Small Business Economic Impact Statement

Chapter 246-290 WAC

A Rule Concerning PFAS in Group A Public Water Supplies

Prepared by the Department of Health
on behalf of the State Board of Health

August 3, 2021

SECTION 1:

Describe the proposed rule, including: a brief history of the issue; an explanation of why the proposed rule is needed; and a brief description of the probable compliance requirements and the kinds of professional services that a small business is likely to need in order to comply with the proposed rule.

Background

More than 6.2 million Washington residents get their drinking water from Group A public water systems (Group A water systems). In Washington State, the State Board of Health (board) regulates Group A water systems under Revised Code of Washington (RCW) 43.20.050.

Under RCW 70A.125.080, the Washington State Department of Health (department) is directed to administer a Group A drinking water program with at least the elements necessary to assume primary enforcement responsibility of the federal Safe Drinking Water Act.

The department administers the Group A drinking water program and regulates Group A water systems with a formal agreement with the U.S. Environmental Protection Agency (EPA) known as "primacy". The department's other authorities to regulate Group A water systems come from state laws, like those mentioned above, and Washington Administrative Code (WAC), like the Group A public water supplies rule, chapter 246-290 WAC, which the board is proposing to amend at this time. The department and the board work closely on rulemaking projects, with the department providing expertise, resources, and recommendations to the board. Ultimately, it is the board that has the authority to adopt the proposed changes in this rule.

The board accepted a petition from Toxic Free Future and nine other organizations on October 11, 2017, to set drinking water standards for per- and polyfluoroalkyl substances (PFAS) in chapter 246-290 WAC.

PFAS are chemicals that have been used in industry and consumer products such as carpeting, apparels, upholstery, food paper wrappings, fire-fighting foams, and metal plating worldwide since the 1950s. Wide use combined with their persistent and bioaccumulative properties have led to widespread detection of perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), and perfluorononanoic acid (PFNA) in the blood serum of the general U.S. population [1]. Average serum levels of PFAS may be more than 100 times higher than national norms in communities exposed via contaminated drinking water[2]. A recent Center for Disease Control (CDC)/ Agency for Toxic Substances and Disease Registry (ATSDR) study in the community of Airway Heights, Washington showed that study participants had mean serum levels of PFHxS that were 60 times higher than national norms even two years after PFAS contamination had been fully mitigated in their community drinking water[3]. Mean serum levels of PFOS and PFOA in participant's serum were 10 and six times higher than national norms, respectively.

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[1] CDC - NHANES, Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (January 2019), C.f.D.C.a. Prevention, Editor. 2019, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Atlanta, GA.

[2] Frisbee, S.J., et al., *Perfluorooctanoic acid, perfluorooctanesulfonate, and serum lipids in children and adolescents: results from the C8 Health Project.* Arch Pediatr Adolesc Med, 2010. **164**(9): p. 860-9; Li, Y., et al., *Half-lives of PFOS, PFHxS and PFOA after end of exposure to contaminated drinking water.* Occup Environ Med, 2018. **75**(1): p. 46-51; Pitter, G., et al., *Serum Levels of Perfluoroalkyl Substances (PFAS) in Adolescents and Young Adults Exposed to Contaminated Drinking Water in the Veneto Region, Italy: A Cross-Sectional Study Based on a Health Surveillance Program.* Environ Health Perspect, 2020. **128**(2): doi.org/10.1289/EHP5337.

[3] CDC/ATSDR PFAS Exposure Assessment Community Level Results for Spokane County (WA) near Fairchild Air Force Base, 2020 https://www.atsdr.cdc.gov/pfas/communities/factsheet/Spokane-County-Community-Level-Results-Factsheet.html

Health concerns about PFAS stem from the wide range of adverse effects observed in animal testing. Effects of the best studied PFAS include liver, kidney, thyroid and immune toxicity; developmental and reproductive toxicity, hormone disruption and tumors in certain organs like the liver[4]. The specific profile of effects and the weight of evidence varies by the PFAS examined.

Health researchers are still learning about how environmental exposure to PFAS might affect people's health. The strongest evidence from epidemiology indicates that some PFAS may increase serum cholesterol levels[5], alter liver enzyme levels[6], slightly lower birth weights[7], and reduce immune response to childhood vaccines[8]. Outcomes with more limited evidence of an association with PFAS exposure include thyroid disease, hypertension disorders during pregnancy, reproductive problems, altered hormone levels, and metabolic issues[9]. There is some evidence from occupational and non-occupational studies that PFOA may increase rates of kidney and testicular cancer[10]. Little human-data are available for other PFAS.

