



Ammunition, Fireworks and Explosive Waste

Environmental and public safety concerns

In addition to immediately apparent examples, such as faulty ammunition and fireworks, explosive wastes can also be found in less obvious places. Examples include explosively-activated life safety systems – automotive airbags, seatbelt pre-tensioners, ballistic parachute systems. Ensure you identify and properly manage all explosive wastes your site may generate.

Waste ammunition, fireworks, and explosives can present both immediate and long-term environmental and public safety concerns. The Minnesota Pollution Control Agency (MPCA) and the Minneapolis-St. Paul metropolitan area counties (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington – i.e., “Metro Counties”) regulate management and disposal of waste ammunition, fireworks and explosives under the Minnesota Hazardous Waste Rules and local Metro County ordinances.

Other state and federal agencies, including the Minnesota Department of Public Safety (DPS) and the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) may also regulate the possession, transport, and destruction of these materials for protection of public safety. This fact sheet only provides guidance regarding the MPCA requirements. Contact your Metro County and any other applicable agencies to determine your full local requirements.

When are ammunition, fireworks and explosives wastes regulated?

Ammunition, fireworks, and explosives are regulated as wastes in Minnesota when they cannot be used for their intended purpose. Assume small arms ammunition waste is a D008 lead-containing hazardous waste. Assume explosives and fireworks wastes, including flares, are D003 reactive hazardous wastes unless you evaluate them and document that they are non-hazardous. Some fireworks may also be D005 barium-containing hazardous wastes. In Minnesota, hazardous wastes must be managed and disposed of properly. For more information about waste evaluation, see MPCA fact sheet #w-hw1-01, [Evaluate Waste](http://www.pca.state.mn.us/publications/w-hw1-01.pdf) at <http://www.pca.state.mn.us/publications/w-hw1-01.pdf>.

Unwanted ammunition from households, businesses and government agencies that can and will be used for shooting remains a product not subject to hazardous waste requirements. Unwanted fireworks that will be used for displays, legitimate training or instruction also remain products not subject to MPCA regulation. Unwanted explosives used for legitimate training activities by government or private emergency responders are not considered wastes. “Legitimate training” includes, at a minimum, a prepared curriculum, specific training objectives and post-training assessment. Mass burns or detonations of waste ammunition, fireworks or explosives are not considered legitimate training and may be disposal of hazardous waste without a permit, which is prohibited.

Ammunition projectiles, propellant, and primers

Manage unusable assembled ammunition as a hazardous waste. If separated, small-arms ball projectiles and casings, including slugs and shot, may be considered an exempt hazardous scrap metal when recycled; however, they must be separated from propellant, primers, contaminated wadding or shooting range backstop material. For more information about hazardous scrap metals see MPCA fact sheet #w-hw4-27, [Hazardous Scrap Metal](http://www.pca.state.mn.us/publications/w-hw4-27.pdf) at <http://www.pca.state.mn.us/publications/w-hw4-27.pdf>.

Separation of unusable assembled rounds may be accomplished through:

- De-manufacturing to disassemble the finished round and preserve its components for separate reuse or disposal.
Caution: De-manufacturing requires safe techniques to prevent risk of fire or personal injury.
- A ‘popping furnace’ to burn the propellant and recover the scrap metal.
Note: In Minnesota, ammunition ‘popping furnaces’ are considered hazardous waste incinerators and require a permit from the MPCA. Do not burn or thermally-treat waste ammunition, propellant, or primers without a Hazardous Waste Permit except as discussed in this fact sheet.

If the de-manufacturing process produces propellant, intact primers or other components that will be used for their intended purpose, you may consider it to be ‘continued use’ in Minnesota. If disassembled components will be used for other purposes, such as using small arms propellant to manufacture commercial explosives, the separated components are regulated hazardous wastes in Minnesota, but may be eligible for partial exemption as a hazardous waste feedstock.

For more information about continued use and hazardous waste feedstocks, see MPCA fact sheet #w-hw2-42, [Recycling Hazardous Waste](http://www.pca.state.mn.us/publications/w-hw2-42.pdf) at <http://www.pca.state.mn.us/publications/w-hw2-42.pdf>.

Shooting range operation & closure

Projectiles fired and left in place in an indoor or outdoor shooting range are not “waste” while the range is operating. Shooting ranges are regulated by the Minnesota Department of Natural Resources (DNR) under the Shooting Range Protection Act while they remain operating. For questions regarding requirements for operating shooting ranges, contact the DNR using the contact information at the end of this fact sheet.

While not required, shooting range operators are encouraged to separate and remove fired projectiles from the range periodically to lower their future cleanup burden. Separated projectiles can be recycled as hazardous scrap metal.

If you remove backstop material – such as rubber, wood or soil – from the range, manage it as a lead-contaminated hazardous waste unless you evaluate it and document that it is non-hazardous. If you use loose materials, such as soil or rubber chips, you may sift or density-separate projectiles from the material and recycle the separated projectiles as exempt hazardous scrap metal. Manage the remaining material as a fully-regulated hazardous waste.

