

Meeting Summary

PFAS 2025 Advisory Committee Meeting 2

Jan. 22, 2025



Meeting attendees

Committee members in attendance (for all or part of meeting):

- Negonnekodoqua Blair, Confederated Tribes of the Umatilla Indian Reservation
- Anzie St Clair, Port of Portland
- Jim Denson, Waste Management
- Jamie DeWitt, Oregon State University
- Heather Gosack, WSP
- Jeremy Haney, Oregon Military Department
- Jeff Hunter, Perkins Coie, on behalf of Oregon Business and Industry
- Michael Karnosh, Confederated Tribes of Grand Ronde
- Johnny Leavy, City of Medford Public Works Water Reclamation Division and Association of Clean Water Agencies
- Karen Lewotsky, Oregon Environmental Council
- Jamie Porter, Rainbow Water District
- Rose Poton, Verde
- Teryn Yazdani, Columbia Riverkeeper

DEQ team members in attendance:

- Franziska Landes, Senior Environmental Scientist and Hydrogeologist
- Sarah Van Glubt, Project Manager
- Dan Hafley, Project Manager and Hydrogeologist
- Mike Kucinski, Interim Land Quality Administrator
- Annie Rohlf, Public Affairs Specialist
- Cade Anslern, Administrative Specialist

Public attendees (for all or part of meeting): 50 other attendees were present

Welcome and agenda overview

Franziska Landes welcomed everyone to the meeting, reviewed the agenda, and shared ground rules. The Oregon Department of Environmental Quality (DEQ) team members introduced themselves, followed by introductions by the rulemaking advisory committee (RAC) members. Mike Kucinski provided welcoming remarks emphasizing the importance of the RAC in the rulemaking process.

Clarifying scope and questions from RAC meeting #1

Franziska Landes provided information on the scope of the rulemaking, clarifying that this rulemaking applies to the Cleanup Program and the designation of hazardous substances, the list of chemicals that the Cleanup Program can conduct or require investigations and cleanup where risk exists. This rulemaking would not change the Cleanup Program's processes for investigating or cleaning up sites, and discussions around

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exemptions for certain industries, past PFAS releases, or closed sites are out of scope of this rulemaking. Additionally, the Cleanup Program typically defers to DEQ's permitting programs regarding releases from permitted facilities, such as wastewater treatment plants and landfills; testing or treatment requirements would come from those DEQ programs and are not part of this rulemaking. During this meeting, DEQ is requesting input from the RAC on the constituents included in the rulemaking and racial equity, environmental justice, and fiscal impacts of the rulemaking. Franziska also discussed DEQ's regulatory authority related to this rulemaking, in response to some questions DEQ received from RAC members. Oregon Statute 465.400 provides the Environmental Quality Commission (EQC) with the authority to designate hazardous substances. DEQ's Cleanup Program's purpose is to protect human health and the environment from releases or suspected releases of hazardous substances, and the Cleanup Program follows Oregon's Hazardous Substances Remedial Action Rules (OAR 340-122) to address these releases.

RAC questions

- A RAC member noted that other compounds included in the rulemaking, such as 1-bromopropane, would not be discussed at this meeting, and asked if additional comments from the RAC were requested for these.
 - DEQ stated that comments regarding all compounds included in the rulemaking are welcome as part of the RAC process.
- A RAC member noted that six PFAS compounds have drinking water MCLs and asked why DEQ is not considering adding all of these in the rulemaking. From their perspective, all six are important to include to focus on protecting human health and the environment.
 - DEQ stated that this would be addressed in the next presentation and discussion topic.

PFAS constituents presentation

Sarah Van Glubt discussed rule language options based on feedback received from the RAC:

1. Add PFOA and PFOS by readopting the current federal list of CERCLA hazardous substances by updating the date of the rule. This is the approach DEQ initially proposed.
2. Add PFOA and PFOS by including a separate line item in the rule listing these compounds. The effect of this option would be the same as the first. This option was included based on calls for clarity by some RAC members.
3. Add the six PFAS compounds for which the EPA has set enforceable drinking water standards (Maximum Contaminant Levels, or MCLs), including PFOA, PFOS, PFHxS, PFNA, HFPO-DA (GenX), and PFBS, including their salts and structural isomers. These compounds have well established toxicity information, and are commonly detected in soil and water, including some of Oregon's drinking water. This option was included based on questions from some RAC members about why additional PFAS compounds were not proposed in the rulemaking.

