

Meeting Minutes
Cleanup Standards Scientific Advisory Board
Hybrid Virtual (Microsoft Teams) & In-Person Meeting (RCSOB Room 105)
April 23, 2025

Cleanup Standards Scientific Advisory Board (CSSAB) Members Present

Charles Campbell, Chairperson*
Joel Bolstein
James Connor
Colleen Costello
Mark Urbassik
Donald Wagner
Anneclaire De Roos
Craig Robertson
Stephanie Gundling (Alternate)
Neil Ketchum (Alternate)

Department of Environmental Protection (DEP) Staff Present

Troy Conrad*
Michael Maddigan*
John Gross*
Brie Sterling*
Deborah Miller*
Megan Specht*
Yumi Creason*
Dana Marshall*
Josh Neyhart
Shay Decker*
Lindsay Williamson*
Kevin Beer*
Sean Gimbel*

Members of the Public Present

Trent Machamer
Terry O'Reilly
Jeffrey Ivicic
Jenny Kachel
William Hitchcock
Michael Nines

* 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

No comments were raised on the minutes from the October 30th meeting. Mr. Campbell motioned to approve, seconded by Mr. James Connor. The minutes were approved.

Administrative Issues

No administrative issues were raised during this meeting.

Membership

The CSSAB currently has 12 members. There is a single vacancy under the House Speaker. There are three positions that are expired, belonging to Mr. Charles Campbell, Ms. Tina Serafini, and Mr. Donald Wagner.

Land Recycling Program Staffing Update

At Central Office, both sections are fully staffed. Several of the regional offices have vacancies, and it has been a challenge to get them filled.

Rulemaking Update

The proposed Chromium VI rulemaking was adopted by the Environmental Quality Board (EQB) at their April 8th meeting. The rulemaking is now with the Office of Attorney General for their 30-day review period. After their review, it will go to the Independent Regulatory Review Commission and House and Senate's Environmental Resources and Energy Committees for approval. The preamble and annex will then be submitted by the Legislative Review Board for publication for public comment in the PA Bulletin, likely in summer of 2025.

The Land Recycling Program (LRP) is currently compiling the response to public comment document for the Chapter 250 Final rulemaking. LRP plans to present the final rulemaking to the EQB at their September meeting and anticipates that the final rulemaking will be published before the end of 2025.

Program Statistics

As of April 9th, 2025, there have been 8,632 sites completed through the Act 2 program, and 1,897 are currently in progress. So far in 2025, there have been 67 Notices of Intent to Remediate (NIR); the three-year mean is 232 NIRs per year.

Report approval rates continue to improve compared to 4-5 years ago and have been consistent across the regions. Mr. Connor asked whether the administrative process training hosted by LRP in September 2024, has had a positive effect on administrative disapproval rates. Mr. Mike Maddigan explained that the program is continuing to track that data, but there is not yet enough data to come to any conclusions. The program tracks approval rates by standard and by region, and Mr. Maddigan offered to share that data with board members upon request.

Upcoming Training Opportunities

A recording of the Act 2 administrative completeness webinar is available on the LRP website.

LRP staff are continuing to partner with the Pennsylvania Council of Professional Geologists (PCPG) to create a series of four webinars on Act 2 basics and each of the cleanup standards. The first webinar will be held within the next few months, with each additional webinar following in 2-4-week increments. Following the release of these webinars, two in-person trainings will be offered, one in the eastern part of the state and one in the west. These trainings will dive deeper into technical issues, discuss case studies, and provide an opportunity to gather face to face and ask detailed questions about Act 2.

This summer and fall, LRP will be partnering with the Environmental Protection Agency (EPA) Region 3 and Mid-Atlantic TAB to host funding trainings to prepare stakeholders for grant season.

LRP will once again be hosting several Brownfields Basics trainings in the fall. Specifics have yet to be determined.

The 2026 PA Brownfield Conference will be held March 23-25th at the Wind Creek Event Center in Bethlehem. Planning is currently underway.

PFAS Action Team Update

Mr. Josh Neyhart provided the board with updates on the PFAS Action Team, a group of senior leaders from various DEP programs who meet monthly to discuss issues related to PFAS.

All public water systems are now required to conduct quarterly PFAS testing, and the first set of results are expected soon. The action team expects that some training and guidance will be necessary to ensure that smaller water systems remain in compliance with testing requirements. Some PFAS detections may lead to site investigations, at which time Environmental Cleanup and Brownfields (ECB) will work with Safe Drinking Water to identify the potential source(s).

PFAS compounds have been found in biosolids. EPA has released a risk assessment, though the Action Team does not believe that information suggested a need for immediate action. They are continuing to

work with experts from the Department of Agriculture, Penn State, Material Matters, and other external stakeholders with expertise on the subject to determine an appropriate course of action.

The Action Team are also monitoring any changes that may come out of the federal government due to the administration change, but nothing official has come out so far. Any changes to the federal PFAS maximum contaminant levels (MCLs) will not affect the official Pennsylvania drinking water MCL.

