Meeting Minutes Cleanup Standards Scientific Advisory Board (CSSAB) Hybrid Virtual (WebEx) & In-Person Meeting (Room 105 of RCSOB) June 30, 2022

CSSAB Members Present:

Charles Campbell, Chairman Michael Meloy
Joel Bolstein Craig Robertson
James Connor Mark Smith
Colleen Costello Mark Urbassik
Annette Guiseppi-Elie Donald Wagner

Department of Environmental Protection (DEP) Staff Present:

Jill AndersonMichael MaddiganAbbey CaddenFrank NemecTroy ConradJessica RitenourJohn GrossValerie ShafferDawn HissnerNikolina SmithDarek JagielaMegan SpechtKurt KlapowskiBrie Sterling

Others Present:

Jeffrey Christopher William Hitchcock Nily Dan Josephine Martin Stephanie Gundling

Open Meeting

CSSAB Chairman Charles Campbell commenced the meeting at 0930 starting with around-the-room introductions and roll call of those attending virtually.

Mr. Campbell requested approval of the draft revised CSSAB meeting minutes from the October 4, 2021 hybrid virtual meeting. Mr. Michael Meloy requested that the meeting minutes be amended to state that the CSSAB requested the upcoming vanadium rulemaking to be implemented expeditiously. Additionally, Mr. Meloy requested an updated timeline for the referenced rulemaking. The CSSAB approved the minutes pending the one requested revision. Updated meeting minutes will be posted on the DEP website upon revision.

Membership: Mr. Michael Maddigan reviewed CSSAB Membership. Currently, 11 of 13 positions are filled on the CSSAB. Two of the 11 member's terms have expired: Ms. Tina Serafini (expired 9/8/2019) and Mr. Campbell (expired 12/7/2013). The term of Mr. Mark Smith expires on April 12, 2023. On May 31, 2023, the following Board Member's terms will expire: Ms. Annette Guiseppi-Elie, Mr. Craig Robertson, Mr. Meloy, Mr. Joel Bolstein, and Ms. Colleen Costello. Mr. Mark Urbassik introduced Ms. Stephanie Gundling as Mr. Urbassik's approved alternate going forward. Ms. Gundling provided a brief background of her qualifications.

Administrative issues: None

Update on Safe Drinking Water PFAS MCL Proposed Rulemaking

Ms. Dawn Hissner, Acting Director of the Bureau of Safe Drinking Water (BSDW), gave a Power Point presentation regarding her Bureau's proposed per-and polyfluoroalkyl substances (PFAS) maximum contaminant level (MCL) for drinking water in Pennsylvania. She was accompanied by Ms. Jill Anderson, Section Chief for the Technical Support Section. Ms. Hissner presented a general background of PFAS origins and federal actions to address PFAS in drinking water. EPA is expected to publish a PFAS Final Rule in late 2023. For any final federal rule promulgated, every state has three years of deferred compliance to allow for the development of their own programs and to update their respective regulations. Ms. Hissner outlined the formation of Pennsylvania's PFAS Action Team and PA DEP's interim measures regarding PFAS and their efforts to implement a drinking water standard. The DEP rulemaking's purpose would be to establish maximum contaminant level goals (MCLGs) and MCLs for only perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) which are to be protective of adverse developmental and immune system effects. BSDW is proposing to set a MCLG of 8 ng/l (nanograms per liter = parts per trillion) and a MCL of 14 ng/l for PFOA and a MCLG of 14 ng/l and a MCL of 18 ng/l for PFOS. Samples must be analyzed by an accredited lab using an approved method and must have a reporting limit of 5 ng/l. Compliance of these values will be based on an average of four quarterly samplings for one year. Any violation of the MCL will require a Tier 2 public notice (i.e. as soon as practicable, but definitely within 30 days of discovery). Comment period for the proposed rule ended in April 2022, with 3,555 comments submitted. If adopted by the Environmental Quality Board and approved by House and Senate Environmental Resources and Energy committees and PA's Independent Regulatory Review Commission, BSDW is hopeful to have a final regulation published in early 2023.