Regardless of which option, the content in the meeting materials about racial equity, environmental justice, and fiscal impacts would generally not be impacted. DEQ expects racial equity and environmental justice would be better supported by the addition of more compounds as that would be more protective, and fiscal impacts are expected to be about the same given that these compounds are analyzed with the same method and can be treated with the same technologies.

PFAS constituents discussion

Annie Rohlf facilitated the discussion with the following questions for RAC consideration:

1. What PFAS constituents should be considered to best protect human health and the environment?
2. How might the different rule language proposals impact the communities and parties you represent?

During first portion of the discussion, each RAC member was called upon to give input regarding the language options proposed by DEQ, noting that, if none seemed satisfactory, the RAC member was encouraged to provide an alternative.

Most RAC members supported option 3:

- Various RAC members expressed the opinion that listing the six PFAS compounds would be more protective of human health and the environment.
- A RAC member stated their organization represents all Oregonians, and that the six compounds are already identified in statute as threatening to human health and other life and they encouraged the use of option 3 to protect human health.
- A RAC member stated it is their job to ensure the protection of Tribal resources and members in their use of Oregon's waterways, with consideration for their higher-than-average fish consumption rate and in-water Tribal activities. They were strongly in favor of adding all six compounds, noting that if there is a compound that may harm the public or environment, they are in favor of adding that compound.
- A RAC member stated that Oregon would fall behind in protecting its people if DEQ did not regulate at least those six compounds, and if fewer were regulated, they wanted to hear stronger arguments on how that would protect human health. They stated that Tribal treaty rights protect public goods (water, fish, and other foods) that impact all people, not just Tribes.
- A RAC member stated they support option 3 as they would not want to complete investigation and cleanup activities and then need to repeat the process if new compounds are added later.

In some cases, those supporting option 3 also supported or advocated for DEQ to consider listing additional PFAS compounds:

- Various RAC members expressed being open to or supporting the inclusion of additional PFAS compounds beyond the six in option 3.
- A RAC member discussed that considering the entire PFAS class would be a more proactive and protective approach, rather than asking the public to wait until we have specific toxicological information on each compound when we already know the entire class of contaminants is problematic.
- A RAC member stated they did not know of any reason not to expand further beyond the six, as non-persistent PFAS compounds can degrade into persistent ones, and are still mobile and bioaccumulative toxicological hazards.
- A RAC member stated that in representing environmental justice communities and all other Oregonians, their concern is in maintaining safe drinking water across the state. Concerns with regards to avoiding re-testing and re-cleaning up also influenced their opinion.
- A RAC member stated DEQ should consider regulating all PFAS with data on harmful impacts, including those with EPA regional screening levels. They also recommended writing the rule so that more compounds could be added as their harms are discovered, similar to Washington state's approach. They stated that, with regards to discussion question #2, their represented communities had many different needs, but a need for clarity on rules was shared between them all.

Some RAC members expressed uncertainty regarding what option would be best to select:

- A RAC member was not sure which option to support but stated the need to include PFOS and PFOA evaluation in cleanups. They advocated for making quality risk-based decisions and stated that they were not sure what science was available about all six compounds, particularly how they behave in media outside of drinking water.
- A RAC member indicated that utilities with groundwater and surface water sources are passive receivers. If water systems are required to treat to MCL standards for the six PFAS, investigating sources is a reasonable and good step for now.
- A RAC member was neutral on the options presented. They stated that option 1 or 2 would be sufficient for them, and that while they were not opposed to option 3, they were concerned about insufficient DEQ resources. They supported option 3 if DEQ had the resources for implementation while still maintaining its duty of protecting human health and the environment. They also voiced the need to consider future changes at the federal level, health-based levels versus MCLs, impacts on land application, and public perception.

