

**Department of Legislative Services**  
Maryland General Assembly  
2002 Session

**FISCAL NOTE**  
**Revised**

Senate Bill 630

(Senator Frosh, *et al.*)

Education, Health, and Environmental Affairs and Judicial Proceedings

**Chemical Terrorism Protection Act of 2002**

This bill requires the Secretary of the Environment to adopt regulations relating to the use of “inherently safer technologies” by owners and operators of specified “chemical sources.” The regulations must require owners and operators to use such technologies or certify that they cannot use them for specified reasons. The bill outlines the general duties of an owner or operator. Finally, the bill authorizes the Secretary and the Attorney General to enforce the bill and establishes civil and criminal penalty provisions.

**Fiscal Summary**

**State Effect:** General fund expenditures would increase by \$69,400 in FY 2003 to develop regulations. Future year estimates reflect contractual services and the cost of hiring additional employees in FY 2004 and are annualized, adjusted for inflation, and reflect ongoing operating expenses. Potential minimal increase in general fund revenues as a result of the bill’s penalty provisions.

(in dollars)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
GF Revenue	-	-	-	-	-
GF Expenditure	69,400	651,300	393,300	411,000	429,800
Net Effect	(\$69,400)	(\$651,300)	(\$393,300)	(\$411,000)	(\$429,800)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect*

**Local Effect:** Local jurisdictions that own and operate specified chemical sources will become subject to regulation by the Maryland Department of the Environment (MDE) and could incur a significant increase in costs related to hazard assessments and the implementation of inherently safer technologies. This bill imposes a mandate on a unit of local government.

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## **Analysis**

**Bill Summary:** The Secretary must adopt regulations that require owners and operators of chemical sources to: (1) use an inherently safer technology to eliminate or reduce the hazards posed by a release caused by a criminal attack or similar conduct; or (2) certify, in accordance with specified requirements, that the owner or operator cannot use an inherently safer technology because none exists, the use of the technology would create an equal or greater hazard, or the use of the technology would be prohibitively expensive in comparison to the potential damages of a criminal release. An owner or operator that cannot use an inherently safer technology for those reasons must submit a certification to the Secretary and must use best available technologies and practices to mitigate the consequences of releases caused by criminal or similar conduct in accordance with the regulations.

By October 1, 2002, the Secretary must adopt regulations that meet those requirements and that apply to chemical sources in the State that are required to prepare risk management plans in accordance with specified provisions of the federal Clean Air Act. By October 1, 2003, the Secretary must adopt regulations that meet those requirements and that apply to chemical sources in the State that use, store, or produce a substance of concern in amounts that may cause off-site threat to public health or the environment in the event of a criminal release.

Each owner and operator of a chemical source that is subject to the regulations has a general duty to: (1) identify hazards that may result from an accidental release or a criminal release using appropriate hazard assessment techniques; (2) ensure safer design and maintenance of the chemical source by taking such actions that are necessary to prevent accidental and criminal releases; and (3) minimize the consequences of any accidental release or criminal release that does occur.

If the Secretary or the Attorney General determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment, because of a potential accidental release or criminal release from a chemical source, or a failure to provide information or access requested under the bill, the Secretary or the Attorney General may: (1) sue for an immediate injunction; or (2) take other action as specified in the bill. The bill authorizes the Secretary or the Attorney General to require a person to establish and maintain records, make reports, or provide other information under specified circumstances. The bill also establishes right-of-entry provisions for the Secretary or the Attorney General and authorizes them to issue an order directing compliance with requests.

A person who violates the bill's provisions is liable for a civil penalty not exceeding \$25,000 to be collected in a civil action. Each day a violation occurs is a separate violation. Any person who knowingly violates, or fails to comply with, any order issued or any regulation adopted under the bill is guilty of a misdemeanor and on conviction is subject to: (1) for a first offense, a fine not exceeding \$25,000 per day or imprisonment not exceeding one year, or both; or (2) after a first conviction, a fine not exceeding \$50,000 per day or imprisonment not exceeding two years, or both.

