

Section 1. Registration Information

Source Identification

Facility Name:	Shell Chemical LP - Deer Park Chemical Plant
Parent Company #1 Name:	Shell Oil Company
Submission Type:	Resubmission
Receipt Date:	November 2023

Facility Identification

Facility ID:	1000 0013 7372
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Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	618143986
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Facility Location Address

Street 1:	5900 Highway 225
Street 2:	N/A
City:	Deer Park
State:	TX
ZIP:	77536
ZIP4:	N/A
County:	Harris

Facility Latitude and Longitude

Latitude (decimal):	29.713556
Longitude (decimal):	-095.123806

Local Emergency Planning Committee and Regulations

LEPC:	Harris County-Deer Park Area L
OSHA PSM:	Yes
EPCRA 302:	Yes
CAA Title V:	Yes

Process Chemicals

Program Level:	Program Level 3 process
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Methane
CAS Number:	74-82-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (Z)-
CAS Number:	627-20-3
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (E)-
CAS Number:	646-04-8
Flammable/Toxic:	Flammable
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:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (Z)-
CAS Number:	627-20-3
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (E)-
CAS Number:	646-04-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Methane
CAS Number:	74-82-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Ethane
CAS Number:	74-84-0
Flammable/Toxic:	Flammable
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:	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:	1-Butene
CAS Number:	106-98-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
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-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Butene-cis
CAS Number:	590-18-1
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	2-Butene-trans [2-Butene, (E)]
CAS Number:	624-64-6
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Ethylene [Ethene]
CAS Number:	74-85-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Methane
CAS Number:	74-82-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Ethane
CAS Number:	74-84-0
Flammable/Toxic:	Flammable
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:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	1-Butene
CAS Number:	106-98-9
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
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-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Butene-cis
CAS Number:	590-18-1
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	2-Butene-trans [2-Butene, (E)]
CAS Number:	624-64-6
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Ethylene [Ethene]
CAS Number:	74-85-1
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:	1-Butene
CAS Number:	106-98-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Ethyl acetylene [1-Butyne]
CAS Number:	107-00-6
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Butene-cis
CAS Number:	590-18-1
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	2-Butene-trans [2-Butene, (E)]
CAS Number:	624-64-6
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Vinyl acetylene [1-Buten-3-yne]
CAS Number:	689-97-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Butene
CAS Number:	25167-67-3
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (Z)-
CAS Number:	627-20-3
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (E)-
CAS Number:	646-04-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (Z)-
CAS Number:	627-20-3
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	2-Pentene, (E)-
CAS Number:	646-04-8
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	Methane
CAS Number:	74-82-8
Flammable/Toxic:	Flammable

Program Level:	Program Level 3 process
Chemical Name:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
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:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1-Pentene
CAS Number:	109-67-1
Flammable/Toxic:	Flammable
Program Level:	Program Level 3 process
Chemical Name:	1,3-Pentadiene
CAS Number:	504-60-9
Flammable/Toxic:	Flammable

Process NAICS

NAICS Code:	32511
NAICS Description:	Petrochemical Manufacturing

Section 6. Accident History

Accident History ID: Accident 1

Date of Accident:	May 2023
Time Accident Began (HH:MM):	15:00
NAICS Code of Process Involved:	32511
NAICS Description:	Petrochemical Manufacturing
Release Duration:	052 Hours 02 Minutes

Release Event

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

Release Source

Storage Vessel:	Yes
Piping:	Yes
Process Vessel:	Yes
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:	17.0
Units:	Miles/h
Direction:	SSE
Temperature:	91
Atmospheric Stability Class:	D
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 (\$):	250000000

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:	N/A
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
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Contributing Factors

Equipment Failure:	Yes
Human Error:	Yes
Improper Procedures:	N/A
Overpressurization:	N/A
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:	Notified and Responded
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Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment:	N/A
Revised Maintenance:	N/A
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
None:	N/A
Other Changes Introduced:	The site is in the process of implementing process updates

Chemicals in Accident History

Quantity Released (lbs):	645600
Percent Weight:	N/A
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:	Acetylene [Ethyne]
CAS Number:	74-86-2
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:	Isoprene [1,3-Butadiene, 2-methyl-]
CAS Number:	78-79-5
Flammable/Toxic:	Flammable

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

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

Chemical Name:	1,3-Butadiene
CAS Number:	106-99-0
Flammable/Toxic:	Flammable

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

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

Chemical Name:	Propylene [1-Propene]
CAS Number:	115-07-1
Flammable/Toxic:	Flammable

Chemical Name:	Propadiene [1,2-Propadiene]
CAS Number:	463-49-0
Flammable/Toxic:	Flammable

Chemical Name:	3-Methyl-1-butene
CAS Number:	563-45-1
Flammable/Toxic:	Flammable

Chemical Name:	2-Methyl-1-butene
CAS Number:	563-46-2
Flammable/Toxic:	Flammable

Chemical Name:	2-Butene-cis
CAS Number:	590-18-1
Flammable/Toxic:	Flammable

Chemical Name:	2-Butene-trans [2-Butene, (E)]
CAS Number:	624-64-6
Flammable/Toxic:	Flammable
Chemical Name:	2-Pentene, (Z)-
CAS Number:	627-20-3
Flammable/Toxic:	Flammable
Chemical Name:	2-Pentene, (E)-
CAS Number:	646-04-8
Flammable/Toxic:	Flammable
Chemical Name:	Vinyl acetylene [1-Buten-3-yne]
CAS Number:	689-97-4
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

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):

City of Deer Park, Texas

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

(281) 479-1511