Section 1. Registration Information

Source Identification

Facility Name: CHS INC. - Laurel Refinery

Parent Company #1 Name: CHS INC.
Submission Type: Resubmission
Receipt Date: January 2023

Facility Identification

Facility ID: 1000 0014 3285

Dun and Bradstreet Numbers (DUNS)

Facility DUNS: 6147177

Facility Location Address

Street 1: 803 Highway 212 South

 Street 2:
 P.O. Box 909

 City:
 Laurel

 State:
 MT

 ZIP:
 59044

 ZIP4:
 N/A

County: Yellowstone

Facility Latitude and Longitude

Latitude (decimal): 45.658333 Longitude (decimal): -108.769167

Local Emergency Planning Committee and Regulations

LEPC: Yellowstone County LEPC

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

Process Chemicals

Program Level: Program Level 3 process

Chemical Name: Hydrogen fluoride/Hydrofluoric acid

(conc 50% or greater) [Hydrofluoric

acid]

CAS Number: 7664-39-3 Flammable/Toxic: Toxic

Program Level: Program Level 3 process

Chemical Name: Propane
CAS Number: 74-98-6
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: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Program Level: Program Level 3 process

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

EPA Facility Identifier: 1000 0014 3285 Plan Sequence Number: 1000103123

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Plan Sequence Number: 1000103123

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: 1-Pentene
CAS Number: 109-67-1
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

EPA Facility Identifier: 1000 0014 3285 Plan Sequence Number: 1000103123

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Propylene [1-Propene]

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

Chemical Name: Hydrogen
CAS Number: 1333-74-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

EPA Facility Identifier: 1000 0014 3285 Plan Sequence Number: 1000103123

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

Plan Sequence Number: 1000103123

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

Plan Sequence Number: 1000103123

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Propylene [1-Propene]

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

Chemical Name: Hydrogen
CAS Number: 1333-74-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

Plan Sequence Number: 1000103123

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Propylene [1-Propene]

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

Chemical Name: Hydrogen
CAS Number: 1333-74-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

Plan Sequence Number: 1000103123

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4 Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

EPA Facility Identifier: 1000 0014 3285 Plan Sequence Number: 1000103123

Chemical Name: Hydrogen
CAS Number: 1333-74-0
Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1 Flammable/Toxic: Flammable

Program Level: Program Level 3 process
Chemical Name: Flammable Mixture

Flammable Mixture Chemical Components

Chemical Name: Isopentane [Butane, 2-methyl-]

CAS Number: 78-78-4
Flammable/Toxic: Flammable

Chemical Name: Methane
CAS Number: 74-82-8
Flammable/Toxic: Flammable

Chemical Name: Ethane
CAS Number: 74-84-0
Flammable/Toxic: Flammable

Chemical Name: Propane
CAS Number: 74-98-6
Flammable/Toxic: Flammable

Chemical Name: Isobutane [Propane, 2-methyl]

CAS Number: 75-28-5
Flammable/Toxic: Flammable

Chemical Name: Butane
CAS Number: 106-97-8
Flammable/Toxic: Flammable

Chemical Name: Pentane
CAS Number: 109-66-0
Flammable/Toxic: Flammable

Chemical Name: Ethylene [Ethene]

CAS Number: 74-85-1
Flammable/Toxic: Flammable

Process NAICS

NAICS Code: 32411

NAICS Description: Petroleum Refineries

Section 6. Accident History

Accident History ID: Accident 1

Date of Accident: January 2022

Time Accident Began (HH:MM): 11:15
NAICS Code of Process Involved: 32411

NAICS Description: Petroleum Refineries
Release Duration: 000 Hours 01 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: 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: 2.0
Units: Miles/h
Direction: SW
Temperature: 25
Atmospheric Stability Class: F
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 (\$): 0

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 Human Error: Yes 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: N/A 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): 300
Percent Weight: N/A

Chemical Name: Flammable Mixture

Flammable Mixture Chemical Components

Chemical Name: Flammable Mixture

CAS Number: 00-11-11 Flammable/Toxic: Flammable

Accident History ID: Accident 2

Date of Accident: February 2018

Time Accident Began (HH:MM): 15:30
NAICS Code of Process Involved: 32411

NAICS Description: Petroleum Refineries
Release Duration: 000 Hours 10 Minutes

Release Event

Gas Release: Yes
Liquid Spill/Evaporation: N/A
Fire: Yes
Explosion: N/A
Uncontrolled/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:
 N/A

Other Release Source: Gasket Failure

Weather Conditions at the Time of Event

Wind Speed: 0.0
Units: Miles/h
Direction: SW
Temperature: 25
Atmospheric Stability Class: F
Precipitation Present: N/A
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: 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: Wrong gasket installed by manufacturer

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: N/A Revised Operating Procedures: N/A 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: Improved quality control

Chemicals in Accident History

Quantity Released (lbs):100Percent Weight:N/AChemical Name:HydrogenCAS Number:1333-74-0Flammable/Toxic:Flammable

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):

Yellowstone County LEPC

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

(406) 256-2775