Mr. Joel Bolstein reminded the Board that PennVEST has funding available for PFAS related projects where people need to be connected to public water. Such projects should be directed to PennVEST, leaving HSCA funding for other projects.

Ms. Colleen Costello asked about a disconnect between the Pennsylvania MCL versus the federal groundwater medium-specific concentration values (MSCs) for PFOA and PFOS. Mr. Neyhart said that this same question was also commonly received during the public comment period on the Chapter 250 rulemaking, and that the team is preparing a response to the question that will be released with the response document.

Ms. Costello also asked about PFAS waste disposal, considering it takes three or more months for waste facilities to receive DEP approval to accept PFAS waste. Mr. Neyhart had not heard this concern and will discuss the matter with the Waste Program to find out what they are seeing in that regard and will update the board at the next meeting. He also clarified that the current focus of the Action Team is water and contamination management. Work on disposal and destruction will be next.

Mr. Campbell asked whether the Action Team knew of any changes or issues on the horizon regarding sample collection and analysis. Mr. Neyhart is not aware of any issues regarding analysis but agreed to double check with the Safe Drinking Water Program. There are, however, very strict sample management guidelines due to the difficulty of avoiding contamination.

Mr. Bolstein asked whether DEP has made a decision regarding using fate and transport to model for PFAS in groundwater. Ms. Brie Sterling explained that the DEP is still waiting for results from leaching potential testing, and that she has been told those papers will be released within the next year. For now, the Department recommends the use of Quick Dominico (QD) and proving its effectiveness with multiple lines of evidence. Ms. Costello inquired if use of EPA leaching models would be accepted, and Ms. Sterling replied that the DEP staff have not looked into any other methods, having decided on QD with the regions. However, the most important thing is that multiple lines of evidence are used, as it is still unclear how PFAS leaches.

Mr. Bolstein asked if there was a model that could be used to calculate the groundwater to surface water interface in order to avoid surface water sampling. Ms. Sterling said that Interstate Technology Regulatory Council (ITRC) have not heard about such a model and agreed to check with DEP's Bureau of Clean Water. Mr. Bolstein asked how to demonstrate compliance when working on sites where a stream runs through an area with groundwater issues, as it is difficult to determine whether detected PFAS are coming from the site or are simply background. Mr. Maddigan will consult with other DEP staff to develop a clear answer. Mr. Neyhart also offered for the PFAS Action Team to work on a solution, and Ms. Costello suggested they meet with the Board to discuss things in more detail.

Department of Waste PFAS Update

Mr. Kevin Beer from the Bureau of Waste Management attended the meeting to discuss using the management of fill policy to address PFAS. If clean fill is used on a project, it can be done without a permit. To demonstrate that fill is clean/uncontaminated, it can be analyzed. Fill only needs to be evaluated for PFAS if there may have been a release of PFAS at that site. Clean fill concentration limits are derived via direct contact values, but no generic soil to groundwater numbers have been established for PFAS. As we do not know the leaching potential of PFAS, we must use a method that will provide conservative values so we can be sure no leaching will occur. As such, remediators should use a method as outlined in Appendix A, Section F of the management of fill policy. Ms. Costello mentioned that Synthetic Precipitation Leaching Procedure (SPLP) has been shown to significantly overestimate impact and asked if there will be a process put in place to avoid such overestimations. Mr. Beer explained that remediators have to use conservative methods if they wish to use clean fill determinations without the need for regulatory oversight. The Bureau of Waste Management is willing to work closely with remediators on a site-specific basis if they want to use a more precise method, but they cannot submit a certification of clean fill and expect it to be accepted without demonstrating it will not impact groundwater.

Mr. Will Hitchcock mentioned that New York State regulations require that fill originating in New York City be sampled for PFAS as a matter of course. He also pointed out differences in application of SPLP analysis across regions, some of them inconsistently with policy. He requested that the process be standardized across the state.

Mr. Michael Nines asked whether the Bureau of Waste Management would consider the use of other methodologies besides SPLP. Mr. Beer explained that the DEP is continually evaluating other methods and is open to considering any that may be more appropriate. Mr. Nines asked if the LRP is working on developing a generic value. Ms. Sterling explained that such calculations cannot be completed until there is more information on the leaching potential of PFAS.

Ms. Costello requested that the Department put together a document to help the regulated public navigate sites involving PFAS as the science is changing. Mr. Maddigan agreed to consider creating such a document.

Chapter 250 Updates

Ms. Sterling stated that the draft Chapter 250 rulemaking was published for public comment in July of 2024. The comment period ended in September 2024, and DEP has been preparing responses. The vast majority of comments were regarding PFAS and fell into three main categories: the DEP rulemaking's interaction with EPA's MCL rule, the impact on the management of fill policy, and "other."

