



U.S. ARMY CHEMICAL MATERIALS AGENCY

Compliance and Safety Under the Resource Conservation and Recovery Act

The U.S. Army Chemical Materials Agency (CMA) works with a variety of public, private and government organizations to ensure safe, effective operations. The program mission is to safely store the nation's stockpile and destroy its chemical munitions. As a result, CMA operates under a variety of laws and regulations. One of the primary statutes governing the storage and disposal program is the Resource Conservation and Recovery Act (RCRA), a federal law that regulates the treatment, storage and disposal of hazardous wastes. CMA's disposal facilities are regulated under RCRA because they are considered hazardous waste generators, thus designated as permitted treatment, storage, and disposal facilities. The use of the term "permitted" means that facilities must obtain requisite permits to operate through a variety of phases in their operations.

Facility status as a waste generator

From the moment a chemical-filled munition or container is moved out of storage for disposal, it is considered hazardous waste. CMA's agent disposal operations also generate various byproducts that are considered hazardous wastes, such as ash, charcoal from filtration systems, caustic wastewater from chemical agent neutralization, or used personal protective equipment. Also, our facilities generate wastes typical of most industrial operations, such as oil and solvents used for equipment operation and maintenance. These wastes qualify CMA as a RCRA-designated Large Quantity Generator, thus requiring compliance with a distinct set of regulations for storage, waste tracking, labeling, record keeping and reporting.

What is a hazardous waste?

A hazardous waste is any solid waste that is designated as either listed or characteristic.

Listed hazardous wastes are specifically identified in the regulations. An example of a listed waste is trichlorethylene (TCE) used in dry-cleaning.

Characteristic hazardous wastes exhibit any one of four hazardous waste characteristics:

- Ignitability
- Corrosivity
- Reactivity
- Toxicity

Treatment, Storage, and Disposal Facilities (TSDFs)

Facilities that treat, store or dispose of hazardous waste must obtain a RCRA permit to ensure rigorous standards are met. Among other requirements, such facilities must have emergency plans and train appropriate personnel to properly handle hazardous waste.

The process to obtain a TSDF permit is complex, involving oversight from the U.S. Environmental Protection Agency (EPA) and state environmental agencies and public participation.

RCRA Permit Process

To obtain its RCRA permits at each site, the Army submitted a detailed application describing how each disposal facility would be built and operated in order to comply with RCRA regulations. Then, as a requirement in the process, the CMA held public meetings for each permit to communicate the Army's intent to submit an application and to obtain public comments at each of the eight storage and disposal sites.

For more information, contact the CMA Public Affairs Office at (410) 436-3629 (800) 488-0648



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Following this initial step, appropriate state agencies and the EPA reviewed the facility's application, established permit conditions, then issued a draft permit for public comment. During the comment period, the permitting agency held public meetings and a public hearing. All public comments were reviewed and responded to prior to issuing the final RCRA permit.

Permit Modifications

From time to time CMA facilities undergo administrative, technical, or operational changes, for example, installing new technology or changing procedures to meet new regulations or to ensure optimal safety of workers, the public and the environment. When these changes occur, the facility must apply for a modification to the permit. The permitting agency may also initiate a permit modification, in which case the public has another opportunity to provide comments, just as during the original permitting process.

Under RCRA there are three classes of permit modification, ranging from minor to major changes in the operation of the facility.

- Class I modifications include minor changes not affecting operations or administrative procedures, such as changes in permit-listed key contacts or replacement of equipment with functionally equivalent equipment. For this class, the operator must notify the parties on the permitting agency's public mailing list for that facility of the change within 90 days of implementation.
- Class II modifications address changes needed to maintain safety or comply with new regulations. The operator must post a notice of the change in a local newspaper, allow a 60-day comment period and hold a public meeting during the middle 30 days of that period.
- Class III modifications address substantial changes in a facility or its operations, such as a change in the technology used to dispose of a hazardous waste. In addition to the public participation requirements of a Class II modification, the permitting agency must provide additional opportunities for the public

to participate, including providing public notice and a comment period for the agency's draft permit decision and holding a public meeting if members of the public request it.

Permit renewals that involve changes equivalent to Class III modifications are subject to the same pre-application meeting and public notice requirements as the original permit application.

When chemical agent disposal is complete at a site, each facility will go through a closure process. During closure, building structures and associated grounds are tested and, if necessary, cleaned to meet standards demonstrating they are free of contamination from chemical agent and other hazardous wastes. Successfully completing this process, known as clean closure, allows the facility to terminate its RCRA permit and discontinue its status as a hazardous waste generator and TSDF.

Online references

For RCRA permits for CMA storage and disposal facilities, refer to <http://www.cma.army.mil>

For the Resource Conservation and Recovery Act, see 42 U.S. Code, sections 6901 et seq. The full text of the Act is online at <http://www4.law.cornell.edu/uscode/42/ch82.html>

For EPA regulations on RCRA and related EPA material online, go to <http://www.epa.gov/epaoswer/osw/laws-reg.htm>