U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
La Salle Chemical Plant Fire - Removal Polrep
Initial and Final Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #1**
Initial/Final
La Salle Chemical Plant Fire

La Salle, IL
Latitude: 41.3368590 Longitude: -89.0858910

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From: Robert Kondreck, OSC
Date: 1/17/2023
Reporting Period: 1/11/2023 - 1/14/2023

1. Introduction

1.1 Background

Site Number:		**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	
NPL Status:	NPL	**Operable Unit:**	
Mobilization Date:	1/11/2023	**Start Date:**	1/11/2023
Demob Date:	1/13/2023	**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	H-2023-0030
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category
Emergency Response - Active Production Facility

1.1.2 Site Description
1.1.2.1 Location

The Site consists of the Carus LLC facility (Facility), located at 1500 8th Street in La Salle, Illinois and areas surrounding the Facility. The Facility is located less than half a mile west of the Little Vermilion River, which flows into the Illinois River approximately 1 mile downstream from the Facility. The area around the Facility is mixed use with light industrial, commercial, residential, and public properties in close proximity. There are several schools and parks within half a mile of the Facility. There are concerns for Environmental Justice potential at this location.

1.1.2.2 Description of Threat
On January 11, 2023, a fire occurred at the Facility involving solid Potassium Permanganate, a hazardous substance and strong oxidizer that turns caustic when mixed with water. The fire spread throughout a shipping warehouse, which stored approximately 1,089,400 lbs of Potassium Permanganate (NRC#1357481). As a result of the fire, Potassium Permanganate product and byproduct became airborne and deposited in the form of granules around the Facility. The City of La Salle Fire Chief issued a shelter-in-place order which is estimated to have affected approximately 1,000 residences.

Multiple fire fighting crews used water to suppress the fire resulting in Potassium Permanganate to be released into the Facility storm sewer system and emergency containment pond. Normally this water would have flown into a storm water lagoon and released into the Vermilion River through a NPDES-permitted outfall. However, a monitoring station located in the sewer line automatically diverted the flow to the emergency containment pond after high pH and other chemicals were detected. This resulted in all firefighting run-off water being contained in the Facility's emergency containment pond. Some firefighting water did impact on-site soils.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results
On January 11, 2023, US EPA and START arrived on-site and observed multiple fire departments and hazardous materials teams extinguishing the fire. The Facility later determined, based on the total amount of materials stored in the shipping warehouse at the time, that approximately 1,089,400 pounds of

Potassium Permanganate (NRC#1357481) may have been consumed in the fire or mobilized with the firefighting run-off. No other chemicals of substantial quantity stored on-site was reported to have been released.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The fire and subsequent suppression efforts resulted in the release of Potassium Permanganate into the environment. Aerial deposition of Potassium Permanganate and its altered forms were deposited in the fallout from the fire to nearby properties (industrial, commercial, residential, and public). Land release of the same chemicals occurred while extinguishing the fire. Most of the runoff was controlled through an emergency containment pond, however some chemicals migrated throughout the Facility and onto on-site soils.

Potassium Permanganate is a CERCLA listed Hazardous Substance (40 CFR Part 302) with a reportable quantity of 100 pounds. Potassium Permanganate is used in solutions as a disinfectant, deodorizer, bleaching agent, and in air and water purification. The chemical appears dark purple to black in its concentrated form, and purple to pink when diluted with water. The water will remain pink in concentrations as low as 1 ppm according to Facility personnel. Based on consultation with the Defense Threat Reduction Asset (DTRA), when Potassium Permanganate is involved in a fire, it may oxidize forming different types of Manganese Oxides. Manganese Oxides may appear black, brown, or green depending on the oxidation state. Social media reports showed black, purple, brown, and green spots on nearby homes, cars, and other properties. Verification of discoloration was confirmed in field reconnaissance conducted by START.

2.1.2 Response Actions to Date

Upon arrival on 1/11/2023, START was deployed to perform air monitoring and documentation of response activities. Air monitoring locations were based on IMAAC plume models. Air monitoring was conducted from 1/11/2023 - 1/12/2023, until the La Salle Fire Chief declared the fire fully extinguished. START performed air monitoring for particulates and chemicals, including mineral acid (as indicated by Hydrochloric Acid) and fluorine oxidizer (as indicated by Chlorine). No readings above action levels were detected. Data summaries can be found in the 'Documents' section of the website (see Section 6.1).

