

Chapter 445

(Senate Bill 253)

AN ACT concerning

**Controlled Hazardous Substance Facility Permit – Research Facilities –
Chemical Warfare Material Requirements**

FOR the purpose of providing that certain provisions of law regarding chemical warfare material requirements under a controlled hazardous substance facility permit do not apply to certain research facilities under certain circumstances; establishing additional requirements applicable to research, development, and demonstration permits issued for the incineration of chemical warfare materials at a research facility; and generally relating to controlled hazardous substance facility permits.

BY repealing and reenacting, with amendments,

Article – Environment

Section 7–239.1, 7–239.2, 7–239.3, and 7–239.4

Annotated Code of Maryland

(2013 Replacement Volume and 2024 Supplement)

BY adding toArticle – EnvironmentSection 7–239.5Annotated Code of Maryland(2013 Replacement Volume and 2024 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
That the Laws of Maryland read as follows:

Article – Environment

7–239.1.

(a) In §§ 7–239.1 through ~~7–239.4~~ **7–239.5** of this subtitle the following words have the meanings indicated.

(b) (1) “Chemical warfare material” means any of the following:

- (i) Adamsite (Phenarsazine chloride);
- (ii) GA (Ethyl–N, N–dimethyl phosphoramidocyanidate);
- (iii) GB (Isopropyl methyl phosphonofluoridate);
- (iv) GD (Pinacolyl methylphosphonofluoridate);

- (v) H, HD (Bis(2-chloroethyl) sulfide);
- (vi) HT (60 percent HD and 40 percent T (Bis[2(2-chloroethyl-thio)ethyl]ester));
- (vii) L (Dichloro(2-chlorovinyl)arsine);
- (viii) T (2-2' Di (3-chloroethylthio)-diethyl ether); or
- (ix) VX (O-ethyl-S-(2-diisopropylaminoethyl) methyl phosphonothiolate).

(2) “Chemical warfare material” includes any substance that has chemical warfare material as an active or principal ingredient or ingredients, and degradation products of chemical warfare material.

(C) “MAXIMUM CREDIBLE EVENT” MEANS A HYPOTHETICAL, WORST-CASE EXPLOSION, FIRE, OR TOXIC AGENT RELEASE THAT IS REALISTICALLY POSSIBLE.

~~(D)~~ **(D)** (1) “Monitoring data” means data from actual stack emissions under all operating conditions at a controlled hazardous substance facility.

(2) “Monitoring data” does not include trial burn data or data derived from incineration of agent simulants.

~~(D)~~ **(E)** “RESEARCH FACILITY” MEANS A FACILITY DESIGNATED BY THE U.S. DEPARTMENT OF DEFENSE FOR THE RESEARCH, DEVELOPMENT, AND DEMONSTRATION OF TECHNOLOGIES RELATED TO CHEMICAL WARFARE MATERIALS.

7-239.2.

(a) The State of Maryland finds that the chemical warfare materials specified under § 7-239.1 of this subtitle were designed for warfare, specifically the destruction of human beings, and for no legitimate civilian industrial use.

(b) 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.

(c) Since these chemical warfare materials are highly toxic or carcinogenic, in addition to any other applicable requirements at law, the State shall require [without exemption or waiver] that an applicant for the treatment by incineration of chemical

warfare materials shall comply with all [the] **APPLICABLE** requirements of this subtitle and all **APPLICABLE** regulations adopted under this subtitle.

(D) NOTHING IN THIS SECTION OR IN §§ 7-239.3 ~~AND 7-239.4~~ THROUGH 7-239.5 OF THIS SUBTITLE SHALL LIMIT THE AUTHORITY OF THE DEPARTMENT TO APPLY REGULATIONS ADOPTED UNDER THIS SUBTITLE TO A CHEMICAL WARFARE MATERIAL THAT IS A CONTROLLED HAZARDOUS SUBSTANCE.

7-239.3.

~~**(A) THIS SECTION DOES NOT APPLY TO THE INCINERATION OF CHEMICAL WARFARE MATERIALS AT A RESEARCH FACILITY IF THE INCINERATION IS DONE FOR RESEARCH, DEVELOPMENT, OR DEMONSTRATION PURPOSES.**~~

~~**(a) (B)**~~ A chemical warfare material that is a solid waste is a controlled hazardous substance.

~~**(b) (C)**~~ **(1) SUBJECT TO § 7-239.5 OF THIS SUBTITLE, THIS SUBSECTION DOES NOT APPLY TO THE INCINERATION OF CHEMICAL WARFARE MATERIALS AT A RESEARCH FACILITY IF THE INCINERATION IS DONE FOR RESEARCH, DEVELOPMENT, OR DEMONSTRATION PURPOSES.**

(2) In addition to any other applicable requirements, the Department may not issue a permit for the construction, material alteration, or operation of a controlled hazardous substance facility to be used for the treatment by incineration of a chemical warfare material unless:

~~**(i)**~~ **(I)** The permit applicant demonstrates to the satisfaction of the Department prior to issuance of a controlled hazardous substance facility permit:

