



Testimony of the Michigan Chemistry Council
before the House Communications & Technology Committee
Tuesday, February 13, 2018

Ms. Chairman and Members of the Committee,

My name is John Dulmes, and I'm the executive director of the Michigan Chemistry Council. On behalf of my members, thank you for the opportunity to provide testimony on the issue of drone security and the chemical industry. Our companies support more than 80,000 Michigan jobs and generate \$262 million in state and local taxes. 96% of all manufactured goods are directly touched by the business of chemistry, making our industry essential to every facet of Michigan's economy.

Like many other industries, we are excited about the many beneficial applications of unmanned aircraft systems (UAS), or drones. These possibilities include:

- Plant/process equipment monitoring/inspections
- Environmental and safety inspections, including flare stack monitoring
- Infrastructure inspections, including remote fence lines and property boundaries
- Security surveillance, including perimeter security and access control
- Aerial photography and advanced imaging
- Emergency response operations, including incident, disaster, and spill response

While drone technology is promising, it also raises a number of questions and concerns, particularly about potential security threats. Along with refineries, power plants, and water treatment facilities, chemical facilities are generally recognized as a crucial part of the nation's critical infrastructure. Of course, our industry is committed to the safety of our employees and the communities in which we operate, and chemical companies nationwide have invested more than \$14 billion to enhance physical site, transportation, and cyber security at their facilities under the ACC's Responsible Care initiative. Many of our members are additionally regulated under the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards (CFATS).

As the federal government and states consider further drone regulations, we feel it is necessary to ensure that sufficient protections are in place to prohibit the intentional misuse of drones over chemical facilities. We support legislation that would protect chemical plants and other key facilities from unauthorized over-flight or surveilling of their sites. Such legislation would provide additional protection from possible dangers to our facilities. As an example, drones that malfunction over a chemical plant could fall into an active chemical process unit and create a safety hazard. Furthermore, drones could capture videos or photos of a chemical plant layout, revealing sensitive security information that could be later used for deliberate harm, or proprietary information that is gathered as part of corporate espionage. The data gathered by drones presents unique cybersecurity concerns. In a worst-case scenario, drones themselves could be used as direct weapons against chemical plants. While our member companies have done much to ensure the safety and security of their facilities, drones unfortunately present a multitude of unpredictable concerns.

To address these concerns, we have worked with the Legislature and the Unmanned Aircraft Systems Task Force to develop common-sense recommendations to protect such key facilities, which are already defined in MCL 750.552c and includes chemical plants, refineries, power plants, water treatment facilities, hazardous waste disposal facilities, and telecommunications sites. The Task Force recommended that state legislation be passed to implement such protections.

We encourage you to support this legislation and to promote the safe and responsible development of drone technologies in the state of Michigan.

Best,
John Dulmes

State Drone Laws ENACTED 2014 to 2017 – Critical Infrastructure Facilities

STATE/BILL	BILL DESCRIPTION	SCHEDULE
Arizona <u>SB 1449</u>	SB 1449 prohibits the operation of an unmanned aircraft to intentionally photograph, record, collect information, or conduct surveillance on a critical facility, including chemical and rubber manufacturing facilities, without the prior consent of the owner or operator; on a person or on a person's property without prior consent.	5/11/2016- signed by the governor.
Arkansas <u>HB 1770</u>	HB 1770 protects chemical facilities by prohibiting unauthorized drone surveillance of critical infrastructure.	Enacted in 2015
Delaware <u>HB 195</u>	HB 195 prohibits unmanned aircraft systems from flying over critical infrastructure, sporting events, concerts, and large events.	9/6/16 – Signed by the Governor.
Florida <u>HB 1027</u>	HB 1027 creates a new state statute (330.41) that prohibits operation of unmanned aircraft over certain critical infrastructure facilities. As amended , the definition of critical infrastructure includes a chemical or rubber manufacturing or storage facility and a mining facility	6/23/17 –signed by the governor.
Florida <u>SB 766</u>	SB 766 prohibits the unauthorized use of drones over private property and provides for civil action if the law is violated.	Enacted in 2015.
Louisiana <u>HB 1029</u>	HB 1029 makes it unlawful to intentionally use an unmanned aircraft system to conduct surveillance of, gather evidence or collect information about, or photographically or electronically record a targeted facility without prior written consent of owner of targeted facility -- defined to include petroleum and alumina refineries; chemical and rubber manufacturing facilities; and nuclear power electric generation facilities. (R.S. 14.337)	Enacted in 2014
Nevada <u>AB 239</u>	AB 239 regulates the use of unmanned aerial vehicles in the state. The bill prohibits drone operation within a horizontal distance of 500 feet or a vertical distance of 250 feet from a critical facility without the written consent of the owner of the critical facility.	Enacted in 2015

Oklahoma <u>HB 2599</u> <u>Enacted bill</u>	HB 2599 contains language to protect chemical facilities by prohibiting unauthorized drone surveillance of critical infrastructure.	5/18/16 – Signed by the Governor.
Oregon <u>HB 4066</u>	HB 4066 was amended to include language making it a crime for a person to intentionally operate a drone over a critical infrastructure facility at an altitude not higher than 400 feet above ground level; or (b) allow a drone to make contact with a critical infra-structure including any person or object on the premises of or within the facility. Critical infrastructure is defined to include chemical manufacturing facilities.	3/29/2016 – Signed by the Governor.
Tennessee <u>SB 2106</u>	SB 2106 prohibits an individual from knowingly using an unmanned aircraft within 250 feet of the perimeter of any critical infrastructure (including chemical manufacturing and storage facilities), without the owner or business operator's written consent, to conduct surveillance, gather evidence or collect info or photograph or record data.	4/12/16 – Signed by the Governor.
Texas <u>HB 1481</u>	HB 1481 prohibits the operation of an unmanned aircraft over certain critical infrastructure facilities including a chemical, polymer, or rubber manufacturing facility; an above-ground oil/gas/chemical pipeline; a petroleum or alumina refinery; and facilities related to electric infrastructure and water infrastructure.	Enacted in 2015.