Mr. Campbell inquired about laboratory capabilities in PA. Ms. Hissner replied that laboratories which have sufficient capability are accredited with the Bureau of Labs for drinking water testing. Mr. Bolstein inquired if the cost of drinking water system compliance with the proposed MCLs was investigated. Ms. Hissner replied that a thorough cost analysis was conducted and confirmed that it would be expensive to treat drinking water (specific figures were not available at the presentation). The cost analysis is provided in the preamble of the proposed regulation. Mr. Bolstein also asked what notification is provided to residents who have been previously told that it was safe to drink water containing 70 ng/l of PFAS and now are being told that a much lower contaminant level is the safe level for their drinking water. Ms. Hissner replied that as PFAS is an emerging contaminant there is very little knowledge of long-term health effects. Although

there is no specific notification, there is ongoing public education and outreach. With new regulations will come a robust training program, and it is hopeful that promised federal infrastructure funding will assist with the expense of upgrading public drinking water systems. Mr. Meloy agreed that a robust communications strategy is vital. Mr. Meloy inquired if PA's MCL differs from the federal MCL (i.e. if the federal MCL is higher than the state MCL), does PA need to revise their MCL to match the federal MCL. Ms. Hissner replied that PA state MCLs have been justified via studies regarding health effects and cost-to-benefits and would not be revised. Ms. Hissner also explained that PADEP has "primacy" meaning that EPA grants PADEP the authority to regulate drinking water since the state MCL is as stringent as the federal MCL. However, if the federal MCL is lower than the state MCL, in order to maintain primacy enforcement, the state MCL would need to be revised to the lower federal MCL. Mr. Meloy also inquired if there is a phase-in period to implement the state MCL. Ms. Hissner replied that a 1-2 year delay in monitoring is built-in to the proposed state rule. Half of the water suppliers would start monitoring in January 2024, and the other half of the suppliers would start monitoring in January 2025. This process has never happened in the history of the DEP, but a new regulatory package would be required, including a revised cost analysis. Further questions regarding this presentation will be collected by Mr. Campbell and forwarded to DEP.

Update on Environmental Justice Policy

Mr. Justin Dula, Environmental Community Relations Specialist from the DEP's Environmental Justice Office, presented an update of DEP's Environmental Justice Policy (EJP). Mr. Dula summarized the historical background associated with the efforts conducted in Pennsylvania. A lawsuit filed by residents of Chester, PA in 1996 led to the creation of an environmental justice work group which released a report in 1999 and recommendations in 2001 which led to PA's 2004 EJP which remains in effect today. The PA EJP defines an environmental justice area as a census tract where 30% or more of the population is minority based (non-white), or 20% of the population lives below the poverty line. If a facility applying for a permit is within one-half mile of an environmental justice area, the population in question is given chance to comment on the proposed permit. The EJP was proposed for revision in 2018, and currently a response to comment document is being drafted for the latest iteration of the proposed updated policy, which is expected to be completed in autumn 2022. Mr. Dula reviewed the 8 sections of the proposed revised policy, all of which are on the DEP's Office of Environmental Justice website.

Following Mr. Dula's presentation, Ms. Guiseppi-Elie inquired whether the EJ work group is considering children's health in the mapping of EJ areas. Mr. Dula confirmed that children's health is one of the considerations for the updated mapping process. Ms. Costello inquired whether the permit review process described in the policy would affect Act 2 site work. Mr. Dula stated that the permit review process generally occurs after Act 2 sitework has been completed. When a permit is considered administratively complete, the site map associated with that permit is the one associated with that permit. Mr. Meloy asked if the DEP is adding any substantive requirements for permit issuance other than the outreach efforts summarized. Mr. Dula reported that since Environmental Justice is a policy rather than a regulation, permits cannot be denied based solely on environmental justice concerns.

