

**TESTIMONY OF
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BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

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Good morning Chairman Boxer and members of the Committee, I am Barry Breen, Principal Deputy Assistant Administrator for the U.S Environmental Protection Agency's Office of Solid Waste and Emergency Response. Thank you for the opportunity to testify today on the EPA's Risk Management Program and emergency planning and community right-to-know issues.

West, Texas Facility and Geismar, LA Incidents

On April 17, 2013, a fire and explosion occurred at the West Fertilizer plant in the town of West, Texas, causing multiple injuries and fatalities. The explosion shock wave caused multiple fires within a six block radius. The EPA responded as part of a multi-agency effort, including the U.S. Chemical Safety Board (CSB), the Federal Bureau of Alcohol Tobacco and Firearms (ATF), the Texas Commission on Environmental Quality (TCEQ), and Texas Fire Marshal Office. As part of the EPA's role, the agency conducted air monitoring using both stationary sites and a mobile monitoring team in the neighborhoods west of the facility. The EPA monitored for airborne contaminants including volatile organic compounds, ammonia, carbon monoxide, and lower explosive limits of methane gas. The EPA also deployed emergency response personnel to the site of the explosion and fire at the Williams Olefin facility in Geismar,

LA. The agency is conducting its post-accident assessment efforts in coordination with the other federal, state and local agencies for both incidents.

The Emergency Planning and Community Right-To-Know Act

In response to the devastating chemical disaster in Bhopal, India in 1984, Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA) in 1986 to ensure that local communities have the authority they need to prevent, prepare for, and respond to chemical accidents. The EPCRA provisions help increase local planners, responders, and the public's knowledge and access to information on chemicals at individual facilities and risks associated with them. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. The implementing regulations for emergency planning, emergency release notification, and the chemicals subject to these regulations are codified in 40 CFR part 355. The implementing regulations for community right-to-know reporting (or hazardous chemical reporting) are codified in 40 CFR part 370.

Subtitle A of EPCRA establishes the framework for local emergency planning. The Act requires that the EPA publish a list of extremely hazardous substances (EHSs). The EHS list was established by the EPA to identify chemical substances that could cause serious irreversible health effects from accidental releases {(See 40 CFR part 355 (52 FR 13378, April 22, 1987))}. The Agency was also directed to establish a threshold planning quantity (TPQ) for each extremely hazardous substance.

The purpose of the EHSs list is to focus initial efforts in the development of state and local contingency plans. Inclusion of a chemical on the EHSs list indicates a need for the community

to undertake a program to investigate and evaluate the potential for accidental exposure associated with the production, storage or handling of the chemical at a particular site and develop a chemical emergency response plan around those risks.

Under EPCRA section 302, a facility that has an EHS on-site in excess of its TPQ must notify the State Emergency Response Commission (SERC) and Local Emergency Planning Committee (LEPC), as well as participate in local emergency planning activities. Under the Statute, the LEPC shall then develop a community emergency response plan. Emergency Response plans contain information that community officials can use at the time of a chemical accident.

The EPA and the National Oceanic and Atmospheric Administration (NOAA) have developed a system of software applications used widely by States and local emergency planning committees to plan for and respond to chemical emergencies. This system is called the Computer-Aided Management of Emergency Operations (CAMEO) and it was developed to assist front-line chemical emergency planners and responders. Emergency responders and planners use CAMEO to access, store, and evaluate information critical for developing emergency plans. In addition, CAMEO supports regulatory compliance by helping users meet the chemical inventory reporting requirements of EPCRA. The CAMEO system integrates a chemical database and a method to manage the data, an air dispersion model, and a mapping capability. All modules work interactively to share and display critical information in a timely fashion.

Subtitle B of EPCRA established community right-to know requirements in order to ensure information on chemicals in the community is provided to the public as well as emergency

responders. Under ECPRA sections 311 and 312, facilities that have either (1) a hazardous chemical present at or above 10,000 pounds or (2) an EHS present at or above its TPQ or 500 pounds—whichever is the lesser, are required to submit an Emergency and Hazardous Chemical Inventory form (Tier II) and a Material Safety Data Sheet (MSDS) for that chemical to their SERC, LEPC and local fire department. A chemical is hazardous as defined under the Hazard Communication Standard (HCS) of the Occupational Safety and Health Act (OSHA). There is not a separate list of hazardous chemicals. If a facility is required by OSHA to develop and/or maintain a MSDS for that chemical and it is present at or above the threshold discussed above, it must be reported. Local fire departments receive this information and should use it to understand the chemical(s) present at facilities in their community and precautions they may need to take in responding to an accident at the facility.