~~**(i)**~~ **1.** That the proposed incinerator technology has consistently met all applicable federal and State performance standards in an operational facility comparable to the proposed facility for a period of time and under conditions acceptable to the Department;

~~**(ii)**~~ **2.** That emissions and monitoring data from a comparable facility demonstrate compliance with State toxic air pollutant standards established under Title 2 of this article;

~~**(iii)**~~ **3.** That a destruction and removal efficiency of 99.9999 percent is achievable for each chemical warfare material to be incinerated at the facility;

~~**(iv)**~~ **4.** That the applicant has made adequate provision to support and fund the development of a plan that demonstrates the capability of removing,

sheltering, and protecting persons from the largest area at risk from a worst-case release, as defined by the Department;

~~(v)~~ **5.** That an emergency preparedness plan has been developed with adequate public participation that provides training, coordination, and equipment necessary for State and local emergency response personnel and community members to respond to a release of a chemical warfare material from the proposed facility; and

~~(vi)~~ **6.** That the emergency preparedness plan has been presented at public meetings in each county potentially impacted by a worst-case release;

~~(2)~~ **(II)** The Department finds that the applicant has fully evaluated all reasonable alternative methods for treatment or disposal including transport to a less populated disposal site in order to create less risk of release or harm to the general public or the environment; and

~~(3)~~ **(III)** The local governing body of each county and municipal corporation included in the worst-case release has a reasonable opportunity to review and provide comment on the facility permit application and the emergency preparedness plan under ~~paragraph (1)(v) of this subsection~~ **ITEM (I)5 OF THIS PARAGRAPH.**

7-239.4.

(A) ~~THIS SUBJECT TO § 7-239.5 OF THIS SUBTITLE, THIS SECTION DOES NOT APPLY TO THE INCINERATION OF CHEMICAL WARFARE MATERIALS AT A RESEARCH FACILITY IF THE INCINERATION IS DONE FOR RESEARCH, DEVELOPMENT, OR DEMONSTRATION PURPOSES.~~

[(a)] (B) The Department shall require as conditions of operation of a controlled hazardous substance facility to be used for the treatment by incineration of a chemical warfare material that:

(1) Treatment by incineration be monitored on a continuous basis;

(2) Monitoring data be regularly reviewed by a qualified independent third party selected by the Department; and

(3) Monitoring data and reviews be reported to the Department in the manner and frequency determined appropriate by the Department.

[(b)] (C) Any permit issued under this section shall be for a quantity that is specifically identified and:

(1) May be renewed for good cause as to the length of time for completion of the incineration authorized under the permit; but

(2) May not be modified as to the amount of controlled hazardous substance to be destroyed.

[(c)] (D) After destruction of the specific quantity of the controlled hazardous substance allowed by the terms of the permit issued under this section, the incinerator shall be disassembled and disposed of in accordance with all applicable federal and State performance standards and in a time period established by the permit.

[(d)] (E) In addition to the facility permit fee required under § 7-237 of this subtitle, the applicant shall pay the compensation of an independent third party with whom the Department may contract for the review of application materials and monitoring data.

7-239.5.

(A) (1) THE DEPARTMENT MAY ISSUE A RESEARCH, DEVELOPMENT, AND DEMONSTRATION PERMIT FOR THE INCINERATION OF CHEMICAL WARFARE MATERIALS AT A RESEARCH FACILITY IN ACCORDANCE WITH THIS SECTION.

(2) THE REQUIREMENTS OF THIS SECTION ARE IN ADDITION TO ANY GENERAL REQUIREMENTS FOR RESEARCH, DEVELOPMENT, AND DEMONSTRATION PERMITS, INCLUDING GENERAL REQUIREMENTS RELATED TO PUBLIC PARTICIPATION IN THE PERMITTING PROCESS.

(3) THE DEPARTMENT MAY NOT ISSUE A PERMIT UNDER THIS SECTION UNLESS:

(1) THE PERMIT APPLICANT DEMONSTRATES TO THE SATISFACTION OF THE DEPARTMENT PRIOR TO THE ISSUANCE OF THE PERMIT THAT:

1. THE APPLICANT HAS MADE ADEQUATE PROVISIONS TO SUPPORT AND FUND THE DEVELOPMENT OF A PLAN THAT DEMONSTRATES THE CAPABILITY OF EVACUATING, SHELTERING, AND PROTECTING PERSONS FROM THE LARGEST AREA AT RISK FROM A MAXIMUM CREDIBLE EVENT, AS DETERMINED BY THE DEPARTMENT;

2. AN EMERGENCY PREPAREDNESS PLAN HAS BEEN DEVELOPED THAT ENUMERATES THE TRAINING, COORDINATION, AND EQUIPMENT NECESSARY FOR STATE AND LOCAL EMERGENCY RESPONSE PERSONNEL AND COMMUNITY MEMBERS TO RESPOND TO A RELEASE OF A CHEMICAL WARFARE MATERIAL FROM THE RESEARCH FACILITY; AND

3. THE EMERGENCY PREPAREDNESS PLAN HAS BEEN DEVELOPED WITH ADEQUATE PUBLIC PARTICIPATION AND PRESENTED AT PUBLIC

MEETINGS IN EACH COUNTY POTENTIALLY IMPACTED BY A MAXIMUM CREDIBLE EVENT; AND

(II) THE LOCAL GOVERNING BODY OF EACH COUNTY AND MUNICIPAL CORPORATION INCLUDED IN THE MAXIMUM CREDIBLE EVENT HAS A REASONABLE OPPORTUNITY TO REVIEW AND PROVIDE COMMENT ON THE PERMIT APPLICATION AND THE EMERGENCY PREPAREDNESS PLAN UNDER ITEM (I)2 OF THIS PARAGRAPH.

