



# Aqueous Film-Forming Foam Collection and Disposal Program



## DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT Fact Sheet and Summary

December 2023  
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## PUBLICATION INFORMATION

This report is available on Ecology's website at:

<https://apps.ecology.wa.gov/publications/summarypages/2304070.html>.

### Related publication:

[Aqueous Film-Forming Foam Collection and Disposal Program: Draft Environmental Impact Statement](#)<sup>1</sup>

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<sup>1</sup> <https://apps.ecology.wa.gov/publications/summarypages/2304064.html>

<sup>2</sup> [ecology.wa.gov/about-us/contact-us](http://ecology.wa.gov/about-us/contact-us)

<sup>3</sup> [ecology.wa.gov/accessibility](http://ecology.wa.gov/accessibility)

# Fact Sheet

## Aqueous Film-Forming Foam Collection and Disposal Program: Draft Programmatic Environmental Impact Statement

### Date of Issuance

December 20, 2023

### Date Comments Are Due

February 5, 2024

### Description

Aqueous film-forming foam (AFFF) is used to put out fires fueled by flammable liquids, such as oil or gasoline. AFFF is concerning because it contains per- and polyfluoroalkyl substances (PFAS). These toxic chemicals do not easily break down and can negatively impact human health and the environment.

In 2018, Washington passed the [Firefighting Agents and Equipment law](#),<sup>4</sup> which restricts AFFF manufacture, sale, and use for firefighting training. This leaves municipal fire departments and other first responders with unused AFFF stored on site. In response, the Washington State Department of Ecology (Ecology, we) proposed the AFFF Collection and Disposal Program to help fire departments safely dispose of their on-site AFFF at little to no cost to participants.

The Draft Programmatic Environmental Impact Statement (DEIS) provides the environmental and public health information needed for an informed and transparent decision on how to safely dispose of AFFF stockpiled at the state's municipal fire departments.

We prepared the DEIS in compliance with the State Environmental Policy Act (SEPA) requirements described in [chapter 43.21C RCW \(Revised Code of Washington\)](#)<sup>5</sup> and [chapter 197-11 WAC \(Washington Administrative Code\)](#).<sup>6</sup> SEPA provides guidance to state and local governments involved in environmental policy decisions. The SEPA process is intended to ensure that environmental values are considered during decision-making actions by state and local agencies.

### Included in the DEIS

As required under SEPA guidance, this DEIS includes:

- ▶ Information on existing uses of AFFF.
- ▶ Analysis of current laws and regulations governing hazardous materials.
- ▶ Policies for the protection of important and sensitive ecological areas and their existing uses.
- ▶ Commitments to coordinate with key stakeholders, which include government agencies, organizations, Native American Tribes, and interested individuals.

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<sup>4</sup> Chapter 70A.400 RCW (<https://app.leg.wa.gov/rcw/default.aspx?cite=70A.400>)

<sup>5</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=43.21C>

<sup>6</sup> <https://apps.leg.wa.gov/WAC/default.aspx?cite=197-11>

## Alternatives Considered

Alternatives presented in this DEIS are:

- ▶ Alternative 1: Approved Hold in Place.
- ▶ Alternative 2: Incineration.
- ▶ Alternative 3: Solidification and Landfilling.
- ▶ Alternative 4: Class I Deep Well Injection.
- ▶ Alternative 5: No Action.

## Timing of Additional Environmental Review

The analysis in this DEIS is programmatic in nature. It has been prepared to disclose probable significant adverse impacts associated with adopting and implementing the alternatives. Any individual projects or activities that are proposed or carried out may require additional, more detailed, project-level environmental review prior to implementation. These projects and activities could require SEPA compliance, National Environmental Policy Act compliance, or both, depending on the location of the proposal and/or types of permits required.

## Public Comment on the DEIS

We are conducting a public comment period from **December 20, 2023 to February 5, 2024**, in accordance with [WAC 197-11-455](#).<sup>7</sup> All comments on the DEIS received during the public comment period will be addressed in the Final Environmental Impact Statement, planned for issuance in May 2024.

## How to Submit Comments

You can submit comments on the DEIS in the following ways:

**Online:** [ecology.wa.gov/AFFF-comment](https://ecology.wa.gov/AFFF-comment)

**Email:** [AFFFDisposal@ecy.wa.gov](mailto:AFFFDisposal@ecy.wa.gov)

**Mail:** Washington State Department of Ecology  
Attn: Sean Smith  
P.O. Box 330316  
Shoreline, WA 98133-9716

## Document Availability

The full DEIS for the AFFF Collection and Disposal Program is available on Ecology's website at: <https://apps.ecology.wa.gov/publications/summarypages/2304064.html>.