Ms. Sterling presented an overview of the comments. Commentators requested that all of the PFAS compounds from the MCL publication, including PFHFS and PFNA, be included in the rulemaking, and that the rulemaking explain the approach to the Hazard Index (HI) calculation more thoroughly. The MCL compounds and HI approach were released by EPA after the draft rulemaking was approved, and the Commonwealth Documents Law prohibits the addition of new science or information to a final form

rulemaking that was not presented in the proposed rulemaking. A document explaining the HI calculation is hosted on the LRP website and will be referenced in the comment response document for the public to access. There were also comments requesting clarification on how the EPA's MSCs will impact the PFAS enforcement date for public drinking water systems. Systems do not have to meet the new MSCs now but do have to start monitoring PFAS levels and work towards meeting the new limits.

Ms. Sterling clarified that LRP does not account for impacts to the management of fill policy. The management of fill policy requires that remediators calculate generic soil-to-groundwater values. This cannot currently be calculated for PFAS because science does not yet know their leaching potential. Management of fill policy also requires understanding of background values, and Act 2 does not allow for the calculation of background values.

There were a variety of other PFAS related comments. Some asked whether the new rulemaking will require reopeners. LRP prefers to avoid reopeners but encourages partners to reenter the Act 2 program. Commenters requested clarification on whether it would be necessary to attain the statewide health standard for PFAS; Ms. Sterling clarified that any standard is available.

There were also some comments regarding lead and PAHs. Some stated that DEP should adopt a target blood lead level of 3.5 micrograms per deciliter. Ms. Sterling explained that the Centers for Disease Control and Prevention (CDC) uses 3.5µg/dL as a reference value, not an attainment value. The idea is that a child's blood levels reaching that value indicates that more monitoring should be done. Other comments stated that DEP should not add averaging as a statistical test. This was addressed in the white paper; LRP added restrictions requiring this be done with attainment data, as would be done with any other attainment demonstration. Because averaging is used within the adult lead model and the Integrated Exposure Uptake Biokinetic Model for Lead in Children (IEUBK model), LRP believed it appropriate to allow averaging for PFAS. Another comment stated that the proposed carcinogenic polycyclic aromatic hydrocarbons (PAH) toxicity values and MSCs create an unacceptable risk. When LRP double-checked the commenter's calculation, they found that it did not align with the way DEP calculates MSCs and that the calculated MSCs do not allow unacceptable risk.

Ms. Sterling explained that the next step for the rulemaking is to finalize revisions to the preamble and comment response document. LRP then plans to present the final rulemaking to the EQB in the third quarter of 2025. Mr. Campbell asked whether LRP planned to share the comment response document at the next board meeting. Mr. Maddigan explained that LRP does not usually share the comment response document with the board and Mr. Conrad explained that it will be posted on the EQB's website with the rest of the final rulemaking documents once it is presented to the board for adoption.

Mr. Nines mentioned that the federal values are the relevant groundwater standards for Pennsylvania and that the published rulemaking will not have the correct numbers. He asked whether LRP plans to refer the regulated community to the standards posted to the LRP website. Ms. Sterling confirmed this to be the case and acknowledged that the discrepancy causes confusion, but because of the way the laws were written, the tables cannot be changed in the rulemaking until the next update.

Mr. Nines also mentioned the economic impacts of the new PFAS rulemaking, especially as they relate to the management of fill policy and asked if consideration of the costs versus benefits of the rulemaking and its effect on fill policy is outside of the scope of LRP's considerations for proposed rulemakings. Mr. Maddigan explained that across entire revised rulemakings, there are compounds

whose values decrease, and others where the values increase, meaning that the economic impact is usually negligible overall. He added that the preamble to the rulemaking explains that the impact to the management of fill policy is only to add compounds to the list; the process for addressing PFAS does not change, only the listed values do.

Ms. Costello asked whether there are any specific upcoming studies on groundwater leaching, fate and transport modelling, etc. Ms. Sterling knows of two upcoming studies being performed by Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP) in Alaska, one in situ and one ex situ. She acknowledged there are likely more studies being performed but is not aware of any specifically. Once any studies are fully published, LRP will be happy to consider any new science, though Mr. Maddigan added that with any new research, DEP has to review the study and peer review extensively to ensure staff are working with science that is accurate and applies to the program. He requests that board members send any studies they come across to Central Office for LRP to consider.

Mr. John Clarke asked if statistical averaging for lead will affect the management of fill policy. Mr. Beer explained that the Bureau of Waste Management's procedures for determining whether clean fill values are met are not affected by the new rulemaking. The only change is the direct contact value itself.

Mr. Nines asked if Act 2 uses the lower of direct contact values and 100x groundwater value rather than using the generic value, and Ms. Sterling and Mr. Maddigan confirmed.

Public Comments

There were no public comments.

Next Meeting

The next CSSAB meeting is scheduled for July 16, 2025.

Closing

Mr. Campbell motioned to adjourn the meeting, with Ms. Costello seconding the motion. The meeting was adjourned at 1230.