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El Dorado Chemical Company NPDES Permit No. AR0000752 Renewal Application

March 2022

THIS REPORT WAS CREATED BY THE
GBMc & ASSOCIATES TEAM FOR
EL DORADO CHEMICAL COMPANY

NPDES Permit No. AR0000752 Renewal Application

Prepared for:

El Dorado Chemical Company
4500 North West Avenue
El Dorado, AR 71730

Prepared by:

GBMc & Associates
219 Brown Lane
Bryant, AR 72022

March 2022

CONTENTS

APPLICATION SUMMARY

APPLICATION SUMMARY

El Dorado Chemical Company (EDCC) manufactures ammonium nitrate, ammonia, nitric acid, and sulfuric acid at a facility located in El Dorado, Arkansas. The facility is currently permitted through the Arkansas Department of Energy and Environment – Division of Environmental Quality (DEQ), National Pollutant Discharge Elimination System (NPDES) Permit No. AR0000752.

EDCC's current NPDES permit expires on September 30, 2022. Therefore, this application package is being submitted to request a renewal of the existing NPDES permit. Included with this application package are Forms 1, 2C, 2E, 2F, PPS, Area Maps, Site Diagrams, Water Supply Source, and other pertinent information necessary to complete the permit renewal process.

During this permit renewal process, we would like to bring an item to your attention:

- During the time of permit renewal application preparation, Outfall 002 (emergency overflow outfall from the Day Pond) did not discharge. Additionally, Outfall 002 has not discharged in at least five years.
- Outfall 001 has not discharged in the last 5 years. Analytical data for Outfall 010 is representative of Outfall 001.

FORM 1

NPDES PERMIT APPLICATION

FORM 1

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT
DIVISION OF ENVIRONMENTAL QUALITY - OFFICE OF WATER QUALITY
5301 Northshore Drive
North Little Rock, AR 72118-5317
www.adeq.state.ar.us/water

PURPOSE OF THIS APPLICATION

☐ INITIAL PERMIT APPLICATION FOR NEW FACILITY
☐ INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
☐ MODIFICATION OF EXISTING PERMIT
☒ REISSUANCE (RENEWAL) OF EXISTING PERMIT
☐ MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT
☐ CONSTRUCTION PERMIT

SECTION A- GENERAL INFORMATION

1. Legal Applicant Name (The permit will be issued under this name. This is the entity that controls and is responsible for operations and compliance.):

   El Dorado Chemical Company

   Note: The legal name of the applicant must be identical to the name listed with the Arkansas Secretary of State.

2. Operator Type: Private ☒ Municipality ☐ State ☐ Federal ☐ Partnership ☐ Corporation ☐ Other ☐

   State of Incorporation: Oklahoma

3. Facility Name: El Dorado Chemical Company

4. Is the legal applicant identified in number 1 above the owner of the facility? ☒ Yes ☐ No

5. NPDES Permit Number (If Applicable): AR0000752

6. NPDES General Permit Number (If Applicable): N/A

7. NPDES General Storm Water Permit Number (If Applicable): ARR001595

8. Permit Numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation which are not listed above:

Permit Name	Permit Number	Held by
Air Permit	0573-AOP-R24	EDCC
Specific Hazardous Waste Permit Details	ARD001700657	EDCC

9. Give driving directions to the wastewater treatment plant with respect to known landmarks:

   The facility is located north of the City of El Dorado, approximately 1 mile west of State Highway 7 Spur on North West Avenue.

10. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

    Street: 4500 North West Avenue

    City: El Dorado County: Union State: AR Zip: 71730

11. Facility Mailing Address for permit, DMR, and invoice (Street or Post Office Box):

Name: David Sartain Title: Environmental Coordinator

Street: 4500 North West Avenue P.O. Box N/A

City: El Dorado State: AR Zip: 71730

E-mail address*: dsartain@edc-ark.com Fax: 870-863-1499

* Is emailing all documents (permit, letters, DMRs, invoices, etc.) acceptable to the applicant? ☒ Yes ☐ No

12. Neighboring States Within 20 Miles of the permitted facility (Check all that apply):

Oklahoma ☐ Missouri ☐ Tennessee ☐ Louisiana ☒ Texas ☐ Mississippi ☐

13. Indicate applicable Standard Industrial Classification (SIC) Codes and NAICS codes for primary processes (See Item #3 of the instructions for assistance in determining the correct SIC and NAICS Codes):

2873 SIC Facility Activity under this SIC or NAICS:

325311 NAICS Fertilizer Manufacturing Facility

14. Design Flow: Highest Monthly Average of the last two years Flow:

Design Flow	Highest Monthly Average of the last two years Flow
Outfall 001 – N/A	Outfall 001 – 0.0 MGD
Outfall 002 – N/A	Outfall 002 – 0.0 MGD
Outfall 003 – 0.0017 MGD	Outfall 003 – 0.1303 MGD
Outfall 006 – N/A	Outfall 006 – 0.368 MGD
Outfall 007 – N/A	Outfall 007 – 0.364 MGD
Outfall 010 – N/A	Outfall 010 – 1.98 MGD

15. Is the outfall equipped with a diffuser? ☐ Yes ☒ No

16. Responsible Official (as described on the last page of this application):

Name: Derek Turner Title: General Manager

Address: 4500 North West Avenue Phone Number: 870-863-1400

E-mail Address: dturner@lsbindustries.com

City: El Dorado State: AR Zip: 71730

17. Cognizant Official (Duly Authorized Representative of responsible official as described on the last page of this application):

Name: David Sartain Title: Environmental Coordinator

Address: 4500 North West Avenue Phone Number: 870-863-1400

E-mail Address: dsartain@edc-ark.com

City: El Dorado State: AR Zip: 71730

18. Name, address and telephone number of active consulting engineer firm (If none, so state):

Contact Name: Amanda Gallagher

Company Name: GBMc & Associates

Address: 219 Brown Lane Phone Number: 501-847-7077

E-mail Address: agallagher@gbmcassoc.com

City: Bryant State: AR Zip: 72022

19. Wastewater Operator Information

Wastewater Operator Name: David Sartain License number: 008725

Class of municipal wastewater operator: I ☒ II ☐ III ☐ IV ☐

Class of industrial wastewater operator: Basic ☒ Advanced ☐

Wastewater Operator Name: Eddie Pearson License number: 011898

Class of municipal wastewater operator: I ☒ II ☐ III ☐ IV ☐

Class of industrial wastewater operator: Basic ☒ Advanced ☐

SECTION B: FACILITY AND OUTFALL INFORMATION

1. Facility Location (All information must be based on the **front door (gate)** location of the facility). A topographic map must be submitted. See Item #5 of the instructions for additional details.:

   Lat: 33 ° 15 ‘ 47.28 ” Long: 92 ° 40 ‘ 58.75 ”

2. Outfall Information (If more than two outfalls, add additional pages)

Outfall 001

End-of-Pipe Location:	Latitude:	33	°	15	’	33.8 ”	Longitude:	92	°	41	’	14.2 ”
Monitoring Location:	Latitude:	33	°	15	’	33.8 ”	Longitude:	92	°	41	’	14.2 ”

Description of outfall location: Northeast side of Lake Kildeer

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

An unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek, and thence to the Ouachita River in Segment 2D of the Ouachita River Basin.

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

pH neutralization, aeration pond, & equalization pond

How are effluent samples collected?

An automatic sampler is utilized to collect composite samples at Outfall 001.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Totalizing meter

Outfall 002

End-of-Pipe Location:	Latitude:	33	°	15	’	45.3 ”	Longitude:	92	°	41	’	20.3 ”
Monitoring Location:	Latitude:	33	°	15	’	45.3 ”	Longitude:	92	°	41	’	20.3 ”

Description of outfall location: End of pipe south of Lake Lee

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

An unnamed tributary of Flat Creek in Segment 2D of the Ouachita River Basin

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

pH neutralization and aeration.

How are effluent samples collected?

A portable automatic sampler is used to collect samples at the outfall.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Weir

Outfall 003
End-of-Pipe
Location: Latitude: 33 ° 15 ’ 40.66 ” Longitude: 92 ° 41 ’ 9.67 ”
Monitoring
Location: Latitude: 33 ° 15 ’ 40.66 ” Longitude: 92 ° 41 ’ 9.67 ”

Description of outfall location: Southwest of sand filters associated with Outfall 003 treatment system.

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):
An unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek, and thence to the Ouachita River in Segment 2D of the Ouachita River Basin.

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

Imhoff tank and sand filter

How are effluent samples collected?

Portable automatic sampler is used to collect samples at the outfall.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Weir at outfall.

Outfall 006
End-of-Pipe
Location: Latitude: 33 ° 16 ’ 03 ” Longitude: 92 ° 41 ’ 02 ”
Monitoring
Location: Latitude: 33 ° 16 ’ 01.01 ” Longitude: 92 ° 41 ’ 3.02 ”

Description of outfall location: Northeast boundary of facility.

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):
An unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek, and thence to the Ouachita River in Segment 2D of the Ouachita River Basin.

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

None

How are effluent samples collected?

Grab samples are collected at the Outfall.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Parshall flume with totalizing meter.

Outfall 007
End-of-Pipe
Location: Latitude: 33 ° 16 ’ 11 ” Longitude: 92 ° 41 ’ 16 ”
Monitoring
Location: Latitude: 33 ° 16 ’ 6.27 ” Longitude: 92 ° 41 ’ 15.88 ”

Description of outfall location: Northern boundary of facility.

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):
An unnamed tributary of Flat Creek, thence to Flat Creek, thence to Haynes Creek, thence to Smackover Creek, and thence to the Ouachita River in Segment 2D of the Ouachita River Basin.

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

None

How are effluent samples collected?

Grab samples are collected at the Outfall.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Parshall flume with totalizing meter.

Outfall 010

End-of-Pipe Location: Latitude: 33 ° 15 ' 32.6 " Longitude: 92 ° 41 ' 14.4 "

Monitoring Location: Latitude: 33 ° 15 ' 32.6 " Longitude: 92 ° 41 ' 14.4 "

Description of outfall location: Pump station on the east side of Lake Kildeer

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

Via joint pipeline to the Ouachita River. Approximately 13.9 miles east of EDCC, on the Ouachita River,

Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

pH neutralization, aeration pond, & equalization pond

How are effluent samples collected?

An automatic sampler is utilized to collect composite samples at Outfall 010 prior to discharge to the Joint Pipeline.

How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

Totalizing meter

3. Is the proposed or existing facility located above the 100-year flood level? ☒ Yes ☐ No

NOTE: FEMA Map must be included with this application. Maps can be ordered at www.fema.gov .

If "No", what measures are (or will be) used to protect the facility? N/A

4. Population for Municipal and Domestic Sewer Systems: N/A

5. Backup Power Generation for Treatment Plants

Are there any permanent backup generators? Yes ☐ No ☒

If Yes, how many? ________ Total Horsepower (hp)? ________

If no, check one of the following.

☐ Portable generator is available.

☐ The WWTP does not require power to operate.

☒ Operations at the facility will cease if power is not available.

☒ The WWTP has sufficient capacity to hold influent until power is restored.

☐ Other, please explain ____________________

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

1. Solids/Sludge Disposal Method (Check as many as are applicable):

☒ **Solids are not produced at this facility.**

☐ **Landfill:**

Landfill Site Name _____ ADEQ Solid Waste Permit No. _____

☐ **Land Application:** ADEQ State Permit No. _____

☐ **Septic tank**: Arkansas Department of Health Permit No.: _____

☐ **Distribution and Marketing**: Facility receiving sludge:

Name: ____________ Address: ____________

City: ____________ State: ________ Zip: ________ Phone: ____________

Rail: ☐ ______ Pipe: ☐ ______ Other: ____________

☐ **Subsurface Disposal** (Lagoon for which the sole purpose is storing sludge):

Location of lagoon ____________ How old is the lagoon? ____________

Surface area of lagoon: ________ Acre Depth: ________ ft Does lagoon have a liner? ☐ Yes ☐ No

☐ **Incineration:** Location of incinerator _____

☐ **Remains in Treatment Lagoon(s):**

How old is the lagoon(s)? ____________ Has sludge depth been measured? ☐ Yes ☐ No

If Yes, Date measured? ________ Sludge Depth? ______ft If No, When will it be measured? ________

Has sludge ever been removed? Yes ☐ No ☐ If Yes, When was it removed? ____________

☐ **Other** (Provide complete description): _____

SECTION D - WATER SUPPLY

Water Sources which are downstream of the outfall location, i.e., those which could be affected by the discharge from this facility (check as many as are applicable):

☐ **None**

☐ **Private Well** - Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

☒ **Municipal Water Utility** (Specify City): See Water Supply Sources Attachment

Distance from Discharge point: ☒ Within 5 miles ☐ Within 50 miles

☒ **Surface Water** - Name of Surface Water Source: See Water Supply Sources Attachment

Distance from Discharge point: ☐ Within 5 miles ☒ Within 50 miles

Lat: _________ ° _________ ‘ ________ “ Long: ________ ° ________ ‘ ________ “

☒ **Other** (Specify): See Water Supply Sources Attachment

Distance from Discharge point: ☒ Within 5 miles ☒ Within 50 miles

NOT APPLICABLE (N/A): ☐

SECTION E: TRUST FUND REQUIREMENTS AND DISCLOSURE STATEMENT

1. Ark. Code Ann. § 8-4-203(b)(1)(A) forbids the Arkansas Department of Energy and Environment – Division of Environmental Quality (DEQ) from issuing, modifying, renewing, or transferring a permit for a nonmunicipal domestic sewage treatment works without the applicant first fulfilling the trust fund requirements set forth in that section. Ark. Code Ann. § 8-4-203(b)(1)(B) defines "nonmunicipal domestic sewage treatment works" as a device or system operated by an entity other than a city, town, or county that treats, in whole or in part, waste or wastewater from humans or household operations and must continually operate to protect human health and the environment despite a permittee's failure to maintain or operate the device or system. NDSTW's can include, but are not limited to:

    - Sewer Improvement Districts;
    - Subdivisions,
    - Mobile Home Parks,
    - Property Owner' Associates,
    - RV parks, and
    - Apartments

    Exclusions Excluded from this application's Section E.1. requirements for trust fund contribution fees are:

    - State or federal facilities,
    - Schools,
    - Universities and colleges,
    - Public facilities boards and public water authorities,
    - Entities that continuously operate due to a connection with a city, town, or county, and
    - Commercial or industrial entity that treats domestic sewage from its operations and does not accept domestic sewage from other entities or residences.

    The trust fund form may be obtained from the DEQ web site at:

    http://www.adeq.state.ar.us/water/permits/npdes/individual/pdfs/ndstw-trust-fund-certification-form.pdf

2. Disclosure Statement:

    Ark. Code Ann. 8-1-106 requires that applicants for any type of permit or transfer of any permit, license, certification or operational authority issued by the DEQ file a Disclosure Statement with their application unless exempt for doing so under Ark. Code Ann. §8-1-106(b)(2). The filing of a Disclosure Statement is mandatory. No application can be considered administratively complete without a completed Disclosure Statement unless that facility is exempt. Publicly traded companies may submit the most recent 10k and 10Q filings to the Securities and Exchange Commission in lieu of the Disclosure Statement. The form may be obtained from the ADEQ web site at:

    https://www.adeq.state.ar.us/ADEQ_Disclosure_Statement.pdf

NOT APPLICABLE (N/A): ☐

SECTION F – INDUSTRIAL ACTIVITY

1. Does an effluent guideline limitation promulgated by EPA (Link to a Listing of the 40 CFR Effluent Limit Guidelines) under Section 304 of the Clean Water Act (CWA) apply to your facility?

   YES ☒ (Answer questions 2 and 3) NO ☐

2. What Part of 40 CFR? 418

3. What Subpart(s)? B, D, E

4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

   EDCC produces ammonia, ammonium nitrate, nitric acid, and sulfuric acid.

5. Production: (projected for new facilities)

Product(s) Manufactured	Last 12 Months		Highest Production Year of Last 5 Years		
	Tons		Tons		
(Brand name)	Highest Month	Days of Operation	Highest Yearly Total	Monthly Average	Days of Operation
Ammonia	41,347 (11/2021)	20	433,704 (2020)	36,142	332
Ammonium Nitrate	42,604 (10/2021)	30	449,039 (2018)	18,710	302
Nitric Acid					
DMW-1	9910 (01/2022)	26	75,639 (2018)	343	221
DMW-2	33,695 (01/2022)	26	368,184 (2018)	1109	332
NACSAC	1276 (01/2022)	16	16,666 (2018)	88	189

* These units could be off-lbs, lbs quenched, lbs cleaned/etched/rinsed, lbs poured, lbs extruded, etc.

NOT APPLICABLE (N/A): ☐

SECTION G - WASTEWATER DISCHARGE INFORMATION

Facilities that checked "Yes" in question 1 of Section F are considered Categorical Industrial Users and should skip to question 2.

1. **For Non-Categorical Users Only**: List average wastewater discharge, maximum discharge, and type of discharge (batch, continuous, or both), for each plant process. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

No.	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
N/A				

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: (GPD)

Time of batch discharges _____ (days of week) at _____ (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

Answer questions 2, 3, 4, and 5 only if you are subject to Categorical Standards.

2. For Categorical Users: Provide the wastewater discharge flows for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [Note: 1) New facilities should provide estimates for each discharge and 2) Facilities should denote whether the flow was measured or estimated.]

No.	Regulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
001 002 010	Treated Process Water	See Wastewater Source List Attachment		Continuous

No.	Unregulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
001 002 010	Stormwater Runoff	Variable	Variable	Intermittent

No.	Dilution (e.g., Cooling Water)	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
N/A				

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: N/A per day Average discharge per batch: (GPD)

Time of batch discharges _____ (days of week) at _____ (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

		Yes	Type	No	N/A
Current:	Flow Metering	☒ Yes	Type: See Below	☐ No	N/A ☐
	Sampling Equipment	☒ Yes	Type: See Below	☐ No	N/A ☐
Planned:	Flow Metering	☐ Yes	Type: ______________	☒ No	N/A ☐
	Sampling Equipment	☐ Yes	Type: ____________	☒ No	N/A ☐

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

Outfalls 001, 002, 003, and 010 – Automatic Samplers

Outfalls 001 and 010 – Totalizing Meters. Outfall 003 – Weir. Outfalls 006 and 007 – Parshall Flume with Totalizing Meter

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?

☐ Yes ☒ No (If no, skip Question 5)

5. Briefly describe these changes and their effects on the wastewater volume and characteristics:

N/A

NOT APPLICABLE (N/A): ☒

SECTION H -TECHNICAL INFORMATION

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment system.

1. Describe the proposed construction activity. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

   There are no proposed changes to the existing treatment system at this time.

2. One set of construction plans and specifications, approved (signed and stamped) by a **Professional Engineer** (PE) registered in **Arkansas**, must be submitted as follows:

   a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
   b. Specifications and complete design calculations.
   c. All treated wastewater discharges should have a flow measuring device such as a weir or Parshall flume installed after the final treatment unit. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow measuring device should be provided both before and after treatment.