Land Recycling Program (LRP) Update

Personnel Update: Mr. Troy Conrad reported that DEP Secretary Pat McDonnell is leaving the position on July 1, 2022 and will be succeeded by Mr. Ramez Ziadeh, who is to be named Acting Secretary. Mr. Joe Adams will be named Acting Deputy Secretary. Mr. Bob DiGilarmo will be named Acting Deputy Secretary of Field Operations. Ms. Lisa Daniels has been named Acting Deputy Secretary of Office of Water Programs. Mr. Kurt Klapowski has been named Acting Deputy Secretary of Oil & Gas Management. In the Southcentral Regional Office, Mr. Rod Nesmith, Regional Director has retired and Ms. Andrea Blosser has been named Acting Regional Director. Mr. Maddigan has been named Program Manager for the LRP. Ms. Brie Sterling has been selected as the Group Manager of the LRP Cleanup Standards section in Central Office (CO).

Other Program Updates: Currently, LRP in CO has six vacancies out of 11 total positions, however, the hiring process for new staff is ongoing. Mr. Maddigan provided the Board with LRP report statistics for the period of January 1 – May 31, 2022. Environmental Covenants (EC) received: 41 (three-year annual mean of ECs received: 126); Final Reports (FRs) received: 156 (three-year annual mean of FRs received: 466); FR Approval rate: 75%; Cleanup Plans (CPs) received: 47 (three-year annual mean of CPs received: 125); CP Approval rate: 51-55%; Remedial Investigation Reports (RIR) received: 54 (three-year annual mean of RIR received: 166); RIR Approval rate: 49%; Risk Assessment Reports (RAR) received: 20 (three-year annual mean of RAR received: 68); RAR Approval rate: 45%. Mr. Bolstein inquired if the disapproval frequency has been broken down by region and if there are any management thoughts regarding submittal of last-day disapprovals of minor technical issues and the challenges that imposes on real estate transactions. Mr. Maddigan indicated that regional disapprovals can be tracked; additionally, training programs are being developed for both DEP staff and remediators to assist with consistency and timely submittals and responses. Mr. Conrad stressed that DEP Project Officers and Program Managers are encouraged to work with remediators to iron out minor deficiencies prior to deemed approved dates. Mr. Meloy stated that getting projects/sites through Act 2 is harder than ever before and also requested site statistics be emailed to the CSSAB. Mr. Conrad agreed to email site statistics to Mr. Campbell for distribution. Mr. Donald Wagner stated that his clients are complaining that DEP is revising policy decisions mid-project, causing an uptick of disapprovals of projects that could be avoided if communication between the Department and consultants were better. Mr. Wagner suggested further training of new staff and new consultants regarding policy decisions in order to improve consistency and report review timeframes.

Mr. Maddigan reported that the vanadium rulemaking is expected to be published draft in July 2022 for public comment with an anticipated final rule publication in spring of 2022 (edit: Mr. Maddigan intended to state spring of 2023). A full Chapter 250 rulemaking will follow the special vanadium rulemaking. The LRP Technical Guidance Manual (TGM) is planned for an update in 2023. A DEP internal workgroup, the Historic Pesticide workgroup, is examining how the legal application of historic pesticides can lead to an Act 2 cleanup. It is anticipated that ultimately an appendix will be added to the TGM regarding this topic.

Presentation of Polycyclic Aromatic Hydrocarbon (PAH) Workgroup's Findings

Mr. William Hitchcock presented the CSSAB PAH Workgroup's findings regarding the relative potency factors for carcinogenic PAHs. The findings and conclusions were presented in the Workgroup's published white paper. The US EPA and California EPA use relative potency factors (RPFs) to quantify cancer risk of PAHs relative to Benzo(a)pyrene (BaP). The PAH Workgroup examined how RPFs can be applied to the calculation of medium-specific concentrations (MSCs). The Workgroup has determined that the US EPA's 1993 RPFs are the most consistent with established Chapter 250 hierarchy of toxicity value sources and they are more consistent with the US EPA's regional screening levels (RSLs) used under the site-specific standard. In general, the MSCs for the carcinogenic PAHs would increase because in the past, RPFs were only assessed relative to the cancer potency of BaP, which has been determined to be less potent. Going forward, the PAH Workgroup recommends this approach, with language describing this process to be added to future Chapter 250 regulation and Act 2 TGM updates.