Print copies of the document may be obtained by written request to Sean Smith at [Sean.Smith@ecy.wa.gov](mailto:Sean.Smith@ecy.wa.gov), or by calling 425-324-0328.

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<sup>7</sup> <https://app.leg.wa.gov/WAC/default.aspx?cite=197-11-455>

## Information Session

At this informal online meeting, you'll learn more about the DEIS from a presentation by our staff. You can ask questions, but we won't collect public comments at this time.

**Date:** January 17, 2024

**Time:** 10 a.m. – 11:30 a.m.

**Zoom link:** [us02web.zoom.us/j/89520569255](https://us02web.zoom.us/j/89520569255)

## Public Hearing

At this formal online hearing, you can submit verbal or written public comments on the DEIS, following a brief overview by our staff. We'll collect formal public comments for the DEIS record.

**Date:** January 31, 2024

**Time:** 1 p.m. – 4 p.m.

**Zoom link:** [us02web.zoom.us/j/88449630921](https://us02web.zoom.us/j/88449630921)

## For More Information

During the past several years, we coordinated a team of state agencies and worked with a wide range of experts to study and collect information on the program area. We collaborated with residents, stakeholders, Tribes, and other state agencies to present the most accurate, science-based information possible. The DEIS builds off this work. Background materials and other information are available in the appendices to this DEIS and online through the following:

### Our Webpages:

- [AFFF Draft Environmental Impact Statement](#)<sup>8</sup>
- [PFAS in firefighting foam EZView page](#)<sup>9</sup>
- [Aqueous film-forming foam](#)<sup>10</sup>
- [AFFF Collection and Disposal Program](#)<sup>11</sup>

### Our Publications:

- [How Should We Dispose of Toxic Firefighting Foam?](#)<sup>12</sup>
- [AFFF Collection and Disposal Program Alternatives](#)<sup>13</sup>

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<sup>8</sup> [ecology.wa.gov/AFFF-DEIS](https://ecology.wa.gov/AFFF-DEIS)

<sup>9</sup> [www.ezview.wa.gov/site/alias\\_\\_1962/37693/pfas\\_in\\_firefighting\\_foam.aspx](https://www.ezview.wa.gov/site/alias__1962/37693/pfas_in_firefighting_foam.aspx)

<sup>10</sup> [ecology.wa.gov/AFFF](https://ecology.wa.gov/AFFF)

<sup>11</sup> [ecology.wa.gov/AFFF-Disposal](https://ecology.wa.gov/AFFF-Disposal)

<sup>12</sup> [apps.ecology.wa.gov/publications/SummaryPages/2304052.html](https://apps.ecology.wa.gov/publications/SummaryPages/2304052.html)

<sup>13</sup> [apps.ecology.wa.gov/publications/SummaryPages/2304013.html](https://apps.ecology.wa.gov/publications/SummaryPages/2304013.html)



- [Focus on: What Is an EIS?](#)<sup>14</sup>
- [PFAS in Firefighting Foam](#)<sup>15</sup>

## Contact

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<sup>14</sup> [apps.ecology.wa.gov/publications/SummaryPages/2304012.html](https://apps.ecology.wa.gov/publications/SummaryPages/2304012.html)

<sup>15</sup> [apps.ecology.wa.gov/publications/SummaryPages/2204037.html](https://apps.ecology.wa.gov/publications/SummaryPages/2204037.html)

## Executive Summary

Aqueous film-forming foam (AFFF) is used to put out fires fueled by flammable liquids, such as oil or gasoline. AFFF is concerning because it contains per- and polyfluoroalkyl substances (PFAS). These toxic chemicals don't easily break down, and they can negatively impact human health and the environment.

In 2018, Washington passed the Firefighting Agents and Equipment law ([chapter 70A.400 RCW](#)),<sup>16</sup> which restricts AFFF manufacture, sale, and use for firefighting training. This leaves municipal fire departments and other first responders with on-site stockpiles of AFFF that they may never use.

In response, Washington State Department of Ecology (Ecology, we) proposed the Aqueous Film-Forming Foam Collection and Disposal Program, intended to help fire departments safely dispose of stockpiles of AFFF at little to no cost to participants. The Washington Legislature appropriated funds for this program because it recognized the threat AFFF and PFAS pose to the state's environment and public health.