Some RAC members supported option 1:

- A RAC member stated that changes and lawsuits at the federal level may impact the CERCLA list, and that the list may be expanded beyond technology's ability to treat materials.
- A RAC member stated that DEQ originally proposed only updating the rule to follow the CERCLA list. They voiced support for ensuring DEQ's list of hazardous substances aligns with the federal list only

and were concerned with whether DEQ had the resources to regulate all six compounds, third party action in Oregon once compounds are listed, and unclear cleanup standards.

The second portion of the discussion included time for RAC members to have an open conversation.

- A RAC member stated that several years ago, they testified in New Mexico's triennial review of water quality standards, and proposed including PFAS so the state could stay ahead of the curve when testing environmental media. They wanted to know if DEQ would consider the approach used in that case and expressed a willingness to share their testimony.
 - DEQ welcomed receiving this material and sharing with other RAC members.
 - Another RAC member expressed interest in receiving this material, as well as any available information on emerging chemicals of concern.
- A RAC member wanted to know more about current sites in Oregon where PFOS or PFOA are not detected but the other PFAS with MCLs are present.
 - DEQ stated that one of its primary concerns in the rulemaking effort is reflecting the data available, and that while PFOA and PFOS are often primary PFAS present at sites, other chemicals with MCLs are sometimes found at similar or higher concentrations. Some examples of this include Kingsley Field in Klamath Falls which has PFHxS as the primary risk driver in groundwater in some areas, and some public water systems where non-PFOA/PFOS compounds are detected above MCLs. Further, the nature of the compound mixtures can help identify sources.
- A RAC member encouraged DEQ to ensure its approach does not lose effectiveness if it regulates more compounds. They supported prioritizing the compounds with the biggest impact first, then expand the approach later as resources allow.
- Various RAC members restated that listing additional PFAS would be more protective, as supported by available science indicating PFAS are toxic and persistent. A RAC member stated it is better to be prepared when and where PFAS show up, rather than wait to list additional compounds in future rulemakings. A RAC member stated that including additional compounds is further supported by the knowledge that toxicity is driven by mixtures of contaminants, and having a full dataset gives better information.

Racial equity and environmental justice presentation

Sarah Van Glubt discussed the rulemaking's potential impacts on racial equity and environmental justice in Oregon. Minority communities, including racial minority and Tribal communities, face disproportionate burdens of environmental contamination and have higher rates of disease and adverse health conditions, which can be caused or exacerbated by exposure to environmental contamination. This rulemaking would contribute to a healthier environment, which has health benefits to communities that are difficult to quantify.

To date, PFAS have been detected in 32 of Oregon's drinking water systems, with 23 systems exceeding EPA drinking water standards. Treatment for PFAS is extremely costly to install and maintain. This rulemaking would support identifying sources of contamination to drinking water and parties responsible to address. Otherwise, cost burdens to test and treat fall to municipalities and rate payers, of which small community water systems and low-income communities would likely be disproportionately impacted.

PFAS have been detected in fish around Oregon, in some cases at levels exceeding the Oregon Health Authority's (OHA) screening level, including in the Columbia Slough in Portland. Populations that consume higher amounts of fish are most impacted by fish contamination, including Tribal communities, subsistence fishers (including low-income and immigrant communities), and recreational fishers. Tribal communities are particularly important to consider because of the cultural significance of fish, and because these communities consume substantially more fish than non-Tribal communities. Tribal communities may also be impacted by contamination of other important first foods (such as game, roots, and berries). This rulemaking is needed to identify sources and ensure responsible parties address contamination impacting fish. Fish advisories are one tool available but are limited in usefulness and are not a long-term solution.

Racial equity and environmental justice discussion

Annie Rohlf facilitated the discussion with the following questions for RAC consideration:

1. What are additional racial equity and environmental justice considerations?
2. How might the health of the communities and parties you represent be affected by this rulemaking?