From 1/11/2023 - 1/13/2023, START surveyed the off-site areas and documented purple and black/brown staining on various materials. On 1/11/2023, the Facility opened a telephone hotline where residents could call to get assistance in cleanup of their property, though it was not functional until the following day (1/12/2023). By 1/13/2023, the Facility was managing a working hotline, performing home visits, and deploying cleaning services to residents affected by the release. Illinois EPA facilitated discussions with Illinois DAG to provide a fact sheet on cleaning pets and animals after residents voiced concerns. The Facility will maintain the hotline into the foreseeable future and has committed to address resident and community concerns.

The Illinois DNR, USCG MSU Chicago and Illinois EPA investigated reports of the Little Vermilion River being purple in color. Illinois DNR monitored surface water for discoloration and environmental impacts (fish or animal kill) following the release from 1/11/2023 - 1/13/2023. Illinois DNR did not identify purple water or environmental impacts, and will continue to monitor surface waters for the next couple of weeks.

From 1/11/2023 - 1/13/2023, Illinois EPA collected surface water, soil, and wipe samples. Surface water samples were collected from the Little Vermilion River, emergency containment pond, and the storm water outfall location. Surface water samples were collected from the Vermilion River downstream from the Facility. Wipe samples only were collected from several residences, as no visible impacts were seen in off-site soils. Wipe samples and surface water samples were also taken within the Facility. It is anticipated that samples will be analyzed for both organic and inorganic parameters. Sample results were not available at the time of this report.

The Facility assembled a team of contractors to manage cleanup activities. Response contractors were on-site prior to US EPA's arrival and maintained a presence throughout the emergency response.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRP has been identified as Carus LLC, which provided consent to access and was issued a Notice of Federal Interest. Initial investigation by Illinois OSFM indicates the cause of the fire was accidental.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
Contaminated Water	water	1,653,000 gallons	TBD	TBD	TBD
Contaminated Debris	solid/semi-solid	TBD	TBD	TBD	TBD

Regional Metrics		
This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	N/A
	Cubic yards of contaminated sediments removed and/or capped	N/A
	Gallons of oil/water recovered	TBD
	Acres of soil/sediment cleaned up in floodplains and riverbanks	N/A
Stand Alone Assessment	Number of contaminated residential yards cleaned up	N/A
	Number of workers on site	N/A
Contaminant(s) of Concern: Potassium Permanganate		
Oil Response Tracking		
Estimated volume	Initial amount released	N/A
	Final amount collected	N/A

CANAPS Info	FPN Ceiling Amount	N/A
	FPN Number	N/A
	Body of Water affected	N/A

Administrative and Logistical Factors (Place X where applicable)					
	Precedent-Setting HQ Consultations (e.g., fracking, asbestos)	X	Community challenges or high involvement		Radiological
	More than one PRP		Endangered Species Act / Essential Fish Habitat issues		Explosives
	AOC		Historic preservation issues	X	Residential impacts
	UAO	X	NPL site		Relocation
	DOJ involved		Remote location		Drinking water impacted
	Tribal consultation or coordination or other issues		Extreme weather or abnormal field season	X	Environmental justice
	Statutory Exemption for $2 Million		Congressional involvement	X	High media interest
	Hazmat Entry Conducted – Level A, B or C		Statutory Exemption for 1 Year	X	Active fire present
		X	Incident or Unified Command established	X	Actual air release (not threatened)

Green Metrics		
Metric	**Amount**	**Units**
Diesel Fuel Used	0	gallons
Unleaded Fuel Used	50	gallons
Alternative/E-85 Fuel Used	0	gallons
Electricity from electric company	0	kWh
Electric Company Name and Account #	0	
Electricity from sources other than the electric company	0	kWh
Solid waste reused	0	
Solid waste recycled	0	
Water Used	0	gallons

2.2 Planning Section

2.2.1 Anticipated Activities

US EPA will continue to assist the Illinois EPA as needed and will maintain coordination and communication on site activities until no longer necessary. US EPA will facilitate a weekly Multi-Agency Coordination meeting with the Facility to monitor cleanup efforts starting the week of 1/16/2023. Meetings may be discontinued after regulatory oversight is transferred to Illinois EPA.