The program is not specific to a particular site or location. All Washington State municipal fire departments storing AFFF may elect to participate at their individual discretion.

### Project History

- ▶ **September 1, 2020:** We released a State Environmental Policy Act (SEPA) checklist containing an initial Determination of Non-Significance (DNS) relative to the proposed collection, transportation, treatment, and disposal of AFFF at the Clean Harbors federally permitted incinerator in Aragonite, Utah.
- ▶ **October 1, 2020:** We closed a 30-day comment period on the SEPA checklist and DNS.
- ▶ **January 15, 2021:** After reviewing the comments, we decided to withdraw the DNS.
- ▶ **January 19, 2021:** We issued a Determination of Significance (DS), finding that the foam disposal program could potentially generate significant adverse impacts on the environment. We initiated an Environmental Impact Statement to evaluate alternative ways to implement the AFFF program.

### What is the Purpose of a Programmatic Environmental Impact Statement?

An Environmental Impact Statement (EIS) is a report that details the potential environmental and public health impacts of a proposed action. A programmatic EIS assesses these impacts for a proposed program or plan, rather than a specific action or project. A programmatic EIS provides the basis for review of related actions or projects undertaken at a later date.

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<sup>16</sup> <https://app.leg.wa.gov/rcw/default.aspx?cite=70A.400>

An EIS does not approve or deny a proposed project. It provides information about the probable significant adverse environmental impacts of a proposal. We prepared this draft EIS (DEIS) in accordance with SEPA requirements.<sup>17</sup> The results of the DEIS must be considered by Ecology and any other relevant agency in decisions regarding selection and implementation of a proposed action.

For more information, see the publication [Focus on: What Is an EIS?](#)<sup>18</sup>

## What Is Addressed in this Programmatic EIS?

This DEIS addresses the potential impacts of AFFF collection, storage, transport, and disposal on public health and the environment. Issues addressed in this DEIS include:

- ▶ A reasonable range of alternative approaches to addressing the AFFF concern.
- ▶ Potential adverse environmental impacts. Potential impacts by alternative are summarized in Chapter 4: Mitigation Measures.
- ▶ Possible mitigation measures to reduce or eliminate significant impacts.

For each resource area addressed in the DEIS, the following information is presented:

- ▶ Analytical methodology and thresholds of significance determinations.
- ▶ Potential significant impacts on the resource area.
- ▶ Potential adverse effects on human health and the environment.
- ▶ Mitigation measures and best practices.
- ▶ Data gaps.
- ▶ Significant, unavoidable, adverse impacts.

## Alternatives

SEPA requires that an EIS provides a reasonable range of alternative approaches to the proposed action. Usually, the alternatives considered could achieve the project objectives, and some may have lower environmental costs. Four alternatives and a “no action” alternative have been identified and are analyzed in this DEIS:

- ▶ **Alternative 1: Approved Hold in Place.** AFFF would be held in place at participating fire stations. Suitable containment would be approved and reimbursed by Ecology until acceptable advanced treatment technology becomes available.

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<sup>17</sup> Chapter 197-11 WAC: <https://apps.leg.wa.gov/WAC/default.aspx?cite=197-11>

<sup>18</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/2304012.html>



- ▶ **Alternative 2: Incineration.** AFFF would be collected and transported to a selected existing treatment facility for incineration.
- ▶ **Alternative 3: Solidification and Landfilling.** AFFF would be collected and transported to a selected landfill facility or facilities for solidification and disposal.
- ▶ **Alternative 4: Class I Deep Well Injection.** AFFF would be collected and transported to a selected Class I deep well injection facility or facilities for disposal.
- ▶ **Alternative 5: No Action.** AFFF would be left as is at participating fire stations.

## Legal Requirements

Numerous regulations, laws, and treaty obligations have guided the development of this DEIS. Chapter 2: Project Description and Alternatives describes specific laws and regulations for dangerous waste treatment, storage, and disposal. These include Washington State regulations as well as federal regulations and permitting requirements under the Resource Conservation and Recovery Act (RCRA). Chapter 3: Affected Environment and Environmental Consequences offers crucial insights into Tribal treaties and federal management areas within the AFFF study area.

