Meeting Minutes Cleanup Standards Scientific Advisory Board (CSSAB) Hybrid Virtual (Microsoft Teams) & In-Person Meeting (RSCOB Room 105) March 13, 2024

Cleanup Standards Scientific Advisory Board (CSSAB) Members Present

Charles Campbell, Chairperson* Joel Bolstein Colleen Costello Mark Urbassik Don Wagner Neil Ketchum (Alternate) Stephanie Gundling (Alternate) William Hitchcock (Alternate)

Department of Environmental Protection (DEP) Staff Present

Troy Conrad* Michael Maddigan* John Gross* Brie Sterling* Deborah Miller* Meghan Specht* Dana Marshall* Adam Duh* High Garst* Lindsay Williamson* John Clarke

PA General Assembly Staff Present

Trent Machamer, Senate* Jeffrey Ivicic, Senate

* Attended meeting in person. If no asterisk, then attendance was virtual

Open Meeting

CSSAB chairman, Mr. Charles Campbell, opened meeting at 0930

Approval of Minutes

Mr. Bolstein moved to approve the 11/9/2023 meeting minutes. Mr. Urbassik seconded the motion. The CSSAB unanimously voted to approve the 11/9/2023 with a change to the term expiration dates.

Administrative Issues

Mr. Campbell indicated updates to meeting dates are needed on the DEP website for the CSSAB.

Membership

Ms. Sterling provided an update on board membership. Four secretary reappointment letters were mailed February 28, 2024, for terms that will expire May 31, 2027. There is currently one vacancy to be appointed by the Secretary after the departure of Mr. Michael Meloy. The Senate President pro tempore has two appointments, Tina Serafini and Don Wagner. Ms. Serafini's appointment expired September 2019. Mr. Wagner's appointment expires April 9, 2024. The Senate Minority Leader has two appointments. Mr. Urbassik's term expires April 1, 2026. The second Senate Minority Leader appointment is vacant. The House Speaker has two appointments. Mr. Campbell's appointment expired in 2013. The second House Speaker appointment is vacant. The House Minority Leader has reappointed Mark Smith and James Connor. Mr. Smith's and Mr. Connor's appointments will expire January 18, 2028. Letters requesting appointment/reappointment were sent to the PA Legislature on December 14, 2023. Mr. Bolstein indicated he received an appointment letter from the Secretary. Ms. Costello indicated she has not received an appointment letter from the Secretary.

Land Recycling Program (LRP) Update

Mr. Campbell stated he sent out the new lead guidance issued by the US EPA and inquired if there were any questions from the board or input from DEP staff. Mr. Bolstein inquired as to the impact on current participants in the Act 2 program. Mr. Maddigan stated DEP had reviewed the guidance. Mr. Maddigan stated the guidance is directed toward project managers and how lead is handled at Superfund and RCRA sites. Mr. Maddigan stated some of the guidance applies to the Act 2 program and provides justification for the values proposed by DEP. Mr. Maddigan indicated the guidance does not impact the Act 2 program adversely and he will meet with RCRA for a clearer understanding of any impacts. Mr. Campbell inquired as to the impact of the change in screening level for lead in soil at residential properties from 400 ppm to 200 ppm. Mr. Maddigan stated that the 200 ppm value is what DEP is proposing. Mr. Campbell added that if lead is detected in groundwater at a site evaluated for lead in soil, the groundwater values should be included in the model. Mr. Bolstein added that the only real impact of the guidance is on sites that fall under the One Cleanup Program, where there is US EPA oversight from RCRA program.

Mr. Campbell indicated having firewall issues with uploading documents and OnBase. It was determined that there was a technical issue that needs to be resolved on the user end and not the Department. Ms. Costello requested LRP to resend instructions for uploading documents. Ms. Gundling commented there have been issues encountered with the resubmission of reports under the new electronic system. Mr. Gross indicated he was aware of the issues and the issue would be resolved and submission by email is an alternative in the interim.

