# **Section 1. Registration Information**

### Source Identification

Facility Name: Blue Cube Operations, LLC Parent Company #1 Name: The Olin Corporation

Submission Type: Resubmission Receipt Date: March 2023

**Facility Identification** 

Facility ID: 1000 0023 0626

**Dun and Bradstreet Numbers (DUNS)** 

Facility DUNS: 79829795

**Facility Location Address** 

Street 1: 2301 N. Brazosport Blvd.

 Street 2:
 N/A

 City:
 Freeport

 State:
 TX

 ZIP:
 77541

 ZIP4:
 N/A

 County:
 Brazoria

Facility Latitude and Longitude

Latitude (decimal): 28.969389 Longitude (decimal): -095.379528

Local Emergency Planning Committee and Regulations

LEPC: Brazoria County LEPC

OSHA PSM: Yes
EPCRA 302: Yes
CAA Title V: Yes

Facility Name: Blue Cube Operations, LLC

EPA Facility Identifier: 1000 0023 0626 Plan Sequence Number: 1000104347

#### **Process Chemicals**

Program Level: Program Level 3 process

Chemical Name: Chloroform [Methane, trichloro-]

CAS Number: 67-66-3 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Methyl chloride [Methane, chloro-]

CAS Number: 74-87-3
Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Isopropyl chloride [Propane, 2-chloro-]

CAS Number: 75-29-6
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Propylene [1-Propene]

CAS Number: 115-07-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: 2-Chloropropylene [1-Propene,

2-chloro-]

CAS Number: 557-98-2 Flammable/Toxic: Flammable

Plan Sequence Number: 1000104347

Program Level: Program Level 3 process
Chemical Name: 1-Chloropropylene [1-Propene,

1-chloro-]

CAS Number: 590-21-6 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Methyl chloride [Methane, chloro-]

CAS Number: 74-87-3
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: 1-Butene
CAS Number: 106-98-9
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Plan Sequence Number: 1000104347

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chloroform [Methane, trichloro-]

CAS Number: 67-66-3 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Vinyl chloride [Ethene, chloro-]

CAS Number: 75-01-4
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Propylene [1-Propene]

CAS Number: 115-07-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Plan Sequence Number: 1000104347

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Isopropyl chloride [Propane, 2-chloro-]

CAS Number: 75-29-6
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Propylene [1-Propene]

CAS Number: 115-07-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: 2-Chloropropylene [1-Propene,

2-chloro-]

CAS Number: 557-98-2 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: 1-Chloropropylene [1-Propene,

1-chloro-]

CAS Number: 590-21-6 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Plan Sequence Number: 1000104347

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Sulfur dioxide (anhydrous)

CAS Number: 7446-09-5 Flammable/Toxic: Toxic

Program Level: Program Level 3 process
Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Isopropyl chloride [Propane, 2-chloro-]

CAS Number: 75-29-6
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Propylene [1-Propene]

CAS Number: 115-07-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: 2-Chloropropylene [1-Propene,

2-chloro-]

CAS Number: 557-98-2 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: 1-Chloropropylene [1-Propene,

1-chloro-]

CAS Number: 590-21-6
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Epichlorohydrin [Oxirane,

(chloromethyl)-]

Plan Sequence Number: 1000104347

CAS Number: 106-89-8 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Flammable/Toxic: Toxic

### **Process NAICS**

NAICS Code: 325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

NAICS Code: 48832

NAICS Description: Marine Cargo Handling

# **Section 6. Accident History**

### Accident History ID: Accident 1

Date of Accident: March 2022
Time Accident Began (HH:MM): 20:20
NAICS Code of Process Involved: 325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

Release Duration: 000 Hours 39 Minutes

#### Release Event

Gas Release:N/ALiquid Spill/Evaporation:YesFire:N/AExplosion:N/AUncontrolled/Runaway Reaction:N/A

EPA Facility Identifier: 1000 0023 0626 Plan Sequence Number: 1000104347

#### Release Source

N/A Storage Vessel: N/A Piping: Process Vessel: N/A Transfer Hose: N/A Valve: N/A Pump: Yes Joint: N/A Other Release Source: N/A