Sections 311 and 312 of EPCRA make available to the local and state emergency planners information on other chemicals and facilities, beyond those identified under section 302, that they may wish to include in their emergency planning efforts. The EPA has specified in guidance that Tier II information under section 312 will provide specific information on the quantities and locations of hazardous chemicals. Thus, sections 311 and 312 provide information supportive of the emergency planning required under Subtitle A. The facilities identified as a result of that subtitle are only a "first cut" of the facilities and potential chemical hazards for which emergency planning may be necessary.

Risk Management Program

The Clean Air Act (CAA) 112(r) provisions build on the planning and preparedness groundwork laid by EPCRA. CAA 112(r) provides the authority for the EPA's Risk Management Program (RMP). RMP regulations apply to the owner or operator of a stationary source with more than a threshold quantity of a CAA section 112(r) regulated substance in a process. Section 112(r) chemicals and thresholds may overlap with chemicals listed under other rules, but are not identical to those on any other list. The section 112(r) list includes 63 flammable gases and liquids and 77 acutely toxic chemicals. To develop the list, several statutory factors were considered, including the severity of any acute adverse health effects associated with accidental releases of the substance, the likelihood of accidental releases of the substance, and the potential magnitude of human exposure to accidental releases of the substance. An accidental release is an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source. Many of these substances are also included on the EPCRA extremely hazardous substance (EHS) list. The section 112(r) chemical list and corresponding thresholds for each chemical are published at 40 CFR 68.130. Under CAA section 112 (r), the EPA is required to review the list of chemicals every 5 years or by its own motion or by petition. The EPA also provides an ongoing review of new chemicals and hazards to see if any chemical warrants listing or delisting.

Under the RMP regulations, a covered facility is required to review the hazards associated with the covered substance, process and procedures, as well as develop an accident prevention program and an emergency response program. The "Hazard Review" must identify opportunities for equipment malfunction or human error that could in turn cause the accidental release of the covered substance, as well as safeguards to prevent the potential release, and steps

to detect and monitor for a release. A facility's compliance with these requirements is documented in a Risk Management Plan that is submitted to the EPA. Covered facilities must implement the Plan and update them every 5 years or when certain changes occur. The goal of the EPA's Risk Management Program is to prevent accidental releases of substances to the air that can cause serious harm to the public and the environment from short-term exposures, and to mitigate the severity of releases that do occur. Approximately 12,800 facilities are currently covered under Risk Management Program regulations.

Under the CAA section 112(r) RMP facilities must submit a risk management plan which includes:

- Facility hazard assessments, including worst-case release and alternative release scenarios;
- Facility accident prevention activities, such as use of special safety equipment, employee safety training programs, and process hazards analyses conducted by the facility;
- Past chemical accidents at a facility; and
- Facility emergency response programs and plans.

Another key component of Section 112(r) of the Clean Air Act, is section 112(r)(1), which is the General Duty Clause. This provision requires owners and operators of any stationary sources producing, processing, handling or storing an RMP substance or any other extremely hazardous substance to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which may

occur. This requirement is all encompassing and is used proactively to prevent accidents when hazards are observed that could lead to a chemical accident, or after an accident, if a facility failed to properly carry out this statutory requirement. Under the General Duty, facilities are expected to comply with recognized and generally accepted good engineering practices.

Both EPCRA and the CAA section 112(r) Risk Management Program encourage communication between facilities and the surrounding communities about chemical safety and chemical risks. Regulatory requirements, by themselves, will not guarantee safety from chemical accidents. Those who are handling hazardous substances must take the responsibility and act to prevent, prepare for and respond to chemical emergencies. Information about hazards in a community will allow local emergency officials and the public to work with industry to prevent accidents.

Conclusion

The EPA will continue its efforts to help prevent chemical accidents and releases under the Risk Management Program. Strong chemical accident prevention, preparedness, and response programs rely upon effective partnerships with the public and all levels of government. We will continue our outreach efforts to stakeholders and work with our federal, state, and local partners to promote chemical safety, address chemical process safety issues, and explore opportunities for improving chemical safety.