2.2.1.1 Planned Response Activities

US EPA has demobilized from the Site and will continue to assist Illinois EPA in coordination of Facility response and cleanup efforts remotely until state and/or program contacts are assigned to conduct long-term oversight.

2.2.1.2 Next Steps

See Section 2.2.1.1.

2.2.2 Issues

Cleanup efforts and regulatory oversight may be challenging due to a portion of the Facility property being an actively managed Superfund Site. US EPA and Illinois EPA remedial project managers assigned to the Superfund Site will participate in follow-up coordination meetings.

2.3 Logistics Section

The City of La Salle, the Facility, several MABAS divisions, neighboring fire departments, and the Illinois Northwest IMAT provided site support, facilities and logistics for the emergency response.

2.4 Finance Section

2.4.1 Narrative

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
START	$50,000.00	$30,000.00	$20,000.00	40.00%
Intramural Costs				
USEPA - Direct	$15,000.00	$10,000.00	$5,000.00	33.33%
USEPA - InDirect	$8,000.00	$6,000.00	$2,000.00	25.00%
Total Site Costs	$73,000.00	$46,000.00	$27,000.00	36.99%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

US EPA OSC Robert Kondreck, Facility EHS personnel.

2.5.2 Liaison Officer

US EPA OSC Paul Ruesch, Illinois NW IMAT Daniel Ellis.

2.5.3 Information Officer
US EPA PIO Rachel Linduska, Illinois EPA PIO Kimberly Biggs, City of La Salle PIO Brett Bader.

The City of La Salle, US EPA, Illinois EPA, Illinois DNR, La Salle County, and the Facility participated in joint press conferences on 1/11/2023 and 1/12/2023. Multiple news agencies attended and there was extensive press coverage on the incident nationally. In addition, daily press releases were issued jointly by the City of La Salle, Illinois EPA and US EPA during the response.

3. Participating Entities

3.1 Unified Command
From 1/11/23-to 1/13/23 the Incident Commander was the City of La Salle Fire Chief.

On 1/13/2023, a Unified Command was formed and an Incident Transition Plan was memorialized between US EPA, Illinois EPA, City of La Salle, and the Facility. Plan objectives include the orderly transition from the emergency response phase to site cleanup remediation, protecting human health and the environment, and other objectives meant to facilitate safe cleanup of impacted off-site properties and the Facility.

3.2 Cooperating Agencies
City of La Salle County EMA, Health Department, Fire Department, Community Development
Bureau County EMA
Northwest Illinois Incident Management Team
MABAS Divisions 13, 15, 25, 38 & 41
Illinois EPA, DNR, DPH, OSFM, EMA, DAG
USCG MSU Chicago
US DOL OSHA
ATSDR

4. Personnel On Site

US EPA: 2
START: 4
State of Illinois: 15
USCG: 2
OSHA: 1
City of La Salle (excluding Fire & Police): 4
La Salle County: 5
Bureau County: 1

Total - 34 (does not include Facility personnel)

5. Definition of Terms

ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DAG	Department of Agriculture
DNR	Department of Natural Resources
DOL	Department of Labor
DPH	Department of Public Health
DTRA	Defense Threat Reduction Agency
EHS	Environmental Health and Safety
EMA	Emergency Management Agency
FWS	Fish and Wildlife Service
IMAAC	Inter-Agency Modeling Atmospheric Assessment Center
IMT	Inicident Management Team
PIO	Public Information Officer
ppm	parts per million
MABAS	Mutual Aid Box Alarm System
MACC	Multi-Agency Coordinating Committee
MSU	Marine Safety Unit
NPDES	National Pollution Discharge Elimination System
NRC	National Response Center
OSC	On Scene Coordinator
OSFM	Office of State Fire Marshall
OSHA	Occupational Safety & Health Administration
START	Superfund Technical and Response Team
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency

6. Additional sources of information

6.1 Internet location of additional information/report
https://response.epa.gov/lasallechemicalfire

6.2 Reporting Schedule
This is the final PolRep. No further reporting is anticipated for this incident from US EPA.

7. Situational Reference Materials

No information available at this time.