Regardless of the chosen alternative, we commit to conducting necessary engagement, consultations, and coordination with federally recognized Tribes. In addition, for all alternatives except the no action alternative, we will adhere to the state's regional spill response plans before foam collection, including mandatory communication and coordination with federal, state, Tribal, and local entities.

## Required Permits, Licenses, and Approvals

Because any Washington State municipal fire department with qualifying foam may participate, the AFFF collection program is not specific to a particular site or location. Also, because this is a programmatic DEIS, the specific method of AFFF collection, transport, and disposal remains undetermined. Thus, a comprehensive list of potential required permits, licenses, and approvals cannot be provided at this time. A list of fire departments that would likely participate in the collection program is included as [Appendix A.2](#).<sup>19</sup>

Of the five proposed alternatives analyzed in this DEIS, four (incineration, solidification and landfilling, deep well injection, and no action) do not require Ecology to secure additional permits, licenses, or approvals.

## Key Programmatic Concerns

The following key areas of potential environmental concern are addressed in the DEIS.

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<sup>19</sup> <https://apps.ecology.wa.gov/publications/summarypages/2304064.html>

### ***Risks to public health***

PFAS within AFFF are water soluble and highly mobile, meaning they can easily contaminate groundwater and can be hard to filter out. There are no known natural processes that can break down these substances. Exposures could continue for hundreds of years or more.

### ***Lack of uniform regulations***

Currently, EPA has not identified any PFAS compounds as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act, and no PFAS compounds have National Drinking Water Standards established under the Safe Drinking Water Act. [EPA's Strategic Roadmap](#),<sup>20</sup> released in October 2021, identifies actions they plan to complete over the next several years. These include:

- 1) Proposing to list perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and possibly other PFAS compounds as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act.
- 2) Establishing final National Drinking Water Standards for PFOA and PFOS.

In addition, the [PFAS Action Act \(H.R. 2467\)](#)<sup>21</sup> is being considered by Congress to address both of these issues, but the fate of the bill is uncertain.

## **Program Implementation**

The following actions would be necessary to implement each program alternative:

- ▶ **For Alternative 1: Approved Hold in Place**, we may need to draft new regulations, policies, permits, or guidance on proper storage of AFFF for fire departments. We may need to acquire approval from the receiving state before foam disposal can proceed. We may also need to develop a treatment, storage, and disposal permit.
- ▶ **For Alternative 2: Incineration**, we would authorize our existing waste contractor to transport AFFF to either the Clean Harbors facility in Aragonite, Utah, or the Kimball facility in Nebraska for incineration.
- ▶ **For Alternative 3: Solidification and Landfilling and Alternative 4: Class I Deep Well Injection**, we would solicit bids from qualified dangerous waste contractors. This process would include public notice, a request for bids, transparent bid review, announcement of the chosen hazardous waste transporter/disposal company, and opportunity to challenge or review the selected bid.

We would require existing or newly selected hazardous waste transporter/disposal companies to adhere to all local, state, and federal rules for regulated waste collection, transport, and disposal. This includes, but is not limited to:

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<sup>20</sup> [https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap\\_final-508.pdf](https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf)

<sup>21</sup> H.R.2467 - PFAS Action Act of 2021. <https://www.congress.gov/bill/117th-congress/house-bill/2467>

- ▶ Compliance with U.S. Department of Transportation transporter permits, regulations, and spill response plans.
- ▶ U.S. Environmental Protection Agency (EPA) Air and Water Quality discharge permits.
- ▶ Washington’s dangerous waste rules.
- ▶ Other states’ regulated waste rules.

Finally, prior to foam collection, we would enter into participation agreements with fire departments taking part in the program. We would gather updated foam inventories, including foam volume, the number of containers and their sizes, and the foam locations. Participating fire departments would also be required to file all required dangerous waste paperwork with Ecology. Some fire stations may also be required to apply for an EPA Site ID number, if they do not already have one.

## Significance Determination

Our analysis determined that none of the proposed alternatives would result in significant adverse impacts to communities or natural resources. Alternatives 2, 3 and 4, will not adversely affect natural resources, communities, and Tribes’ usual and accustomed areas or treaty rights when appropriate mitigation measures are implemented.

## What Happens Next?

The public comment period for this DEIS is open from December 20, 2023, to February 5, 2024. After the comment period ends, we’ll review and consider all comments received. We may make changes based on your comments. We plan to issue the Final Environmental Impact Statement in May 2024.

## Document Availability

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## How to Submit Comments

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