3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to DEQ.

SECTION I: SIGNATORY REQUIREMENTS

Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) the authorization is made in writing by the applicant (or person authorized by the applicant);
(2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit and other information requested by the Director:

Signature of Cognizant Official: David Sartain Date: 3-29-22

Printed name of Cognizant Official: David Sartain

Official title of Cognizant Official: Environmental Coordinator Telephone Number: 870-863-1400

Responsible Official

The information contained in this form must be certified by a ***responsible official*** as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

Corporation, a principal officer of at least the level of vice president
Partnership, a general partner
Sole proprietorship: the proprietor
Municipal, state, federal, or other public facility: principal executive officer, or ranking elected official.

"By my signature below, I certify that the cognizant official designated above is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b)." NOTE: If no duly authorized representative is designated in this section, the Division considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Division.

"By my signature below, I certify that, if this facility is a corporation, it is registered with the Secretary of State in Arkansas. Please provide the full name of the corporation if different than that listed in Section A above."

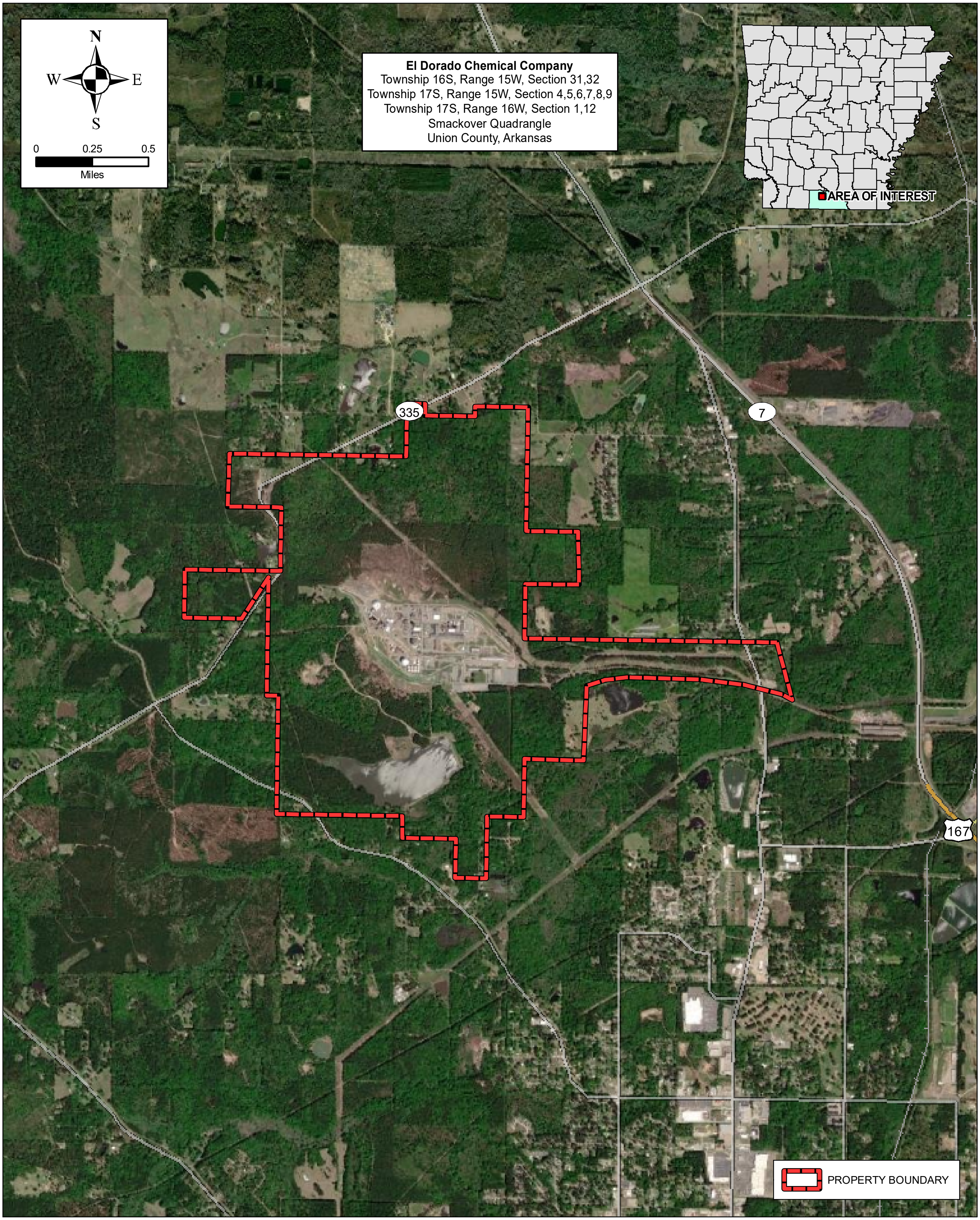
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

Signature of Responsible Official: Date: 3-29-22

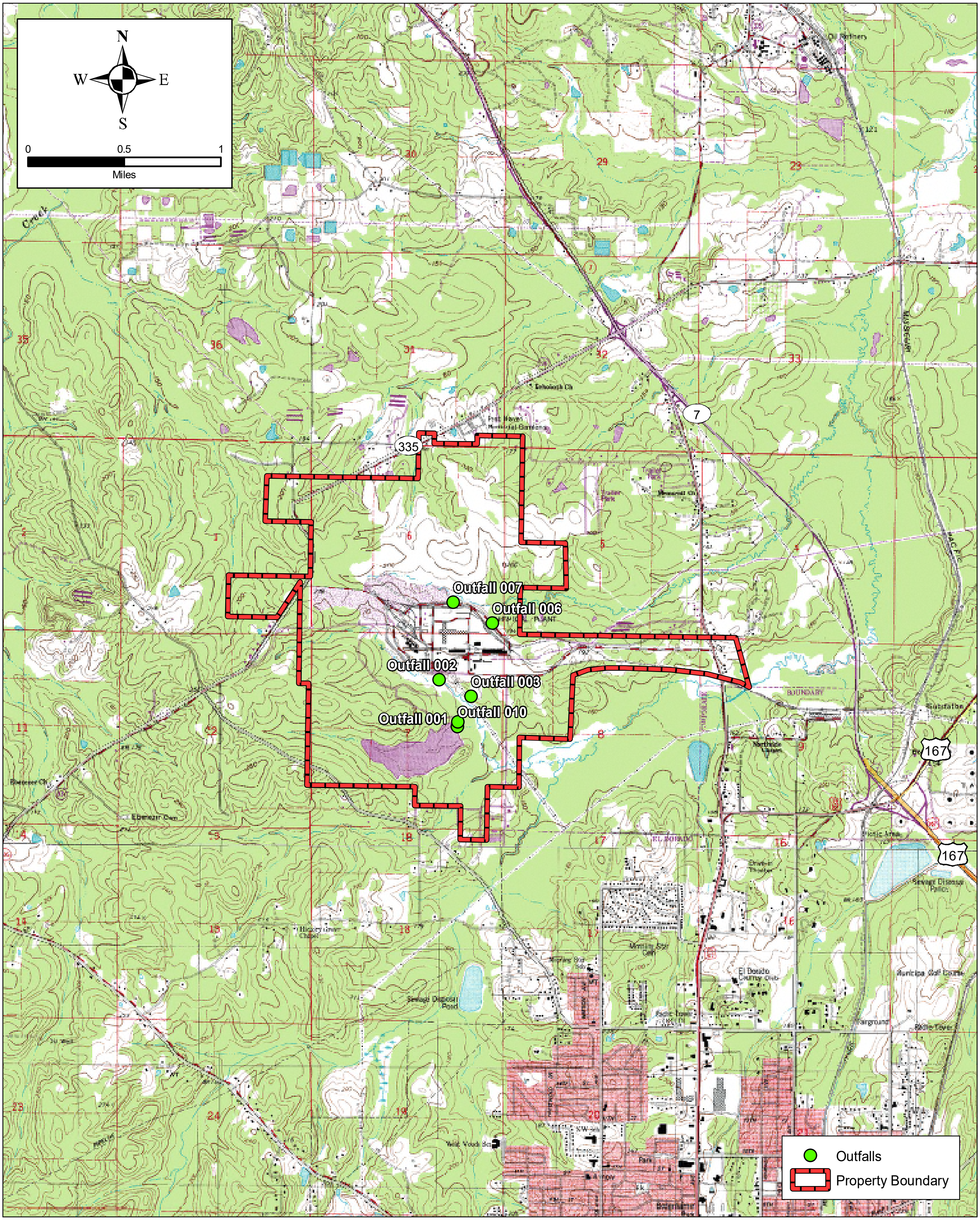
Printed name of Responsible Official: Derek Turner

Official title of Responsible Official: General Manager Telephone Number: 870-863-1400

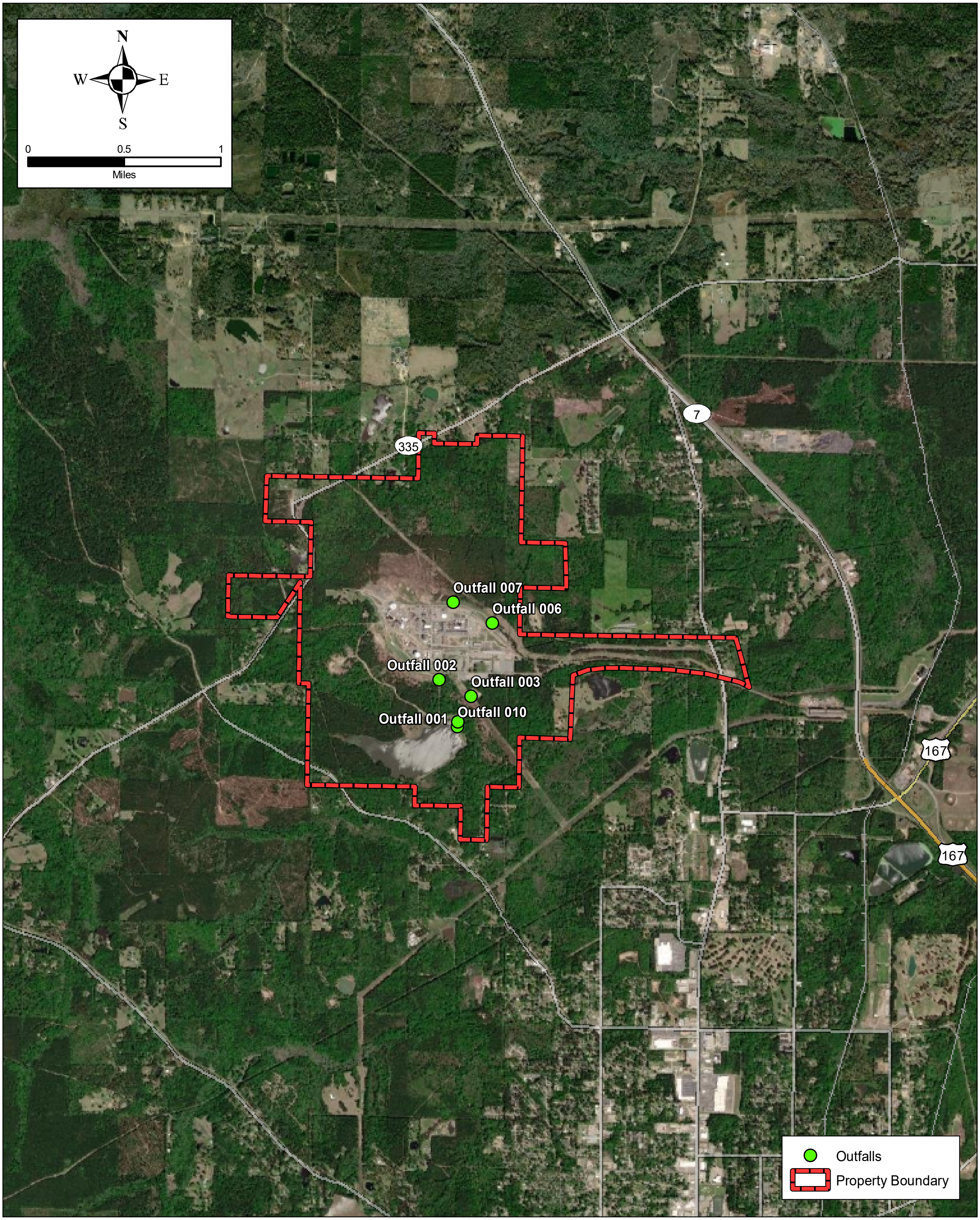
AREA MAPS



DESIGNED BY AAG	GBMc & ASSOCIATES	SHEET TITLE	JOB NAME	PROJECT NO. 2042-99-010	REV. NO.
CHECKED BY AAG		AERIAL PHOTOGRAPHY LOCATION MAP	EL DORADO CHEMICAL COMPANY	DATE 03/03/2022	DWG. NO.
APPR. BY AAG					
DRAWN BY IT			EL DORADO, ARKANSAS	SCALE SHOWN	



DESIGNED BY AAG	GBMc & ASSOCIATES	SHEET TITLE	JOB NAME	PROJECT NO. 2042-99-010	REV. NO.
CHECKED BY AAG		TOPOGRAPHIC SITE MAP	EL DORADO CHEMICAL COMPANY	DATE 03/03/2022	DWG. NO.
APPR. BY AAG					
DRAWN BY IT			EL DORADO, ARKANSAS	SCALE SHOWN	



DESIGNED BY AAG	GBMc & ASSOCIATES	SHEET TITLE	JOB NAME	PROJECT NO. 2042-99-010	REV. NO.
CHECKED BY AAG		AERIAL PHOTOGRAPHY SITE MAP	EL DORADO CHEMICAL COMPANY	DATE 03/03/2022	DWG. NO.
APPR. BY AAG			EL DORADO, ARKANSAS	SCALE SHOWN	
DRAWN BY IT					

FEMA MAP

92°45'W 33°18'58.23"N

92°41'14.17"W 33°14'46.87"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) *Zone A, V, A99*
	With BFE or Depth *Zone AE, AO, AH, VE, AR*
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
	Future Conditions 1% Annual Chance Flood Hazard *Zone X*
	Area with Reduced Flood Risk due to Levee See Notes *Zone X*
	Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X*
	Effective LOMRs
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
OTHER FEATURES	B 20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	513 Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **3/4/2022 11:08 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

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SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: No elevation features on this FIRM
For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 3,000 4,000 Feet

0 105 210 420 630 840 Meters

FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

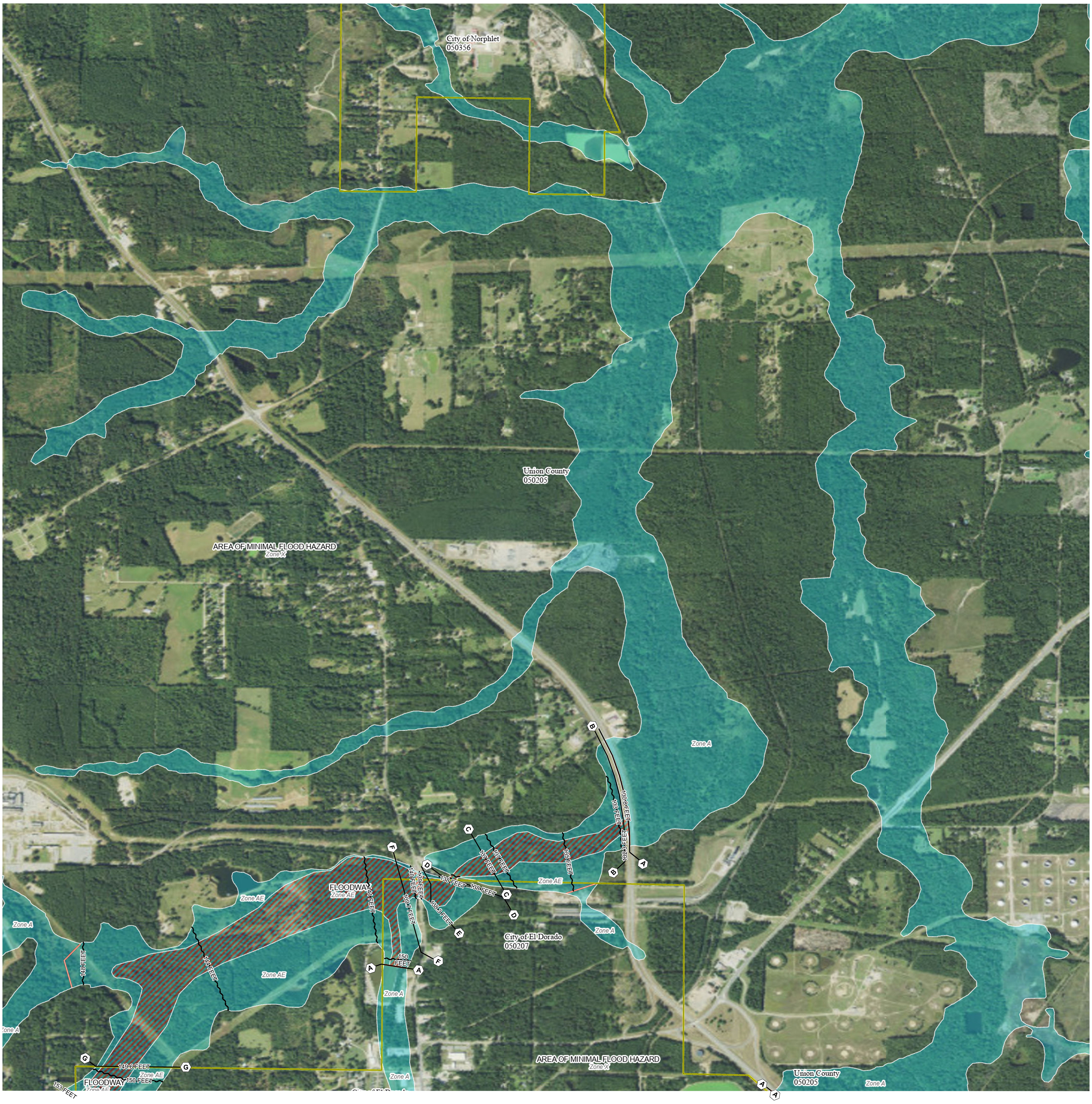
PANEL **140** OF **650**

Panel Contains:

COMMUNITY	NUMBER	PANEL
UNION COUNTY	050205	0140

MAP NUMBER
05139C0140C
EFFECTIVE DATE
September 28, 2007

92°41'15.88"W 33°18'58.23"N



92°37'29.17"W 33°14'46.87"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) *Zone A, V, A99* With BFE or Depth *Zone AE, AO, AH, VE, AR*
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
		Future Conditions 1% Annual Chance Flood Hazard *Zone X*
		Area with Reduced Flood Risk due to Levee See Notes *Zone X*
		Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN	Area of Minimal Flood Hazard *Zone X*
		Effective LOMRs
		Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES	20.2	Cross Sections with 1% Annual Chance
	17.5	Water Surface Elevation
	8	Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
	513	Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

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SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: NAVD88
For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 3,000 4,000 Feet

0 105 210 420 630 840 Meters

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

PANEL **145** OF **650**

Panel Contains:

COMMUNITY	NUMBER	PANEL
CITY OF NORPHLET	050356	0145
UNION COUNTY	050205	0145
CITY OF EL DORADO	050207	0145

MAP NUMBER
05139C0145C
EFFECTIVE DATE
September 28, 2007

WATER SUPPLY SOURCES

WATER SUPPLY SOURCES

The following have sources within 5 miles of El Dorado Chemical Company:

- El Dorado Waterworks
- Norphlet Waterworks
- Wildwood Water Association

The following have surface sources within 50 miles of El Dorado Chemical Company:

- Ashley Mineral Springs
- Magnolia Waterworks
- Camden Waterworks
- El Dorado Chemical Company

WASTEWATER SOURCE LIST

FORM 1 – SECTION G.2

AND

FORM 2C – SECTION 3.1

WASTEWATER SOURCE LIST

Outfall No.	Operation/Process	Average Flow (GPD)
001 002 010	**Nitric Acid Manufacturing** • Cooling Towers (3) • Railcar Cleaning • Boiler Blowdown (2) • Decanted Water from Vaporizer • Wash Down Water • Stormwater Runoff	 170 GPM 33 GPM 10 GPM 0.1 GPM 10 GPM Variable
	Sulfuric Acid Manufacturing • Railcar Cleaning • Boiler Blowdown • Stormwater Runoff	 23 GPM 5 GPM Variable
	Ammonium Nitrate Prilling, Shipping, & Storage (Low Density and High Density) • Washdown of Solid Material Spills • Cooling Tower • Stormwater Runoff	 15 GPM 8 GPM Variable
	Steam Plant • Reverse Osmosis (RO) Waste Stream • Boiler Blowdown • Stormwater Runoff	 50 GPM 15 GPM Variable
	Ammonia Storage • Condensate off Ammonia Storage Containers • Stormwater Runoff	 < 10 GPM Variable
	Ammonia Manufacturing • Cooling Towers • Multi-Filtration • Boiler Blowdown • Ion Exchange Polishers	 128 GPM 75 GPM 75 GPM 12.7 GPM
	Groundwater Recovery Wells (1&2)	2.5 GPM
	Sanitary Wastewater from Septic Tanks	Variable

FORM 2C

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AR0000752	El Dorado Chemical Company	

Form 2C NPDES | **EPA**

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below.

