.

- Review of toxicity values for PAHs: CSSAB had previously recommended that DEP evaluate the current toxicity values for PAHs and consider using alternative values from the RSL table and examining the use of surrogate values and solubility limits to calculate MSCs. The DEP agrees that PAH toxicity values should be reevaluated. However, due to time and staffing constraints, this task is to be postponed until the next Chapter 250 rulemaking.

- Language for Public Involvement Plan: The Board felt that the previously proposed revision to the language in § 250.6.(c)(4) was confusing and redundant considering the public notice requirements provided in § 250.5. The Board recommended revising this language or simply not changing the language currently in § 250.6. It was also recommended that the word "of" be removed from § 250.6.(c)(2) so that the sentence is grammatically correct. Ms. Costello stated that public participation will likely increase in the future as awareness of the ability to participate rises.

~~DEP has decided to combine the formerly proposed language from § 250.6.(c)(4) with § 250.6.(c). This should avoid confusion while making it clear to the public that they have a right to be involved with the development and review of the remedial investigation report, risk assessment report, cleanup plan, and final report when a public involvement plan has been initiated. Ms. Costello stated that public participation will likely increase in the future as awareness of the ability to participate rises.~~

- Chloride Soil MSC: The Board recommended DEP revise § 250.305(g) to allow for the determination of soil MSCs for substances with Secondary Maximum Contaminant Levels (SMCLs). This determination would be based on the physical capacity of the soil to contain a regulated substance as described in § 250.305(b). These revisions would result in the ability for remediators to determine soil MSCs for chloride and sulfate that

also consider impacts to ecological receptors as described in § 250.311(a) through (f). Thus, a revision to § 250.311(b) would also be needed to reference the proposed changes to § 250.305(g) and the physical capacity of the soil to contain a regulated substance described in § 250.305(b). DEP agreed with the Board's recommendation and made the requested revisions to the referenced sections.

Other Business/Closing Issues

Mr. Bolstein asked if there is a way to search for sites by contaminant of concern. Mr. John Gross responded that DEP staff can perform that search internally.

Mr. McDonnell requested a letter of support from CSSAB for the forthcoming Chapter 250 rulemaking within the next one to two weeks. Chairman Campbell replied that the CSSAB will discuss that request internally following meeting adjournment and will contact Mr. McDonnell with an answer within the next few days.

Meeting Adjourned at 1140.