Sarah Fees

Please see attached file with comments from Landau Associates.



February 1, 2023

Washington State Department of Ecology – Toxics Cleanup Program Post Office Box 47600 Olympia, Washington 98504-7600

Submitted to: Draft PFAS guidance for investigating & remediating PFAS contamination in Washington state (commentinput.com)

Re: Comments on Washington State Department of Ecology's Draft Guidance for Investigating and Remediating PFAS Contamination in Washington State

Thank you for the opportunity to comment on the Washington State Department of Ecology's (Ecology's) Draft Guidance for Investigating and Remediating PFAS Contamination in Washington State (Publication No. 22-09-058; Draft Guidance). We appreciate that this document consolidates available documentation in one place and provides references for other useful guidance (including ITRC's PFAS guidance). Our comments are intended to clarify this Draft Guidance and request additional detail on the regulatory implications of this Draft Guidance document. Specific comments on the Draft Guidance are provided below.

Document Organization

- There are two sections on cleanup levels and screening levels one for human health (Chapter 3) and one for ecological receptors (Chapter 5). These chapters are separated by a chapter discussing sampling methodology (Chapter 4). We suggest reorganizing so that the sections on cleanup levels and screening levels are together, followed by the section discussing sampling methodology.
- Section 4.1.1 discusses the list of analyses for PFAS compounds that should be collected; however, Section 4.5 discusses when PFAS sampling would be required and what compounds to sample. We suggest moving the current Section 4.1.1 to Section 4.5 to improve readability.

General Comments

- The Draft Guidance references and provides links to many documents that are frequently updated as additional PFAS information is released. Will Ecology's Guidance also be continually updated as the referenced links are updated?
- Background PFAS levels are not discussed.

MTCA defines "natural background" as "the concentration of hazardous substance consistently present in the environment that has not been influenced by localized human activities" (Washington Administrative Code 173-340-200). While PFAS are human-made, the MTCA definition also recognizes that, for instance, certain PCB levels will be considered "natural background." The Draft Guidance does not address background concentrations of PFAS in the environment, despite the fact that they are prevalent in all types of media, and often cannot be traced to a source. As it further develops this Draft Guidance, Ecology should provide information and direction to regulated parties on how it intends to account for background levels of PFAS when setting cleanup levels at a particular property or site.

- Six PFAS compounds are identified with screening/cleanup levels in the human health cleanup levels/screening levels discussed in Chapter 3; however, 10 PFAS compounds have concentrations protective of ecological receptors as provided in Chapter 5, Table 7. How will these different compounds with ecological screening levels be addressed and handled by Ecology when evaluating a site under human health issues?
- Several sections in the document discuss recommended cleanup levels or identify values as screening levels. Please clearly identify if the values discussed throughout the document are screening levels or are MTCA enforceable cleanup levels.
- The Draft Guidance does not include information or requirements for data validation to evaluate laboratory performance.

Chapter 3 – Section 3.2

The Draft Guidance document states: "Ecology expects that the SALs will be considered ARARs and therefore applied as the cleanup levels at sites where groundwater is currently being used, or may be used in the future, as a potable drinking water source."

- The text states that Department of Health (DOH) State Action Levels (SALs) may be determined as an Applicable or Relevant and Appropriate Requirement (ARAR) for a Site and as such are used as preliminary groundwater cleanup levels. When and how will Ecology determine if DOH SALs are ARARs and as such become enforceable under MTCA?
- Within Table 3, the second and third columns labeled "Method B" and "Method C" appear to be formula values and should be identified as such (e.g., Method B Formula Value).
- Same comment above for Table 4.

Chapter 4 – Section 4.1.1

The Draft Guidance states: "At the time we published this guidance, screening levels/cleanup levels were only available for the six PFAS chemicals described in Chapter 3. As more toxicity information becomes available and assessments are completed, the list of PFAS compounds with screening or cleanup levels will expand. Therefore, Ecology recommends analyzing for a comprehensive set of PFAS compounds, consistent with current, available analytical methods and laboratory capabilities. This will allow future assessment of the site once additional screening/cleanup levels for the other PFAS chemicals have been established."

- Analytical methods described in the draft guidance include methods analyzing 24 analytes and 40 analytes. But as Ecology identified, it has only set screening/cleanup levels for 6 PFAS compounds. Analyzing numerous compounds, for which there are currently no screening or cleanup levels (for the purposes of this letter described as "Other PFAS Compounds"), raises a number of questions that Ecology has not addressed in the Draft Guidance, and which create potential complications for parties conducting cleanups. We encourage Ecology to at least consider the following questions before finalizing the Draft Guidance's recommendation to analyze for any PFAS compounds other than the six PFAS chemicals for which there are established screening/cleanup levels:
 - Will parties conducting an investigation (whether voluntary or under formal agency oversight) be required to analyze for the Other PFAS Compounds? If so, has Ecology considered the impact of the cost to conduct such analysis (e.g., lab fees, data

validation, and reporting costs)? It may be excessive to require analysis of PFAS compounds that Ecology does not currently, and may never, regulate.

- If parties analyze for the Other PFAS Compounds, without being required to do so by Ecology, will they be required to submit all of the analytical information they obtain to Ecology? If so, how will Ecology use that information now and/or in the future? For instance, does Ecology plan to use the Other PFAS Compounds analytical data to make cleanup decisions, and if so, on what basis/under what authority?
- If Ecology requires submission of Other PFAS Compounds analytical information, we assume that information will be accessible to the public. Has Ecology considered the ramifications of sharing data with the public about PFAS compounds for which it has no screening/cleanup levels?
- Will parties conducting investigation be required to retain analytical information they obtain about the Other PFAS Compounds? If so, in what manner, and for how long?
- If an investigation uses an accredited method at the time of sampling, will Ecology require future sampling under newer accredited methods as they are developed?

Chapter 4 - Section 4.4

• Trip Blanks

The Draft Guidance indicates: "One trip blank for each cooler to assess whether contamination is introduced during sample shipment."

 ITRC guidance does not include trip blanks but does suggest "performance evaluation samples." Is there scientific evidence that supports the need for submitting a trip blank, given that other blank samples will be submitted?

Rinse Blanks

The Draft Guidance states: "One sample collected from the last rinse each day for each type of sampling equipment used for each matrix."

- Consider revising this statement to indicate rinse blanks are only required for nondedicated sampling equipment that comes into contact with the sampled matrix.
- Duplicate Samples

The Draft Guidance indicates: "More frequent collection of duplicate samples from heterogeneous media—such as soil or sediments where homogenization of samples cannot be performed—should be assessed on a case-by-case basis."

 Is this statement regarding triplicate samples from Incremental Sampling Methodology? If so, please state.

Chapter 6

• Treatment assumptions largely consider only active remediation. Passive remediation should also be considered where active remediation may be cost prohibitive or otherwise infeasible.

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We appreciate the opportunity to review the Draft Guidance. We hope that you will consider these comments for inclusion and revision of the final Guidance for Investigating and Remediating PFAS Contamination in Washington State.

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