Outfall Number	Receiving Water Name	Latitude				Longitude			
001	Unnamed Tributary of Flat Creek	33°	15′	33.8″	N	92°	41′	14.2″	W
002	Unnamed Tributary of Flat Creek	33°	15′	45.3″	N	92°	41′	20.3″	W
010	Via Ouachita Joint Pipeline	33°	15′	32.6″	N	92°	41′	14.4″	W

SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

Line Drawing

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–1 at end of instructions for example.)

☑ Yes ☐ No

SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

Average Flows and Treatment

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** 001/002/010

Operations Contributing to Flow

Operation	Average Flow
Treated Process Wastewater	See Wastewater Source List Attachment
Stormwater Runoff	Variable mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
Nitric Acid, Sulfuric Acid, and Ammonia Manufacturing pH neutralization, aeration, and equalization	2K, 3B, 3G	
Steam Plant pH neutralization, aeration, and equalization	2K, 3B, 3G	
Groundwater Recovery Wells (#1 & #2) pH neutralization, aeration, and equalization	2K, 3B, 3G	
Ammonia Nitrate Prilling and Storage aeration and equalization	3B, 3G	

Average Flows and Treatment Continued

3.1 cont.

Outfall Number 001/002/010 Cont.

Operations Contributing to Flow

Operation	Average Flow
See Wastewater Source List Attachment	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
Ammonia Storage- aeration and equalization	3B, 3G	
Sanitary Wastewater from Septic Tanks aeration and equalization	3B, 3G	

Outfall Number ___________

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

System Users

3.2 Are you applying for an NPDES permit to operate a privately owned treatment works?

☐ Yes ☑ No → SKIP to Section 4.

3.3 Have you attached a list that identifies each user of the treatment works?

☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AR0000752	El Dorado Chemical Company	

SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

Outfall Number	Operation (list)	Frequency: Average Days/Week	Frequency: Average Months/Year	Flow Rate: Long-Term Average	Flow Rate: Maximum Daily	Duration
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days

SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

Applicable ELGs

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☑ Yes ☐ No ➔ SKIP to Section 6.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation
Fertilizer Manufacturing	Subpart B - Ammonia	40CFR418
Fertilizer Manufacturing	Subpart D - Ammonium Nitrate	40CFR418
Fertilizer Manufacturing	Subpart E - Nitric Acid	40CFR418

Production-Based Limitations

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☑ Yes ☐ No ➔ SKIP to Section 6.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

Outfall Nmber	Operation, Product, or Material	Quantity per Day	Unit of Measure
001,002,010	Ammonium Nitrate	1486	Tons
001,002,010	Ammonia	2067	Tons
001,002,010	Nitric Acid	See Below	Tons

DMW-1	381	Tons
DMW-2	1109	Tons
NACSAC	88	Tons

SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☑ No ☐ Not applicable

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

Effluent and Intake Characteristics

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

Table A. Conventional and Non-Conventional Pollutants

7.1 Are you requesting a waiver from your NPDES permitting authority for one or more of the Table A pollutants for any of your outfalls?

☐ Yes ☑ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number _____ Outfall Number _____ Outfall Number _____

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☑ Yes ☐ No; a waiver has been requested from my NPDES permitting authority for all pollutants at all outfalls.

Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)

☑ Yes ☐ No ➔ SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☑ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)
Fertilizer Manufacuring	☑ Volatile ☑ Acid ☑ Base/Neutral ☑ Pesticide
	☐ Volatile ☐ Acid ☐ Base/Neutral ☐ Pesticide
	☐ Volatile ☐ Acid ☐ Base/Neutral ☐ Pesticide

Effluent and Intake Characteristics Continued

7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☑ Yes ☐ No	
7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☑ Yes ☐ No	
7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No	
7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes ➔ Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☑ No	
7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No	
Table C. Certain Conventional and Non-Conventional Pollutants		
7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? ☑ Yes ☐ No	
7.13	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☑ Yes ☐ No	
Table D. Certain Hazardous Substances and Asbestos		
7.14	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☑ Yes ☐ No	
7.15	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? ☑ Yes ☐ No	
Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)		
7.16	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes ➔ Complete Table E. ☑ No ➔ SKIP to Section 8.	
7.17	Have you completed Table E by reporting *qualitative* data for TCDD? ☑ Yes ☐ No	

SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

Used or Manufactured Toxics

8.1	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☑ No ➔ SKIP to Section 9.		
8.2	List the pollutants below.		
	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

Biological Toxicity Tests

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☑ Yes ☐ No → SKIP to Section 10.

9.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
Chronic WET Testing	Required by Permit	☑ Yes ☐ No	Quarterly with DMRs
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

Contract Analyses

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☑ Yes ☐ No → SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	American Interplex		
Laboratory address	8600 Kanis Road Little Rock, AR 72204		
Phone number	(501) 224-5060		
Pollutant(s) analyzed	All		

SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

Additional Information

11.1 Has the NPDES permitting authority requested additional information?

☐ Yes ☑ No → SKIP to Section 12.

11.2 List the information requested and attach it to this application.

1.	4.
2.	5.
3.	6.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AR0000752	El Dorado Chemical Company	

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

12.1 In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2	
☑ Section 1: Outfall Location	☐ w/ attachments	
☑ Section 2: Line Drawing	☑ w/ line drawing	☐ w/ additional attachments
☑ Section 3: Average Flows and Treatment	☑ w/ attachments	☐ w/ list of each user of privately owned treatment works
☑ Section 4: Intermittent Flows	☐ w/ attachments	
☑ Section 5: Production	☐ w/ attachments	
☑ Section 6: Improvements	☐ w/ attachments	☐ w/ optional additional sheets describing any additional pollution control plans
☑ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information	☐ w/ explanation for identical outfalls
	☐ w/ small business exemption request	☐ w/ other attachments
	☑ w/ Table A	☑ w/ Table B
	☑ w/ Table C	☑ w/ Table D
	☑ w/ Table E	☐ w/ analytical results as an attachment
☑ Section 8: Used or Manufactured Toxics	☐ w/ attachments	
☑ Section 9: Biological Toxicity Tests	☐ w/ attachments	
☑ Section 10: Contract Analyses	☐ w/ attachments	
☑ Section 11: Additional Information	☐ w/ attachments	
☑ Section 12: Checklist and Certification Statement	☐ w/ attachments	

12.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Derek Turner	General Manager
Signature	Date signed 3-29-22

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OUTFALLS 001/010

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))[1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent				Intake (Optional)	
					Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for *all* of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☐	Concentration	mg/L	8.8	2.9	2.2	24		
			Mass	lb/day	119.5	46.6	29.4	24		
2.	Chemical oxygen demand (COD)	☐	Concentration	mg/L	27	27	27	1		
			Mass	lb/day	240	N/A	N/A	1		
3.	Total organic carbon (TOC)	☐	Concentration	mg/L	8.2	N/A	N/A	1		
			Mass	lb/day	72.9	N/A	N/A	1		
4.	Total suspended solids (TSS)	☐	Concentration	mg/L	26.0	11.5	10.2	24		
			Mass	lb/day	418.4	179.7	132.9	24		
5.	Ammonia (as N)	☐	Concentration	mg/L	55.0	33.0	15.9	24		
			Mass	lb/day	493.7	250.4	190.0	24		
6.	Flow	☐	Rate	MGD	1.99	1.98	1.54	24		
7.	Temperature (winter)	☐	°C	°C	10.0	N/A	N/A	1		
	Temperature (summer)	☐	°C	°C	28.9	N/A	N/A	1		
8.	pH (minimum)	☐	Standard units	s.u.	6.12	6.12	NA	24		
	pH (maximum)	☐	Standard units	s.u.	8.14	8.14	NA	24		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

Outfall 001 has not discharged during this permit cycle. Data for Outfall 010 is representative of Outfall 001.

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	001/010

Form Approved 03/05/19
OMB No. 2040-0004

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
1.2	Arsenic, total (7440-38-2)	☑	☑	☐	Concentration	See PPS Form						
					Mass							
1.3	Beryllium, total (7440-41-7)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
1.4	Cadmium, total (7440-43-9)	☑	☑	☐	Concentration	mg/L	0.001	0.001	0.001	24		
					Mass	lb/day	0.008	0.008	0.007	24		
1.5	Chromium, total (7440-47-3)	☑	☑	☐	Concentration	mg/L	0.01	0.01	0.01	24		
					Mass	lb/day	0.166	0.166	0.140	24		
1.6	Copper, total (7440-50-8)	☑	☑	☐	Concentration	mg/L	0.011	0.011	0.006	24		
					Mass	lb/day	0.182	0.182	0.082	24		
1.7	Lead, total (7439-92-1)	☑	☑	☐	Concentration	mg/L	0.005	0.005	0.001	24		
					Mass	lb/day	0.076	0.076	0.013	24		
1.8	Mercury, total (7439-97-6)	☑	☑	☐	Concentration	ug/L	0.007	0.007	0.005	24		
					Mass	lb/day	N/A	N/A	N/A	N/A		
1.9	Nickel, total (7440-02-0)	☑	☑	☐	Concentration	mg/L	0.01	0.01	0.01	24		
					Mass	lb/day	0.166	0.166	0.140	24		
1.10	Selenium, total (7782-49-2)	☑	☑	☐	Concentration	mg/L	0.002	0.002	0.002	24		
					Mass	lb/day	0.033	0.033	0.028	24		
1.11	Silver, total (7440-22-4)	☐	☑	☐	Concentration	mg/L	0.0005	0.0005	0.0005	24		
					Mass	lb/day	0.008	0.008	0.007	24		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
1.13	Zinc, total (7440-66-6)	☑	☑	☐	Concentration	mg/L	0.240	0.240	0.129	24		
					Mass	lb/day	3.978	3.978	1.860	24		
1.14	Cyanide, total (57-12-5)	☑	☑	☐	Concentration	mg/L	0.013	0.013	0.010	24		
					Mass	lb/day	0.182	0.182	0.142	24		
1.15	Phenols, total	☑	☑	☐	Concentration	See PPS Form						
					Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
2.2	Acrylonitrile (107-13-1)	☑	☐	☑	Concentration							
					Mass							
2.3	Benzene (71-43-2)	☑	☐	☑	Concentration							
					Mass							
2.4	Bromoform (75-25-2)	☑	☐	☑	Concentration							
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☑	☐	☑	Concentration							
					Mass							
2.6	Chlorobenzene (108-90-7)	☑	☐	☑	Concentration							
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☑	☐	☑	Concentration							
					Mass							
2.8	Chloroethane (75-00-3)	☐	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
2.10	Chloroform (67-66-3)	☑	☐	☑	Concentration							
					Mass							
2.11	Dichlorobromomethane (75-27-4)	☑	☐	☑	Concentration							
					Mass							
2.12	1,1-dichloroethane (75-34-3)	☑	☐	☑	Concentration							
					Mass							
2.13	1,2-dichloroethane (107-06-2)	☑	☐	☑	Concentration							
					Mass							
2.14	1,1-dichloroethylene (75-35-4)	☑	☐	☑	Concentration							
					Mass							
2.15	1,2-dichloropropane (78-87-5)	☑	☐	☑	Concentration							
					Mass							
2.16	1,3-dichloropropylene (542-75-6)	☑	☐	☑	Concentration							
					Mass							
2.17	Ethylbenzene (100-41-4)	☑	☐	☑	Concentration							
					Mass							
2.18	Methyl bromide (74-83-9)	☑	☐	☑	Concentration							
					Mass							
2.19	Methyl chloride (74-87-3)	☑	☐	☑	Concentration							
					Mass							
2.20	Methylene chloride (75-09-2)	☑	☐	☑	Concentration							
					Mass							
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one): Believed Present	Presence or Absence (check one): Believed Absent	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (optional): Long-Term Average Value	Intake (optional): Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
2.23	Toluene (108-88-3)	☑	☐	☑	Concentration							
					Mass							
2.24	1,2-trans-dichloroethylene (156-60-5)	☑	☐	☑	Concentration							
					Mass							
2.25	1,1,1-trichloroethane (71-55-6)	☑	☐	☑	Concentration							
					Mass							
2.26	1,1,2-trichloroethane (79-00-5)	☑	☐	☑	Concentration							
					Mass							
2.27	Trichloroethylene (79-01-6)	☑	☐	☑	Concentration							
					Mass							
2.28	Vinyl chloride (75-01-4)	☑	☐	☑	Concentration							
					Mass							
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
3.2	2,4-dichlorophenol (120-83-2)	☑	☐	☑	Concentration							
					Mass							
3.3	2,4-dimethylphenol (105-67-9)	☑	☐	☑	Concentration							
					Mass							
3.4	4,6-dinitro-o-cresol (534-52-1)	☑	☐	☑	Concentration							
					Mass							
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
3.7	4-nitrophenol (100-02-7)	☑	☐	☑	Concentration							
					Mass							
3.8	p-chloro-m-cresol (59-50-7)	☑	☐	☑	Concentration							
					Mass							
3.9	Pentachlorophenol (87-86-5)	☑	☐	☑	Concentration							
					Mass							
3.10	Phenol (108-95-2)	☑	☐	☑	Concentration							
					Mass							
3.11	2,4,6-trichlorophenol (88-05-2)	☑	☐	☑	Concentration							
					Mass							
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
4.2	Acenaphthylene (208-96-8)	☑	☐	☑	Concentration							
					Mass							
4.3	Anthracene (120-12-7)	☑	☐	☑	Concentration							
					Mass							
4.4	Benzidine (92-87-5)	☑	☐	☑	Concentration							
					Mass							
4.5	Benzo (a) anthracene (56-55-3)	☑	☐	☑	Concentration							
					Mass							
4.6	Benzo (a) pyrene (50-32-8)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
4.8	Benzo (ghi) perylene (191-24-2)	☑	☐	☑	Concentration							
					Mass							
4.9	Benzo (k) fluoranthene (207-08-9)	☑	☐	☑	Concentration							
					Mass							
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☑	☐	☑	Concentration							
					Mass							
4.11	Bis (2-chloroethyl) ether (111-44-4)	☑	☐	☑	Concentration							
					Mass							
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☑	☐	☑	Concentration							
					Mass							
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☑	☐	☑	Concentration							
					Mass							
4.14	4-bromophenyl phenyl ether (101-55-3)	☑	☐	☑	Concentration							
					Mass							
4.15	Butyl benzyl phthalate (85-68-7)	☑	☐	☑	Concentration							
					Mass							
4.16	2-chloronaphthalene (91-58-7)	☑	☐	☑	Concentration							
					Mass							
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☑	☐	☑	Concentration							
					Mass							
4.18	Chrysene (218-01-9)	☑	☐	☑	Concentration							
					Mass							
4.19	Dibenzo (a,h) anthracene (53-70-3)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
4.21	1,3-dichlorobenzene (541-73-1)	☑	☐	☑	Concentration							
					Mass							
4.22	1,4-dichlorobenzene (106-46-7)	☑	☐	☑	Concentration							
					Mass							
4.23	3,3-dichlorobenzidine (91-94-1)	☑	☐	☑	Concentration							
					Mass							
4.24	Diethyl phthalate (84-66-2)	☑	☐	☑	Concentration							
					Mass							
4.25	Dimethyl phthalate (131-11-3)	☑	☐	☑	Concentration							
					Mass							
4.26	Di-n-butyl phthalate (84-74-2)	☑	☐	☑	Concentration							
					Mass							
4.27	2,4-dinitrotoluene (121-14-2)	☑	☐	☑	Concentration							
					Mass							
4.28	2,6-dinitrotoluene (606-20-2)	☑	☐	☑	Concentration							
					Mass							
4.29	Di-n-octyl phthalate (117-84-0)	☑	☐	☑	Concentration							
					Mass							
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☑	☐	☑	Concentration							
					Mass							
4.31	Fluoranthene (206-44-0)	☑	☐	☑	Concentration							
					Mass							
4.32	Fluorene (86-73-7)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
4.34	Hexachlorobutadiene (87-68-3)	☑	☐	☑	Concentration							
					Mass							
4.35	Hexachlorocyclopentadiene (77-47-4)	☑	☐	☐	Concentration							
					Mass							
4.36	Hexachloroethane (67-72-1)	☑	☐	☑	Concentration							
					Mass							
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☑	☐	☑	Concentration							
					Mass							
4.38	Isophorone (78-59-1)	☑	☐	☑	Concentration							
					Mass							
4.39	Naphthalene (91-20-3)	☑	☐	☑	Concentration							
					Mass							
4.40	Nitrobenzene (98-95-3)	☑	☐	☑	Concentration							
					Mass							
4.41	N-nitrosodimethylamine (62-75-9)	☑	☐	☑	Concentration							
					Mass							
4.42	N-nitrosodi-n-propylamine (621-64-7)	☑	☐	☑	Concentration							
					Mass							
4.43	N-nitrosodiphenylamine (86-30-6)	☑	☐	☑	Concentration							
					Mass							
4.44	Phenanthrene (85-01-8)	☑	☐	☑	Concentration							
					Mass							
4.45	Pyrene (129-00-0)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
5.2	α-BHC (319-84-6)	☑	☐	☑	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☑	☐	☑	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☑	☐	☑	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☑	☐	☑	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☑	☐	☑	Concentration							
					Mass							
5.7	4,4’-DDT (50-29-3)	☑	☐	☑	Concentration							
					Mass							
5.8	4,4’-DDE (72-55-9)	☑	☐	☑	Concentration							
					Mass							
5.9	4,4’-DDD (72-54-8)	☑	☐	☑	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☑	☐	☑	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☑	☐	☑	Concentration	See PPS Form						
					Mass							
5.13	Endosulfan sulfate (1031-07-8)	☑	☐	☑	Concentration							
					Mass							
5.14	Endrin (72-20-8)	☑	☐	☑	Concentration							
					Mass							
5.15	Endrin aldehyde (7421-93-4)	☑	☐	☑	Concentration							
					Mass							
5.16	Heptachlor (76-44-8)	☑	☐	☑	Concentration							
					Mass							
5.17	Heptachlor epoxide (1024-57-3)	☑	☐	☑	Concentration							
					Mass							
5.18	PCB-1242 (53469-21-9)	☑	☐	☑	Concentration							
					Mass							
5.19	PCB-1254 (11097-69-1)	☑	☐	☑	Concentration							
					Mass							
5.20	PCB-1221 (11104-28-2)	☑	☐	☑	Concentration							
					Mass							
5.21	PCB-1232 (11141-16-5)	☑	☐	☑	Concentration							
					Mass							
5.22	PCB-1248 (12672-29-6)	☑	☐	☑	Concentration							
					Mass							
5.23	PCB-1260 (11096-82-5)	☑	☐	☑	Concentration							
					Mass							
5.24	PCB-1016 (12674-11-2)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☑	☐	☑	Concentration	See PPS Form						
					Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

☐ Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.

