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BILL



ANALYSIS

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House Bill 4108 (Substitute S-1 as reported)
Sponsor: Representative Jeff Mayes
House Committee: Agriculture
Senate Committee: Agriculture, Forestry and Tourism

Date Completed: 7-11-05

RATIONALE

Anhydrous ammonia is both a widely used fertilizer and a key ingredient in the illegal manufacture of methamphetamine. As a fertilizer, anhydrous ammonia is an efficient source of nitrogen that is readily available to farmers in large quantities at a low cost. This accessibility, however, also makes farmers and suppliers an increasingly popular target of thieves, who use anhydrous ammonia to convert pseudoephedrine, commonly found in over-the-counter cold medicine, into the addictive stimulant methamphetamine. Whether used by farmers or illegal drug makers, the chemical can be extremely dangerous if it is not properly handled. It must be stored under high pressure in specially designed tanks, and workers must be trained to handle the product and follow strict procedures. When anhydrous ammonia comes into contact with body tissue, it can cause dehydration, cell destruction, and severe chemical burns, leading to permanent injury or death, depending on the amount and duration of the exposure.

Although individuals who sell or use anhydrous ammonia as a fertilizer presumably are aware of its risks and take the proper precautions, people who steal the chemical might cut hoses, damage tubing, and smash valves—jeopardizing themselves, other individuals, and livestock. In addition to the physical injury, property damage, and the costs that may result, the victims face another concern: the potential exposure to lawsuits brought by others, including the thieves, who have been injured or lost property. To address this concern, it has been suggested that the law should provide immunity to farmers and suppliers who

comply with standards for the storage of anhydrous ammonia.

CONTENT

The bill would create the “Anhydrous Ammonia Security Act” to do the following:

- **Require the Agriculture Commission to issue anhydrous ammonia safety and security practices (AASSPs) regarding the security of anhydrous ammonia in the possession of sellers and end users in this State.**
- **Specify that storage in a locked tank and/or storage with a dye would constitute safe and secure storage practices.**
- **Establish tort immunity for a seller or end user who stored, secured, used, transported, or protected anhydrous ammonia in compliance with AASSPs.**

AASSPs

The Agriculture Commission would have to issue AASSPs by June 1, 2006. In addition to any other practices included, the AASSPs would have to provide that both of the following, either separately or in combination as the Commission determined, would constitute safe and secure storage practices for anhydrous ammonia:

- Storage in a tank that was properly equipped with a functioning tank or valve lock that was used at all times except when the seller or end user was taking anhydrous ammonia from the tank or filling it.

-- Storage with a substance added to the anhydrous ammonia that was or that contained a dye that would, on release from the container holding the anhydrous ammonia, stain objects that it came in contact with, including skin and clothing, in a highly visible manner.

In establishing AASSPs, the Commission would have to give due consideration to available Department of Agriculture information and written recommendations from the Michigan State University College of Agriculture and Natural Resources Extension, the Department of State Police, local law enforcement agencies, anhydrous ammonia manufacturers, retailers, and end users, and other professional and industry organizations.

The bill would define "anhydrous ammonia" as an inorganic compound that consists of one nitrogen atom and three hydrogen atoms, with a chemical formula of NH_3 . The bill states, "Anhydrous ammonia is ammonia gas in a compressed or liquefied form and is not aqueous ammonia, which is a solution of ammonia gas in water."

"Seller" would mean a person selling anhydrous ammonia at wholesale or retail to an end user for a legal purpose. "End user" would mean the person actually using anhydrous ammonia for a legal purpose.

Immunity

A seller or end user who stored, secured, used, transported, or protected anhydrous ammonia in compliance with AASSPs would be immune from tort liability for personal injury, property damage, or death that resulted from the larceny or attempted larceny of anhydrous ammonia, or from a person obtaining or using, or attempting to obtain or use, anhydrous ammonia illegally. This would include immunity from liability for an injury to, damage to the property of, or the death of a person who was not the person committing or attempting to commit a larceny of, or obtaining, using, or attempting to obtain or use, anhydrous ammonia illegally.

The failure of a seller or end user to store, secure, use, transport, or protect anhydrous ammonia in compliance with AASSPs would not, by itself, create tort liability for personal injury, property damage, or death caused by the storage, securing, use, transportation, or protection of anhydrous ammonia.

These provisions would apply to a cause of action that accrued after the bill's effective date and after AASSPs were established.