Chemical source means a "substance of concern" that is contained in: (1) a stationary source, as defined under the federal Clean Air Act; (2) a vessel; (3) a motor vehicle; (4) rolling stock; and (5) a container. Substance of concern means a substance designated by the Administrator of the U.S. Environmental Protection Agency (EPA) in accordance with a specified provision of the federal Clean Air Act relating to risk management.

Inherently safer technology means a technology, product, raw material, or practice that, compared with those currently in use:

- reduces or eliminates the possibility of a release of a substance of concern from the chemical source prior to secondary containment, control, or mitigation; and
- reduces or eliminates the threats to public health and the environment associated with a release or potential release of a substance of concern from the chemical source.

Inherently safer technology includes several specified technologies.

**Current Law:** Federal laws related to chemical safety generally address cleanup, planning, response, and risk management. The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) operates a program relating to process safety management. The program, which is intended to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable, or explosive highly hazardous chemicals from a process, involves hazard analysis and the development of process safety and emergency management plans. The Maryland Occupational Safety and Health Program within the Department of Labor, Licensing, and Regulation is involved with the implementation of process safety management standards at the State level.

Under the federal Clean Air Act (CAA), specified chemical sources must prepare risk management plans and submit them to EPA. That federal law contains a general duty for owners and operators of facilities producing, using, handling, or storing extremely hazardous substances to design and maintain a safe facility to prevent accidental releases and to minimize the consequence of any releases that occur. MDE does not have delegated authority of the federal program under the CAA and therefore does not evaluate risk management plans.

MDE does regulate some of the facilities that would be affected by this bill, however. With specified exceptions, a person must be permitted by MDE before the person may own, establish, operate, or maintain a facility in the State that transfers quantities of a single hazardous material that meets or exceeds 100,000 pounds in weight at any time during a calendar year. Generally, a person may not store, discharge, treat, or dispose of a controlled hazardous substance in this State except in a controlled hazardous substance facility and in accordance with law. A person must hold a facility permit before the person may own, establish, operate, or maintain a controlled hazardous substance facility in the State. With specified exceptions, a person may not transport any controlled hazardous substance from any source in this State or to any controlled hazardous substance facility unless the person holds a hauler certificate, a vehicle certificate, and a driver certificate.

A person who violates specified provisions of the hazardous materials and controlled hazardous substance laws is liable to a civil penalty not exceeding \$25,000 per day. MDE may also assess an administrative penalty of up to \$25,000 per violation not exceeding \$100,000 total. Criminal violations (for negligence) are considered misdemeanors and, for a first offense, carry a fine of up to \$25,000 or imprisonment not exceeding one year, or both; after a first conviction, the fine would be up to \$50,000 per day or imprisonment not exceeding two years, or both. Specified offenses relating to controlled hazardous substances are considered felonies and carry a fine not exceeding \$100,000 or imprisonment not exceeding five years, or both; any person who knowingly commits specified violations is guilty of a felony and upon conviction is subject to a fine not exceeding \$250,000 or imprisonment not exceeding 15 years, or both.

**Background:** This bill is similar to federal legislation that has been introduced in the U.S. Senate. S. 1602 (The Chemical Security Act of 2001) was introduced in October 2001. The bill was referred to the Senate Environment and Public Works Committee. In November 2001, the Subcommittee on Superfund, Toxics, Risk, and Waste Management held a hearing on the bill. According to testimony provided by Senator Barbara Boxer, one of the co-sponsors of the bill, the bill was introduced in response to the September 11, 2001 terrorist attacks.

Other states have implemented programs dealing with chemical security and preparedness. In 1986 New Jersey enacted the Toxic Catastrophe Prevention Act in an effort to prevent accidental releases. A few years ago, New Jersey amended the regulations for that program to incorporate the federal Accidental Release Prevention requirements of the CAA. New Jersey advises that its program focuses on prevention and preparedness and works in conjunction with other programs in the State to provide a comprehensive prevention and response system. The program, which was designed in cooperation with the regulated community, requires regulated facilities to perform reviews and risk assessments and to quantitatively assess and characterize risk. The program only applies to facilities that handle, use, manufacture, store, or have the

capability of generating an extraordinarily hazardous substance at specified threshold quantities. The program does not require the use of inherently safer technology.