Mr. Maddigan reported that the Remediation Standards section currently has two Environmental Chemist (EC) 2s and one EC1. The vacant third EC2 position has been posted. This group handles technical aspects of the program, which includes updating the Technical Guidance Manual (TGM), updating databases, reviewing risk assessments, and assisting consultants and regional staff with technical questions and issues. The Brownfields Redevelopment section is fully staffed with four Solid Waste Program Specialists and one Program Analyst 1. This group handles program analytics, long term stewardship, regional report tracking, program promotion and communication, publications, conferences, and all aspects of delivering the PA Brownfields Conference.

Mr. Maddigan reported the Q&A Workgroup is currently working on draft language for how to address the impact of soil contamination in groundwater at soils-only Act 2 voluntary cleanup sites.

Mr. Maddigan reported that the vanadium final rulemaking was published in the November 11th edition of the PA Bulletin. Also, the lead/PAH proposed rulemaking was adopted by EQB at their March 12, 2024, meeting. Once the proposed rulemaking is published, there will be a 60-day comment period, which may be discussed at the next CSSAB meeting.

Mr. Maddigan provided a report on LRP statistics. As of March 1, 2024, LRP has 8,294 sites completed, 1,903 sites currently in the program, and 36 NIR's submitted to date in 2024. The 3-yr mean is 238 NIR submissions. 21 EPA Brownfields grants were awarded in PA for FY 2023-2024 for a total of \$15 million received by PA stakeholders. LRP is currently working to bring more EPA Brownfields funds back to PA in 2025 fiscal year. LRP will continue to evaluate program metrics for report submission and review trends focusing on final decisions made by the regions for various report types. For example, LRP has determined that approximately 15% of final disapprovals can be attributed to administrative incompleteness. As a result of this information, LRP is in the final stages of developing a webinar focusing on administrative Act 2 submittals. Separating out the technical deficiency decisions allows for a clearer picture of the decisions made by LRP. Mr. Bolstein commented focus should be put on the technical deficiency letters and the increase in the number of letters that are sent out. Mr. Bolstein added that a large number of technical deficiencies can be attributed to characterization and not attainment. Mr. Maddigan indicated ongoing statistical evaluations will include determining why certain report types are disapproved at higher rates than others and examining the variations in the disapproval rates.

Mr. Maddigan reported that New Act 2 forms have been developed. A revised Model EC was posted in August 2023. Anyone with specific questions is to contact Mr. Maddigan directly. An updated NIR form was posted in late January 2024.

Mr. Maddigan reminded the Board of the upcoming PA Brownfields Conference on March 25-27 at the Penn Stater Hotel and Conference Center in State College, PA. Registration can be done online on the Engineers Society of Western PA's website.

Ms. Costello inquired as to the timeline for the publication and comment review process for the lead/PAH proposed rulemaking. Mr. Maddigan stated the proposed rulemaking would be published in the coming weeks and the 60-day comment period would begin. Mr. Maddigan added that barring any issues comments could be discussed at the June 2024 CSSAB meeting.

Ms. Sterling reported that the Historical Pesticides Workgroup continues its work that a draft guidance has been worked up that will be discussed at the next meeting of the workgroup. After review, the guidance would be ready to bring before the CSSAB. Ms. Sterling added that once the guidance is completed it will be incorporated into the TGM.

Mr. Garst provided an update on the DEP PFAS Action Team. Mr. Garst reviewed the Department's efforts on PFAS, namely recognizing the Governor's proposal to include additional PFAS testing capacity at the state environmental laboratory, updates on DEP's administration of the Commonwealth's PFOA/PFOS Maximum Contaminant Level (MCL) rule, and organizational conversations about the forthcoming federal MCL rule for various PFAS compounds. Mr. Garst noted that, while the Department could not guess what the MCL rule from EPA would be, the Department would be prepared to provide an update to the Board once the new rule is promulgated to discuss how it could impact MSC values and board members should continue to monitor the DEP website. Mr. Garst reported DEP has submitted an application with the National Governor's Association and American Association for the Advancement of Science for a planning retreat specific to the Commonwealth's needs in addressing threats related to firefighting foam, the potential for a firefighting foam buyback program, and researching destruction technologies. DEP is working on a set of toolkits specific to the DW MCL for members of the public and Public Water Supplies (PWS) to better understand the MCL rule and the threat of PFAS to PWS. Mr. Bolstein indicated that he is on the board of PENNVEST and funding is available for PFAS contamination projects. Ms. Costello commented on the forthcoming EPA PFAS MCL rule and inquired as to how air and vapor intrusion (VI) will be impacted. Mr. Garst indicated he would research the matter further and get back to the Board.