☐ Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.	Bromide (24959-67-9)	☐	☑	Concentration							
				Mass							
2.	Chlorine, total residual	☐	☑	Concentration							
				Mass							
3.	Color	☐	☑	Concentration							
				Mass							
4.	Fecal coliform	☑	☐	Concentration	col/100mL	2400	789	N/A	24		
				Mass							
5.	Fluoride (16984-48-8)	☐	☑	Concentration							
				Mass							
6	Nitrate-nitrite	☑	☐	Concentration	mg/L	92	42	32	24		
				Mass	lb/day	1060	574	415	24		
7.	Nitrogen, total organic (as N)	☑	☐	Concentration							
				Mass							
8.	Oil and grease	☑	☐	Concentration	mg/L	13	5.6	5.1	24		
				Mass	lb/day	174	85	67.6	24		
9.	Phosphorus (as P), total (7723-14-0)	☑	☐	Concentration	mg/L	0.47	0.37	0.15	24		
				Mass	lb/day	N/A	N/A	N/A	N/A		
10.	Sulfate (as SO_4) (14808-79-8)	☑	☐	Concentration	mg/L	140	109	79	24		
				Mass	lb/day	2309	1629	1054	24		
11.	Sulfide (as S)	☐	☑	Concentration							
				Mass							

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☑	Concentration							
				Mass							
13.	Surfactants	☐	☑	Concentration							
				Mass							
14.	Aluminum, total (7429-90-5)	☐	☑	Concentration							
				Mass							
15.	Barium, total (7440-39-3)	☐	☑	Concentration							
				Mass							
16.	Boron, total (7440-42-8)	☐	☑	Concentration							
				Mass							
17.	Cobalt, total (7440-48-4)	☐	☑	Concentration							
				Mass							
18.	Iron, total (7439-89-6)	☐	☑	Concentration							
				Mass							
19.	Magnesium, total (7439-95-4)	☐	☑	Concentration							
				Mass							
20.	Molybdenum, total (7439-98-7)	☐	☑	Concentration							
				Mass							
21.	Manganese, total (7439-96-5)	☐	☑	Concentration							
				Mass							
22.	Tin, total (7440-31-5)	☐	☑	Concentration							
				Mass							
23.	Titanium, total (7440-32-6)	☐	☑	Concentration							
				Mass							

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**										
	Alpha, total	☐	☑	Concentration							
				Mass							
	Beta, total	☐	☑	Concentration							
				Mass							
	Radium, total	☐	☑	Concentration							
				Mass							
	Radium 226, total	☐	☑	Concentration							
				Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☑		
2.	Acetaldehyde	☐	☑		
3.	Allyl alcohol	☐	☑		
4.	Allyl chloride	☐	☑		
5.	Amyl acetate	☐	☑		
6.	Aniline	☐	☑		
7.	Benzonitrile	☐	☑		
8.	Benzyl chloride	☐	☑		
9.	Butyl acetate	☐	☑		
10.	Butylamine	☐	☑		
11.	Captan	☐	☑		
12.	Carbaryl	☐	☑		
13.	Carbofuran	☐	☑		
14.	Carbon disulfide	☐	☑		
15.	Chlorpyrifos	☐	☑		
16.	Coumaphos	☐	☑		
17.	Cresol	☐	☑		
18.	Crotonaldehyde	☐	☑		
19.	Cyclohexane	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☑		
21.	Diazinon	☐	☑		
22.	Dicamba	☐	☑		
23.	Dichlobenil	☐	☑		
24.	Dichlone	☐	☑		
25.	2,2-dichloropropionic acid	☐	☑		
26.	Dichlorvos	☐	☑		
27.	Diethyl amine	☐	☑		
28.	Dimethyl amine	☐	☑		
29.	Dintrobenzene	☐	☑		
30.	Diquat	☐	☑		
31.	Disulfoton	☐	☑		
32.	Diuron	☐	☑		
33.	Epichlorohydrin	☐	☑		
34.	Ethion	☐	☑		
35.	Ethylene diamine	☐	☑		
36.	Ethylene dibromide	☐	☑		
37.	Formaldehyde	☐	☑		
38.	Furfural	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☑		
40.	Isoprene	☐	☑		
41.	Isopropanolamine	☐	☑		
42.	Kelthane	☐	☑		
43.	Kepone	☐	☑		
44.	Malathion	☐	☑		
45.	Mercaptodimethur	☐	☑		
46.	Methoxychlor	☐	☑		
47.	Methyl mercaptan	☐	☑		
48.	Methyl methacrylate	☐	☑		
49.	Methyl parathion	☐	☑		
50.	Mevinphos	☐	☑		
51.	Mexacarbate	☐	☑		
52.	Monoethyl amine	☐	☑		
53.	Monomethyl amine	☐	☑		
54.	Naled	☐	☑		
55.	Naphthenic acid	☐	☑		
56.	Nitrotoluene	☐	☑		
57.	Parathion	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☑		
59.	Phosgene	☐	☑		
60.	Propargite	☐	☑		
61.	Propylene oxide	☐	☑		
62.	Pyrethrins	☐	☑		
63.	Quinoline	☐	☑		
64.	Resorcinol	☐	☑		
65.	Strontium	☐	☑		
66.	Strychnine	☐	☑		
67.	Styrene	☐	☑		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☑		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☑		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☑		
71.	Trichlorofon	☐	☑		
72.	Triethanolamine	☐	☑		
73.	Triethylamine	☐	☑		
74.	Trimethylamine	☐	☑		
75.	Uranium	☐	☑		
76.	Vanadium	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☑		
78.	Xylene	☐	☑		
79.	Xylenol	☐	☑		
80.	Zirconium	☐	☑		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☑	

OUTFALL 002

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii)) [1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (Optional): Long-Term Average Value	Intake (Optional): Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for *all* of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☐	Concentration	No discharge from Outfall 002 since at least 2017						
			Mass							
2.	Chemical oxygen demand (COD)	☐	Concentration							
			Mass							
3.	Total organic carbon (TOC)	☐	Concentration							
			Mass							
4.	Total suspended solids (TSS)	☐	Concentration							
			Mass							
5.	Ammonia (as N)	☐	Concentration							
			Mass							
6.	Flow	☐	Rate							
7.	Temperature (winter)	☐	°C	°C						
	Temperature (summer)	☐	°C	°C						
8.	pH (minimum)	☐	Standard units	s.u.						
	pH (maximum)	☐	Standard units	s.u.						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
1.2	Arsenic, total (7440-38-2)	☑	☑	☐	Concentration							
					Mass							
1.3	Beryllium, total (7440-41-7)	☑	☐	☑	Concentration							
					Mass							
1.4	Cadmium, total (7440-43-9)	☑	☑	☐	Concentration							
					Mass							
1.5	Chromium, total (7440-47-3)	☑	☑	☐	Concentration							
					Mass							
1.6	Copper, total (7440-50-8)	☑	☑	☐	Concentration							
					Mass							
1.7	Lead, total (7439-92-1)	☑	☑	☐	Concentration							
					Mass							
1.8	Mercury, total (7439-97-6)	☑	☑	☐	Concentration							
					Mass							
1.9	Nickel, total (7440-02-0)	☑	☑	☐	Concentration							
					Mass							
1.10	Selenium, total (7782-49-2)	☑	☑	☐	Concentration							
					Mass							
1.11	Silver, total (7440-22-4)	☑	☐	☐	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
1.13	Zinc, total (7440-66-6)	☑	☐	☐	Concentration							
					Mass							
1.14	Cyanide, total (57-12-5)	☑	☑	☐	Concentration							
					Mass							
1.15	Phenols, total	☑	☑	☐	Concentration							
					Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
2.2	Acrylonitrile (107-13-1)	☑	☐	☑	Concentration							
					Mass							
2.3	Benzene (71-43-2)	☑	☐	☑	Concentration							
					Mass							
2.4	Bromoform (75-25-2)	☑	☐	☑	Concentration							
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☑	☐	☑	Concentration							
					Mass							
2.6	Chlorobenzene (108-90-7)	☑	☐	☑	Concentration							
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☑	☐	☑	Concentration							
					Mass							
2.8	Chloroethane (75-00-3)	☑	☐	☐	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
2.10	Chloroform (67-66-3)	☑	☐	☑	Concentration							
					Mass							
2.11	Dichlorobromomethane (75-27-4)	☑	☐	☑	Concentration							
					Mass							
2.12	1,1-dichloroethane (75-34-3)	☑	☐	☑	Concentration							
					Mass							
2.13	1,2-dichloroethane (107-06-2)	☑	☐	☑	Concentration							
					Mass							
2.14	1,1-dichloroethylene (75-35-4)	☑	☐	☑	Concentration							
					Mass							
2.15	1,2-dichloropropane (78-87-5)	☑	☐	☑	Concentration							
					Mass							
2.16	1,3-dichloropropylene (542-75-6)	☑	☐	☑	Concentration							
					Mass							
2.17	Ethylbenzene (100-41-4)	☑	☐	☑	Concentration							
					Mass							
2.18	Methyl bromide (74-83-9)	☑	☐	☑	Concentration							
					Mass							
2.19	Methyl chloride (74-87-3)	☑	☐	☑	Concentration							
					Mass							
2.20	Methylene chloride (75-09-2)	☑	☐	☑	Concentration							
					Mass							
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☑	☐	☐	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
2.23	Toluene (108-88-3)	☑	☐	☑	Concentration							
					Mass							
2.24	1,2-trans-dichloroethylene (156-60-5)	☑	☐	☑	Concentration							
					Mass							
2.25	1,1,1-trichloroethane (71-55-6)	☑	☐	☑	Concentration							
					Mass							
2.26	1,1,2-trichloroethane (79-00-5)	☑	☐	☑	Concentration							
					Mass							
2.27	Trichloroethylene (79-01-6)	☑	☐	☑	Concentration							
					Mass							
2.28	Vinyl chloride (75-01-4)	☑	☐	☑	Concentration							
					Mass							
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
3.2	2,4-dichlorophenol (120-83-2)	☑	☐	☑	Concentration							
					Mass							
3.3	2,4-dimethylphenol (105-67-9)	☑	☐	☑	Concentration							
					Mass							
3.4	4,6-dinitro-o-cresol (534-52-1)	☑	☐	☑	Concentration							
					Mass							
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
3.7	4-nitrophenol (100-02-7)	☑	☐	☑	Concentration							
					Mass							
3.8	p-chloro-m-cresol (59-50-7)	☑	☐	☑	Concentration							
					Mass							
3.9	Pentachlorophenol (87-86-5)	☑	☐	☑	Concentration							
					Mass							
3.10	Phenol (108-95-2)	☑	☐	☑	Concentration							
					Mass							
3.11	2,4,6-trichlorophenol (88-05-2)	☑	☐	☑	Concentration							
					Mass							
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
4.2	Acenaphthylene (208-96-8)	☑	☐	☑	Concentration							
					Mass							
4.3	Anthracene (120-12-7)	☑	☐	☑	Concentration							
					Mass							
4.4	Benzidine (92-87-5)	☑	☐	☑	Concentration							
					Mass							
4.5	Benzo (a) anthracene (56-55-3)	☑	☐	☑	Concentration							
					Mass							
4.6	Benzo (a) pyrene (50-32-8)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available) (required)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
4.8	Benzo (ghi) perylene (191-24-2)	☑	☐	☑	Concentration							
					Mass							
4.9	Benzo (k) fluoranthene (207-08-9)	☑	☐	☑	Concentration							
					Mass							
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☑	☐	☑	Concentration							
					Mass							
4.11	Bis (2-chloroethyl) ether (111-44-4)	☑	☐	☑	Concentration							
					Mass							
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☑	☐	☑	Concentration							
					Mass							
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☑	☐	☑	Concentration							
					Mass							
4.14	4-bromophenyl phenyl ether (101-55-3)	☑	☐	☑	Concentration							
					Mass							
4.15	Butyl benzyl phthalate (85-68-7)	☑	☐	☑	Concentration							
					Mass							
4.16	2-chloronaphthalene (91-58-7)	☑	☐	☑	Concentration							
					Mass							
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☑	☐	☑	Concentration							
					Mass							
4.18	Chrysene (218-01-9)	☑	☐	☑	Concentration							
					Mass							
4.19	Dibenzo (a,h) anthracene (53-70-3)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one): Believed Present	Presence or Absence (check one): Believed Absent	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (optional): Long-Term Average Value	Intake (optional): Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
4.21	1,3-dichlorobenzene (541-73-1)	☑	☐	☑	Concentration							
					Mass							
4.22	1,4-dichlorobenzene (106-46-7)	☑	☐	☑	Concentration							
					Mass							
4.23	3,3-dichlorobenzidine (91-94-1)	☑	☐	☑	Concentration							
					Mass							
4.24	Diethyl phthalate (84-66-2)	☑	☐	☑	Concentration							
					Mass							
4.25	Dimethyl phthalate (131-11-3)	☑	☐	☑	Concentration							
					Mass							
4.26	Di-n-butyl phthalate (84-74-2)	☑	☐	☑	Concentration							
					Mass							
4.27	2,4-dinitrotoluene (121-14-2)	☑	☐	☑	Concentration							
					Mass							
4.28	2,6-dinitrotoluene (606-20-2)	☑	☐	☑	Concentration							
					Mass							
4.29	Di-n-octyl phthalate (117-84-0)	☑	☐	☑	Concentration							
					Mass							
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☑	☐	☑	Concentration							
					Mass							
4.31	Fluoranthene (206-44-0)	☐	☐	☑	Concentration							
					Mass							
4.32	Fluorene (86-73-7)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
4.34	Hexachlorobutadiene (87-68-3)	☑	☐	☑	Concentration							
					Mass							
4.35	Hexachlorocyclopentadiene (77-47-4)	☑	☐	☑	Concentration							
					Mass							
4.36	Hexachloroethane (67-72-1)	☑	☐	☑	Concentration							
					Mass							
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☑	☐	☑	Concentration							
					Mass							
4.38	Isophorone (78-59-1)	☑	☐	☑	Concentration							
					Mass							
4.39	Naphthalene (91-20-3)	☑	☐	☑	Concentration							
					Mass							
4.40	Nitrobenzene (98-95-3)	☑	☐	☑	Concentration							
					Mass							
4.41	N-nitrosodimethylamine (62-75-9)	☑	☐	☑	Concentration							
					Mass							
4.42	N-nitrosodi-n-propylamine (621-64-7)	☑	☐	☑	Concentration							
					Mass							
4.43	N-nitrosodiphenylamine (86-30-6)	☑	☐	☑	Concentration							
					Mass							
4.44	Phenanthrene (85-01-8)	☑	☐	☑	Concentration							
					Mass							
4.45	Pyrene (129-00-0)	☑	☐	☑	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☑	☐	☐	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
5.2	α-BHC (319-84-6)	☑	☐	☑	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☑	☐	☑	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☑	☐	☑	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☑	☐	☑	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☑	☐	☑	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☑	☐	☑	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☑	☐	☑	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☑	☐	☑	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☑	☐	☑	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☑	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							
5.13	Endosulfan sulfate (1031-07-8)	☑	☐	☑	Concentration							
					Mass							
5.14	Endrin (72-20-8)	☑	☐	☑	Concentration							
					Mass							
5.15	Endrin aldehyde (7421-93-4)	☑	☐	☑	Concentration							
					Mass							
5.16	Heptachlor (76-44-8)	☑	☐	☑	Concentration							
					Mass							
5.17	Heptachlor epoxide (1024-57-3)	☑	☐	☑	Concentration							
					Mass							
5.18	PCB-1242 (53469-21-9)	☑	☐	☑	Concentration							
					Mass							
5.19	PCB-1254 (11097-69-1)	☑	☐	☑	Concentration							
					Mass							
5.20	PCB-1221 (11104-28-2)	☑	☐	☑	Concentration							
					Mass							
5.21	PCB-1232 (11141-16-5)	☑	☐	☑	Concentration							
					Mass							
5.22	PCB-1248 (12672-29-6)	☑	☐	☑	Concentration							
					Mass							
5.23	PCB-1260 (11096-82-5)	☑	☐	☑	Concentration							
					Mass							
5.24	PCB-1016 (12674-11-2)	☑	☐	☑	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☑	Concentration	No discharge from Outfall 002 since at least 2017						
					Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
☐	Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
1.	Bromide (24959-67-9)	☐	☐	Concentration	No discharge from Outfall 002 since at least 2017						
				Mass							
2.	Chlorine, total residual	☐	☐	Concentration							
				Mass							
3.	Color	☐	☐	Concentration							
				Mass							
4.	Fecal coliform	☐	☐	Concentration							
				Mass							
5.	Fluoride (16984-48-8)	☐	☐	Concentration							
				Mass							
6	Nitrate-nitrite	☐	☐	Concentration							
				Mass							
7.	Nitrogen, total organic (as N)	☐	☐	Concentration							
				Mass							
8.	Oil and grease	☐	☐	Concentration							
				Mass							
9.	Phosphorus (as P), total (7723-14-0)	☐	☐	Concentration							
				Mass							
10.	Sulfate (as SO_4) (14808-79-8)	☐	☐	Concentration							
				Mass							
11.	Sulfide (as S)	☐	☐	Concentration							
				Mass							