In 1999 Delaware replaced its regulations governing extremely hazardous substances with its Accidental Release Prevention Regulation so that it could request delegation of federal provisions under the CAA. The mission of Delaware's program is to protect the lives and health of persons living and working in vicinity of facilities handling extremely hazardous substances. The program contains requirements for owners or operators of stationary sources having regulated substances on-site to develop and implement a risk management program that anticipates and minimizes the chances of catastrophic events.

According to MDE, approximately 140 sites in Maryland are required to submit risk management plans to EPA pursuant to the CAA. Many of these facilities are regulated by MDE, but MDE does not currently evaluate risk management plans.

**State Revenues:** The bill's civil and criminal penalty provisions are not expected to significantly affect State revenues.

**State Expenditures:** General fund expenditures could increase by \$69,400 in fiscal 2003, which accounts for the bill's October 1, 2002 effective date. This estimate reflects the cost of hiring one engineer to develop regulations and a part-time (0.5) assistant attorney general for legal review. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses, including travel for site visits and meetings with facilities.

Salaries and Fringe Benefits	\$65,700
Equipment and Operating Expenses	<u>3,700</u>
<b>Total FY 2003 State Expenditures</b>	<b>\$69,400</b>

Legislative Services notes that although the bill requires MDE to develop the first set of regulations by October 1, 2002, the bill does not take effect until that date. Accordingly, it is assumed that MDE would develop the first set of regulations as soon as possible after the bill's effective date.

Future year expenditures reflect: (1) the cost of hiring four additional engineers in fiscal 2004 to review information provided by facilities and conduct inspections of facilities; (2) contractual services of \$150,000 in fiscal 2004 only for data management activities; (3) full salaries with 3.5% annual increases and 3% employee turnover; and (4) 1% annual increases in ongoing operating expenses. Future year estimates are based on the following information:

- approximately 140 facilities will be subject to the first set of regulations; and

- an unknown number of additional facilities will be subject to the second set of regulations.

Legislative Services advises that because the second set of regulations would apply to such a broad group (chemical sources that use, store, or produce a substance of concern in specified amounts), as those regulations are developed and implemented, additional resources may be needed for MDE to effectively enforce the bill. The estimate provided above is the minimum number of personnel currently anticipated to be needed. However, because the total number of facilities subject to the second set of regulations is unknown, costs could be higher. Should a total of five engineers and a part-time assistant attorney general prove inadequate to meet the requirements of the bill, MDE may request additional positions through the annual budget process.

The bill's penalty provisions are not expected to significantly affect State expenditures.

**Local Fiscal Effect:** According to MDE, approximately 50 local jurisdictions are currently required to file risk management plans under federal law and would, therefore, become subject to the first set of regulations adopted by MDE under the bill. Additional local jurisdictions would likely be affected by the second set of regulations, which will apply to a much broader group of facilities that use, store, or produce substances of concern. Local jurisdictions subject to both sets of regulations would have to certify that the processes and chemicals they currently use are inherently safe and that no other technology exists that is inherently safer. To the extent local jurisdictions are required to implement inherently safer technologies as a result of the bill, local expenditures could increase significantly. For example, the Maryland Municipal League advises that chemical storage and chemical feed equipment at drinking water and sewage treatment plants would likely be affected by the bill.

The bill's penalty provisions are not expected to significantly affect local finances.

**Small Business Effect:** According to MDE, about 24 small businesses would be affected by the first set of regulations adopted by MDE under the bill. Those entities would be required to research their production, storage, and handling methods to identify and implement inherently safer technology or certify that they cannot for reasons specified in the bill. This would likely impose additional costs on these entities. Additional small businesses, such as dry cleaners and gas stations, could be affected by the second set of regulations. Although the bill's impact on small businesses cannot be reliably estimated at this time, Legislative Services advises that it could be significant.

## **Additional Information**

**Prior Introductions:** None.

**Cross File:** HB 1343 (Delegates Franchot and Zirkin) – Rules and Executive Nominations.

**Information Source(s):** Maryland Department of the Environment, Office of the Attorney General, Maryland Municipal League, American Chemistry Council, New Jersey Department of Environmental Protection, Department of Legislative Services

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Analysis by: Lesley Frymier

Direct Inquiries to:  
John Rixey, Coordinating Analyst  
(410) 946-5510  
(301) 970-5510