(B) A PERMIT ISSUED UNDER THIS SECTION SHALL:

(1) LIMIT THE DURATION OF THE PERMIT IN ACCORDANCE WITH DEPARTMENT REGULATIONS;

(2) PROVIDE FOR THE RECEIPT AND TREATMENT BY THE RESEARCH FACILITY OF ONLY THOSE TYPES AND QUANTITIES OF CHEMICAL WARFARE MATERIALS THAT THE DEPARTMENT CONSIDERS NECESSARY FOR PURPOSES OF DETERMINING THE EFFICACY AND PERFORMANCE CAPABILITIES OF THE INCINERATION TECHNOLOGY OR PROCESS; AND

(3) SUBJECT TO SUBSECTION (C) OF THIS SECTION, INCLUDE REQUIREMENTS AS THE DEPARTMENT CONSIDERS NECESSARY TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT, INCLUDING REQUIREMENTS REGARDING:

(I) MONITORING;

(II) OPERATION;

(III) FINANCIAL RESPONSIBILITY;

(IV) CLOSURE AND REMEDIAL ACTION; AND

(V) ANY OTHER MATTER THAT THE DEPARTMENT CONSIDERS NECESSARY RELATED TO TESTING AND PROVIDING INFORMATION TO THE DEPARTMENT WITH RESPECT TO THE OPERATION OF THE RESEARCH FACILITY.

(C) IN DEVELOPING PERMIT REQUIREMENTS UNDER THIS SECTION, THE DEPARTMENT SHALL:

(1) REQUIRE CONTINUOUS NEAR-REAL TIME AIR EMISSIONS MONITORING, WITH A LAG TIME OF NOT MORE THAN 10 MINUTES, DURING INCINERATION; AND

(2) CONSIDER THE NEED FOR SOIL AND WATER POLLUTION MONITORING.

(D) THE DEPARTMENT MAY ORDER AN IMMEDIATE TERMINATION OF ALL INCINERATION OPERATIONS AT A RESEARCH FACILITY AT ANY TIME THE DEPARTMENT DETERMINES THAT TERMINATION IS NECESSARY TO PROTECT HUMAN HEALTH OR THE ENVIRONMENT.

(E) (1) THE DEPARTMENT SHALL REQUIRE A RESEARCH FACILITY THAT RECEIVES A PERMIT UNDER THIS SECTION TO:

(I) AT LEAST ONCE EVERY YEAR, REPORT TO THE DEPARTMENT ON OPERATIONS UNDER THE PERMIT, INCLUDING:

1. THE QUANTITIES AND TYPES OF CHEMICAL WARFARE MATERIALS INCINERATED DURING THE REPORTING PERIOD;

2. THE RESULTS OF ALL EMISSIONS AND POLLUTION MONITORING UNDERTAKEN UNDER THE PERMIT; AND

3. ANY OTHER INFORMATION REQUESTED BY THE DEPARTMENT; AND

(II) AT LEAST ONCE EVERY 2 YEARS, CONDUCT AND SUBMIT TO THE DEPARTMENT AN ASSESSMENT OF INCINERATION ACTIVITIES CONDUCTED UNDER THE PERMIT ON LOCAL ECOSYSTEMS, PUBLIC HEALTH, AND AIR QUALITY.

(2) THE DEPARTMENT:

(I) SHALL REVIEW ALL REPORTS AND ASSESSMENTS SUBMITTED UNDER THIS SUBSECTION; AND

(II) MAY, ON THE BASIS OF A REPORT OR ASSESSMENT SUBMITTED UNDER THIS SUBSECTION, MODIFY OR REVOKE A PERMIT ISSUED UNDER THIS SECTION.

(3) THE DEPARTMENT SHALL:

(I) TO THE EXTENT THAT DOING SO IS CONSISTENT WITH § 4-352 OF THE GENERAL PROVISIONS ARTICLE, MAKE ALL REPORTS AND ASSESSMENTS REQUIRED UNDER THIS SUBSECTION AVAILABLE ON THE DEPARTMENT'S WEBSITE; AND

(ii) IN ACCORDANCE WITH § 2-1257 OF THE STATE GOVERNMENT ARTICLE, SUBMIT ALL REPORTS AND ASSESSMENTS REQUIRED UNDER THIS SUBSECTION TO THE SENATE COMMITTEE ON EDUCATION, ENERGY, AND THE ENVIRONMENT AND THE HOUSE ENVIRONMENT AND TRANSPORTATION COMMITTEE.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2025.

Approved by the Governor, May 13, 2025.