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☐	Concentration	No discharge from Outfall 002 since at least 2017						
				Mass							
13.	Surfactants	☐	☐	Concentration							
				Mass							
14.	Aluminum, total (7429-90-5)	☐	☐	Concentration							
				Mass							
15.	Barium, total (7440-39-3)	☐	☐	Concentration							
				Mass							
16.	Boron, total (7440-42-8)	☐	☐	Concentration							
				Mass							
17.	Cobalt, total (7440-48-4)	☐	☐	Concentration							
				Mass							
18.	Iron, total (7439-89-6)	☐	☐	Concentration							
				Mass							
19.	Magnesium, total (7439-95-4)	☐	☐	Concentration							
				Mass							
20.	Molybdenum, total (7439-98-7)	☐	☐	Concentration							
				Mass							
21.	Manganese, total (7439-96-5)	☐	☐	Concentration							
				Mass							
22.	Tin, total (7440-31-5)	☐	☐	Concentration							
				Mass							
23.	Titanium, total (7440-32-6)	☐	☐	Concentration							
				Mass							

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**										
	Alpha, total	☐	☐	Concentration	No discharge from Outfall 002 since at least 2017						
				Mass							
	Beta, total	☐	☐	Concentration							
				Mass							
	Radium, total	☐	☐	Concentration							
				Mass							
	Radium 226, total	☐	☐	Concentration							
				Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☑	No discharge from Outfall 002 since at least 2017	
2.	Acetaldehyde	☐	☑		
3.	Allyl alcohol	☐	☑		
4.	Allyl chloride	☐	☑		
5.	Amyl acetate	☐	☑		
6.	Aniline	☐	☑		
7.	Benzonitrile	☐	☑		
8.	Benzyl chloride	☐	☑		
9.	Butyl acetate	☐	☑		
10.	Butylamine	☐	☑		
11.	Captan	☐	☑		
12.	Carbaryl	☐	☑		
13.	Carbofuran	☐	☑		
14.	Carbon disulfide	☐	☑		
15.	Chlorpyrifos	☐	☑		
16.	Coumaphos	☐	☑		
17.	Cresol	☐	☑		
18.	Crotonaldehyde	☐	☑		
19.	Cyclohexane	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☑	No discharge from Outfall 002 since at least 2017	
21.	Diazinon	☐	☑		
22.	Dicamba	☐	☑		
23.	Dichlobenil	☐	☑		
24.	Dichlone	☐	☑		
25.	2,2-dichloropropionic acid	☐	☑		
26.	Dichlorvos	☐	☑		
27.	Diethyl amine	☐	☑		
28.	Dimethyl amine	☐	☑		
29.	Dintrobenzene	☐	☑		
30.	Diquat	☐	☑		
31.	Disulfoton	☐	☑		
32.	Diuron	☐	☑		
33.	Epichlorohydrin	☐	☑		
34.	Ethion	☐	☑		
35.	Ethylene diamine	☐	☑		
36.	Ethylene dibromide	☐	☑		
37.	Formaldehyde	☐	☑		
38.	Furfural	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☑	No discharge from Outfall 002 since at least 2017	
40.	Isoprene	☐	☑		
41.	Isopropanolamine	☐	☑		
42.	Kelthane	☐	☑		
43.	Kepone	☐	☑		
44.	Malathion	☐	☑		
45.	Mercaptodimethur	☐	☑		
46.	Methoxychlor	☐	☑		
47.	Methyl mercaptan	☐	☑		
48.	Methyl methacrylate	☐	☑		
49.	Methyl parathion	☐	☑		
50.	Mevinphos	☐	☑		
51.	Mexacarbate	☐	☑		
52.	Monoethyl amine	☐	☑		
53.	Monomethyl amine	☐	☑		
54.	Naled	☐	☑		
55.	Naphthenic acid	☐	☑		
56.	Nitrotoluene	☐	☑		
57.	Parathion	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one) Believed Present	Believed Absent	Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
58.	Phenolsulfonate	☐	☑	No discharge from Outfall 002 since at least 2017	
59.	Phosgene	☐	☑		
60.	Propargite	☐	☑		
61.	Propylene oxide	☐	☑		
62.	Pyrethrins	☐	☑		
63.	Quinoline	☐	☑		
64.	Resorcinol	☐	☑		
65.	Strontium	☐	☑		
66.	Strychnine	☐	☑		
67.	Styrene	☐	☑		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☑		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☑		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☑		
71.	Trichlorofon	☐	☑		
72.	Triethanolamine	☐	☑		
73.	Triethylamine	☐	☑		
74.	Trimethylamine	☐	☑		
75.	Uranium	☐	☑		
76.	Vanadium	☐	☑		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☑	No discharge from Outfall 002 since at least 2017	
78.	Xylene	☐	☑		
79.	Xylenol	☐	☑		
80.	Zirconium	☐	☑		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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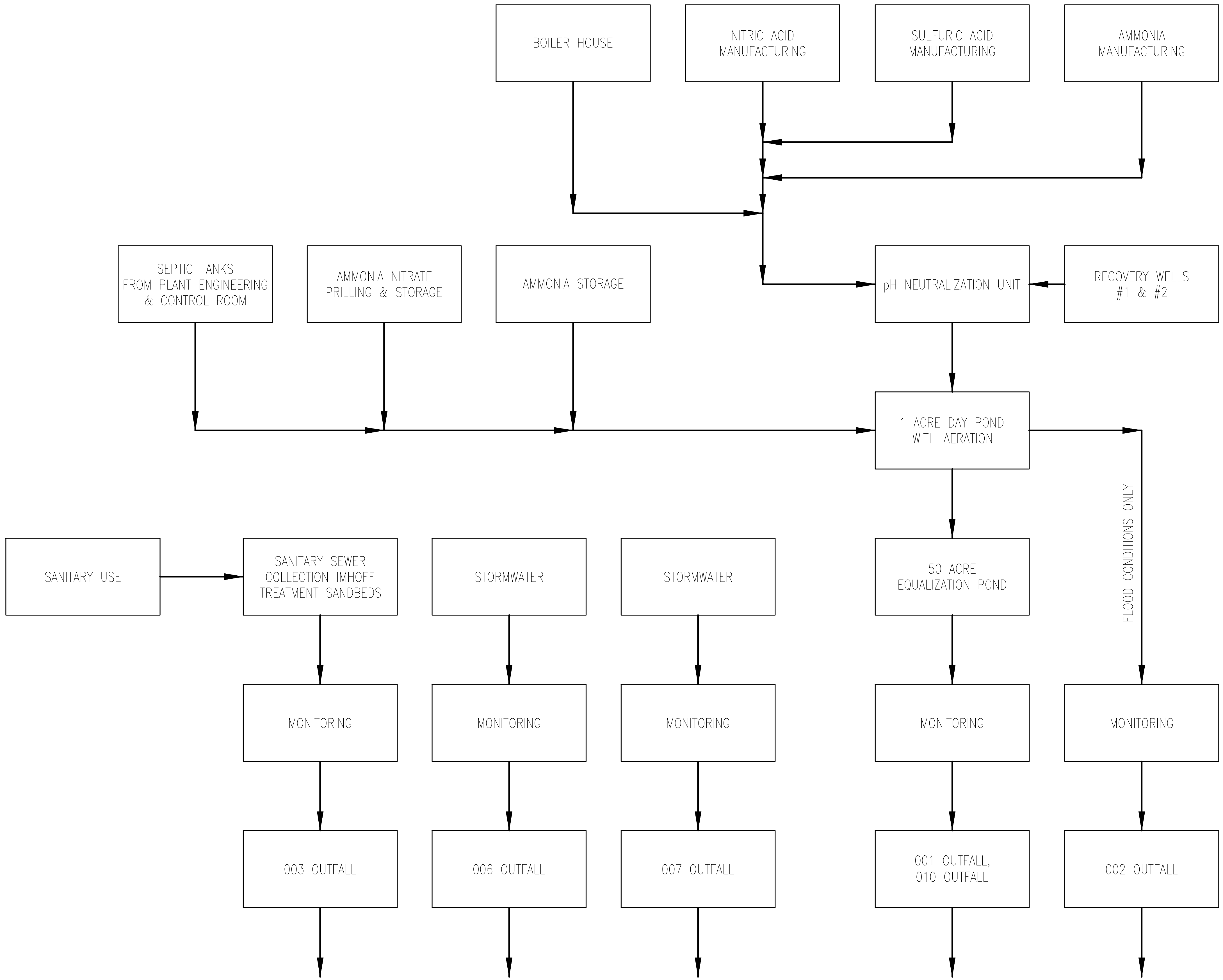
TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	✓	No discharge from Outfall 002 since at least 2017

PROCESS FLOW DIAGRAM



REVISIONS

ZONE	REV	DESCRIPTION	DATE	DR	APVD
	A	CREATED DRAWING	6/03/16	MPB	

EL DORADO CHEMICAL CO.
EL DORADO, ARKANSAS

PLANT: ENVIRONMENTAL | DEPT: 519

WATER FLOW
PROCESS FLOW DIAGRAM

DR BY: MPB	CHK:
APVD:	SCALE: NONE
DATE: 06/03/16	DWG NO. 519-WATERFLOW-PFD
SH 1 OF 1	REV A

FORM 2F

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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Form 2F NPDES

U.S Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below

Outfall Number	Receiving Water Name	Latitude	Longitude
001	Unnamed Tributary to Flat Creek	33° 15′ 33.8″ N	92° 41′ 14.2″ W
002	Unnamed Tributary to Flat Creek	33° 15′ 45.3″ N	92° 41′ 20.3″ W
006	Unnamed Tributary to Flat Creek	33° 16′ 03″ N	92° 41′ 02″ W
007	Unnamed Tributary to Flat Creek	33° 16′ 6.3″ N	92° 41′ 16″ W
010	Unnamed Tributary to Flat Creek	33° 15′ 32.6″ N	92° 41′ 14.4″ W
		° ′ ″	° ′ ″

SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))

Improvements

2.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No → SKIP to Section 3.

2.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

2.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item)

☐ Yes ☐ No

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SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map

3.1 Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)

☑ Yes ☐ No

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources

4.1 Provide information on the facility's pollutant sources in the table below.

Outfall Number	Impervious Surface Area (within a mile radius of the facility)	specify units	Total Surface Area Drained (within a mile radius of the facility)	specify units
001	20	acres	93.45 (Plant Area Only)	acres
002	20	acres	93.45 (Plant Area Only)	acres
010	20	acres	93.45 (Plant Area Only)	acres
006	1.0	acres	11.8	acres
007	4	acres	4.96	acres

4.2 Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)

Storm water runoff from any material stored or temporarily disposed of in the Outfall 001 drainage basin will be treated through EDCC's treatment system (see Section C. below). In general, significant materials (raw and finished product) are not stored or disposed of in such a manner to allow exposure to storm water. Transfer practices for ammonium nitrate do include: 1) cleaning, or scraping of residual ammonium nitrate from rail car floors through hoppers located on the bottom of the rail cars; 2) Removal of excess ammonium nitrate from rail cars that are over filled; and 3) Bulk warehouse dump truck spillage. these cases might be considered temporary storage of final product with exposure to storm water, and are located within the storm water drainage basins 006 and 007. In case 1), stainless steel pans are usually placed below the hoppers to collect scraped ammonium nitrate. In cases 2) and 3), spills from these operations are typically cleaned up immediately following the spill.

Pesticides, soil conditioners, and fertilizers are not used at the facility. Herbicides are occasionally used in spot applications.

4.3 Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)

Stormwater Treatment

Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F–1 (list)
001	Neutralization unit, followed by a 1-acre aeration pond, followed by a 50-acre equalization pond	2K, 3B, 3G
002	Neutralization unit, followed by a 1-acre aeration pond	2K, 3B
010	Neutralization unit, followed by a 1-acre aeration pond, followed by a 50-acre equalization pond	2K, 3B, 3G
006	None	N/A
007	None	N/A

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	AR0000752	El Dorado Chemical Company	

SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges

5.1 *I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.*

Name (print or type first and last name)	Official title
Derek Turner	General Manager
Signature	Date signed 3-29-22

5.2 Provide the testing information requested in the table below.

Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test
001/002/010	Visual		001/002/010
006	Visual		006
007	Visual		007

SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(c)(1)(i)(D))

Significant Leaks or Spills

6.1 Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.

None

SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

7.1 Is this a new source or new discharge?

☐ Yes → See instructions regarding submission of *estimated* data. ☑ No → See instructions regarding submission of *actual* data.

Tables A, B, C, and D

7.2 Have you completed Table A for each outfall?

☑ Yes ☐ No

Discharge Information Continued		
	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? ☑ Yes ☐ No ➔ SKIP to Item 7.5.
	7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? ☑ Yes ☐ No
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge? ☑ Yes ☐ No ➔ SKIP to Item 7.7.
	7.6	Have you listed all pollutants in Exhibit 2F–2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? ☑ Yes ☐ No
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? ☐ Yes ➔SKIP to Item 7.18. ☑ No
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge? ☑ Yes ☐ No ➔ SKIP to Item 7.10.
	7.9	Have you listed all pollutants in Exhibit 2F–3 that you know or have reason to believe are present in the discharge in Table C? ☑ Yes ☐ No
	7.10	Do you expect any of the pollutants in Exhibit 2F–3 to be discharged in concentrations of 10 ppb or greater? ☑ Yes ☐ No ➔ SKIP to Item 7.12.
	7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F–3 that you expect to be discharged in concentrations of 10 ppb or greater? ☑ Yes ☐ No
	7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☑ No ➔ SKIP to Item 7.14.
	7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☐ No
	7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? ☑ Yes ☐ No
	7.15	Do you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge? ☐ Yes ☑ No ➔ SKIP to Item 7.17.
	7.16	Have you listed pollutants in Exhibit 2F–4 that you know or believe to be present in the discharge and provided an explanation in Table C? ☐ Yes ☐ No
	7.17	Have you provided information for the storm event(s) sampled in Table D? ☑ Yes ☐ No

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Discharge Information Continued

Used or Manufactured Toxics

7.18 Is any pollutant listed on Exhibits 2F–2 through 2F–4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct?

☐ Yes ☑ No ➔ SKIP to Section 8.

7.19 List the pollutants below, including TCDD if applicable.

1.	4.	7.
2.	5.	8.
3.	6.	9.

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))

Biological Toxicity Testing Data

8.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years?

☑ Yes ☐ No ➔ SKIP to Section 9.

8.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
Chronic WET Testing	Required by Permit	☑ Yes ☐ No	With Monthly DMRs
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(g)(12))

Contract Analysis Information

9.1 Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 10.

9.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	American Interplex		
Laboratory address	8600 Kanis Road Little Rock, AR 72204		
Phone number	(501) 224-5060		
Pollutant(s) analyzed	All		

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SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

10.1 In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2	
☑ Section 1	☐ w/ attachments (e.g., responses for additional outfalls)	
☑ Section 2	☐ w/ attachments	
☑ Section 3	☐ w/ site drainage map	
☑ Section 4	☐ w/ attachments	
☑ Section 5	☐ w/ attachments	
☑ Section 6	☐ w/ attachments	
☑ Section 7	☑ Table A	☐ w/ small business exemption request
	☑ Table B	☐ w/ analytical results as an attachment
	☑ Table C	☑ Table D
☑ Section 8	☐ w/attachments	
☑ Section 9	☐ w/attachments (e.g., responses for additional contact laboratories or firms)	
☑ Section 10	☐	

10.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Derek Turner	General Manager
Signature	Date signed 3-29-22

OUTFALLS 001/010

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	001/010

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	13 mg/L		5.1 mg/L		24	
2.	Biochemical oxygen demand (BOD_5)	N/A	8.8 mg/L	N/A	3.87 mg/L	24	
3.	Chemical oxygen demand (COD)	N/A	27 mg/L	N/A	27 mg/L	1	
4.	Total suspended solids (TSS)	N/A	26 mg/L	N/A	13 mg/L	24	
5.	Total phosphorus	N/A	0.47 mg/L	N/A	0.22 mg/L	24	
6.	Total Kjeldahl nitrogen (TKN)	N/A	14 mg/L	N/A	14 mg/L	1	
7.	Total nitrogen (as N)	N/A	38 mg/L	N/A	38 mg/L	1	
8.	pH (minimum)	7.16		7.16		24	
	pH (maximum)	8.14		8.14		24	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	001/010

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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Ammonia-Nitrogen	N/A	55.0 mg/L	N/A	22.5 mg/L	24	
Nitrates	N/A	92.0 mg/L	N/A	42.3 mg/L	24	
Dissolved Oxygen	7.5 mg/L	N/A	N/A	N/A	24	
Total Dissolved Solids	N/A	600 mg/L	N/A	446.7 mg/L	24	
Chlorides	N/A	77.0 mg/L	N/A	48.13 mg/L	24	
Sulfates	N/A	140.0 mg/L	N/A	89.1 mg/L	24	
Mercury	N/A	0.007 ug/L	N/A	0.0051 ug/L	24	
Hexavalent Chromium	N/A	0.01 mg/L	N/A	0.01 mg/L	24	
Copper	N/A	0.011 mg/L	N/A	0.0057 mg/L	24	
Lead	N/A	0.0046 mg/L	N/A	0.0009 mg/L	24	
Nickel	N/A	0.01 mg/L	N/A	0.01 mg/L	24	
Selenium	N/A	0.002 mg/L	N/A	0.002 mg/L	24	
Silver	N/A	0.0005 mg/L	N/A	0.0005 mg/L	24	
ZInc	N/A	0.24 mg/L	N/A	0.13 mg/L	24	
Cyanide	N/A	0.013 mg/L	N/A	0.0101 mg/L	24	
Fecal Coliform	2400 col/100 mL	N/A	N/A	N/A	24	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	001/010

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
See Table B.						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
N/A					

Provide a description of the method of flow measurement or estimate.

Outfall 010 is continuously flow monitored using a totalizing meter.

OUTFALL 002

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease						
2.	Biochemical oxygen demand (BOD_5)	No discharge from Outfall 002 since at least 2017.					
3.	Chemical oxygen demand (COD)						
4.	Total suspended solids (TSS)						
5.	Total phosphorus						
6.	Total Kjeldahl nitrogen (TKN)						
7.	Total nitrogen (as N)						
8.	pH (minimum)						
	pH (maximum)						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	002

Form Approved 03/05/19
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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Ammonia-Nitrogen	No discharge from Outfall 002 since at least 2017.					
Nitrates						
Copper						
Lead						
Zinc						
Chlorides						
Sulfates						
Total Dissolved Solids						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	002

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
See Table B.						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
	AR0000752	El Dorado Chemical Company	002

Form Approved 03/05/19
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TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
	No discharge from Outfall 002 since at least 2017.				

