

2022

# CHEMICAL SECURITY SUMMIT

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August 23-25, 2022

#ChemicalSecurity



# Chemical Facility Anti-Terrorism Standards (CFATS) Case Study:

## Strategic and Tactical CFATS Considerations for a Multi-Tenant Dow, DuPont, and Corteva Facility

Presented by:

- Scott Welchel, Chief Security Officer, Dow
- Donald Ostmann, Chief Security Officer, DuPont
- Edward Montooth, Chief Security Officer, Corteva
- Steve Roberts, Chemical Security Group (Moderator)



- On August 31, 2017, the Dow Chemical Company and the E.I. du Pont de Nemours & Company completed a merger of equals and became a combined entity known as DowDuPont.
- DowDuPont had three operating divisions: Agriculture, Materials Science, and Specialty Products.

## DowDuPont Merger Successfully Completed

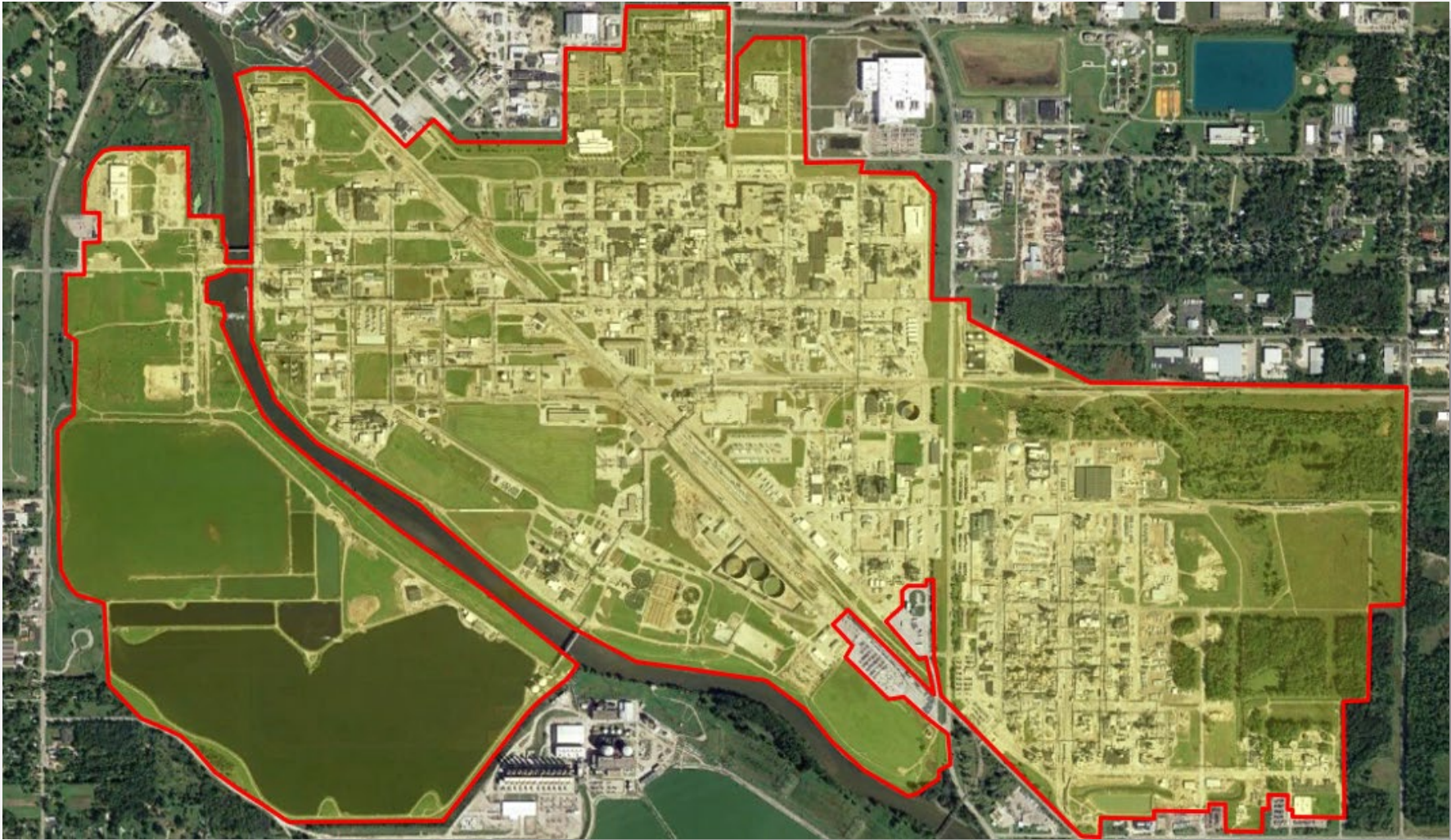
*Company Moves Forward Toward Intended Separation into Industry-Leading, Publicly Traded Companies in Agriculture, Materials Science and Specialty Products; Separations Expected to Occur Within 18 Months*