#### Weather Conditions at the Time of Event

Wind Speed: 15.0
Units: Miles/h
Direction: SSE
Temperature: 68
Atmospheric Stability Class: N/A
Precipitation Present: N/A
Unknown Weather Conditions: N/A

### On-Site Impacts

Employee or Contractor Deaths:

Public Responder Deaths:

Public Deaths:

Employee or Contractor Injuries:

Public Responder Injuries:

Public Injuries:

On-Site Property Damage (\$):

### **Known Off-Site Impacts**

Deaths: 0
Hospitalizations: 0
Public Deaths: 0
Other Medical Treatments: 0
Evacuated: 0
Sheltered-in-Place: 0
Off-Site Property Damage (\$): 0

Facility Name: Blue Cube Operations, LLC

EPA Facility Identifier: 1000 0023 0626 Plan Sequence Number: 1000104347

### **Environmental Damage**

Fish or Animal Kills:

Tree, Lawn, Shrub, or Crop Damage:

N/A

Water Contamination:

N/A

Soil Contamination:

N/A

Other Environmental Damage:

N/A

### **Initiating Event**

Initiating Event: Equipment Failure

### **Contributing Factors**

**Equipment Failure:** Yes Human Error: N/A Improper Procedures: N/A Overpressurization: N/A **Upset Condition:** N/A N/A By-Pass Condition: Maintenance Activity/Inactivity: Yes Process Design Failure: N/A Unsuitable Equipment: N/A **Unusual Weather Condition:** N/A Management Error: N/A Other Contributing Factor: N/A

#### Off-Site Responders Notified

Off-Site Responders Notified: No, not notified

#### Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment: N/A Yes Revised Maintenance: **Revised Training:** N/A N/A **Revised Operating Procedures:** New Process Controls: N/A Yes New Mitigation Systems: Revised Emergency Response Plan: N/A **Changed Process:** N/A Reduced Inventory: N/A N/A Other Changes Introduced: N/A

### Chemicals in Accident History

Quantity Released (lbs): 39
Percent Weight: N/A

Chemical Name: Vinyl chloride [Ethene, chloro-]

CAS Number: 75-01-4
Flammable/Toxic: Flammable

Quantity Released (lbs): 6
Percent Weight: 0.1

Chemical Name: Hydrogen chloride (anhydrous)

[Hydrochloric acid]

CAS Number: 7647-01-0 Flammable/Toxic: Toxic

### Accident History ID: Accident 2

Date of Accident:March 2021Time Accident Began (HH:MM):15:40NAICS Code of Process Involved:325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

Release Duration: 000 Hours 06 Minutes

#### Release Event

Gas Release:YesLiquid Spill/Evaporation:N/AFire:N/AExplosion:N/AUncontrolled/Runaway Reaction:N/A

#### Release Source

N/A Storage Vessel: Piping: N/A Process Vessel: N/A Transfer Hose: N/A Valve: Yes Pump: N/A Joint: N/A Other Release Source: N/A

Weather	Conditions	at the 7	Time of	<b>Event</b>
VVCation	Containons	at the		

Wind Speed: N/A
Units: N/A
Direction: N/A
Temperature: N/A
Atmospheric Stability Class: N/A
Precipitation Present: N/A
Unknown Weather Conditions: Yes

### **On-Site Impacts**

Employee or Contractor Deaths:

Public Responder Deaths:

Public Deaths:

Employee or Contractor Injuries:

Public Responder Injuries:

Public Injuries:

On-Site Property Damage (\$):

### **Known Off-Site Impacts**

Deaths: 0
Hospitalizations: 0
Public Deaths: 0
Other Medical Treatments: 0
Evacuated: 0
Sheltered-in-Place: 0
Off-Site Property Damage (\$): 0

### **Environmental Damage**

Fish or Animal Kills:

Tree, Lawn, Shrub, or Crop Damage:

N/A

Water Contamination:

N/A

Soil Contamination:

N/A

Other Environmental Damage:

N/A

### **Initiating Event**

Initiating Event: Human Error

### **Contributing Factors**

**Equipment Failure:** N/A N/A Human Error: Improper Procedures: N/A N/A Overpressurization: **Upset Condition:** N/A By-Pass Condition: N/A Maintenance Activity/Inactivity: N/A Process Design Failure: N/A Unsuitable Equipment: N/A **Unusual Weather Condition:** N/A Management Error: N/A Other Contributing Factor: N/A

### Off-Site Responders Notified

Off-Site Responders Notified: No, not notified

### Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment: N/A N/A Revised Maintenance: Revised Training: Yes Revised Operating Procedures: Yes New Process Controls: N/A New Mitigation Systems: N/A Revised Emergency Response Plan: N/A **Changed Process:** N/A Reduced Inventory: N/A N/A None:

Other Changes Introduced: Discipline administered

### Chemicals in Accident History

Quantity Released (lbs):1Percent Weight:100Chemical Name:ChlorineCAS Number:7782-50-5Flammable/Toxic:Toxic

#### Accident History ID: Accident 3

Date of Accident: October 2019

Time Accident Began (HH:MM): 13:49
NAICS Code of Process Involved: 325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

Release Duration: 000 Hours 07 Minutes

#### Release Event

Gas Release:N/ALiquid Spill/Evaporation:YesFire:N/AExplosion:N/AUncontrolled/Runaway Reaction:N/A

#### Release Source

Storage Vessel: N/A Piping: Yes Process Vessel: N/A Transfer Hose: N/A Valve: N/A Pump: N/A Joint: N/A Other Release Source: N/A

### Weather Conditions at the Time of Event

Wind Speed: N/A
Units: N/A
Direction: N
Temperature: 80
Atmospheric Stability Class: N/A
Precipitation Present: Yes
Unknown Weather Conditions: N/A

### **On-Site Impacts**

Employee or Contractor Deaths:

Public Responder Deaths:

O
Public Deaths:

Employee or Contractor Injuries:

Public Responder Injuries:

O
Public Injuries:

O
On-Site Property Damage (\$):

### **Known Off-Site Impacts**

Deaths: 0
Hospitalizations: 0
Public Deaths: 0
Other Medical Treatments: 0
Evacuated: 0
Sheltered-in-Place: 0
Off-Site Property Damage (\$): 0

### **Environmental Damage**

Fish or Animal Kills:

Tree, Lawn, Shrub, or Crop Damage:

N/A

Water Contamination:

N/A

Soil Contamination:

N/A

Other Environmental Damage:

N/A

### **Initiating Event**

Initiating Event:

**Equipment Failure** 

### **Contributing Factors**

**Equipment Failure:** Yes N/A Human Error: Improper Procedures: Yes N/A Overpressurization: **Upset Condition:** Yes By-Pass Condition: N/A Maintenance Activity/Inactivity: N/A Process Design Failure: N/A Unsuitable Equipment: N/A **Unusual Weather Condition:** N/A Management Error: N/A Other Contributing Factor: N/A

### Off-Site Responders Notified

Off-Site Responders Notified: No, not notified

#### Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment: Yes N/A Revised Maintenance: Revised Training: N/A **Revised Operating Procedures:** Yes New Process Controls: N/A New Mitigation Systems: N/A Revised Emergency Response Plan: N/A **Changed Process:** N/A Reduced Inventory: N/A N/A None: Other Changes Introduced: N/A

### Chemicals in Accident History

Quantity Released (lbs):14Percent Weight:100Chemical Name:ChlorineCAS Number:7782-50-5Flammable/Toxic:Toxic

### Accident History ID: Accident 4

Date of Accident:

Time Accident Began (HH:MM):

NAICS Code of Process Involved:

325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

Release Duration: 000 Hours 01 Minutes

#### Release Event

Gas Release:YesLiquid Spill/Evaporation:N/AFire:N/AExplosion:N/AUncontrolled/Runaway Reaction:N/A

#### Release Source

Storage Vessel: N/A Piping: N/A Process Vessel: N/A Transfer Hose: N/A Valve: N/A Pump: N/A Joint: Yes Other Release Source: N/A