Provide a description of the method of flow measurement or estimate.

OUTFALL 006

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	6.2 mg/L		5.06 mg/L		22	
2.	Biochemical oxygen demand (BOD_5)	N/A	5.2 mg/L	N/A	5.2 mg/L	1	
3.	Chemical oxygen demand (COD)	N/A	32 mg/L	N/A	32 mg/L	1	
4.	Total suspended solids (TSS)	N/A	78.0 mg/L	N/A	21.4 mg/L	22	
5.	Total phosphorus	N/A	0.2 mg/L	N/A	0.2 mg/L	1	
6.	Total Kjeldahl nitrogen (TKN)	N/A	12 mg/L	N/A	12 mg/L	1	
7.	Total nitrogen (as N)	N/A	49 mg/L	N/A	49 mg/L	1	
8.	pH (minimum)	6.3		6.3		22	
	pH (maximum)	8.97		8.97		22	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	006

Form Approved 03/05/19
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TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Ammonia-Nitrogen	N/A	33.0 mg/L	N/A	13.1 mg/L	22	
Nitrate + Nitrate-N	N/A	37.0 mg/L	N/A	37.0 mg/L	1	
Sulfate	N/A	78.0 mg/L	N/A	22.2 mg/L	22	
Total Dissolved Solids	N/A	450.0 mg/L	N/A	196.1 mg/L	22	
Chlorides	N/A	74.0 mg/L	N/A	13.3 mg/L	22	
Copper	N/A	35.0 ug/L	N/A	11.01 ug/L	22	
Lead	N/A	6.0 ug/L	N/A	1.77 ug/L	22	
Zinc	N/A	870 ug/L	N/A	239.39 ug/L	22	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	006

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TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	**Maximum Daily Discharge** (specify units)		**Average Daily Discharge** (specify units)		**Number of Storm Events Sampled**	**Source of Information** (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	**Flow-Weighted Composite**	**Grab Sample Taken During First 30 Minutes**	**Flow-Weighted Composite**		
See Table B.						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
	AR0000752	El Dorado Chemical Company	006

Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
02/03/2022	48	0.72	33 days	0.101 MGD	N/A

Provide a description of the method of flow measurement or estimate.

Flow is measured with a Parshall flume with totalizing meter.

OUTFALL 007

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	007

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	8.8 mg/L		5.5 mg/L		22	
2.	Biochemical oxygen demand (BOD_5)	N/A	4.5 mg/L	N/A	4.5 mg/L	1	
3.	Chemical oxygen demand (COD)	N/A	25 mg/L	N/A	25 mg/L	1	
4.	Total suspended solids (TSS)	N/A	82 mg/L	N/A	26.8 mg/L	22	
5.	Total phosphorus	N/A	< 0.1 mg/L	N/A	< 0.1 mg/L	1	
6.	Total Kjeldahl nitrogen (TKN)	N/A	8.2 mg/L	N/A	8.2 mg/L	1	
7.	Total nitrogen (as N)	N/A	56 mg/L	N/A	56 mg/L	1	
8.	pH (minimum)	6.0		6.0		22	
	pH (maximum)	8.43		8.43		22	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	007

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Ammonia- Nitrogen	N/A	95 mg/L	N/A	7 mg/L	22	
Nitrate + Nitrite- N	N/A	48 mg/L	N/A	48 mg/L	1	
Sulfate	N/A	330 mg/L	N/A	120.9 mg/L	22	
Total Dissolved Solids	N/A	450.0 mg/L	N/A	mg/L	22	
Chlorides	N/A	36.0 mg/L	N/A	8.9 mg/L	22	
Copper	N/A	22.0 mg/L	N/A	6.8 mg/L	22	
Lead	N/A	7.8 mg/L	N/A	1.02 mg/L	22	
Zinc	N/A	890.0 mg/L	N/A	147.1 mg/L	22	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AR0000752	El Dorado Chemical Company	007

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

List each pollutant shown in Exhibits 2F–2, 2F–3, and 2F–4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
See Table B.						

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
	AR0000752	El Dorado Chemical Company	007

Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

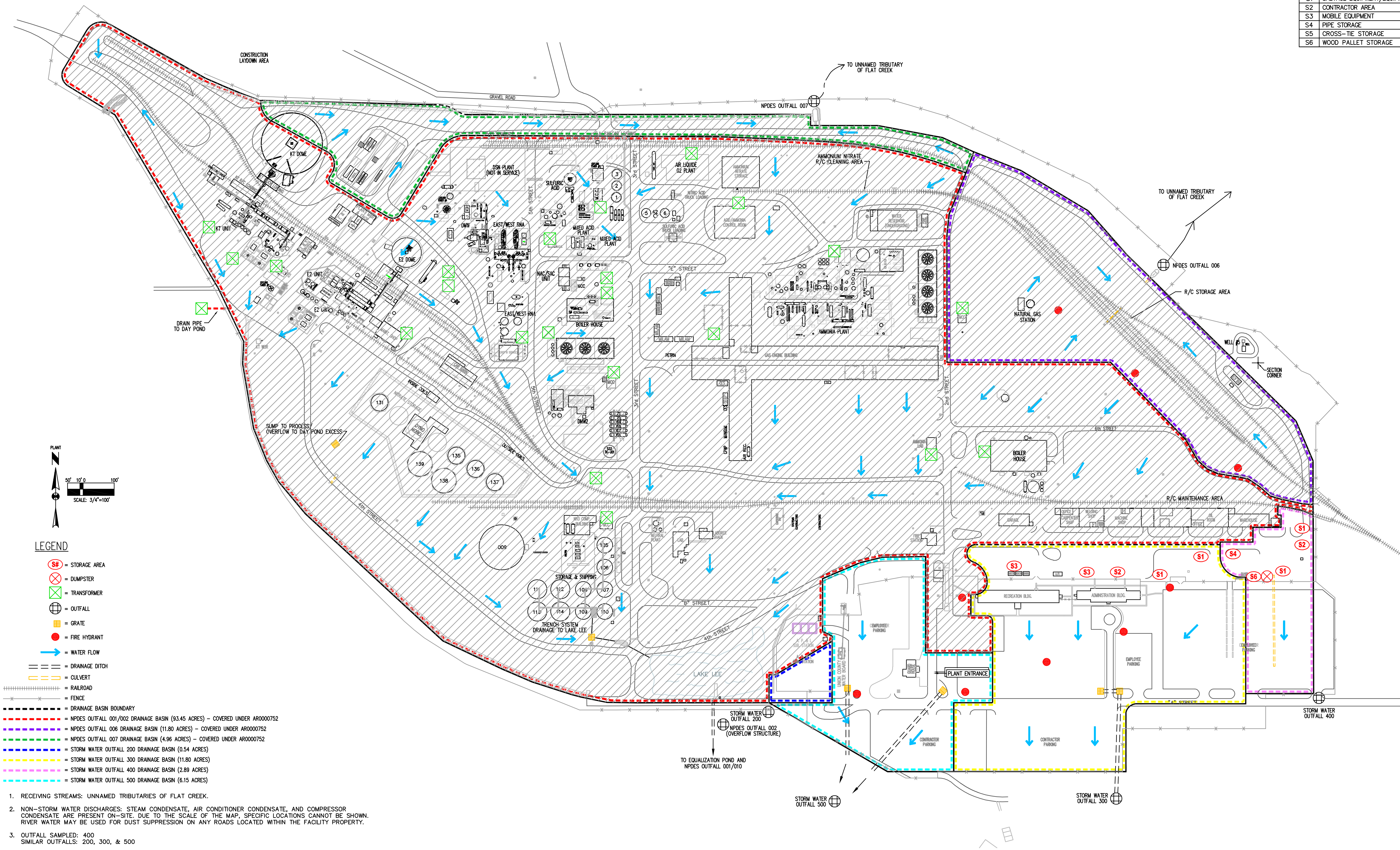
Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
02/03/2022	48	0.72	33 days	0.025 MGD	N/A

Provide a description of the method of flow measurement or estimate.

Flow is measured with a Parshall flume with totalizing meter.

SITE DRAINAGE MAP

STORAGE	
S1	SALVAGE EQUIPMENT/EQUIPMENT STORAGE
S2	CONTRACTOR AREA
S3	MOBILE EQUIPMENT
S4	PIPE STORAGE
S5	CROSS-TIE STORAGE
S6	WOOD PALLET STORAGE



LEGEND

- (S#) = STORAGE AREA
- = DUMPSTER
- = TRANSFORMER
- = OUTFALL
- = GRATE
- = FIRE HYDRANT
- = WATER FLOW
- = DRAINAGE DITCH
- = CULVERT
- = RAILROAD
- = FENCE
- = DRAINAGE BASIN BOUNDARY
- = NPDES OUTFALL 001/002 DRAINAGE BASIN (93.45 ACRES) – COVERED UNDER AR0000752
- = NPDES OUTFALL 006 DRAINAGE BASIN (11.80 ACRES) – COVERED UNDER AR0000752
- = NPDES OUTFALL 007 DRAINAGE BASIN (4.96 ACRES) – COVERED UNDER AR0000752
- = STORM WATER OUTFALL 200 DRAINAGE BASIN (0.54 ACRES)
- = STORM WATER OUTFALL 300 DRAINAGE BASIN (11.80 ACRES)
- = STORM WATER OUTFALL 400 DRAINAGE BASIN (2.89 ACRES)
- = STORM WATER OUTFALL 500 DRAINAGE BASIN (6.15 ACRES)

1. RECEIVING STREAMS: UNNAMED TRIBUTARIES OF FLAT CREEK.
2. NON-STORM WATER DISCHARGES: STEAM CONDENSATE, AIR CONDITIONER CONDENSATE, AND COMPRESSOR CONDENSATE ARE PRESENT ON-SITE. DUE TO THE SCALE OF THE MAP, SPECIFIC LOCATIONS CANNOT BE SHOWN. RIVER WATER MAY BE USED FOR DUST SUPPRESSION ON ANY ROADS LOCATED WITHIN THE FACILITY PROPERTY.
3. OUTFALL SAMPLED: 400
   SIMILAR OUTFALLS: 200, 300, & 500

NO	DATE	REVISION	BY	CK.	APPR.

DESIGNED BY	IT
CHECKED BY	AAG
APPR. BY	AAG
DRAWN BY	AAG

GBMc
Strategic Environmental Services
219 Brown Lane
Bryant, Arkansas 72022

SHEET TITLE
FACILITY SITE MAP FOR ARR000000 GENERAL PERMIT

JOB NAME
INDUSTRIAL STORM WATER POLLUTION PREVENTION PLAN
EL DORADO CHEMICAL COMPANY
EL DORADO, ARKANSAS

PROJECT NO.	2042-99-010
DATE	08/22/2019
SCALE	SHOWN
REV. NO.	
DWG. NO.	S1

FORM 2E

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AR0000752	El Dorado Chemical Company	

FORM 2E NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL FACILITIES WHICH DISCHARGE ONLY NONPROCESS WASTEWATER

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(h)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below.

Outfall Number	Receiving Water Name	Latitude	Longitude
003	Unnamed Tributary to Flat Creek	33° 15′ 40.66″ N	92° 41′ 9.67″ W
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

SECTION 2. DISCHARGE DATE (40 CFR 122.21(h)(2))

Discharge Date

2.1 Are you a new or existing discharger? (Check only one response.)

☐ New discharger ☑ Existing discharger ➔ SKIP to Section 3.

2.2 Specify your anticipated discharge date:

SECTION 3. WASTE TYPES (40 CFR 122.21(h)(3))

Waste Types

3.1 What types of wastes are currently being discharged if you are an existing discharger or will be discharged if you are a new discharger? (Check all that apply.)

☑ Sanitary wastes
☐ Restaurant or cafeteria waste
☐ Non-contact cooling water
☐ Other nonprocess wastewater (describe/explain directly below)

3.2 Does the facility use cooling water additives?

☐ Yes ☑ No ➔ SKIP to Section 4.

3.3 List the cooling water additives used and describe their composition.

Cooling Water Additives (list)	Composition of Additives (if available to you)

SECTION 4. EFFLUENT CHARACTERISTICS (40 CFR 122.21(h)(4))

Effluent Characteristics

4.1 Have you completed monitoring for all parameters in the table below at each of your outfalls and attached the results to this application package?

☑ Yes ☐ No; a waiver has been requested from my NPDES permitting authority (attach waiver request and additional information) ➔ SKIP to Section 5.

4.2 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Source (use codes per instructions)
		Mass	Conc.	Mass	Conc.	
Biochemical oxygen demand (BOD_5)	8	0.24 lb/d	2 mg/L	0.12 lb/d	2 mg/L	
Total suspended solids (TSS)	8	1.2 lb/d	10 mg/L	0.6 lb/d	10 mg/L	
Oil and grease	1	<0.33 lb/d	< 5 mg/L	<0.33 lb/d	< 5 mg/L	
Ammonia (as N)	10	0.64 lb/d	7.1 mg/L	0.14 lb/d	1.9 mg/L	
Discharge flow	24	0.42 MGD				
pH (report as range)	24	6.09 - 7.05				
Temperature (winter)	1	10.5 C				
Temperature (summer)	1	24.4 C				

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

Effluent Characteristics Continued

4.3 Is fecal coliform believed present, or is sanitary waste discharged (or will it be discharged)?

☑ Yes ☐ No ➔ SKIP to Item 4.5.

4.4 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Source (Use codes per Instructions.)
		Mass	Conc.	Mass	Conc.	
Fecal coliform	1		100 col		21.2 col	
E. coli						
Enterococci						

4.5 Is chlorine used (or will it be used)?

☐ Yes ☑ No ➔ SKIP to Item 4.7.

4.6 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Source (use codes per instructions)
		Mass	Conc.	Mass	Conc.	
Total Residual Chlorine						

4.7 Is non-contact cooling water discharged (or will it be discharged)?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.8 Provide data as requested in the table below.[1] (See instructions for specifics.)

Parameter or Pollutant	Number of Analyses (if actual data reported)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Source (use codes per instructions)
		Mass	Conc.	Mass	Conc.	
Chemical oxygen demand (COD)						
Total organic carbon (TOC)						

SECTION 5. FLOW (40 CFR 122.21(h)(5))

Flow

5.1 Except for stormwater water runoff, leaks, or spills, are any of the discharges you described in Sections 1 and 3 of this application intermittent or seasonal?

☐ Yes ➔ Complete this section. ☑ No ➔ SKIP to Section 6.

5.2 Briefly describe the frequency and duration of flow.

SECTION 6. TREATMENT SYSTEM (40 CFR 122.21(h)(6))

Treatment System

6.1 Briefly describe any treatment system(s) used (or to be used).

Imhoff tank with sand filter.

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AR0000752	El Dorado Chemical Company	

SECTION 7. OTHER INFORMATION (40 CFR 122.21(h)(7))

Other Information

7.1 Use the space below to expand upon any of the above items. Use this space to provide any information you believe the reviewer should consider in establishing permit limitations. Attach additional sheets as needed.

N/A

SECTION 8. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

8.1 In Column 1 below, mark the sections of Form 2E that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☑ Section 1: Outfall Location	☐ w/ attachments (e.g., responses for additional outfalls)
☑ Section 2: Discharge Date	☐ w/ attachments
☑ Section 3: Waste Types	☐ w/ attachments
☑ Section 4: Effluent Characteristics	☐ w/ attachments
☑ Section 5: Flow	☐ w/ attachments
☑ Section 6: Treatment System	☐ w/ attachments
☑ Section 7: Other Information	☐ w/ attachments
☑ Section 8: Checklist and Certification Statement	☐ w/ attachments

8.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Derek Turner	General Manager
Signature	Date signed 3-29-22

PRIORITY POLLUTANT SCAN

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility:

   ____El Dorado Chemical Company____

2. Name, address and telephone number of laboratory:

   ___American Interplex________501-224-5060____

   __8600 Kanis Rd, Little Rock, AR 72204____

3. Is the lab certified by the State of Arkansas? Yes _X___ No ___

4. What are the certification dates?

   Issued data 02/28/2022 Expire date 02/28/2023

5. Is the laboratory certified for all the parameters?

   YES __X__ No ____ (Explain)

6. Date and time of samples collected:

   1/18/2022 10:00 and 1/19/2022 10:10 and 03/02/2022 1000

7. Date and time samples were received in the laboratory:

   1/19/2022 11:00 and 03/02/2022 1120

8. Sample location (Outfall No.):

   Outfall 010

9. Samples collected by:

   Name Edward Pearson

   Title Environmental Technician

   Telephone 870-863-1400

10. I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Derek Turner	General Manager
Printed Name of person signing	Title
	3-29-22
Signature	Date signed

List all attachments to this form:

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable	ND	200.8	60	60
2. Arsenic (Total), Recoverable	5.8	200.8	0.5	0.5
3. Beryllium (Total), Recoverable	ND	200.8	0.5	0.5
4. Cadmium (Total), Recoverable	ND	200.8	0.5	0.5
5. Chromium (Total), Recoverable	ND	200.8	10	10
7. Chromium (6+), Dissolved	ND	SM 3500-Cr B 2011	10	10
8. Copper (Total), Recoverable	6.4	200.8	3	0.5
9. Lead (Total), Recoverable	0.52	200.8	0.5	0.5
10. Mercury (Total), Recoverable	ND	1631E	0.005	0.005
12. Nickel (Total), Recoverable	5.5	200.8	3	0.5
13. Selenium (Total), Recoverable	ND	200.8	5	5
14. Silver (Total), Recoverable	ND	200.8	0.5	0.5
15. Thallium (Total), Recoverable	ND	200.8	0.5	0.5
16. Zinc (Total), Recoverable	230	200.8	100	20
129. Phenols, Total Recoverable	20	420.1	5	5
17. Cyanide (Total), Recoverable	ND	SM 4500-CN C,E 2011	10	10

DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	ND	1613B	0.00001	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
19. Acrolein	ND	624.1	20	50
20. Acrylonitrile	ND	624.1	10	20
21. Benzene	ND	624.1	5	10
22. Bromoform	ND	624.1	5	10
23. Carbon Tetrachloride	ND	624.1	2	2
24. Chlorobenzene	ND	624.1	5	10
25. Chlorodibromomethane	ND	624.1	5	10
26. Chloroethane	ND	624.1	5	50
27. 2-Chloroethyl vinyl ether	ND	624.1	10	10
28. Chloroform	ND	624.1	10	10
29. Dichlorobromomethane	ND	624.1	5	10
30. 1,1-Dichloroethane	ND	624.1	5	10
31. 1,2-Dichloroethane	ND	624.1	5	10
32. 1,1-Dichloroethylene	ND	624.1	5	10
33. 1,2-Dichloropropane	ND	624.1	5	10
34. 1,3-Dichloropropylene	ND	624.1	5	10
35. Ethylbenzene	ND	624.1	5	10
36. Methyl Bromide [Bromomethane]	ND	624.1	5	50
37. Methyl Chloride [Chloromethane]	ND	624.1	5	50
38. Methylene Chloride	ND	624.1	5	20
39. 1,1,2,2-Tetrachloroethane	ND	624.1	5	10
40. Tetrachloroethylene	ND	624.1	5	10
41. Toluene	ND	624.1	5	10
42. 1,2-trans-Dichloroethylene	ND	624.1	2	10
43. 1,1,1-Trichloroethane	ND	624.1	5	10
44. 1,1,2-Trichloroethane	ND	624.1	5	10
45. Trichloroethylene	ND	624.1	5	10
46. Vinyl Chloride	ND	624.1	2	10

ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
47. 2-Chlorophenol	ND	625.1	5	10
48. 2,4-Dichlorophenol	ND	625.1	5	10
49. 2,4-Dimethylphenol	ND	625.1	5	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol	ND	625.1	10	50
51. 2,4-Dinitrophenol	ND	625.1	10	50
52. 2-Nitrophenol	ND	625.1	5	20
53. 4-Nitrophenol	ND	625.1	5	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	ND	625.1	5	10
55. Pentachlorophenol	ND	625.1	5	5
56. Phenol	ND	625.1	4	10
57. 2,4,6-Trichlorophenol	ND	625.1	5	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
58. Acenaphthene	ND	625.1	5	10
59. Acenaphthylene	ND	625.1	5	10
60. Anthracene	ND	625.1	5	10
61. Benzidine	ND	625.1	50	50
62. Benzo(a)anthracene	ND	625.1	5	5
63. Benzo(a)pyrene	ND	625.1	5	5
64. 3,4-Benzofluoranthene	ND	625.1	10	10
65. Benzo(ghi)perylene	ND	625.1	10	20
66. Benzo(k)fluoranthene	ND	625.1	5	5
67. Bis(2-chloroethoxy) methane	ND	625.1	5	10
68. Bis(2-chloroethyl) ether	ND	625.1	5	10
69. Bis(2-chloroisopropyl) ether	ND	625.1	5	10
70. Bis(2-ethylhexyl) phthalate	ND	625.1	5	10
71. 4-Bromophenyl phenyl ether	ND	625.1	5	10
72. Butyl benzyl phthalate	ND	625.1	5	10
73. 2-Chloronapthalene	ND	625.1	5	10
74. 4-Chlorophenyl phenyl ether	ND	625.1	5	10
75. Chrysene	ND	625.1	5	5
76. Dibenzo (a,h) anthracene	ND	625.1	5	5
77. 1,2-Dichlorobenzene	ND	625.1	5	10
78. 1,3-Dichlorobenzene	ND	625.1	5	10
79. 1,4-Dichlorobenzene	ND	625.1	5	10
80. 3,3'-Dichlorobenzidine	ND	625.1	5	5
81. Diethyl Phthalate	ND	625.1	5	10
82. Dimethyl Phthalate	ND	625.1	4	10
83. Di-n-Butyl Phthalate	ND	625.1	5	10
84. 2,4-Dinitrotoluene	ND	625.1	5	10
85. 2,6-Dinitrotoluene	ND	625.1	5	10
86. Di-n-octyl Phthalate	ND	625.1	5	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
87. 1,2-Diphenylhydrazine	ND	625.1	5	20
89. Fluorene	ND	625.1	5	10
90. Hexachlorobenzene	ND	625.1	5	5
91. Hexachlorobutadiene	ND	625.1	2	10
92. Hexachlorocyclopentadiene	ND	625.1	10	10
93. Hexachloroethane	ND	625.1	4	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	ND	625.1	5	5
95. Isophorone	ND	625.1	5	10
96. Naphthalene	ND	625.1	4	10
97. Nitrobenzene	ND	625.1	5	10
98. N-nitrosodimethylamine	ND	625.1	10	50
99. N-nitrosodi-n-propylamine	ND	625.1	10	20
100. N-nitrosodiphenylamine	ND	625.1	10	20
101. Phenanthrene	ND	625.1	5	10
102. Pyrene	ND	625.1	5	10
103. 1,2,4-Trichlorobenzene	ND	625.1	5	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin	ND	608.3	0.01	0.01
105. Alpha-BHC	ND	608.3	0.005	0.05
106. Beta-BHC	ND	608.3	0.01	0.05
107. Gamma-BHC	ND	608.3	0.01	0.05
108. Delta-BHC	0.44	608.3	0.2	0.05
109. Chlordane	ND	608.3	0.02	0.2
110. 4,4'-DDT	ND	608.3	0.02	0.02
111. 4,4'-DDE (p,p-DDX)	ND	608.3	0.01	0.1
112. 4,4'-DDD 9(p,p-TDE)	ND	608.3	0.02	0.1
113. Dieldrin	ND	608.3	0.005	0.02
114. Alpha-endosulfan	ND	608.3	0.01	0.01
115. Beta-endosulfan	ND	608.3	0.01	0.02
116. Endosulfan sulfate	ND	608.3	0.02	0.1
117. Endrin	ND	608.3	0.01	0.02
118. Endrin aldehyde	ND	608.3	0.05	0.1
119. Heptachlor	ND	608.3	0.005	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	ND	608.3	0.01	0.01
130. Chlorpyrifos	ND	608.3	0.02	0.07
121. PCB-1242	ND	608.3	0.1	0.2
122. PCB-1254	ND	608.3	0.1	0.2
123. PCB-1221	ND	608.3	0.1	0.2
124. PCB-1232	ND	608.3	0.1	0.2
125. PCB-1248	ND	608.3	0.1	0.2
126. PCB-1260	ND	608.3	0.1	0.2
127. PCB-1016	ND	608.3	0.1	0.2
128. Toxaphene	ND	608.3	0.2	0.3

CERTIFICATES OF GOOD STANDING

Search Incorporations, Cooperatives, Banks and Insurance Companies

This is only a preliminary search and no guarantee that a name is available for initial filing
until a confirmation has been received from the Secretary of State after filing has been processed
Please review our NAME AVAILABILITY GUIDELINES HERE prior to searching for a new entity name.

Printer Friendly Version

LLC Member information is now confidential per Act 865 of 2007

Use your browser's back button to return to the Search Results

Begin New Search

For service of process contact the Secretary of State's office.

Corporation Name	EL DORADO CHEMICAL COMPANY
Fictitious Names	EL DORADO CHEMICAL CO.
Filing #	100060003
Filing Type	Foreign For Profit Corporation
Filed under Act	For Bus Corp; 958 of 1987
Status	Good Standing
Principal Address	
Reg. Agent	CAPITOL CORPORATE SERVICES, INC.
Agent Address	300 SPRING BUILDING, SUITE 900 300 S. SPRING STREET LITTLE ROCK, AR 72201
Date Filed	07/22/1983
Officers	SEE ATTACHED, Incorporator/Organizer MARK T BEHRMAN , President MICHAEL J FOSTER , Secretary CHERYL MAGUIRE , Vice-President KRISTY CARVER , Treasurer
Foreign Name	N/A
Foreign Address	16 SOUTH PENNSYLVANIA AVE OKLAHOMA CITY, 73107
State of Origin	OK

Purchase a Certificate of Good Standing for this Entity

Pay Franchise Tax for this corporation

BUSINESS ENTITIES SEARCH - VIEW ENTITY

Print Page

Order Number: 53618420002

Details

Filing Number:	1900404572
Entity Name:	EL DORADO CHEMICAL COMPANY
Status:	In Existence
Entity Type:	Domestic For Profit Business Corporation
Jurisdiction:	Oklahoma
Original Filing Date:	May 3 1983
Duration:	Perpetual
Entity Address:	N/A

Registered Agent Information

Name:	CAPITOL DOCUMENT SERVICES, INC.
Effective:	Sep 8 2016
Address:	1833 S MORGAN RD
City,State,ZipCode:	OKLAHOMA CITY OK 73128

FILING HISTORY :

Document Number	Filing Type	Filing Date
590734	Certificate of Incorporation	May 3, 1983
690997	Amended Certificate of Incorporation	April 5, 1984
1358263	Change of Registered Agent and/or Office	November 1, 1994
690998	Restated Certificate Of Incorporation	December 8, 2000
14229220002	Certificate of Merger	April 1, 2010
23391590002	Certificate of Merger	December 23, 2013
29847110023	Change of Registered Agent and/or Office	March 11, 2016
31377710013	Change of Registered Agent and/or Office	September 8, 2016
32275690002	Certificate of Merger	December 23, 2016
37345710011	Change of Registered Agent and/or Office	June 11, 2018

NAMES INFORMATION

Name	Name Type	Name Status	Creation Date
E.D.C., INC.	Legal	Former	May 3, 1983
EL DORADO CHEMICAL COMPANY	Legal	In use	April 5, 1984

PRINCIPALS

Name	Title
SHARON D MEIER	Incorporator
NATALIE ARGO	Incorporator
THOMAS A MANN	Incorporator

TRADENAMES

No entries found.

STOCKS INFORMATION

Date	Stock Type	Number of Shares	PAR Value	Amount
May 3, 1983	Common (Voting)	25000	1	$0.00

POC: $0

TAC:	$25000
Total Investment in OK:	$0
Qualified:	NO

FINANCIAL REPORTS

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

Or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number: 1-7677

LSB INDUSTRIES, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware **(State of or other Jurisdiction Incorporation or Organization)**	**73-1015226** **(I.R.S. Employer Identification No.)**
3503 NW 63rd Street, Suite 500, Oklahoma City, Oklahoma **(Address of Principal Executive Offices)**	**73116** **(Zip Code)**

Registrant's Telephone Number, Including Area Code: (405) 235-4546

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value $.10	**LXU**	**New York Stock Exchange**
Preferred Stock Purchase Rights	**N/A**	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports submit such files). ☒ Yes ☐ No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of the Registrant's voting common equity held by non-affiliates of the Registrant, computed by reference to the price at which the voting common stock was last sold as of June 30, 2021, was approximately $141 million. As a result, the Registrant is an accelerated filer as of December 31, 2021. For purposes of this computation, shares of the Registrant's common stock beneficially owned by each executive officer and director of the Registrant and LSB Funding LLC were deemed to be owned by affiliates of the Registrant as of June 30, 2021. Such determination should not be deemed an admission that such executive officers, directors or entity of our common stock are, in fact, affiliates of the Registrant or affiliates as of the date of this Form 10-K.

As of February 18, 2022, the Registrant had 89,564,162 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's proxy statement for its annual meeting of stockholders will be filed with the Securities and Exchange Commission within 120 days after the end of its 2020 fiscal year, are incorporated by reference in Part III.

Auditor Firm Id:	00042	Auditor Name:	Ernst & Young LLP	Auditor Location:	Oklahoma City, OK, United States

PART I

ITEM 1. BUSINESS

Overview

All references to "LSB Industries," "LSB," "the Company," "we," "us," and "our" refer to LSB Industries, Inc. and its subsidiaries, except where the context makes clear that the reference is only to LSB Industries, Inc. itself and not its subsidiaries. Notes referenced throughout this document refer to consolidated financial statement footnote disclosures that are found in Item 8.

The Company was formed in 1968 as an Oklahoma corporation and became a Delaware corporation in 1977. We manufacture and market chemical products for the agricultural, industrial and mining markets. We own and operate three multi plant facilities in El Dorado, Arkansas (the "El Dorado Facility"), Cherokee, Alabama (the "Cherokee Facility"), and Pryor, Oklahoma (the "Pryor Facility"), and we operate a facility on behalf of Covestro LLC ("Covestro") in Baytown, Texas (the "Baytown Facility"). Our products are sold through distributors and directly to end customers throughout the United States and parts of Mexico and Canada.

Our Business

Our business manufactures products for three principal markets:

- ***Agricultural Markets:*** ammonia, fertilizer grade ammonium nitrate ("AN" and "HDAN") and urea ammonia nitrate ("UAN");
- ***Industrial Markets:*** high purity and commercial grade ammonia, high purity AN, sulfuric acids, concentrated, blended and regular nitric acid, mixed nitrating acids, carbon dioxide, and diesel exhaust fluid ("DEF"); and
- ***Mining Markets:*** industrial grade AN ("LDAN") and AN solutions.

The products we manufacture at our facilities are primarily derived from natural gas (a raw material feedstock). Our facilities and production processes have been designed to produce products that are marketable at nearly each stage of production. This design has allowed us to develop and deploy a business model optimizing the mix of products to capture the value opportunities in the end markets we serve with a focus on balancing our production.

The chart below highlights representative products and applications in each of our end markets.

End Market	Products	Applications
Agricultural	UAN, HDAN and ammonia	Fertilizer and fertilizer blends for corn and other crops; NPK fertilizer blends
Industrial	Nitric acid, metallurgical and commercial grade ammonia, sulfuric acid, diesel exhaust fluid and other urea solutions, Specialty E-2 ammonium nitrate and CO2	Semi-conductor and polyurethane intermediates, ordnance; Pulp and paper, alum, water treatment, metals and vanadium processing; Power plant emissions abatement, water treatment, refrigerants, metals processing; Exhaust stream additive, horticulture / greenhouse applications; refrigeration
Mining	LDAN, AN solution and HDAN	Ammonium nitrate fuel oil (ANFO) and specialty emulsions for mining applications, surface mining, quarries, and construction

The following table summarizes net sales information relating to our products:

	2021	2020
Percentage of consolidated net sales:		
Agricultural products	48%	51%
Industrial products	42%	38%
Mining products	10%	11%
	100%	100%

For information regarding our net sales, operating results and total assets for the past three fiscal years, see the Consolidated Financial Statements included in this report.

Our Strategy

We pursue a strategy of balancing the sale of product as fertilizer into the agriculture markets at spot prices or short duration pre-sales and developing industrial and mining customers that purchase substantial quantities of products, primarily under contractual obligations and/or pricing arrangements that generally provide for the pass through of some raw material and other manufacturing costs. We believe this product and market diversification strategy allows us to have more consistent levels of production compared to some of our competitors and helps reduce the volatility risk inherent in the prices of our raw material feedstock and/or the changes in demand for our products.

The strategy of developing industrial and mining customers helps to moderate the risk inherent in the agricultural markets where spot sales prices of our agricultural products may not have a correlation to the natural gas feedstock costs but rather reflect market conditions for like and competing nitrogen sources. This volatility of sales pricing in our agricultural products may, from time to time, compromise our ability to recover our full cost to produce the product. Additionally, the lack of sufficient non-seasonal agricultural sales volume to operate our manufacturing facilities at optimum levels can preclude us from balancing production and storage capabilities. Looking forward, we remain focused on upgrading margins by maximizing downstream production. Our strategy calls for further development of industrial customers who assume the volatility risk associated with the raw material costs and mitigate the effects of seasonality in the agricultural sector.

Our strategy also includes evaluating and pursuing acquisitions of strategic assets or companies, mergers with other companies and investment in additional production capacity where we believe those acquisitions, mergers or expansion of production capacity will enhance the value of the Company and provide appropriate returns.

Key Operating Initiatives for 2022

As discussed in more detail under “Key Operating Initiatives for 2022” of “Management’s Discussion and Analysis of Financial Condition and Results of Operations” (“MD&A”) contained in Item 7 of this report, we believe our future results of operations and financial condition will depend significantly on our ability to successfully implement the following key initiatives:

- *Investing in Safety and Reliability at our Facilities to further our Progress Towards Becoming a “Best in Class” Chemical Plant Operator Supplying our Customers with Products of the Highest Quality.*
- *Continue Broadening the Distribution and Optimization of our Product mix.*
- *Development and Implementation of a Strategy to Capitalize on Low Carbon Ammonia and Clean Energy Opportunities*.
- *Pursue Acquisition of Strategic Assets or Companies.*

As for our liquidity, we had approximately $143.5 million of combined cash and borrowing capacity at the end of 2021, which we believe provides us with ample liquidity to fund our operations and meet our current obligations. Also see discussions under “Liquidity and Capital Resources” of our MD&A.

Our Competitive Strengths

Strategically Located Chemical Assets and Long-Standing Customer Relationships

Our business benefits from highly advantageous locations with logistical and distribution benefits. We have access to the Nustar ammonia pipeline from the U.S. Gulf at our El Dorado Facility, which provides low-cost transportation to distribution points. The El Dorado Facility also has rail access providing favorable freight logistics to our industrial and agricultural customers and cost advantaged when selling a number of our products West of the Mississippi River. Our Cherokee Facility is located east of the Mississippi River, allowing it to reach customers that are not freight logical for others. Our Cherokee Facility sits adjacent to the Tennessee River, providing barge receipt and shipping access, in addition to truck and rail delivery access. Our Pryor Facility is located in the heart of the Southern Plains with close proximity to the Port of Catoosa along with strategic rail and truck delivery access.

Advantaged Raw Material Cost Position

We produce ammonia at our El Dorado, Cherokee and Pryor Facilities, which allows us to take advantage of the spread between producing and purchasing ammonia at those facilities.

Diversified Sources of Revenue

Our business serves a broad range of end markets, which we believe diminishes the cyclicality of our financial performance. Our business serves the agricultural, industrial and mining markets. The flexible nature of our production process and storage capability allows us the ability to shift our product mix based on end market demand.

Operation of Multiple Facilities and High Production Capacity

We operate our business through several facilities. Operating multiple facilities diversifies the risk and impact of operational issues that may occur at a single plant, which gives us a strategic advantage over competitors that operate their company through a single facility. Additionally, our competitive production capacity of our combined plants allows us to decrease manufacturing costs, helping us to achieve enhanced margins.

Agricultural Market Conditions

As discussed in more detail under “Key Industry Factors” of MD&A, the price at which our agricultural products are ultimately sold depends on numerous factors, including the supply and demand for nitrogen fertilizers which, in turn, depends upon world grain demand and production levels, the cost and availability of transportation and storage, weather conditions, competitive pricing and the availability of imports. Additionally, expansions or upgrades of competitors’ facilities and international and domestic political and economic developments continue to play an important role in the global nitrogen fertilizer industry economics. These factors can affect, in addition to selling prices, the level of inventories in the market which can cause price volatility and affect product margins.

Looking forward to 2022, corn prices for the vast majority of 2021 remained above levels not seen since 2014, and at current prices exceeding $6 per bushel, are significantly above the $4 per bushel level that we believe represents a very favorable level for farmers to earn significant income on their crops. The strong corn prices over the past year have been driven, in part, by a rebound in the production of ethanol, a gasoline additive that represents approximately 40% of total U.S. corn use annually, as miles driven have returned to near pre-pandemic levels. Also supporting the strong corn pricing over the past year has been Chinese demand for corn for use as feed for swine as part of the nation’s efforts to rebuild its swine production in the wake of a virus that dramatically reduced its swine population several years ago. This demand for feed is expected to remain robust as China has moved to large institutional hog farms which consume significant quantities of corn. Globally, corn supplies have been constrained by drought conditions in South America and the Western U.S., which has served to further bolster corn prices. Early forecasts point to U.S. corn acreage to be planted in the 2022-2023 planting season to be approximately 90 to 92 million acres, modestly lower than the 2021-2022 estimate of 93.4 million acres, but still at a very healthy level to support strong demand for fertilizers.