TGM Section IV Revisions

Ms. Sterling presented the revisions to Section IV of the TGM. Most revisions come from incorporation of information from the VI FAQ document. There are not revisions to Sections I, V, or VI. Draft revisions to Sections II and III were presented at the November 9, 2023, CSSAB meeting. The Board will get to review each section at Board meetings as completed by the Department. After input from the Regional Offices and CSSAB, the entire TGM will go out to the public for comment. The following Section II and III revisions are currently not addressed in this draft: table of contents, section references within text, updated figures, and page numbering and formatting. The figures are currently being revised and all others will be updated once the full document is completed. References to PQLs were removed from Section IV as PQLs are not relevant to VI screening. Act 2 specifies that in demonstrating attainment of any standard, the concentration of a regulated substance shall not be required to be less than the PQL set by EPA. Screening is the process of determining if more evaluation is necessary to move toward attainment. Utilizing PQLs in screening could potentially eliminate compounds from further evaluation that still create an unacceptable risk via vapor intrusion. It is important to remember that the VI screening values are not MSC values. Part A of Section IV was revised to clarify that elemental mercury now has VI screening values, which were added at the end of September 2022 for indoor air, sub-slab, and near source. This edit takes mercury out of the general statement about volatile inorganics. In addition, text was added clarifying that if off-site planned uses are known then they should be evaluated. Part C.1 of Section VI had text added clarifying VI pathway elimination via a clean water lens between the VI source and the building. Part C.2 had language added to clarify how garages and crawl spaces are evaluated. Part D had language added to clarify that if preferential pathways are eliminated via mitigation, then it no longer needs to be evaluated. Part D.2 had language added to include owner surveys as an option for significant foundation openings. Part E had text added clarifying that the

presence of preferential pathways may require evaluation of structures outside the proximity distance. In addition, text was added expanding the discussion on the interaction between preferential pathways and proximity distances. Part F.1 was revised adding language clarifying that screening values are used aquifer MSCs. Also, a statement was added stating that only indoor air and soil gas and not soil and groundwater screening values are calculated for mercury. Part G.1 had language added to explain that a paved area should be evaluated for significant openings similarly to a building slab. Part G.2 had language that clarified the appropriate depth (5 feet) for a near-source soil gas sample and that near source samples may be taken beneath a slab deeper than the sub-slab but shallower than 5 feet. In addition, a paragraph was added to explain the limitations and screening value options for near-source samples and that temperature differential does not apply to sub-slab samples. Language was added that clarified that the time (45 days) and temperature (15°C) can be adjusted in consultation with the project officer. Language was added clarifying that at least a second round of sampling is necessary for screening and one round is sufficient with mitigation. Part G.3 had language added clarifying that modeling may be used for a slab on grade building with groundwater shallower than 5 feet. Part G.4 had a new section added to define and explain the methodology used to calculate soil gas and indoor air screening values for elemental mercury. Part H was revised to clarify that active mitigation systems should be inspected quarterly and how to address off-site properties. Part K.4 was revised to clarify the difference between identifying source area and screening values and the reasoning behind using 1/10th of the values for SSS screening. In addition, language was added clarifying how to use the adjusted SHS screening values and the appropriate RSL value. The text referring to the addition of cumulative risk will be removed. Mr. Campbell inquired as to the use of the term chemical of concern and whether it is defined. Ms. Sterling responded that the entire TGM will be reviewed to ensure all terms are used consistently and in correct context.

Ms. Costello inquired as to the expectation for the remediator relaying information regarding planned off site uses to the DEP. Ms. Sterling indicated the expectation is no different than that for any offsite property. Ms. Costello inquired if a deed notice would be required in addition to post remedial care plan for offsite properties that may be developed in future. Ms. Sterling responded there would be no difference than the monitoring of property with typical post remedial care plan.