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[4] Agency for Toxic Substances and Disease Registry (ATSDR), Toxicological Profile for Perfluoroalkyls - Draft for Public Comment. 2018, U.S. Department of Health and Human Services: Atlanta. p. 852; EPA, *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)*. 2016, Environmental Protection Agency: Washington, D.C. p. 103; EPA, *Drinking Water Health Advisory of Perfluoroctane Sulfonate (PFOS)*, O.o. Water, Editor. 2016, Environmental Protection Agency; EPA, *Human Health Toxicity Values for Perfluorobutane Sulfonic Acid (CASRN 375-73-5) and Related Compound Potassium Perfluorobutane Sulfonate (CASRN 29420-49-3): Public Comment Draft*. 2018; National Toxicology Program (NTP), NTP Technical Report on the Toxicity Studies of Perfluoroalkyl Sulfonates (Perfluorobutane Sulfonic Acid, Perfluorohexane Sulfonate Potassium Salt, and Perfluorooctane Sulfonic Acid) Administered by Gavage to Sprague Dawley Rats P.H. Service, Editor. 2019, U.S. Department of Health and Human Services: Research Triangle Park, NC; National Toxicology Program (NTP), NTP Technical Report on the Toxicity Studies of Perfluoroalkyl Carboxylates (Perfluorohexanoic Acid, Perfluorooctanoic Acid, Perfluorononanoic Acid, and Perfluorodecanoic Acid) Administered by Gavage to Sprague Dawley Rats P.H. Service, Editor. 2019, U.S. Department of Health and Human Services: Research Triangle park, NC; NJDWQI, Health-based Maximum Contaminant Level Support Document: Perfluorononanoic acid (PFNA) 2015, New Jersey Drinking Water Quality Institute Health Effects Subcommittee.

[5] Frisbee, S.J., et al., Perfluorooctanoic acid, perfluorooctanesulfonate, and serum lipids in children and adolescents: results from the C8 Health Project. Arch Pediatr Adolesc Med, 2010. 164(9): p. 860-9; Graber, J.M., et al., Per and polyfluoroalkyl substances (PFAS) blood levels after contamination of a community water supply and comparison with 2013-2014 NHANES. J Expo Sci Environ Epidemiol, 2019. 29(2): p. 172-182; Li, Y., et al., Associations between perfluoroalkyl substances and serum lipids in a Swedish adult population with contaminated drinking water. Environ Health, 2020. 19(1): p. 33.

[6] Bassler, J., et al., *Environmental perfluoroalkyl acid exposures are associated with liver disease characterized by apoptosis and altered serum adipocytokines.* Environ Pollut, 2019. **247**: p. 1055-1063; Salihovic, S., et al., *Changes in markers of liver function in relation to changes in perfluoroalkyl substances - A longitudinal study.* Environ Int, 2018. **117**: p. 196-203; Salihovic, S., et al., *Changes in markers of liver function in relation to changes in perfluoroalkyl substances - A longitudinal study.* Environ Int, 2018. **117**: p. 196-203; Gallo, V., et al., Serum perfluorooctanoate (PFOA) and perfluorooctane sulfonate (PFOS) concentrations and liver function biomarkers in a population with elevated PFOA exposure. Environ Health Perspect, 2012. 120(5): p. 655-60.

[7] Johnson, P.I., et al., The Navigation Guide - evidence-based medicine meets environmental health: systematic review of human evidence for PFOA effects on fetal growth. Environ Health Perspect, 2014. 122(10): p. 1028-39; Meng, Q., et al., Prenatal Exposure to Perfluoroalkyl Substances and Birth Outcomes; An Updated Analysis from the Danish National Birth Cohort. Int J Environ Res Public Health, 2018. 15(9); Wikstrom, S., et al., Maternal serum levels of perfluoroalkyl substances in early pregnancy and offspring birth weight. Pediatr Res, 2019.