Following conclusion of the presentation, the floor was opened for questions or comments. Each CSSAB member present at the meeting was willing to vote on this proposal without further comment. A roll-call vote resulted in 10 members voting to recommend this proposal to DEP and one voting member absent. This issue will be now be vetted by DEP management for consideration for the next Chapter 250 rulemaking.

Presentation of Lead Workgroup's Findings

Mr. Robertson presented the CSSAB Lead Workgroup's progress report regarding using an arithmetic mean as a new attainment test for lead in soils for the Statewide health standard (SHS). DEP's proposed adoption of the Integrated Exposure Uptake Biokinetic model for lead in children (IEUBK) utilizing a blood lead level of 5 µg/dl will result in a new direct contact MSC for lead in soil of 200 mg/kg. DEP has already adopted use of the IEUBK model under the Sitespecific standard (SSS) using the averaging of sampling results as input to the model to determine attainment of an acceptable risk level. The Lead Workgroup report resulted in four conclusions: 1) Lead is unique among regulated substances that are systemic toxicants in that there are no systemic toxicity values available for lead to calculate numeric values; 2) US EPA instructs the IEUBK model user to use average lead concentrations in soil that a child may be exposed to as model inputs, although a 95% UCL of soil concentrations may also be used if a more conservative value is warranted; 3) Use of the average attainment test utilized under the SHS would be no less conservative or protective than its use under the SSS due primarily to a preference for permanent remediation remedies under the SHS; and 4) adoption of the arithmetic mean attainment test will largely eliminate the use of the 95% UCL for attainment and the average "value" will in most cases be less than the 75%/10X attainment "value". The Lead Workgroup report also resulted in two recommendations: 1) Adopting a simple mathematical mean as an attainment test for lead in soil for direct contact under the SHS; and 2) the average attainment test will be exempt from the requirements of § 250.707(d) but subject to the "hotspot" provisions of § 250.703(d).

Following the presentation, the floor was opened to questions/comments. Ms. Guiseppe-Elie expressed reservations about utilizing the IEUBK model as a SHS attainment test as the IEUBK is generally utilized to determine an acceptable lead in soil risk level, not a cleanup standard. It was ultimately decided to continue the Lead Workgroup meetings to revise the conclusion language of the draft report for the final Lead Workgroup report. Voting by the Board regarding the recommendations from the report has been postponed until the final report is issued.

Next Steps for Chapter 250 Rulemakings

Mr. Maddigan gave a report regarding the schedule for the next Chapter 250 rulemaking. Based on today's proceedings regarding the lead attainment issue, the originally scheduled August CSSAB meeting will be shortened and re-scheduled to August 11 and will include only discussion of the Lead Workgroup's finalized report regarding using averaging as an attainment test in soil. A full meeting will be added to the schedule for October 2022 (exact date to be determined).

Ms. Sterling discussed potential revisions to Chapter 250 for the next rulemaking which may need CSSAB input. The origin of the mutagen list and logic behind that list will be explored. Updates to Chapter 250, Table 8, Constituents of Potential Ecological Concern, may be considered. Mr. Robertson reported that he may have information regarding both of these issues in his files and will search in time for the next meeting. In § 250.606(d)(3)iii, the words, "below grade" are proposed for deletion in order to expand vapor intrusion risk assessment. In May 2021, US EPA issued a technical memo regarding utilization of toxicity values from lower tier sources rather than IRIS values. DEP is considering utilizing this source for future revisions. Mr. Conrad discussed how EPA's recently released Health Advisory Levels (HALs) for PFAS may factor in the Act 2 program. DEP is evaluating the various implications of the interim HALs and this issue is under consideration by DEP legal counsel. Mr. Meloy requests that DEP clarify how the PQLs may interact with the new and extremely low HALs.

Public Comment

Ms. Nily Dan asked a question (via Webex chat box) regarding the site-specific standard. Ms. Sterling replied that she would address that question offline. Mr. David Hess (via Webex chat box) requested the final technical white papers referenced in today's meeting be posted to the DEP website. DEP agreed to post the two workgroup reports on the LRP website once they are finalized.

Meeting Adjourned at 1445.