**MIDLAND, Mich., and WILMINGTON, Del. - September 01, 2017** - DowDuPont™ (NYSE:DWDP) today announced the successful completion of the merger of equals between The Dow Chemical Company (“Dow”) and E.I. du Pont de Nemours & Company (“DuPont”), effective Aug. 31, 2017. The combined entity is operating as a holding company under the name “DowDuPont™” with three divisions – Agriculture, Materials Science and Specialty Products.

- **In mid-2019, DowDuPont split up to focus on specific segments.**
- **Corteva began as a new company to focus on agriculture.**
- **To do this, legacy Dow and DuPont business units, facilities, and parts of facilities had to be realigned.**
- **Midland, Michigan, has been the home to Dow since 1897, and Dow built a large manufacturing complex there, known as MiOps.**
- **Under the split, however, Dow would no longer own or operate all MiOps units – various units were transferred to DuPont and Corteva to align to the focus of each company.**



# Background



# How Many CFATS Facilities?



- Whether Dow would continue to operate MiOps as a single CFATS facility (for itself and on behalf of DuPont and Corteva) or whether MiOps would split into three “separate” CFATS facilities was a key consideration.
- Pros of Dow Operating MiOps as a Single CFATS Facility:
  - No major changes to filings (e.g., Top-Screen, Site Security Plan (SSP)); and
  - “Business as usual” with the Cybersecurity and Infrastructure Security Agency (CISA).
- Cons of Dow Operating MiOps as a Single CFATS Facility:
  - Some Risk-Based Performance Standards (RBPSs) would pose a challenge;
  - Inconsistent with some other regulatory filings; and
  - Inconsistent with the concept of operating as discrete entities.

- **With the decision to operate as three separate but related, CFATS facilities, strategic considerations included:**
  - 1. Using a consistent format and approach to CFATS compliance / program implementation;**
  - 2. Controlling perimeter security and access; and**
  - 3. Maintaining engagement with CISA.**

# Strategic Consideration 1: Ensure Consistency

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- Using a consistent format and approach to CFATS among Dow, DuPont, and Corteva simplified compliance.
- Toward that end, Dow, DuPont, and Corteva each submitted ASPs:
  - The ASP describes “what” each company does for RBPS compliance and references implementing procedures that describe the “how” (in some instances).
  - This, in turn, allowed each company to develop an ASP that is approximately 12 pages in length.