[8] National Toxicology Program (NTP), Systematic Review of Immunotoxicity Associated with Exposure to Perfluorooctanoic acid (PFOA) or Perfluoroctane Sulfonate (PFOS). 2016, National Toxicology Program, U.S. Department of Health and Human Services; DeWitt, J.C., S.J. Blossom, and L.A. Schaider, Exposure to per-fluoroalkyl and polyfluoroalkyl substances leads to immunotoxicity: epidemiological and toxicological evidence. J Expo Sci Environ Epidemiol, 2019. 29(2): p. 148-156; Grandjean, P., et al., Serum Vaccine Antibody Concentrations in Adolescents Exposed to Perfluorinated Compounds. Environ Health Perspect, 2017. 125(7): p. 077018; Abraham, K., et al., Internal exposure to perfluoroalkyl substances (PFASs) and biological markers in 101 healthy 1-year-old children: associations between levels of perfluorooctanoic acid (PFOA) and vaccine response. Arch Toxicol, 2020; Timmermann, C.A.G., et al., Serum Perfluoroalkyl Substances, Vaccine Responses, and Morbidity in a Cohort of Guinea-Bissau Children. 2020. 128(8): p. 087002.

[9] Fenton, S.E., et al., Per- and Polyfluoroalkyl Substance Toxicity and Human Health Review: Current State of Knowledge and Strategies for Informing Future Research. Environ Toxicol Chem, 2021. 40(3): p. 606-630; C8 Science Panel. *C8 Probable Link Reports*. 2012 11/28/2013; Available from: http://www.c8sciencepanel.org/prob_link.html.

[10] IARC, Some Chemicals Used as Solvents and in Polymer Manufacture, in IARC Monographs on the Identification of Carcinogenic Hazards to Humans. Volume 110. 2017, International Agency for Research on Cancer (IARC): Lyon, France; Shearer, J.J., et al., *Serum concentrations of per- and polyfluoroalkyl substances and risk of renal cell carcinoma.* J Natl Cancer Inst, 2020.

Starting in 2002, PFAS have been detected in U.S. drinking water, primarily near manufacturing facilities, local fire departments, military bases and airports. Between 2013 and 2015, EPA required a representative number of Group A water systems to measure for six PFAS as part of the third Unregulated Contaminant Monitoring Rule (UCMR3)[11].

In Washington State, this UCMR3 sampling included 132 water systems representing 94 percent of people served by Group A water systems. Additionally, voluntary testing by the Navy, Air Force, and Army has discovered additional drinking water contamination in private and public wells on or around four military bases between 2016 and 2020. Proactive testing by nearby public water systems has discovered additional wells that are impacted.

PFAS have been identified in drinking water in Issaquah and in private wells and public water systems at or near four military bases: Naval Air Station (NAS) Whidbey Island, Fairchild Air Force Base, Joint Base Lewis-McChord, and Navy Base Kitsap-Bangor. In each area, the sum of PFOA and PFOS in at least one drinking water well exceeded the lifetime health advisory level (HAL) of 70 parts per trillion (ppt) set by the EPA in May 2016. PFAS-based firefighting foam is the suspected source of contamination at all these areas. Ongoing investigations may identify other contributing sources. In light of this several Group A water systems have either installed treatment to reduce PFAS or are pursuing treatment.

In Washington, while we know PFAS have been identified in multiple areas, we do not yet know the full extent of PFAS contamination in our drinking water supplies, and the science around PFAS is evolving quickly.

In this rulemaking, the board and the department considered setting a state maximum contaminant level (MCL) for PFAS but ultimately the board directed the department to develop a "state advisory level", which is undergoing a concurrent name change in this proposal to “state action level (SAL).”

Why are the changes to the rule needed?

This proposed rule change is needed to protect public health from an unregulated contaminant in Washington State drinking water.

Monitoring for these proposed contaminants will help us identify PFAS contamination in Group A public water systems across our state. The proposed rule establishes public notification requirements to inform drinking water consumers if levels of PFAS in their drinking water exceed a SAL. The proposed rule will help us better understand the extent of PFAS contamination across our state.

Michigan, a state that has done comprehensive testing[12], found contamination sites that were not located near any obvious PFAS release site. Because we still don't know about all the different uses of PFAS or the industrial users of PFAS, testing based on proximity to a known release site will not be comprehensive enough. Finding PFAS in drinking water supplies led Michigan to seek and find local release sites that could be mitigated. Mitigating a source will benefit the drinking water supply, and consumers of that supply, over the long term.