RAC members discussed the need to control upstream uses and sources:

- A RAC member stated that until we control the use of PFAS the rulemaking is likely to have minimal impact on human health since the compounds are so ubiquitous. The RAC member stated that municipalities and wastewater treatment facilities would be at risk of third-party lawsuits, and that associated costs passed onto rate payers would most impact low-income rate payers.
- A RAC member stated that bills have been filed in this legislative session to restrict upstream sources which would result in less PFAS in waste streams and a need to address releases.
- A RAC member emphasized that while fish consumption advisories are a necessary step to protect the public, they do not address treatment of sources. Contaminants need to be removed from the system rather than the public just being warned of their existence.

RAC members discussed the importance of health considerations:

- A RAC member stated that indirect health concerns should also be considered, such as the stress related to finding elevated levels of the compounds in an individual's blood or water supply, stress of being unable to complete testing, and fear of lost wages from sickness. All these forms of stress make individuals more susceptible to the negative effects of toxicity.
- A RAC member stated that less consideration has gone toward quality of life and human health costs. They stated that while the communities they represent may face higher water bills if PFAS treatment is needed, the cancer and other illnesses they are experiencing due to contamination take priority and can be addressed by using existing money and resources.
- RAC members emphasized prioritizing protecting disadvantaged communities as their priority.

RAC members discussed benefits to Tribes with this rulemaking, including reducing fish contamination. A RAC member stated there is a need for Tribes to assess spills and dump sites, both illegal and permitted, but they do not have the resources to characterize all these sites.

RAC members discussed resources needed to address PFAS:

- A RAC member emphasized that finding the resources to deal with PFAS will be a common problem, and DEQ must consider that strain.
- A RAC member stated they believe that DEQ and all present can use the same skills in solving other issues to overcome those presented by regulating PFAS, and that complex financial issues always arise in this work and are addressed.
- A RAC member expressed support for small community water systems, rural systems, and private wells, but noted these parties do not have the resources to complete investigations. However, given DEQ's focus of this rulemaking is not on passive receivers like landfills or water treatment facilities, they were concerned about DEQ requirements for industry, including a concern that DEQ will implement a wide sweeping data collection effort against nearly all potential sources. They requested more clarity from DEQ on the implementation of this rulemaking beyond investigating the presence of the compounds.
- A RAC member stated that without clear rationale, it is difficult for DEQ to secure additional funding; however, this rulemaking would help DEQ build the basis for requesting funds from the legislature and governor to do new work around PFAS and to implement protective measures.

A RAC member asked for clarification on the data collected by the Department of Defense (DOD). DEQ stated that the DOD is proactively investigating PFAS contamination at their facilities and are not limiting themselves solely to PFOA and PFOS. However, DOD has had to return to some sites now that there are MCLs for compounds such as PFHxS which were not tested for originally, costing millions of dollars.

A RAC member asked for clarification on levels available for soil cleanup. DEQ stated that the EPA has regional screening levels for soil in residential and occupational use, and for leaching into groundwater, around which DEQ's levels are typically based.

A RAC member asked for clarification on what DEQ would do with data collected. They expressed concern about testing levels in the parts per trillion and the likelihood of detections at such low levels. They also expressed concern about data collection in the context of community health if third-party lawsuits result. DEQ responded that as with other contaminants, the focus would be on areas of greatest concern and evaluating releases in a stepwise process to prioritize human and ecological exposure. If a site has used PFAS but has not caused a release or if the release is very small, it would be of lesser concern, and if there is no exposure impact cleanup is unlikely to be needed.

Public input period

City of Bend Water Services representative: The participant encouraged DEQ to look into including compounds by reference rather than by name due to regulation differences at the federal level, noting that PFOS/PFOA are included in the CERCLA list, but not the additional four compounds with MCLs. They stated that adding all six compounds with MCLs would create regulations difficult for wastewater utilities to follow, and that the drinking water element would resolve itself as groups pass regulations to eliminate the compounds from entering water supplies.

