

## Section 1. Registration Information

### Source Identification

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Facility Name:	Phillips 66 Wood River Refinery
Parent Company #1 Name:	Phillips 66 Company
Submission Type:	Resubmission
Receipt Date:	April 2022

### Facility Identification

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Facility ID:	1000 0007 5884
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### Dun and Bradstreet Numbers (DUNS)

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Facility DUNS:	159011589
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### Facility Location Address

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Street 1:	900 South Central Ave
Street 2:	N/A
City:	Roxana
State:	IL
ZIP:	62084
ZIP4:	N/A
County:	Madison

### Facility Latitude and Longitude

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Latitude (decimal):	38.837500
Longitude (decimal):	-90.073333

### Local Emergency Planning Committee and Regulations

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LEPC:	Madison County LEPC
OSHA PSM:	Yes
EPCRA 302:	Yes
CAA Title V:	Yes

## Process Chemicals

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Program Level:	Program Level 3 process
Chemical Name:	Hydrogen sulfide
CAS Number:	7783-06-4
Flammable/Toxic:	Toxic

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:	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:	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:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
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:	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
CAS Number:	00-11-11
Flammable/Toxic:	Flammable

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Chemical Name:	Butane
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Chemical Name:	Pentane
CAS Number:	109-66-0
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Chemical Name:	Hydrogen
CAS Number:	1333-74-0
Flammable/Toxic:	Flammable
Chemical Name:	Ethylene [Ethene]
CAS Number:	74-85-1
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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:	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:	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:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
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:	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
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:	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:	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:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
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:	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
CAS Number:	00-11-11
Flammable/Toxic:	Flammable



### Flammable Mixture Chemical Components

Chemical Name:	Ethyl mercaptan [Ethanethiol]
CAS Number:	75-08-1
Flammable/Toxic:	Flammable
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
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
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:	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-]
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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
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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:	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:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
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:	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
CAS Number:	00-11-11
Flammable/Toxic:	Flammable

### Flammable Mixture Chemical Components

Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
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CAS Number:	74-84-0
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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

Program Level:	Program Level 3 process
Chemical Name:	Flammable Mixture
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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:	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:	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:	2-Methylpropene [1-Propene, 2-methyl-]
CAS Number:	115-11-7
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:	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
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:	Hydrogen
CAS Number:	1333-74-0
Flammable/Toxic:	Flammable

## Process NAICS

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NAICS Code:	32411
NAICS Description:	Petroleum Refineries

## Section 6. Accident History

### Accident History ID: Accident 1

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Date of Accident:	February 2019
Time Accident Began (HH:MM):	16:26
NAICS Code of Process Involved:	32411
NAICS Description:	Petroleum Refineries
Release Duration:	000 Hours 08 Minutes

## Release Event

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



## Release Source

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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:	7.0
Units:	Miles/h
Direction:	ESE
Temperature:	26
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 (\$):	9600000

## Known Off-Site Impacts

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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

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Initiating Event:	Human Error
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## Contributing Factors

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Equipment Failure:	N/A
Human Error:	Yes
Improper Procedures:	Yes
Overpressurization:	Yes
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

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Off-Site Responders Notified:	Notified Only
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## Changes Introduced as a Result of the Accident

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Improved or Upgraded Equipment:	N/A
Revised Maintenance:	N/A
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
None:	N/A
Other Changes Introduced:	N/A

## Chemicals in Accident History

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Quantity Released (lbs):	50222
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:	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

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

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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

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

Madison County LEPC

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

(618) 692-0537