One example is that contamination of PFAS in the Ann Arbor water system led to discovery of a chrome plating company that was discharging PFOS to a tributary upstream[13]. The local government required the company to install pretreatment to remove the PFOS from its discharge. That not only benefitted the water system but also fish and wildlife that share the river.

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[11] EPAs UCMR3 Webpage: https://www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule

[12] Michigan water testing resting results: https://www.michigan.gov/pfasresponse/0,9038,7-365-95571_95577_95587---,00.html

[13] MI investigation of Ann Harbor water - https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_95792_95795---,00.html and https://www.wixomgov.org/Home/ShowDocument?id=7721

PFAS are odorless and tasteless so the only way to know if they are in your water system is to test for them. PFAS contamination of groundwater is likely to be a localized problem. One-time testing broadly across our state of Group A systems will help us find impacted drinking water supplies and notify other nearby private and Group B wells that they may want to test[14]. It will start the process of finding and mitigating local sources.

Should PFAS results be very high in a community, then the department and local health officer would work to support them in our shared mission to protect public health—just as we would in any other public health emergency.

A key part of this assistance would be in risk communications to help the utility and its customers discuss next steps. These discussions will likely lead to choices these communities will have to make to protect public health and safety and address the PFAS contamination in their drinking water supplies. This is a mission we all share.

The department is working with the Department of Ecology (Ecology), to develop a PFAS Chemical Action Plan (PFAS CAP)[15]. The proposed PFAS SALs lay the foundation for Ecology to establish clean-up standards for PFAS. The draft PFAS CAP[16] makes several recommendations that would support Group A water systems in addressing PFAS contamination when and if it is discovered upon implementation of these proposed amendments.

What are the compliance requirements in the proposed rule?

The proposal establishes SALs for five PFAS contaminants—PFOA, PFOS, PFHxS, PFNA, and perfluorobutane sulfonic acid (PFBS). The proposed rule requires Group A community and nontransient noncommunity (NTNC) public water systems[17] to test for PFAS. These Group A water systems will be required to take one sample every three years—for each active and permanent or seasonal source—to determine if the drinking water is contaminated with PFAS.

It should be noted that transient noncommunity (TNC) Group A water systems[18] that are near a known or suspected area of PFAS contamination may also be required to sample for PFAS under the proposed rule.

For those Group A water systems that have detections of PFAS, but do not exceed the SAL, the proposed rule requires additional ongoing monitoring, with the frequency of monitoring based upon the detected level in comparison to the SAL. It also establishes reporting, recordkeeping, and consumer confidence report (CCR) requirements.

For those Group A water systems that exceed the SAL, the rule also sets follow-up actions such as monitoring, public notification, and additional recordkeeping and reporting requirements.

For those Group A water systems that exceed the SAL, the rule sets follow-up actions such as monitoring, public notification, and additional recordkeeping and reporting requirements. There may be individual situations where a water system's PFAS results are very high and pose an immediate public health threat. In those unique situations the department, the water system, and the local health officer will work together

[14] A Group B water system is a public water system that does not meet the definition of a Group A water system. (See Table 1 and chapter 246-291 WAC for further explanation of a Group B water system.) Group B water systems are regulated by local health jurisdictions, not the department or the board.
[15] A CAP identifies, characterizes, and evaluates uses and releases of a specific Persistent Bioaccumulative Toxin (PBT), a group of PBTs, or metals of concern, and recommends actions to protect human health or the environment.
[16] Department of Ecology, PFAS CAP Publication 20-04-035 https://apps.ecology.wa.gov/publications/SummaryPages/1810001.html
[17] For explanation of what constitutes Group A community and nontransient noncommunity (NTNC), and TNC public water systems see https://apps.leg.wa.gov/wac/default.aspx?cite=246-290-020
[18] Ibid, footnote 12 this page.

to take actions to protect public health, as they would in the event of any known or unknown contaminant. If supported by the facts and emerging science, the local health officer and/or the department may order a water system to take action to remedy a public health emergency under its general authority to regulate drinking water systems, including RCW 70A.125.030(1); RCW 70.05.070; RCW 43.70.130(7). This would be a case-by-case decision, not a requirement of general application under this rule.

Some Group A water systems hire outside firms/contractors to conduct certain activities for the business. This includes contractors to take water samples, prepare consumer confidence reports (CCR), and represent the company before the Washington Utilities and Transportation Commission. These costs are further discussed in section 3 below.