Oregon Department of Transportation Hazardous Materials Program representative: The participant asked if DEQ has given thought to what the process of detecting releases and spills of PFAS would look like. For example, Salem's watershed is over 400,000 acres; would DEQ be looking at source investigations on a large watershed level? What happens when PFAS is in sediment, or released during wildfires? DEQ clarified that the process would look the same as with other contaminants. DEQ has a process for prioritizing sites and addresses in a source-specific manner.

The participant asked via Zoom chat if there would be no update to the definition of hazardous substance established in OAR 340-093-0030 (48), or if PFAS be included by reference to ORS 465.400? DEQ responded that this rulemaking would update the definition of hazardous substance in OAR 340-122-0115 (30), and provided the following link: <https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=71832>

CCS representative (via Zoom chat): The participant asked if part of this planning includes considering approved technologies for remediation and if so, what will be the process for getting a technology approved by DEQ?

Fiscal impact presentation

Sarah Van Glubt discussed the rulemaking's potential fiscal impacts to various parties in Oregon and requested RAC input on whether the proposed rule would have fiscal impacts and to what extent as well as potential adverse impacts to small businesses and recommendations for ways DEQ might alleviate burdens to small businesses.

In some cases, this rulemaking may result in some parties being required to investigate PFAS releases and complete cleanup actions. Overall, most parties and facilities are not expected to be financially impacted by this rulemaking as most sites will not have PFAS concerns. This rulemaking would only apply to releases or suspected releases, in which case sites will be prioritized by greatest likelihood of release and potential impacts to people and the environment. Initial efforts will be focused on data collection. Investigations are only required if a release is known/suspected to have occurred and can range from simple to complex. In many cases an initial simple investigation is sufficient to confirm a release has not occurred. Cleanup actions are only required if a release is confirmed and poses risk to human health or the environment. These can also range from simple to complex. Generally, investigation and some cleanup costs are expected to be similar for PFAS to those already completed for other contaminants.

This rulemaking is expected to result in a cleaner/healthier environment, which would result in healthier communities and reduced chances of experiencing adverse health conditions. Better health would in turn result

in benefits to individual and family finances, the overall economy, and quality of life. In some cases, publicly owned facilities (such as wastewater treatment facilities and water providers) may financially benefit from parties responsible for contamination identifying and cleaning up PFAS sources in the environment. This could reduce the financial burden to facilities and their ratepayers for testing and treatment. In some cases, publicly owned facilities (such as airports and municipal fire training facilities) may be financially burdened if they resulted in PFAS releases to the environment. Overall, it is expected that communities largely stand to financially benefit from this rulemaking.

Fiscal impact discussion

Annie Rohlf facilitated the discussion with the following questions for RAC consideration:

1. What are additional fiscal or cost considerations?
2. How might the communities and parties you represent be economically impacted by this rulemaking?

RAC members discussed impacts to parties required to complete investigation or cleanup:

- A RAC member asked how DEQ plans to uphold the polluter-pays principle as mentioned in its fiscal impact statement and how a confirmed release would be defined. They also asked if any protections would be put in place for publicly owned utilities, municipal sites such as airports and fire training facilities, or passive receivers.
- A RAC member proposed that the RAC push DEQ to consider exempt releases, such as passive receivers since it is not DEQ's intent to cover certain passive receivers with this rulemaking. They noted that airports and fire training facilities were required to use materials containing PFAS and that making requirements of them would be unjust.
- A RAC member inquired whether, if DEQ did not plan on applying this rulemaking to passive receivers, similar liability considerations would be made for river trusts, wastewater treatment plants, and similar parties buying property that had PFAS on-site at the time of purchase.
- A RAC member stated that they foresee the cost of remediation of water reducing with the introduction of new technologies, pointing out several North Carolina companies focused on treating PFAS in water cost effectively at utility-level scales.
- A RAC member emphasized the RAC's obligation to determine whether this rulemaking has a significant adverse impact on small businesses and if so, DEQ must determine how to protect small businesses. The RAC member did not believe DEQ sufficiently addressed impacts to small businesses in the fiscal impact statement. They encouraged DEQ to look at related statutes and noted small processing plants could be put out of business by being required to investigate.
- A RAC member agreed that while this rulemaking would support significant remediation, they cautioned against the implementation of the rule in a way that would result in essentially a research project for entities investigating. While additional PFAS have been discussed for consideration in this rulemaking, they are not aware of any commercially available method to test for all PFAS compounds. They recommended sticking to what is commercially available now to control costs.
- A RAC member noted that funding investigations and cleanups through grants, insurance, and other programs requires regulation, and that there is a cost benefit to communities and collective health to work toward treatment.

