



LYONDELLBASELL CHEMICAL LEAK

SETRAC After-Action Report/Improvement Plan

July 27, 2021

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EVENT OVERVIEW

Event Name	LyondellBasell Chemical Release 2021
Event Dates	July 27, 2021
Scope	The LyondellBasell Chemical Release 2021 affected Southeast Texas, more specifically the employees of the LyondellBasell Chemical Plant in La Port Texas. A total of 42 people required treatment for injuries and two deceased.
Mission Area(s) and Healthcare Preparedness Capabilities	<ul style="list-style-type: none">• Health Care and Medical Response Coordination• Medical Surge
Issue Areas	Real-World Event Issues Areas for Coalition Members: <ul style="list-style-type: none">• Patient Tracking• Initial Notification
Threat or Hazard	Acetic Acid Release
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Executive Summary

On July 27, 2021 approximately 100,000 pounds of acetic acid was released in a chemical leak at the LyondellBasell chemical plant in La Port Texas. In total 42 people were treated and 30 employees were hospitalized. Of the 30 hospitalized employee's, one suffered from burns, two deceased, and the remaining experienced respiratory complications.

Major Strengths

The major strengths identified during this event are as follows:

1. Communicated with the individual hospitals in the receiving area of the incident.
2. Utilization of EMTrack to identify the patient location and relay the information back to the on-scene Incident Command Post (ICP).
3. The local receiving facilities were able to quickly and effectively surge to receive incoming patients, to include rapidly deploying facility decontamination teams.

Primary Areas for Improvement

Throughout the event, several opportunities for improvement in CMOC's ability to respond to LyondellBasell Chemical Release were identified. The primary areas for improvement, including recommendations, are as follows:

1. Patient Tracking
2. Initial Notification from Chemical Incident Mutual Aid (CIMA)

AFTER ACTION REPORT METHODOLOGY AND DEVELOPMENT PROCESS

SETRAC conducted an electronic report to solicit information from its' coalition members due to social distancing efforts during the pandemic response period. These return reports provided a platform for regional stakeholders to give feedback into operations during the LyondellBasell Chemical Release. A summary of the feedback was compiled into the After-Action Report (AAR) which is submitted for approval by SETRAC Leadership and filed with the State of Texas.

ANALYSIS OF HEALTHCARE PREPAREDNESS CAPABILITIES

Aligning healthcare preparedness capabilities provides a consistent taxonomy for evaluation of real-world events to support preparedness reporting and trend analysis. Table 1 includes aligned capabilities, and performance ratings for each capability as observed during the event and determined by incident command.

Objective	Healthcare Preparedness Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
1. Provide situational awareness of medical surge capability and infrastructure and assist local jurisdictions as needed.	Medical Surge	X			
2. Effectively utilize existing technologies to receive and disseminate information during the response phase to an incident.	Health Care and Medical Response Coordination		X		

CAPABILITIES AND TIMELINE

Capability 4: Medical Surge

Objective 1: Provide situational awareness of medical surge capability and infrastructure and assist local jurisdictions as needed.

Strengths

The Partial capability level can be attributed to the following strength:

Strength 1: The local receiving facilities were able to quickly and effectively surge to receive incoming patients, to include rapidly deploying facility decontamination teams.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

This objective was met without any identified areas for improvement being noted.

Capability 2: Healthcare and Medical Response Coordination

Objective 2: Effectively utilize existing technologies to receive and disseminate information during the response phase to an incident.

Strengths

The Partial capability level can be attributed to the following strengths:

Strength 1: Communicated with the individual hospitals in the receiving area of the incident.

Strength 2: Utilization of EMTrack to identify the patient location and relay the information back to the on-scene Incident Command Post (ICP).

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Patient Tracking

Analysis: Some hospital staff members were not trained on how to enter patients in EMTrack.

Area for Improvement 2: Initial Notification from Chemical Incident Mutual Aid (CIMA)

Analysis: SETRAC did not receive the initial notification of the incident from CIMA.

SECTION 4: CONCLUSION

The LyondellBassell Chemical Plant incident on the 27th of July 2021, released more than 100,000 pounds of acetic acid where more than 42 individuals received treatment on scene and in area hospitals. 30 patients were identified to have been transported to local hospitals, where the receiving facilities activated and were able to effectively decontaminate these individuals upon arrival.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the SouthEast Texas Regional Advisory Council because of the July 27, 2021 LyondellBassell Chemical Plant Incident.

Capability	Issue/Area for Improvement	Corrective Action	Capability Element ¹	Primary Responsible Organization	Start Date	Completion Date
Capability 2: Healthcare and Medical Response Coordination	Patient Tracking	Identify and train additional staff at regional facilities for train-the trainer capabilities.	Training	SETRAC Emergency Management Coordinators	Sept 27, 2021	On-going
	Initial Notification from Chemical Incident Mutual Aid (CIMA)	Continue to build upon our relations with CIMA and incorporate SETRAC into the CIMA response plan.	Operations	SETRAC Director of Response and Operations	Sept 27, 2021	March 31, 2021

¹ Capability Elements are: Planning, Organization, Equipment, Training, or Event.

APPENDIX B: LYONDELLBASELL CHEMICAL RELEASE 2021 PARTICIPATING AGENCIES/FACILITIES

1. Atascocita Fire Department
2. HCA Clear Lake
3. HCA Southeast
4. Houston Fire Department
5. Houston Methodist Clear Lake
6. Memorial Hermann Southeast
7. SouthEast Texas Regional Advisory Council (SETRAC)
8. Chemical Industrial Mutual Aide (CIMA)