# Strategic Consideration 1: Ensure Consistency



CHEMICAL-TERRORISM VULNERABILITY INFORMATION		
	Alternative Security Program (ASP)	April 8, 2020
Dow	Michigan Operations	[REDACTED]
INTRODUCTION AND PURPOSE		
[REDACTED]		
FACILITY DESCRIPTION		
[REDACTED]		
DHS IDENTIFIED CHEMICALS OF INTEREST		
[REDACTED]		
<small>WARNING: This record contains Chemical-Terrorism Vulnerability Information controlled by 6 CFR 17.406. Do not disclose to persons without a need to know in accordance with 6 CFR 17.406(j). Unauthorized release may result in civil penalties or other action. In any administrative or judicial proceeding, this information shall be treated as classified information in accordance with 6 CFR 17.406(k) and (l).</small>		

CHEMICAL-TERRORISM VULNERABILITY INFORMATION		
	Alternative Security Program (ASP)	April 24, 2020
DuPont	Michigan Operations	[REDACTED]
INTRODUCTION AND PURPOSE		
[REDACTED]		
FACILITY DESCRIPTION		
[REDACTED]		
DHS IDENTIFIED CHEMICALS OF INTEREST		
[REDACTED]		
<small>WARNING: This record contains Chemical-Terrorism Vulnerability Information controlled by 6 CFR 17.406. Do not disclose to persons without a need to know in accordance with 6 CFR 17.406(j). Unauthorized release may result in civil penalties or other action. In any administrative or judicial proceeding, this information shall be treated as classified information in accordance with 6 CFR 17.406(k) and (l).</small>		

CHEMICAL-TERRORISM VULNERABILITY INFORMATION		
	Alternative Security Program (ASP)	March 12, 2020
Corteva	Midland Operations	[REDACTED]
INTRODUCTION AND PURPOSE		
[REDACTED]		
FACILITY DESCRIPTION		
[REDACTED]		
DHS IDENTIFIED CHEMICALS OF INTEREST		
[REDACTED]		
<small>WARNING: This record contains Chemical-Terrorism Vulnerability Information controlled by 6 CFR 17.406. Do not disclose to persons without a need to know in accordance with 6 CFR 17.406(j). Unauthorized release may result in civil penalties or other action. In any administrative or judicial proceeding, this information shall be treated as classified information in accordance with 6 CFR 17.406(k) and (l).</small>		

## Strategic Consideration 2: Dow Controls the Perimeter

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- **As the landlord, Dow retained responsibility for perimeter security and access control.**
- **This means that RBPSs 1-4 are functionally identical for Dow, DuPont, and Corteva.**
  - **DuPont and Corteva simply restate the security Dow provides under a Site Services Agreement (SSA).**
  - **Dow provides, among other things, security officer patrols, staffed access points, vehicle inspections, and a 24x7x365 Dispatch / Emergency Operations Center.**

## Strategic Consideration 3: Maintain Engagement with CISA

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- **Recognizing the size of MiOps and the decision to move from a single CFATS Facility ID to three CFATS Facility IDs, we briefed CISA early and sought its advice and approval where needed.**
- **As novel questions emerged, CISA was able to assist quickly because CISA already knew the overall compliance plan and our status.**

- **Several tactical considerations also emerged, including:**
  - 1. Ensuring accurate Top-Screen filings as COIs were assumed by Dow, DuPont, or Corteva;**
  - 2. Managing Terrorist Screening Database (TSDB) compliance would require Dow to assume “Option 1” responsibility for all contractors; and**
  - 3. Some RBPSs would be same for each company, some completely different, and some a hybrid.**

# Tactical Consideration 1: Top-Screen Reporting

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- **MiOps possesses more than 30 COIs.**
- **However, as a first step, Dow, DuPont, and Corteva had to determine what COIs would go to each company.**
- **Many personnel were involved in this process, which was dictated by how MiOps production units would be allocated.**
- **Once COI allocation was completed, Dow updated its Top-Screen to “zero out” COIs that went to DuPont and Corteva.**
- **DuPont and Corteva then filed new Top-Screens to reflect the COIs they assumed from Dow.**



# Tactical Consideration 1: Top-Screen Reporting

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- **While material modifications may not be common at every facility, MiOps has had many COI changes:**
  - **Dow → 9 Top-Screens since June 2019**
  - **DuPont → 5 Top-Screens since June 2019**
  - **Corteva → 4 Top-Screens since 2019**
- **In particular, this includes new COIs, increases in COI volumes, or changes to COI containment type (e.g., fixed vessel to transportation package).**

