**FEMA Chemical, Biological, Radiological and Nuclear (CBRN) Office**

**Interagency Modeling and Atmospheric Assessment Center (IMAAC)**

**Talking Points**

**What the IMAAC Is:**

* The Interagency Modeling and Atmospheric Assessment Center coordinates and disseminates Federal atmospheric dispersion modeling and hazard prediction products. ([www.fema.gov/imaac](http://www.fema.gov/imaac))
* The IMAAC is an important tool because it assists the men and women who put their lives on the line by ensuring that they have the necessary information to make the best decisions possible.
* The IMAAC helps in the response to chemical and HAZMAT releases, spills, and incidents at no cost to responders. Examples include:
	+ Train derailments with a large HAZMAT release that results in an airborne cloud (for example, a large crude oil fire or vinyl chloride release);
	+ A tanker truck crash with a large chemical release that becomes an airborne cloud, such as chlorine.
* There’s no such thing as an incident that’s too small. Any need for assistance is important. The IMAAC can help to make the determination on how big an issue is or will become through its models.

**Who the IMAAC Is for:**

* IMAAC is for federal, state, local, tribal and territorial (FSLTT) first responders and decision-makers during actual or potential atmospheric HAZMAT incidents.

**Who the IMAAC Toolkit Is for:**

* The IMAAC Toolkit helps professionals in any field that may encounter HAZMAT incidents serve as advocates for the IMAAC and promote its activities.
* For instance, the IMAAC toolkit can be used to share social media messages with your own stakeholders or to post flyers. Other documents within the toolkit also provide information about what IMAAC is and why it’s important.

**What the IMAAC Provides:**

* *Emergency support* – with **no-cost activation**, the IMAAC can be activated for real-world emergencies involving chemical, biological, radiological and nuclear (CBRN) threats and/or large-scale hazardous material atmospheric releases.
* *Modeling products* *fast* – the IMAAC provides modeling products and technical expertise for threat hazard interpretation quickly, regardless of the time of day or year.
* *Response within 30 minutes and 24/7 access to experts* – a technical operations hub at the Defense Threat Reduction Agency (DTRA) is staffed 24/7 by CBRN subject-matter experts (SMEs).
* *Exercise and planning support* – in approximately 30 days, the IMAAC can support national and local level CBRN incident planning activities and exercises by coordinating and producing models for national threats.
* *Real-time training participation* – the IMAAC participates in training and preparation exercises to simulate real-time interaction with emergency personnel.

**The IMAAC in Action:**

* One of the recent cases where IMAAC was used was the Husky Energy Superior Refinery Fire in Superior, Wisconsin.
	+ In April 2018, an explosion at the refinery caused a fire that was largely suppressed, but reignited later in the day when a leaking tank fed a second, larger fire.
	+ Responders allowed the second fire to burn for several hours before beginning large-scale suppression efforts and evacuating the nearby town. They put out the fire later that night.
	+ The FEMA NWC requested IMAAC activation during the original fire but canceled the request when the fire appeared to subside. EPA Region 5 requested reactivation after ignition of the second fire.
	+ Right away, the IMAAC provided a product showing smoke plume and effects based on EPA standards for soot exposure and health contours, and continued to provide plume models and products at 3-hour intervals to reflect shifting winds and updated source terms.
	+ The IMAAC supported on-scene responders until officials on the ground declared deactivation the next day.

**IMAAC Partnerships:**

* Support a program that operates under the Federal Emergency Management Agency (FEMA) and is in partnership with seven other Federal agencies, each with supporting capabilities and/or responsibilities for plume modeling. These agencies include:
	+ Department of Defense (DoD)’s Defense Threat Reduction Agency;
	+ Department of Energy/National Nuclear Security Administration (DOE/NNSA);
	+ National Atmospheric Release Advisory Center (NARAC);
	+ Department of Health and Human Services (HHS);
	+ Environmental Protection Agency (EPA);
	+ National Oceanic and Atmospheric Administration (NOAA);
	+ Nuclear Regulatory Commission (NRC).