

Firefighting Foam Use and Disposal

Firefighting foams are essential tools used by fire departments to protect lives and property. Firefighting foams can be generally categorized as:

- Class A - for structural fires, and dry fuels like wood and paper.
The majority of firefighting foam used in Minnesota is Class A foam.
- Class B - for flammable liquids, such as petroleum, gasoline, diesel, and jet fuel.
Class B foams are used infrequently, but perform a vital role in vehicle, energy and chemical sector, military, and airport incident response.

Firefighting foams can cause risks to public health and the environment if improperly handled or disposed. The Minnesota Pollution Control Agency (MPCA), Minnesota Department of Commerce (Commerce), Minnesota Department of Health (MDH), and the State Fire Marshal Division (SFMD) of the Minnesota Department of Public Safety jointly regulate the use and disposal of firefighting foams.

Class A foam

Class A foams are generally considered nontoxic and will biodegrade over time. Excess foam and unusable Class A foam concentrate may be discharged to a sanitary sewer if the publicly owned treatment works (POTW, commonly known as a sewage treatment plant) receiving the discharge is first notified and any conditions they specify are met. Fire departments are encouraged to take reasonable steps during and after an incident to prevent significant amounts of Class A foam from entering stormwater systems or flowing to surface waters. Debris from fires on which Class A foam was used may be managed as solid waste.

Class B foam

Many Class B foams contain intentionally-added fluorine-based compounds known as *per- and poly-fluoroalkyl substances (PFAS, previously also known as PFCs)*. PFAS is not a single chemical, but a family of fluorine-containing compounds that persist in the environment, are known to bioaccumulate, and may contaminate soil and water in Minnesota.

Firefighting foam users in Minnesota are encouraged to assume that all Class B foam and combination Class A/B foam concentrates are PFAS-containing unless the users have documentation from the manufacturer or another authority that shows that a specific Class B foam concentrate is fluorine-free. PFAS are not required to be listed on foam concentrate Safety Data Sheets even if present.

Note: Class B foam concentrates marketed or labeled as 'PFOS and/or PFOA free' may still contain intentionally-added PFAS and may not be fluorine-free. Though the acronyms are similar, PFOS and PFOA are just specific single compounds in the larger PFAS family, and were often replaced in Class B foam concentrates by other PFAS compounds or by fluorine-containing chemicals that can react to create PFAS.

Use for firefighting

Fire departments and incident commanders should continue to select and use the type of firefighting foam appropriate in an incident to best protect lives, property, and responder safety.

Fire departments and other users are encouraged to contain PFAS-containing foam and firefighting runoff from PFAS-containing foam during incidents to minimize its release to the environment, if they can do so without risking responder or public safety.

Reporting

Fire departments must report any use or release of PFAS-containing foam to the SFMD within 24 hours. For more information, contact the SFMD. See [More information](#) below.

Users other than fire departments must immediately report any discharge or any other use or release of PFAS-containing foam to the Minnesota Duty Officer. See [More information](#) below.

PFAS use and release reports must include:

- Date, time, and location of the use or release.
- Estimated volume of PFAS-containing foam used or released.
- Purpose or reason for the use or release.
- A description of the containment and disposal measures taken to prevent or minimize the release of PFAS to the environment.

Discharge for training

Fire departments and other users may not discharge PFAS-containing foam during training unless they are required to do so by a state or federal law. If users are required by law to discharge PFAS foam for training, they must first implement appropriate containment and disposal measures to prevent release of PFAS foam to the environment and then report the discharge afterward. PFAS-containing foam may not be used for training purposes other than required discharge.

Discharge for testing

Fire departments and other users may not discharge PFAS foam for testing unless they first implement appropriate containment and disposal measures to prevent release of PFAS foam to the environment and then report the use afterward.

Disposal

PFAS-containing foam concentrate may not be disposed to the sanitary sewer or storm sewer, as it will be passed through and released to surface waters. The MPCA strongly encourages PFAS-containing foam concentrates to be disposed by either hazardous waste incineration or in a hazardous waste landfill. Fire departments and other users may contact their regional Very Small Quantity Generator (VSQG) Collection Program, utilize the state hazardous waste disposal vendor contract (#H-69), or independently hire a hazardous waste disposal vendor.

- For a list of VSQG Collection Programs, see MPCA fact sheet #w-hw2-51, Very Small Quantity Generator collection programs, at: <https://www.pca.state.mn.us/sites/default/files/w-hw2-51.pdf>.
- Find a link to the state contract at: <https://www.pca.state.mn.us/waste/administrative-resources-hhw>.

More information

Guidance in this fact sheet was compiled from Minn. Stat. 325F.072, and information from the SFMD, MDH, and Commerce, and incorporate regulatory interpretation decisions made on May 29, 2020; and June 10, 2020.

Minnesota Pollution Control Agency

Toll free (all staff) 1-800-657-3864
All staff 651-296-6300
..... <https://www.pca.state.mn.us/>

State Fire Marshal Division

All staff 651-201-7200
..... <https://dps.mn.gov/divisions/SFM/>

Minnesota Duty Officer

Toll free 1-800-422-0798
Metro 651-649-5451

Minnesota Department of Health

Toll free (all staff) 1-888-345-0823
All staff 651-201-5000
..... <https://www.health.state.mn.us/>

Minnesota Department of Commerce

Toll free (all staff) 1-800-657-3602
All staff 651-539-1500
..... <https://mn.gov/commerce/>