## Tactical Consideration 2: Terrorist Screening Database



- Some legacy Dow employees became Dow or Corteva employees.
- This, in turn, presented questions regarding TSDB compliance under “Option 1.”
- For privacy and operational reasons, DuPont re-entered its legacy Dow employees into the DuPont CSAT Personnel Surety Program (PSP) portal. Corteva did the same for its legacy Dow employees.
- Dow did not delete employees who moved to DuPont or Corteva because it is not required by regulation or policy.

## Tactical Consideration 2: Terrorist Screening Database



- Contractors posed a more challenging question. Some contractors work for Dow, some work for DuPont, some work for Corteva, and some work for all three.
- Because Dow controls access, it made conceptual sense for Dow to assume TSDB compliance on behalf of DuPont and Corteva – and then link TSDB compliance to access credential issuance.
- The fact that DuPont and Corteva would require their contractors to use the local safety council provided a mechanism to achieve this.

## Tactical Consideration 2: Terrorist Screening Database

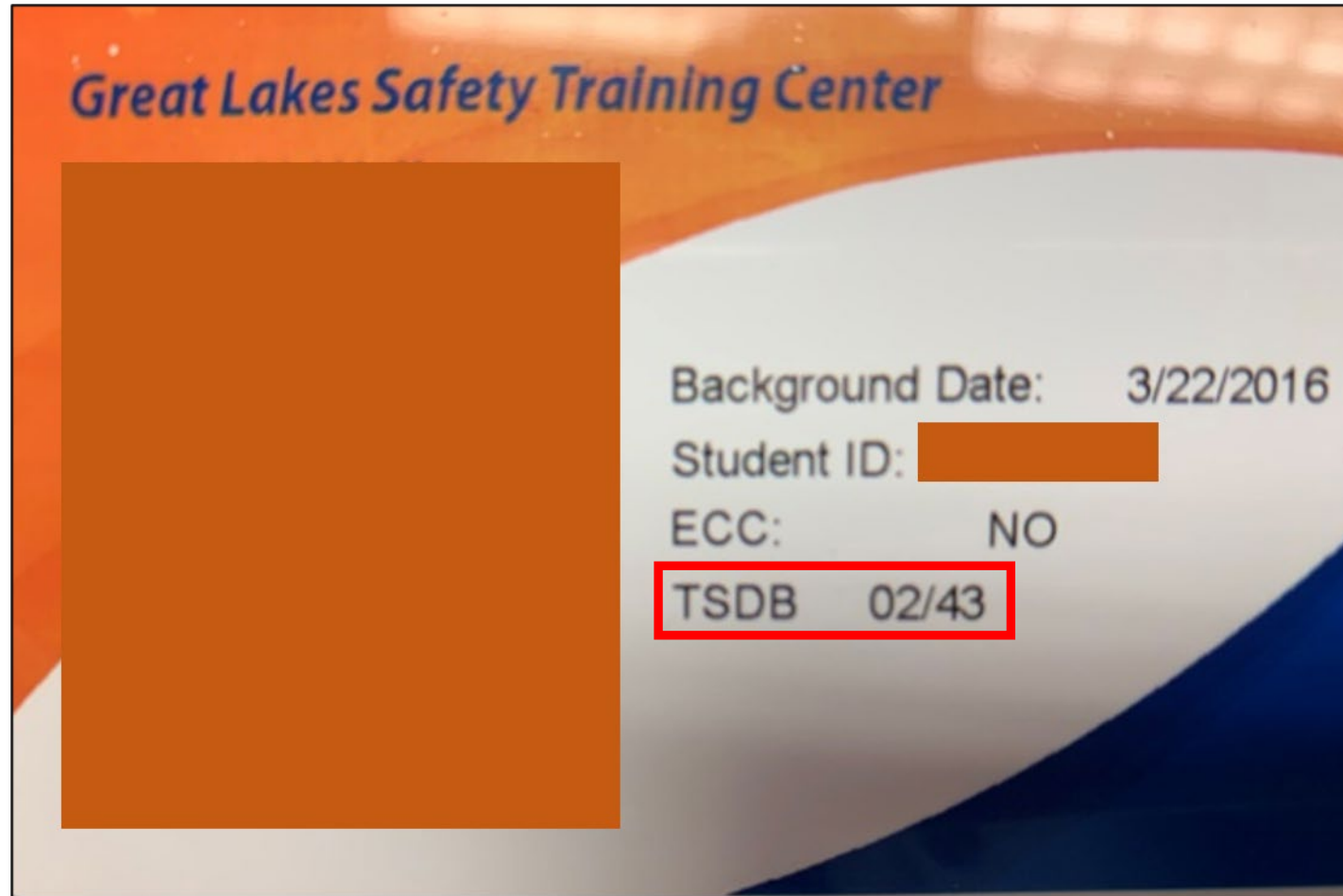


- **For Dow, DuPont, and Corteva, the Great Lakes Safety Training Center inputs a contractor's Personally Identifiable Information into Dow's CSAT PSP portal.**
- **For audit and inspection purposes, Dow can demonstrate TSDB compliance for all contractors, regardless of company affiliation.**
  - **During the 2021 audit, for example, contractor names that could apply to Dow, DuPont, or Corteva were randomly selected to confirm that the names appeared in Dow's PSP portal.**

## Tactical Consideration 2: Terrorist Screening Database



- As an additional check-and-balance, and to assist security officers, a TSDB notation is added to each badge.





## Tactical Consideration 3: RBPS Drafting

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- As previously noted, DuPont and Corteva rely on Dow for RBPS 1-4 security measures through an SSA.
  - For this reason, the ASPs for Dow, DuPont, and Corteva are the same for RBPSs 1-4.