BACKGROUND

"Anhydrous" means without water. Consequently, when anhydrous ammonia comes into contact with water, it rapidly combines with the moisture and forms ammonia hydroxide. When injected into the soil, the liquid ammonia expands into a gas and readily combines with soil moisture. Similarly, the liquid or gas that contacts body tissue—especially the eyes, skin, and respiratory tract—will remove the water and cause dehydration, cell destruction, and severe chemical burns. A concentration of anhydrous ammonia vapor of 134 parts per million (PPM) will cause most people to experience dryness and irritation of the nose, throat, and eyes. At 700 PPM, it can cause coughing and severe eye irritation, which may lead to partial or total loss of sight if untreated. A concentration of 1,700 PPM can cause serious lung damage and, if untreated, death. After a few seconds of exposure at 2,000 PPM, burns and blisters can result. At 5,000 PPM, death by suffocation can occur within minutes. (Source: "Using Agricultural Anhydrous Ammonia Safely", Robert D. Grisso, David Morgan, and Rollin D. Schneider, University of Nebraska Cooperative Extension EC94-738-B.)

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

A recent incident at a farm in southwestern Michigan illustrates the hazards of anhydrous ammonia theft. As reported in *The Detroit News*, after thieves tapped into a tank and left its valve open, a dozen animals were found dead and others sick and dying when the problem was discovered the next morning; by that evening, 64 animals had died or were to be destroyed, and 30 to 40 were sick and blinded ("Thieves raiding farmers' tanks of anhydrous ammonia", 6-11-05). Also, according to the article, a robbery of an anhydrous ammonia distributor in May 2004 resulted in a leak so serious that neighboring farms were evacuated. Reportedly, to avoid these problems, some farmers park the tanks far from their homes

or return them to the supplier at the end of the day, while others are giving up on anhydrous ammonia altogether and switching to more costly fertilizers.

Farmers and suppliers should not have to worry about being sued by people injured by exposure to the chemical, in addition to potentially losing animals, incurring physical injuries, and having to replace damaged equipment, as the result of anhydrous ammonia theft. By extending civil immunity to farmers and suppliers who complied with safe and secure storage practices issued by the Agriculture Commission, the bill would enable farmers to continue using a highly effective, inexpensive fertilizer without fear of litigation.

Supporting Argument

According to a survey conducted by the National Association of Counties, released on July 5, 2005, "Local officials from across the country declared methamphetamine the nation's leading law enforcement scourge—a more insidious drug problem than cocaine—and blamed it for crowding jails and fueling increases in theft and violence, as well as [a] host of social welfare problems" ("Officials Across U.S. Describe Drug Woes, *New York Times*, 7-6-05). Also known as "speed", "crank", or "ice", methamphetamine is highly addictive and, over time, its use can lead to paranoia, psychosis, brain damage, and increased risk of stroke and heart failure. Methamphetamine is typically manufactured with common chemicals—including anhydrous ammonia and pseudoephedrine—in clandestine labs. These labs are on the increase in this State. A *Detroit Free Press* article reported, "'Michigan has seen about a 60% increase in lab numbers statewide compared to this time last year,'" according to a Michigan State Police methamphetamine investigator ("Sheriffs fight growing meth lab problem", 7-6-05).

Legislation enacted in recent years already has taken a number of steps to fight this problem, including the creation of severe penalties for related offenses. For example, owning or using a building, vehicle, or laboratory equipment to manufacture methamphetamine, under certain circumstances, is subject to a maximum penalty of 20 years' imprisonment and/or a \$25,000 fine; the possession of more than 12 grams of ephedrine or pseudoephedrine is punishable by up to two years and/or

\$2,000; and the maximum penalty for transporting or possessing anhydrous ammonia in an unapproved container, or tampering with an approved container, is four years and/or \$5,000. In addition, Senate Bill 189 and House Bill 4322, which are enrolled and awaiting the Governor's signature, would regulate over-the-counter sales of products containing ephedrine or pseudoephedrine.

House Bill 4108 (S-1) also would help fight against the manufacture of methamphetamine. By requiring the Agriculture Commission to issue safety and storage security practices, and offering immunity to farmers and suppliers who complied with them, the bill could enhance the measures taken to protect anhydrous ammonia from would-be thieves, and reduce the availability of the chemical for use in meth labs.

Supporting Argument

Under the bill, the storage of anhydrous ammonia with a dye additive would constitute a safe and secure storage practice (alone or in combination with storage in a properly locked tank). A product called "GloTell", when added to anhydrous ammonia, turns the substance pink, leaves a visible stain that is difficult to wash off, and remains detectable by ultraviolet light for up to 72 hours after being washed off. The use of the dye may deter some thieves and lead to the detection of others. It also can interfere with the manufacture of methamphetamine by producing a gummy pink substance, rather than the desired white powder. Thus, including storage with the dye in the AASSPs could help reduce both anhydrous ammonia theft and meth production.

Legislative Analyst: Suzanne Lowe

FISCAL IMPACT

The bill would have no fiscal impact on State or local government.

Fiscal Analyst: Craig Thiel

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.