#### Weather Conditions at the Time of Event

Wind Speed: 3.0
Units: Miles/h
Direction: SSW
Temperature: 90
Atmospheric Stability Class: B
Precipitation Present: N/A
Unknown Weather Conditions: N/A

### On-Site Impacts

Employee or Contractor Deaths:	0
Public Responder Deaths:	0
Public Deaths:	0
Employee or Contractor Injuries:	1
Public Responder Injuries:	0
Public Injuries:	0
On-Site Property Damage (\$):	

### Known Off-Site Impacts

Deaths:	0
Hospitalizations:	0
Public Deaths:	0
Other Medical Treatments:	0
Evacuated:	0
Sheltered-in-Place:	0
Off-Site Property Damage (\$):	

## **Environmental Damage**

Fish or Animal Kills:	N/A
Tree, Lawn, Shrub, or Crop Damage:	N/A
Water Contamination:	N/A
Soil Contamination:	N/A
Other Environmental Damage:	

### **Initiating Event**

Initiating Event:

**Equipment Failure** 

### **Contributing Factors**

**Equipment Failure:** N/A N/A Human Error: Improper Procedures: Yes N/A Overpressurization: **Upset Condition:** N/A By-Pass Condition: N/A Maintenance Activity/Inactivity: N/A Process Design Failure: N/A Unsuitable Equipment: N/A **Unusual Weather Condition:** N/A Management Error: Yes Other Contributing Factor: N/A

### Off-Site Responders Notified

Off-Site Responders Notified: No, not notified

### Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment: N/A N/A Revised Maintenance: Revised Training: Yes **Revised Operating Procedures:** Yes New Process Controls: N/A New Mitigation Systems: N/A Revised Emergency Response Plan: N/A **Changed Process:** N/A Reduced Inventory: N/A N/A None: Other Changes Introduced: N/A

### Chemicals in Accident History

Quantity Released (lbs):1Percent Weight:100Chemical Name:ChlorineCAS Number:7782-50-5Flammable/Toxic:Toxic

#### Accident History ID: Accident 5

Date of Accident: February 2019

Time Accident Began (HH:MM): 16:00
NAICS Code of Process Involved: 325199

NAICS Description: All Other Basic Organic Chemical

Manufacturing

Release Duration: 000 Hours 01 Minutes

#### Release Event

Gas Release:YesLiquid Spill/Evaporation:N/AFire:N/AExplosion:N/AUncontrolled/Runaway Reaction:N/A

#### Release Source

Storage Vessel: N/A Piping: N/A Process Vessel: N/A Transfer Hose: N/A Valve: Yes Pump: N/A Joint: N/A Other Release Source: N/A

#### Weather Conditions at the Time of Event

Wind Speed: N/A
Units: Miles/h
Direction: N/A
Temperature: N/A
Atmospheric Stability Class: N/A
Precipitation Present: N/A
Unknown Weather Conditions: Yes

### **Initiating Event**

Initiating Event:

Soil Contamination:

Other Environmental Damage:

Human Error

N/A

N/A

### **Contributing Factors**

**Equipment Failure:** N/A N/A Human Error: Improper Procedures: N/A N/A Overpressurization: **Upset Condition:** N/A By-Pass Condition: N/A Maintenance Activity/Inactivity: N/A Process Design Failure: N/A Unsuitable Equipment: N/A **Unusual Weather Condition:** N/A Management Error: N/A Other Contributing Factor: N/A

### Off-Site Responders Notified

Off-Site Responders Notified: No, not notified

#### Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment: N/A Yes Revised Maintenance: Revised Training: Yes Revised Operating Procedures: Yes New Process Controls: N/A New Mitigation Systems: N/A Revised Emergency Response Plan: N/A **Changed Process:** N/A Reduced Inventory: N/A N/A None:

Other Changes Introduced: Discipline administered

### Chemicals in Accident History

Quantity Released (lbs):1Percent Weight:100Chemical Name:ChlorineCAS Number:7782-50-5Flammable/Toxic:Toxic

Plan Sequence Number: 1000104347

# **Section 9. Emergency Response**

### Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

### **Local Agency**

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):

Brazoria County Sherriff's Dept

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(979) 265-9310