



Is There a (Scientific) Method to PFAS Madness? Maybe. Soon.



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There's a buzz in the environmental science community about a new analytical method ([EPA 1633](#)) for PFAS, one of the hottest contaminant issues in the industry today. For those who might not know, laboratory analytical methods, as defined by the US Environmental Protection Agency, are procedures that are used to measure the amount of particular contaminants in water or other environmental media samples. They are designed to produce data that can be proven and defended in court. Currently, the only EPA PFAS method that a lab can be accredited for is 537.1, a drinking water method that was designed for mostly pristine waters—not for soil, wastewater, or tissue samples.

Why the buzz?

Three reasons: 1) The Department of Defense (the home of many PFAS-contaminated sites at facilities nationwide) developed 1633 in collaboration with EPA—so everyone is happy. 2) You can use it for eight sampling matrices: wastewater, surface water, groundwater, soil, biosolids, sediment, landfill leachate, and fish tissue. 3) One method to rule them all (almost). Once it's finalized, EPA Method 1633 will likely replace Modified EPA Method 537.1, ASTM D7968-17, and ASTM D7979-20.

Our company has a band of chemists (aka, nerds who arrange analytical work) who work regularly with numerous labs, and over the last few weeks, we have been getting a ton of questions about EPA Method 1633. The most common question is, “Can I use 1633 for my PFAS project?” The short—but highly incomplete—answer is: “Yes, but no, but maybe soon.” Method 1633 is a draft method put out for testing and trials in a multi-laboratory validation study. That data will be used to finalize and tweak the method for publication. As far as we know, the only lab currently offering 1633 is the one that helped create it: SGS-AXYS ([here is a deep dive for nerds](#)). Unfortunately, there is no EPA accreditation for 1633 yet.

So, could you use it? Yes. However, since the data will be unaccredited, most Quality Assurance/Quality Control managers ([another level of lab nerdiness](#)) would advise you to avoid it. The exception would be when your regulator (aka, US EPA) tells to use 1633. [CWA's website](#) states, “*While the method (1633) is not nationally required for CWA compliance monitoring until EPA has promulgated it through rulemaking, it is recommended now for use in individual permits.*”

So when is “soon?” OK, it is not soon—the earliest it would seem likely would be by late 2022. The multi-lab method validation study has to be completed and statistically analyzed and then the results applied to the draft method. There will be a public comment period and then a final method will be published.

Not exactly a speedy process.

So what does this mean if you (and your labs) are wrestling with PFAS problems at a contaminated site—and you’d really like to move the process along? We’re thinking that you should probably continue to use Modified EPA Method 537.1, ASTM D7968-17, or ASTM D7979-20 for all environmental PFAS Sampling and Analysis Plans (SAPs), Quality Assurance Project Plans (QAPPs). Unless, of course, EPA Method 1633 has been finalized—in which case, EPA Method 1633 should be utilized.

As the world has seen over the last two years of the pandemic, it can take some time to move the needle from “good science” to “sound and defensible science.” Although there is certainly some urgency right now to address the environmental challenges of PFAS, the US EPA—which sits atop the PFAS regulatory chain—wants to make sure that the right science can help solve the long-term problems of PFAS.

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