RAC members discussed costs estimates included in the Fiscal Impact Statement:

- Various RAC members indicated some of the costs in the Fiscal Impact Statement, particularly those related to investigations, were lower than they thought they should be.
- A RAC member noted that capital costs for waste processing vary based on volume of incoming waste, landfill leachate volumes, and treatment needs.
- A RAC member stated that their organization has spent over a million dollars in PFAS investigations since 2016, and that larger sites would cost more. They also noted more work is needed to better understand certain exposure routes, create national standards, and set background levels and wanted to know who would bear the cost of that work. Additionally, they noted that addressing compounds included in federal regulations is also a consideration for sites with a federal presence.
- A RAC noted additional considerations for DEQ to make when estimating costs, for landfills in particular, such as transportation costs, creating and maintaining specialized facilities for certain contaminants, and land acquisition far enough away from vulnerable areas to ensure safe storage.

- A RAC member noted that in their experience completing investigations in 30 states, the costs often end up being higher than projected.
- Some RAC members discussed the issue of continued use of PFAS, and that without product or use restrictions or regulation, PFAS will continue entering the environment. A RAC member stated that DEQ should consider this effect to the fiscal impact.

RAC members discussed impacts to health and communities:

- Various RAC members expressed concerns related to the costs of inaction, especially to the public and communities. A RAC member stated that individuals, families, and communities who need to seek alternative water sources such as bottled water would bear the costs to do so, as well as healthcare costs tied to exposure. Another RAC member stated that the costs paid by frontline communities impacted by pollution historically are typically unaccounted for and are paid out of pocket by the communities.
- Various RAC members noted that some costs, such as societal and environmental costs, are difficult or impossible to quantify, but still important to consider. A RAC member stated that it is easy to value fiscal impacts over elements that cannot be assigned a dollar value and included in cost-benefit analyses. They stated that many costs to the environment and public health are externalized from these analyses, and that while environmental economists are working toward ways to quantify them, they must be considered now. A RAC member stated that the fiscal impacts and environmental justice analysis go hand in hand, and that DEQ should treat them as such.
- A RAC member encouraged keeping a broad perspective on the issue, noting that while PFAS is stressful for parties who may face large financial burdens, it is incumbent on the state to take action and determine responsibility to find funding and begin cleanup.
- A RAC member stated that the nature of Tribal treaty agreements should be a consideration for DEQ. They clarified that at the time of treaty negotiations, while the U.S. government offered improvements to Tribal quality of life through technology, the main basis for land transfer was grounded in the need for Tribes to preserve their ways of life and for the U.S. to protect that right to tradition. However, developments such as PFAS threaten traditional lifeways, and immense wealth has been generated by development on land transferred to the U.S. They stated that cost analyses for cleanup should be contextualized by this wealth generation, and that allocating sufficient resources to address PFAS is vital to maintaining the treaties' principles of equal exchange.

A RAC member asked if they could anonymize and share data they have. DEQ responded that they could and reiterated that all RAC members are welcome to send any supporting evidence they would like DEQ to consider.

Next steps and wrap up

DEQ encouraged RAC members to share any additional feedback today by Wednesday, February 5, 2025 via email. DEQ will compile feedback received and post to the website. Franziska then provided a brief timeline and overview of the next steps of DEQ's rulemaking process. DEQ will compile a public notice packet, which will be published at the beginning of the formal public comment period. The public comment period is anticipated to begin in March. DEQ closed out the meeting by thanking all RAC members for their participation and sharing their valuable time, insights, and expertise.