SECTION 2:

Identify which businesses are required to comply with the proposed rule using the North American Industry Classification System (NAICS) codes and what the minor cost thresholds are.

Table 1: Businesses Required to Comply Using NAICS Code

NAICS Code (4, 5 or 6 digit)	NAICS Business Description	Minor Cost Threshold =1% of Average Annual Payroll[19]	Minor Cost Threshold =.3% of Average Annual Receipts[20]
221310	Water supply and irrigation systems[21]	$2,154	$1,814

SECTION 3:

Analyze the probable cost of compliance. Identify the probable costs to comply with the proposed rule, including cost of equipment, supplies, labor, professional services and increased administrative costs; and whether compliance with the proposed rule will cause businesses to lose sales or revenue.

The department sent surveys to Group A and community and NTNC public water systems that the department had email addresses for in our files. Of the more than 1,000 public water systems, 136 responded to the survey request. In addition, the department conducted a survey of all investor owned utilities (IOUs) regulated by the Washington Utilities and Transportation Commission and a subset of privately owned satellite management agencies (SMAs) (for which the department had email addresses) to obtain an estimated cost of the proposed rule. The table below shows the responses to the survey.

[19] Economic Census, All Sectors: Summary Statistics for the U.S., States, and Selected Geographies: 2017, Table ID EC1700BASIC Dataset: ECNBASIC2017 this represents data from 134 businesses in Washington State.
[20] Economic Annual Surveys, Statistics for All U.S. Firms by Industry, Race, and Receipts Size of Firm for the U.S and States: 2012, Table ID SB1200CSA07 Dataset: SBOCS2012 this represents data from 146 businesses in Washington State.
[21] NAICS defines water supply and irrigation systems as industry that comprises establishments primarily engaged in operating water treatment plants and/or operating water supply systems. The water supply system may include pumping stations, aqueducts, and/or distribution mains. The water may be used for drinking, irrigation, or other uses.

Table 2: Survey Response Summary

Categories	Investor owned utilities (IOUs) and Satellite management agencies (SMAs)	Group A water systems, IOUs and SMAs
Number sampled	49 IOUs + 21 SMAs = 70	Over 1,000
Number responded	14	136
Monitoring cost range per PFAS sample[22]	$675 to $1,140	$610 to $2,386
Monitoring average cost per PFAS sample	$199 + $600= $799	$196 + $600= $796
Public notification cost range per quarter	$50 to $1,216	$15 to $49,680
Public notification average cost per quarter	$482	$2,505
Recordkeeping and reporting annual cost range	$12.50 to $1,034	$1 to $2,400
Recordkeeping and reporting average annual cost	$192	$235
CCR annual cost range per system	$10 to $792	$5 to $4,071
CCR annual average cost per system	$113	$226

Cost Summary

The costs provided in the table above for monitoring are for one sample from one source. A Group A water system will have to multiply these sampling costs by the number of active and permanent or seasonal sources they have on their system to get a planning level estimate of costs[23]. In addition to the initial sampling and public notification costs, if a business must conduct follow-up sampling, again, a multiplication factor would be used to determine total sampling costs.

Some costs are incurred by all Group A water systems that sample whether or not there are detections, such as recordkeeping and reporting. Public notification is only required by those Group A water systems with results that exceed a SAL. Costs associated with this rule for adding additional contaminants to a consumer confidence report applies only if a business' Group A water source had detections for any PFAS contaminants within the last five years. For a more in-depth explanation of the costs of the proposed rule, please refer to the Legislative Significant Analysis for the Group A water system rule. For businesses that operate water systems, the department assumes that the cost of the rule (i.e., monitoring, public notification, recordkeeping and reporting and addition to the consumer confidence report) will ultimately be paid by the users of the water systems in fees.

Loss of sales or revenue discussion

Only one respondent indicated they thought they might lose revenue because some water system clients may use this as an opportunity to look for other SMA competitors that charge less for the same services.

[22] The department survey used an estimated laboratory cost of $600 to run a PFAS sample. This value includes the $600 estimate. Actual laboratory cost to run sample will vary based on laboratory.

[23] Economies of scale may be realized when multiplying the cost per sample by the number of sources due to potential savings from combined transportation and shipping costs. The extent of these potential savings is unknown but believed to be negligible.

SECTION 4:

Analyze whether the proposed rule may impose more than minor costs on businesses in the industry.

