

Burning PFAS in Military Munitions

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS are used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. The best-known fluoropolymer is polytetrafluoroethylene or Teflon.

Why do some military munitions contain PFAS?

PFAS are added to improve the performance and stability of military explosives and munitions.

What happens to PFAS when subjected to open air burning?

PFAS are not destroyed in an open fire and are therefore dispersed to the air and the surrounding environment where they accumulate in people, as well as fish and wildlife. At higher temperatures, poisonous hydrogen fluoride gas may be generated. Hydrogen fluoride is a listed hazardous air pollutant subject to regulation by U.S. EPA and authorized states under the Clean Air Act.

What health risks are associated with exposure to PFAS?

PFAS have been shown to affect growth and development, reproduction, thyroid function, the immune system, injure the liver and increase risk for certain cancers.



EPA and Tennessee state regulators are both permitting the military to open burn munitions wastes containing as much as 15% PFAS at Holston Army Ammunition Plant.

Burning PFAS at Holston Army Ammunition Plant

Every year, Tennessee's Holston Army Ammunition Plant is permitted to open burn **1,250,000 pounds** of munitions wastes that may contain as much as **15% PFAS** by weight.

Why is the Army allowed to open burn PFAS and other toxic waste at Holston?

Both the U.S. EPA and Tennessee regulators are getting ready to re-issue permits allowing open air burning of wastes that contain PFAS and other toxic compounds. This burning has been going on for decades.

Can regulators prohibit the burning of PFAS and highly toxic wastes?

Yes! At other military sites like the Blue Grass Army Depot in Kentucky, the military is prohibited from burning PFAS and dozens of other toxic wastes. Both Blue Grass and Holston are in EPA Region 4.

PFAS Content of Munitions Permitted for Open Burning at Holston Army Ammunition Plant – Partial List

Munitions Item	PFAS (Fluoropolymer)	Percentage by weight	Principal Explosive Ingredient
HDX-106	Teflon®	1.4	RDX
LX-04	Viton-A®	15	HMX
LX-07	Viton-A®	10	HMX
LX-10-2	Viton-A®	5.4	HMX
LX-17	Kel-F®	7.5	TATB
PBX-9502	Kel-F®	5	TATB
PBXN-7	Viton-A®	5	TATB/RDX
PBXN-5	Viton-A®	5	HMX
PBXN-6	Viton-A®	5	RDX
PBXW-14	Viton-A®	5	HMX/TATB
<i>unspecified</i>	OXY-461®	<i>unspecified</i>	<i>unspecified</i>

Kel-F® is also called Neoflon®. RDX = Royal Demolition eXplosive. HMX = High Melting eXplosive. TATB = 1,3,5-Triamino-2,4,6-trinitrobenzene. OXY-461™= vinyl chloride-chlorofluoroethylene copolymer.

YOU CAN HELP STOP open burning of PFAS military wastes!

EPA Region 4 and the Tennessee Department of Environment and Conservation are preparing to issue a modification to Holston's existing air permit allowing the military to continue open burning and releasing PFAS and other toxins to the environment.



Sign the on-line PETITION by Jan 15, 2021 – the end of public comment.

Questions? Contact the Cease Fire Campaign – info@cswab.org or 608.643.3124 – www.CSWAB.org