Mr. Boslein inquired as to whether central office has reviewed how often technical deficiency letters or disapprovals relate to the VI component of an Act 2 cleanup. Mr. Maddigan responded that that information is not currently tracked but that information could be useful. Mr. Maddigan added if there is a means for gathering that information the DEP will look into that further. Mr. Maddigan added that the consensus is that training regarding VI is needed and being worked on. Ms. Costello added that it would be helpful if the training included training on the interface of VI assessment with risk assessment. Mr. Maddigan and Mr. Campbell agreed.

Mr. Campbell inquired if the DEP would like the CSSAB to provide comments on Section IV as was done with Sections II and III. Ms. Sterling responded in the affirmative. Mr. Campbell posed the question to the CSSAB whether this should be handled as was done with Sections II and III with a group discussion amongst CSSAB board members. Ms. Costello agreed that a group discussion on Section IV would be useful. Mr. Campbell inquired if comments from the CSSAB were received by the DEP by the end of April would that be enough lead time to discuss at the next CSSAB meeting. Mr. Maddigan responded in the affirmative. Mr. Campbell inquired if meeting the end of April deadline would be a problem for any CSSAB members. No members indicated meeting the deadline would be an issue. Ms. Gundling inquired as to whether a virtual meeting would be required or if members of the workgroup would like

to just submit comments to her via email. Ms. Costello suggested reaching out to members of the workgroup who are not present and offer a meeting. Mr. Campbell agreed.

Discussion of Board Comments on TGM Section II and III Edits

Ms. Sterling requested clarification on the CSSAB comment on Section III.B.1. Ms. Costello had commented that the statistical approach does not corroborate background section. Ms. Costello added that there are procedures referenced by ITRC that are not included in the guidance for background. Comment response: The section will reference back to background section and which procedure can and cannot be used.

Ms. Costello commented that clarification may be needed in the requirement for projects with tidal flow or discharge into tidal waters. Ms. Sterling indicated that TMS guidance comes from the Bureau of Clean Water but the program will look into what can be done for clarification. Ms. Costello suggested adding language specifying that if there is flow into tidal waters to contact the project officer. Ms. Sterling agreed.

Mr. Maddigan requested clarification on the comment regarding periodically and permanently saturated soils. Mr. Ketchum responded that previously DEP removed soil to groundwater MSC for permanently saturated soils; however, the current revision allows for the application of the soil to groundwater MSC to permanently saturated soils. Mr. Maddigan responded that the DEP will look further into this and if there are any further questions DEP will reach out to Mr. Ketchum or Craig Robertson directly. Ms. Sterling added the language was there to give the option to apply the MSC and not eliminate groundwater, but clarification of the language is needed.

Mr. Campbell inquired as the next steps in the revision process. Ms. Sterling responded the next step is the comments that will be adopted will be incorporated into the TGM and the document will be brought to the regions for concurrence. A determination has not been made as to whether the document will be sent out for public comment. Mr. Campbell inquired as to a timeline for review by the regional offices. Mr. Maddigan responded that DEP planned on completing revisions of all sections before presenting to the regional offices.

Additional Comments

Mr. Bolstein inquired about the One Cleanup Program. Mr. Bolstein stated considerable activity has occurred since the issuance of the Memorandum of Understanding (MOU) and inquired if there are active/ongoing conversations between US EPA Region 3 and the Department about whether the MOU is continuing the work as intended. Mr. Maddigan responded that he is gathering information and meeting with the regions for input. The Department has reached out to counterparts in USA EPA Region 3 RCRA staff to discuss the One Cleanup Program and ensure better communication, consistency and cooperation. Mr. Bolstein recommended including TSCA and discussion of PCBs in the meetings. Mr. Bolstein inquired if there are currently Act 2 sites in One Cleanup Program, should remediators reach out to Central Office or wait until US EPA provides guidance. Mr. Maddigan responded that sites can continue with Act 2 work and if there is a delay due to One Cleanup Program to reach out to the project officer who can then forward concerns to appropriate US EPA Region 3 staff.

Mr. Campbell moved to adjourn the meeting. Mr. Wagner seconded the motion. Meeting adjourned at 1146.