- Cybersecurity (RBPS 8) is unique for each company.
- Each company's respective cybersecurity experts provided the RBPS 8 security measures for each ASP.

## Tactical Consideration 3: RBPS Drafting

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- **Dow, DuPont, and Corteva realized that other RBPS security measures could benefit from policies that address certain security topics at an “overarching level” – not just in the ASPs.**
- **This includes RBPS 13 and RBPS 14 on Elevated Threats and Specific Threats, respectively, and RBPS 10 on Security Equipment.**

# Tactical Consideration 3: RBPS Drafting



			
<b>INDUSTRIAL COMPLEX SECURITY PROCEDURE</b>			
Page 1 of 4	Elevated Threats		Revision Date: November 2020

## 1.0 PURPOSE

The Michigan Operations (MiOps) Chemical Facility Anti-Terrorism Standards (CFATS) Industrial Complex Security Procedure for Elevated Threats (the Procedure) has been developed as one element of Dow Inc.'s (Dow's), DuPont's, and Corteva Agriscience's (Corteva's) comprehensive CFATS compliance initiative. The Procedure defines how the MiOps Industrial Complex increases security during periods of elevated threat pursuant to Risk-Based Performance Standard (RBPS) 13 and the National Terrorism Advisory System (NTAS). The MiOps Industrial Complex may also use the Procedure to implement select elevated threat measures in the event that Dow, DuPont, or Corteva is notified by the Department of Homeland Security (DHS) regarding a specific vulnerability, threat, or risk, pursuant to RBPS 14.

- Now, more than three years later, Dow, DuPont, and Corteva continue to successfully maintain a strong CFATS compliance program – but it takes ongoing coordination among stakeholders.
- Areas of continued focus include:
  - Coordinating annual audits and Compliance Inspection preparation – someone takes the “point.”
  - COI Change Management and Personnel Change Management: of the core CFATS Team present in 2019, several have retired or moved roles.

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