Based on the survey results that show: 1) cost of taking one sample for one source (estimated average cost of $799) and that some businesses have several sources to test, 2) businesses that exceed the PFAS SAL will take additional samples, complete recordkeeping and reporting (average annual cost of $192), send out public notification (estimated quarterly cost $482), and include PFAS information in the CCR (estimated average annual cost $113), the department's assumption is that the proposed rule will impose more than the $1,814 minor cost threshold on two or more businesses in the industry.

SECTION 5:

Determine whether the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule. The majority of estimated costs of the proposed rule are associated with collecting and analyzing PFAS samples. These costs are relatively fixed and are not contingent or impacted by the size of the business. Public notices, follow-up monitoring, and including these contaminants in the system's CCR are not required unless a Group A water system detects or exceeds a PFAS SAL in a compliance sample.

Because the costs are relatively fixed the department assumes that that rule will have a disproportionate impact on small businesses.

SECTION 6:

If the proposed rule has a disproportionate impact on small businesses, identify the steps taken to reduce the costs of the rule on small businesses. If the costs can not be reduced provide a clear explanation of why.

Based upon the requirement in RCW 19.85.030, the department considered, each of the following methods of reducing the impact of the proposed rule on small businesses:

(a) Reducing, modifying, or eliminating substantive regulatory requirements;
The scope of the rule is very narrow. It establishes requirements for Group A water systems to test each source to determine if there is PFAS contamination. The proposal does allow Group A water systems that participate in EPA's UCMR5 to use these sample results towards meeting the initial monitoring requirements. This will be a cost savings for all Group A water systems that participate in UCMR5. Additionally, the proposed rule will help us better understand the extent of PFAS contamination across our state, so we can develop a waiver model that will reduce the burden of monitoring, while still ensuring public health protection.

(b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
There were no simplification, reduction, or elimination of recordkeeping and reporting requirements opportunities. The requirements are aligned with the recordkeeping and reporting requirements for the other contaminants in this chapter and merely adds the five new PFAS SALs.

(c) Reducing the frequency of inspections;
There are no inspections required in the proposed rule and does not apply.

(d) Delaying compliance timetables;
The proposal delays implementation of the rule and the initial testing requirement until 2023. The initial testing requirements will be staged among Group A water systems through 2025. The department will prioritize systems that are more likely to have detections based on what the department already knows about PFAS contamination in the state and systems with larger populations. The proposed rule includes options for samples collected proactively by public water systems, which meet minimum requirements, to count towards initial monitoring.

(e) Reducing or modifying fine schedules for noncompliance; or
The proposal does not include or amend a fine schedule for noncompliance. The requirements for monitoring for PFAS is modeled after the existing requirements for other contaminants.

(f) Any other mitigation techniques including those suggested by small businesses or small business advocates.
The department drafted the proposal to reduce the burden on all systems, including SMAs and IOUs. The proposal does allow for a waiver model to be developed that could potentially reduce the burden to small businesses, but the department will not issue a waiver for systems to reduce costs at the expense of public health. There are no other mitigative techniques available to reduce the burden that meet the general goals and objectives of the authorizing statute.

SECTION 7:

Describe how small businesses were involved in the development of the proposed rule.

The department regularly engages with and presents information about the Group A PFAS rulemaking at the Drinking Water Advisory Group (DWAG) monthly meetings, which membership includes small business owners.

In addition, the department held three workshops around the state (Tacoma, Mt. Vernon, and Spokane) in December 2019, held two informal, 30-day public comment periods, and held a public meeting during the September 2020 DWAG meeting to actively engage that advisory group in the PFAS rulemaking and to encourage their participation in the process—about 130 attended this public meeting.

In December 2020, the rulemaking project manager presented at the Northwest Environmental Business Council on the PFAS rulemaking—more than one hundred people attended the presentation.

In February 2021, the department's director of Drinking Water and the drinking water policy manager presented at two separate conferences with small business representatives and small business association representative in attendance. Lastly, in March 2021, the PFAS rulemaking project manager gave another update to DWAG, which included more than 100 participants.

SECTION 8:

Identify the estimated number of jobs that will be created or lost as the result of compliance with the proposed rule.

In response to one of the questions in the survey, one respondent that manages many systems said they thought they might need to hire one additional staff person to conduct the additional monitoring.