You may send lead-contaminated hazardous waste, including used range backstop material and firearms maintenance patches and wipes, to a lead smelter for recycling. However, when doing this, you must also do one of the following:

- Use a Uniform Hazardous Waste Manifest and count the material towards your site’s regulated generator size status
- Demonstrate that it meets hazardous waste feedstock requirements

If you use a solvent or aqueous-based parts washer to clean firearms at your shooting range, analyze and document that the used solution is not a hazardous waste or manage it as a hazardous waste.

When an indoor or outdoor shooting range is permanently closed, remaining projectiles and contamination in the backstop material are not subject to the Hazardous Waste Rules while they remain in place. However, if not removed and managed appropriately, they may be considered “abandoned” and become subject to statutory hazardous waste liability under federal and state Superfund and Resource Conservation and Recovery Act (RCRA) statutes. Contact the MPCA for clean-up recommendations or discuss your situation with an experienced environmental attorney.

Firearms and less-lethal weapons

Unusable firearms that have been unloaded and from which electronic accessories have been removed are considered non-hazardous. Do not count them towards your hazardous waste generator size. You may destroy unusable firearms by sending them to a suitable scrap metal facility. Contact the facility in advance to arrange for destruction.

Energy-conducting weapons (stun guns) are considered electronic wastes, also known as 'E-wastes', in Minnesota. If you recycle E-wastes, do not count them towards your hazardous waste generator size.

For more information about E-wastes, see MPCA hazardous waste fact sheet #w-hw4-15, [Managing Electronic Wastes](http://www.pca.state.mn.us/publications/w-hw4-15.pdf), at <http://www.pca.state.mn.us/publications/w-hw4-15.pdf>.

Manage pepper sprays, foggers and all other chemical weapons, as hazardous wastes unless you evaluate them and document they are non-hazardous.

For more information on these and other wastes commonly generated by law enforcement agencies, see MPCA hazardous waste fact sheet #w-hw4-13, [Managing Waste at Law Enforcement Agencies](http://www.pca.state.mn.us/publications/w-hw4-13.pdf), at <http://www.pca.state.mn.us/publications/w-hw4-13.pdf>.

Emergency detonation or burning of explosives and related wastes

Explosives, fireworks, or ammunition that present an imminent threat to public safety may be detonated in place by emergency responders without approval from the MPCA or Metro County provided the incident commander determines it necessary to protect public safety. If you transport explosives, fireworks, or ammunition from the seizure site to another location, but later determine that the wastes cannot be safely shipped with a hazardous waste transporter for proper disposal, contact the MPCA to request an Emergency Hazardous Waste Treatment Permit before burning or detonating them.

Deploying explosively-activated life safety systems

Un-deployed explosively-activated life safety systems, including airbags, seatbelt pre-tensioners and ballistic parachutes, may be removed from salvage vehicles for reinstallation as products. Un-deployed explosively-activated life safety systems that will not be reused must be managed as a hazardous waste, even if they are shipped off site for metal recovery. If you follow the manufacturer's directions or industry standards for deployment, you do not need a permit from the MPCA to deploy explosively-activated life safety systems while they are still installed or after removal. Deployed explosively-activated life safety systems may be managed as scrap metal or solid waste.

Storing and treating waste fireworks, flares, and propellant mixtures

Accumulating and storing waste fireworks, flares, and propellant mixtures before disposal can create significant fire risk. To render them safer for storage, you may treat these wastes by soaking them in water. If the treatment or storage container must remain open for safety reasons, provide secondary containment for the full volume of waste and soaking water. Treatment does not require a permit, but it must be done at your site. Because toxic materials can leach from fireworks and flares during soaking, you must ship the entire container, including the water, as a hazardous waste.

More information

Guidance and requirements in this fact sheet were compiled from Minnesota Rules, Chapter 7045. To review Minnesota Rules, visit the Office of the Revisor of Statutes at <https://www.revisor.mn.gov/pubs>. The MPCA and your Metro County have staff available to answer waste management questions. For more information, contact your Metro County hazardous waste office or your nearest MPCA staff.

Metro County Hazardous Waste Offices

Anoka	763-422-7093
Carver	952-361-1800
Dakota	952-891-7557
Hennepin	612-348-3777
Ramsey	651-266-1199
Scott	952-496-8475
Washington	651-430-6655
Websites	http://www.co.[county].mn.us

Minnesota Technical Assistance Program

Toll free	1-800-247-0015
Metro	612-624-1300
Website	http://www.mntap.umn.edu

Small Business Environmental Assistance

Toll free	1-800-657-3938
Metro	651-282-6143
Website	http://www.pca.state.mn.us/sbeap/

Minnesota Department of Natural Resources

Toll free	1-888-646-6367
Metro	651-296-6157
Website	http://www.dnr.state.mn.us/

Minnesota Pollution Control Agency

Toll free (all offices)	1-800-657-3864
Brainerd	218-828-2492
Detroit Lakes	218-847-1519
Duluth	218-723-4660
Mankato	507-389-5977
Marshall	507-537-7146
Rochester	507-285-7343
St. Paul	651-296-6300
Willmar	320-214-3786
Website	http://www.pca.state.mn.us

Minnesota Duty Officer

Toll free	1-800-422-0798
Metro	651-649-5451
Website	https://dps.mn.gov/divisions/bca/Pages/default.aspx

Bureau of Alcohol, Tobacco, Firearms and Explosives - St. Paul Field Division

St. Paul	651-726-0200
Website	http://www.atf.gov/