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FISCAL AND POLICY NOTE
First Reader

Senate Bill 889 (Senator Jennings)
Education, Health, and Environmental Affairs

Controlled Hazardous Substance Facility Permit - Research Facilities - Chemical Warfare Material Requirements

This bill exempts the incineration of chemical warfare materials at a “research facility” from certain State controlled hazardous substances (CHS) statutory and related regulatory standards that are specific to the incineration of chemical warfare materials if the incineration is done for research, development, or demonstration purposes. A “research facility” is defined as a facility designated by the U.S. Department of Defense (DOD) for the research, development, and demonstration of technologies related to chemical warfare materials.

Fiscal Summary

State Effect: Since it is assumed that the bill applies in a limited number of cases, State finances are not anticipated to be materially affected. However, there could be an operational impact on the Maryland Department of the Environment’s (MDE) ability to regulate chemical warfare materials that are incinerated at a qualifying facility as CHS, as discussed below.

Local Effect: The bill is not expected to directly affect local governmental operations or finances.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: The bill repeals the statement “since these chemical warfare materials are highly toxic or carcinogenic,” and exempts the incineration of chemical warfare materials

at a research facility (if the incineration is done for research, development, or demonstration purposes) from CHS standards that are specific to the incineration of chemical warfare materials and are established in § 7-239.3 and § 7-239.4 of the Environment Article.

Broadly, § 7-239.3 declares that a chemical warfare material that is a solid waste is a CHS and establishes several performance standards and required outreach and plan development actions that must be satisfied prior to MDE issuing a CHS facility permit to a facility that will be used for the treatment by incineration of a chemical warfare material. Section 7-239.4 (1) establishes standards that must be included as conditions on the operation of a facility that will be used for the treatment by incineration of a chemical warfare material; (2) requires that an affected incinerator be disassembled and disposed after the incineration is complete, as specified; and (3) requires an applicant for an affected facility permit to pay the compensation of an independent third party hired to review application materials and monitoring data.

Despite these exemptions, under the bill, pursuant to current law, the State, without exemption or waiver, must still require an applicant for the treatment by incineration of chemical warfare materials to comply with all the requirements of the CHS subtitle and all related regulations.

Current Law: “Chemical warfare material” is any one of nine listed substances; the term includes any substance that has chemical warfare material as an active or principal ingredient or ingredients and degradation products of chemical warfare material. Statute establishes that the State of Maryland finds that chemical warfare materials were designed for warfare, specifically the destruction of human beings, and for no legitimate civilian industrial use. Thus, the State recognizes the need to dispose of these chemical warfare materials as safely as possible, ensuring the health and safety of State residents by the regulation of their release into the environment. Further, statute provides that since these chemical warfare materials are highly toxic or carcinogenic, in addition to any other applicable requirements at law, the State must require without exemption or waiver that an applicant for the treatment by incineration of chemical warfare materials shall comply with all statutory and regulatory requirements for CHS.

In addition to the standard CHS requirements, there are additional requirements specific to the incineration of chemical warfare materials. Statute establishes that a chemical warfare material that is a solid waste is also CHS. MDE may not issue a permit to construct, materially alter, or operate a CHS facility that will be used for the treatment of the incineration of a chemical warfare material unless the permit applicant can demonstrate to MDE’s satisfaction that the following requirements have been met:

- the proposed incinerator technology has consistently met all applicable federal and State performance standards in an operational and comparable facility for a period of time and under conditions acceptable to MDE;
- emissions and monitoring data from a comparable facility demonstrate compliance with State toxic air pollutant standards;
- a destruction and removal efficiency of at least 99.9999% is achievable for each chemical warfare material to be incinerated at the facility;
- the applicant has made plans to adequately fund the development of a plan to remove, shelter, and protect persons from the largest area at risk from a worst-case release, as defined by MDE;
- an emergency preparedness plan has been developed with adequate public participation and has been presented at public meetings in counties at risk from a worst-case release;
- MDE finds that the applicant has fully evaluated all reasonable alternative methods for treatment or disposal in order to create less risk of release or harm to the general public or the environment; and
- the local governing body of each jurisdiction included in the worst-case release has a reasonable opportunity to review and provide comment on the permit application and the emergency preparedness plan.

Statute establishes a number of permit restrictions that must be in place in order for MDE to issue a CHS facility permit for the incineration of a chemical warfare materials. More specifically, MDE must require, as a condition of operation of a CHS facility to be used for the incineration of a chemical warfare material, that (1) the incineration of chemical warfare material be monitored on a continuous basis; (2) monitoring data be reviewed by an MDE-selected qualified independent third party; and (3) both the data and reviews be reported to MDE in a manner and frequency determined by the department. Further, MDE may only issue a CHS facility permit for a specifically identified quantity of chemical warfare material. A permit may only be renewed or extended for good cause and to complete the incineration. However, a permit may not be modified as to the amount of CHS material to be destroyed. In addition to CHS facility permit fees, an applicant must pay for the independent third party with whom MDE is authorized to contract for the review of application materials and monitoring data.

After the chemical warfare materials are destroyed, the incinerator must be disassembled and disposed of in accordance with all applicable federal and State performance standards and in a time period established in the permit.

Subtitle 2 of Title 7 of the Environment Article establishes the standards for CHS, which include requirements for facility permitting and transportation restrictions. Among other things, MDE has the general authority to issue, modify, or revoke permits to install, modify,

or operate a disposal system or any part of a disposal system and to require proper maintenance and operation of a disposal system. CHS facility permit application fees are established in regulation and range from \$2,000 to \$10,000 per application. Regulations also establish the method by which permit fees are calculated.

State Fiscal Effect: The bill is not anticipated to have a material fiscal impact on the State since it is assumed to apply in only a limited number of cases. However, there could be an impact on MDE's ability to regulate chemical warfare materials that are incinerated at qualifying facilities as CHS. Although affected facilities must still comply with all other requirements of the CHS subtitle and related regulations, the bill exempts chemical warfare material that will be incinerated at a designated DOD research facility from the explicit statutory language that these materials are considered to be CHS. Thus, the bill could affect MDE's ability to regulate chemical warfare materials that are incinerated at a qualifying facility from being regulated as CHS, although this is somewhat unclear.

Small Business Effect: To the extent that an affected facility is a small business, the bill could offer a meaningful opportunity to enter the market as a research facility for the incineration of chemical warfare materials. It is unknown whether any such facilities are small businesses. The current law restrictions requiring a facility to demonstrate performance standards based on comparable operational facilities make it difficult for a company that plans to utilize new technology to incinerate chemical warfare materials to obtain a permit. Thus, the bill's changes could be meaningful for any affected small businesses.

Additional Information

Prior Introductions: None.

Designated Cross File: None.

Information Source(s): Maryland Department of the Environment; Chemical Biological Center Public Affairs Office; Department of Legislative Services

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