Agricultural Products

We produce and sell UAN, HDAN and ammonia, all of which are nitrogen-based fertilizers. We sell these agricultural products to farmers, ranchers, fertilizer dealers and distributors primarily in the ranch land and grain production markets in the U.S. Our nitrogen-based fertilizers are used to grow food crops, biofuel feedstock crops, pasture land for grazing livestock and forage production. We maintain long-term relationships with wholesale agricultural distributors and retailers and also sell directly to agricultural end-users through our network of wholesale and retail distribution centers.

The price at which our agricultural products are ultimately sold depends on numerous factors, including the supply and demand for nitrogen fertilizers which, in turn, depends upon world grain demand and production levels, the cost and availability of transportation and storage, weather conditions, competitive pricing and the availability of imports. Additionally, expansions or upgrades of competitors’ facilities combined with international and domestic political and economic developments continue to play an important role in the global nitrogen fertilizer industry economics. These factors can affect, in addition to selling prices, the level of inventories in the market which can cause price volatility and affect product margins.

We develop our market position in these areas by emphasizing high quality products, customer service and technical advice.

In addition, we have an agreement with a third-party purchaser, Coffeyville Resources Nitrogen Fertilizers, LLC, (“CVR”), to market and sell a portion of our UAN. Demand for sales under this agreement is based on the expected needs of the purchaser’s customers. The agreement provides the exclusive right (but not the obligation) to purchase, at market prices, substantially all of the UAN produced at our Pryor Facility. The term of the agreement runs through June 2022, with automatic one-year extensions, subject to a 180-day advance notice of termination from CVR or a 90-day advance notice from us.

We sell most of our agricultural products at the current spot market price in effect at the time of shipment, although we periodically enter into forward sales commitments for some of these products.

Industrial and Mining Market Conditions

As discussed in more detail under "Key Industry Factors" of MD&A, in our industrial markets, our sales volumes are typically driven by changes in general economic conditions, energy prices, metals market prices and our contractual arrangements with certain large customers. In our mining markets, our sales volumes are typically driven by changes in the overall North American consumption levels of mining products that can be impacted by weather. Additionally, changes in natural gas prices and demand in renewable power sources, such as wind and solar in the electrical generation sector, will impact demand for our mining products and impact competition within the other sectors of this market.

Looking forward to 2022, selling prices have continued to improve as the supply of ammonia remains tight due to strong global demand, curtailed global supply due to rising natural gas prices, numerous global unplanned outages and lower than expected product imports. As a result, the Tampa Ammonia benchmark price increased to, and remains at multi-year high levels, which has translated into higher selling prices for our products as many of our industrial contracts are indexed to this benchmark price. Demand trends for the industrial products we sell, primarily nitric acid and ammonia, have remained robust despite disruptions to certain end markets, such as auto manufacturing which has been constrained due to a shortage of microprocessors, as activity in other markets, such as homebuilding and power generation has remained strong. In addition, our sales of nitric acid increased steadily throughout 2021 pursuant to the new long-term nitric acid supply contract discussed below. Demand for our mining products continues to improve as quarry and construction activity has been elevated due to robust levels of residential, commercial and civil infrastructure buildout along with strong demand for precious metals, including expectations for rising copper production to support the growing domestic production of electronic vehicles.

Industrial and Mining Products

We manufacture and sell industrial acids and other chemical products primarily to the polyurethane intermediates, paper, fibers, emission control, and electronics industries. In addition, we produce and sell blended and regular nitric acid and industrial and high purity ammonia for many specialty applications, including the reduction of air emissions from power plants.

Sales of our industrial and mining products are generally made to customers pursuant to sales contracts or pricing arrangements on terms that include the cost of the primary raw materials as a pass-through component in the sales price. These contractual sales stabilize the effect of commodity cost changes and fluctuations in demand for these products due to the cyclicality of the end markets.

During 2020, one of our subsidiaries, El Dorado Chemical Company ("EDC") entered into a contract with a customer to supply nitric acid. Under the agreement, EDC will supply between 70,000 to 100,000 tons of nitric acid annually. The initial contract term began in January 2021 and extends through 2027 and includes automatic one-year renewal terms.

In addition, EDC and Koch Fertilizer LLC ("Koch Fertilizer") are parties to an ammonia purchase and sale agreement, under which Koch Fertilizer agreed to purchase, with minimum purchase requirements, a portion of the ammonia that is in excess of EDC's internal needs. The term of the agreement runs until June 2023, with annual renewal options thereafter.

We operate the Baytown Facility on behalf of Covestro and we believe it is one of the largest and most technologically advanced nitric acid manufacturing units in the U.S. We operate and maintain this facility pursuant to a long-term operating contract. The term of this agreement runs until October 2029 with options for renewal.

Our industrial products sales volumes are dependent upon general economic conditions primarily in the housing, automotive, and paper industries. Our sale prices generally vary with the market price of ammonia, sulfur or natural gas, as applicable, in our pricing arrangements with customers.

Our industrial business competes based upon service, price and location of production and distribution sites, product quality and performance and provides inventory management as part of the value-added services offered to certain customers.

We also produce and sell LDAN, HDAN and AN solution to the mining industry, which are primarily used as AN fuel oil and specialty emulsions for usage in the quarry and the construction industries, for metals mining, and to a lesser extent, for coal mining. We have signed long-term contracts with certain customers that provide for the annual sale of LDAN, which a portion include various natural-gas-based pricing arrangements. One of our customers has a plant located at our El Dorado Facility.

Raw Materials

The products we manufacture at our facilities are primarily derived from natural gas. This raw material feedstock is a commodity and subject to price fluctuations. Natural gas is the primary raw material for producing ammonia, UAN, nitric acid and acid blends and other products at our El Dorado, Cherokee and Pryor Facilities. For 2021, we purchased approximately 28.3 million MMBtus of natural gas.

The chemical facilities' natural gas feedstock requirements are generally purchased at spot market price. Periodically, we enter into volume purchase commitments and/or forward contracts to lock in the cost of certain of the expected natural gas requirements primarily to match quantities needed to produce product that has been sold forward. At December 31, 2021, we had natural gas contracts of approximately 5.4 million MMBtus, at an average cost of $4.53 per MMBtu. These contracts extend through March 2022.

See further discussion relating to the outlook for our business under "Key Industry Factors."

Competition

We operate in a highly competitive market with many other larger chemical companies, such as Austin Powder Company, CF Industries Holdings, Inc., Chemtrade Logistics L.L.C.; Cornerstone Chemical, Eco Services Operation Corp., a subsidiary of PQ Holding Group, OCI Partners NV, Dyno Nobel, a subsidiary of Incitec Pivot Limited, The Gavilon Group, Helm AG, Koch Industries, Norfalco, Nutrien, Orica Limited; Praxair, Inc., Quad Chemical Corporation, Southern States Chemical, Trammo Inc. and Veolia North America (some of whom are our customers), many of whom have greater financial and other resources than we do. We believe that competition within the markets we serve is primarily based upon service, price, location of production and distribution sites, and product quality and performance.

Human Capital Management

As of December 31, 2021, we employed 545 persons, 180 of whom are represented by unions under agreements, including agreements being negotiated, that expire in July 2022 through July 2024. We believe we have good relationships with our employees.

Oversight & Management

Our success depends on the capabilities and strength of our workforce. Our Human Resources Director is responsible for developing and executing our human capital strategy. This strategy includes the acquisition, development, and retention of talent to deliver on our overall strategy. Our Chief Executive Officer ("CEO") regularly updates our Board of Directors ("Board") on the operation and status of these human capital activities including:

- *Training & Development* – We are committed to the continued development of our employees. Quarterly reviews of operations and talent occur across all operational business units and corporate functions. It is the responsibility of the CEO and the executive staff to review talent data on an annual basis and plan development actions to ensure succession and continuous improvement and growth.
- *Engagement* – We believe that we have favorable relations with our employees. Approximately 33% of our employees are represented under collective bargaining agreements. We take proactive measures, such as conducting employee surveys to understand and drive employee engagement. Additionally, we conduct benefit surveys annually in an effort to ensure that any changes to benefits are improvements or add value for employees. Each of our business units conducts roundtable discussions to develop action plans to improve the work environment. We have continued to increase our communication efforts with employees, which our workforce has recognized favorably.
- *Health and Safety* – Our Health and Safety Management System continues to build to establish a consistent approach to enhance the work environment, culture and compliance at each business unit. This system is guided by a newly formed executive committee that provides focus and priority to compliance and industry best practices that protect our employees while performing work within our operations. Each business team is responsible for evaluating its unique operations and applying the defined controls to engage employees and manage injury risk. We use leading and lagging metrics, such as near miss tracking, assigning potential risk consequences to events, incident tracking, and releases to monitor our performance and effectiveness across our operations and individual business teams. Events are investigated based on risk using root cause analysis tools and corrective actions are tracked to ensure prevention. In addition, the management system includes periodic third-party audits and internal self-assessment to continuously improve.

Like many other companies, we have experienced challenges resulting from the COVID-19 pandemic and have focused energy and effort on protecting our employees and their families from potential virus exposure while continuing safe and compliant operations. Since the beginning of the pandemic, we established detailed plans and protocols, executed remote work arrangements, and increased communication to employees. To date, our focused actions, which have aligned with the guidance from the Centers for Disease Control and Prevention, have not resulted in any work stoppage.

Government Laws and Regulations

Our facilities and operations are subject to numerous federal, state and local laws and regulations, including matters regarding environmental, health and safety, many of which provide for certain performance obligations, substantial fines and criminal sanctions for violations. Certain of these laws and regulations impose strict liability as well as joint and several liability for costs required to remediate and restore sites where hazardous substances, hydrocarbons or solid wastes have been stored or released. We may be required to remediate contaminated properties currently or formerly owned or operated by us or facilities of third parties that received waste generated by our operations regardless of whether such contamination resulted from the conduct of others or from consequences of our own actions that were in compliance with all applicable laws at the time those actions were taken.

There can be no assurance that we will not incur material costs or liabilities in complying with such laws or in paying fines or penalties for violation of such laws. Our insurance may not cover all environmental risks and costs or may not provide sufficient coverage if an environmental claim is made against us. These laws and regulations (including enforcement policies thereunder) have in the past resulted, and could in the future result, in significant compliance expenses, cleanup costs (for our sites or third-party sites where our wastes were disposed of), penalties or other liabilities relating to the handling, manufacture, use, emission, discharge or disposal of hazardous or toxic materials at or from our facilities or the use or disposal of certain of its chemical products. Historically, our subsidiaries have incurred significant expenditures in order to comply with these laws and regulations and are reasonably expected to do so in the future. We will also be obligated to manage certain discharge water outlets and monitor groundwater contaminants at our chemical facilities should we discontinue the operations of a facility.

Also see discussions concerning our risk factors under Item 1A of this report.

Available Information

We make available free of charge through our Internet website (www.lsbindustries.com) or by calling Investor Relations (212) 836-9607 our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and, if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. In addition to the reports filed or furnished with the SEC, we publicly disclose material information from time to time in press releases, at annual meetings of stockholders, in publicly accessible conferences and investor presentations, and through our website. The information included in our website does not constitute part of this Annual Report on Form 10-K.

Section 16(a) of the Exchange Act requires our directors, officers, and beneficial owners of more than 10% of our common stock to file with the SEC reports of holdings and changes in beneficial ownership of our stock. Based solely on a review of copies of the Forms 3, 4 and 5 furnished to us with respect to 2021, or written representations that no Form 5 was required to be filed, we believe that during 2021 all our directors and officers and beneficial owners of more than 10% of our common stock timely filed their required Forms 3, 4, or 5.

ITEM 1A. RISK FACTORS

1. Risks Relating to Our Liquidity

We may not be able to generate sufficient cash to service our debt and may be required to take other actions to satisfy the obligations under our debt agreements, which may not be successful.

Our ability to make scheduled payments on our debt obligations depends on our financial condition and operating performance, prevailing economic and competitive conditions, and certain financial, business and other factors, some of which may be beyond our control. We may not be able to maintain a level of cash flows sufficient to pay the principal and interest on our debt, including the $500 million principal amount of our 6.250% Senior Secured Notes due 2028 (the “New Notes”).

If cash flows and capital resources are insufficient to fund our debt obligations, we could face substantial liquidity problems and will need to seek additional capital through the issuance of debt, the issuance of equity, asset sales or a combination of the foregoing. If we are unsuccessful, we will need to reduce or delay investments and capital expenditures, or to dispose of other assets or operations, seek additional capital, or restructure or refinance debt. These alternative measures may not be successful, may not be completed on economically attractive terms, or may not be adequate for us to meet our debt obligations when due. Additionally, our debt agreements limit the use of the proceeds from many dispositions of assets or operations. As a result, we may not be permitted to use the proceeds from these dispositions to satisfy our debt obligations. If we cannot make scheduled payments on our debt, we will be in default and the outstanding principal and interest on our debt could be declared to be due and payable, in which case we could be forced into bankruptcy or liquidation or required to substantially restructure or alter our business operations or debt obligations. In such an event, we may not have sufficient assets to repay all of our debt.

Further, if we suffer or appear to suffer from a lack of available liquidity, the evaluation of our creditworthiness by counterparties and rating agencies and the willingness of third parties to do business with us could be materially and adversely affected. In particular, our credit ratings could be lowered, suspended or withdrawn entirely at any time by the rating agencies. Downgrades in our long-term debt ratings generally cause borrowing costs to increase and the potential pool of investors and funding sources to decrease and could trigger liquidity demands pursuant to the terms of contracts, leases or other agreements. Any future transactions by us, including the issuance of additional debt, the sale of any operating assets, or any other transaction to manage our liquidity, could result in temporary or permanent downgrades of our credit ratings.

Our substantial indebtedness level could limit our financial and operating activities, and adversely affect our ability to incur additional debt to fund future needs.

We currently have a substantial amount of indebtedness. As a result, this level could, among other things:

- require us to dedicate a substantial portion of our cash flow to the payment of principal and interest, thereby reducing the funds available for operations and future business opportunities;
- make it more difficult for us to satisfy our obligations, including our repurchase obligations;
- limit our ability to borrow additional money if needed for other purposes, including working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes, on satisfactory terms or at all;
- limit our ability to adjust to changing economic, business and competitive conditions;
- place us at a competitive disadvantage with competitors who may have less indebtedness or greater access to financing;
- make us more vulnerable to an increase in interest rates, a downturn in our operating performance or a decline in general economic conditions; and
- make us more susceptible to changes in credit ratings, which could affect our ability to obtain financing in the future and increase the cost of such financing.

Any of the foregoing could adversely affect our liquidity, operating results and financial condition.

Our debt agreements and the Exchange Agreement contain covenants and restrictions that could restrict or limit our financial and business operations. A breach of these covenants or restrictions could result in an event of default under one or more of our debt agreements or contracts at different entities within our capital structure, including as a result of cross acceleration or default provisions.

Our debt agreements and the Exchange Agreement contain various covenants and other restrictions that, among other things, limit flexibility in operating our businesses. A breach of any of these covenants or restrictions could result in a significant portion of our debt becoming due and payable or could result in significant contractual liability. These covenants and other restrictions limit our ability to, among other things:

- incur additional debt or issue preferred shares;
- pay dividends on, repurchase or make distributions in respect of capital stock, make other restricted payments;
- make investments or certain capital expenditures;
- sell or transfer assets;

- create liens on assets to secure debt;
- engage in certain fundamental corporate changes or changes to our business activities;
- make certain material acquisitions;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our assets;
- enter into transactions with affiliates;
- designate subsidiaries as unrestricted subsidiaries; and
- repay, repurchase or modify certain subordinated and other material debt.

The Working Capital Revolver Loan also contains certain affirmative covenants and requires the borrowers to comply with a fixed charge coverage ratio (as defined in the Working Capital Revolver Loan) if their excess availability (as defined in the Working Capital Revolver Loan) falls below a certain level.

These covenants and restrictions could affect our ability to operate our business and may limit our ability to react to market conditions or take advantage of potential business opportunities as they arise. Additionally, our ability to comply with these covenants may be affected by events beyond our control, including general economic and credit conditions and industry downturns.

In addition, certain failures to make payments when due on, or the acceleration of, significant indebtedness constitutes a default under some of our debt instruments, including the indenture governing the notes. Further, a breach of any of the covenants or restrictions in a debt instrument could result in an event of default under such debt instrument. Upon the occurrence of an event of default under one of these debt instruments, our lenders or noteholders could elect to declare all amounts outstanding under such debt instrument to be immediately due and payable and/or terminate all commitments to extend further credit. Such actions by those lenders or noteholders could cause cross defaults or accelerations under our other debt. If we were unable to repay those amounts, the lenders or noteholders could proceed against any collateral granted to them to secure such debt. In the case of a default under debt that is guaranteed, holders of such debt could also seek to enforce the guarantees. If lenders or noteholders accelerate the repayment of all borrowings, we would likely not have sufficient assets and funds to repay those borrowings. Such occurrence could result in our or our applicable subsidiary going into bankruptcy, liquidation or insolvency.

The age of our chemical manufacturing facilities increases the risk for unplanned downtime, which may be significant.

Our business is comprised of operating units of various ages and levels of automated control. While we have continued to make significant annual capital improvements, potential age or control related issues have occurred in the past and may occur in the future, which could cause damage to the equipment and ancillary facilities. As a result, we have experienced and may continue to experience additional downtime at our chemical facilities in the future.

The equipment required for the manufacture of our products is specialized, and the time for replacement of such equipment can be lengthy, resulting in extended downtime in the affected unit. In addition, the cost for such equipment could be influenced by changes in regulatory policies (including tariffs) of foreign governments, as well as the U.S. laws and policies affecting foreign trade and investment.

Although we use various reliability and inspection programs and maintain a significant inventory of spare equipment, which are intended to mitigate the extent of production losses, unplanned outages may still occur. As a result, these planned and unplanned downtime events at our chemical facilities have in the past and could in the future adversely affect our liquidity, operating results and financial condition.

LSB is a holding company and depends, in large part, on receiving funds from its subsidiaries to fund our indebtedness.

LSB is a holding company with no significant operations or material assets other than the equity interests it holds in its subsidiaries and conducts all of its operations through its subsidiaries. As a result, LSB’s ability to meet its obligations depends, in large part, on the operating performance and cash flows of its subsidiaries, which will be affected by general economic, industry, financial, competitive, operating and other factors beyond our control, and the ability of its subsidiaries to make distributions and pay dividends to LSB.

Each of LSB’s subsidiaries is a separate and distinct legal entity and, under certain circumstances, legal and contractual restrictions, as well as the financial condition and operating requirements of such subsidiaries, may limit LSB’s ability to obtain cash from its subsidiaries. Any payment of dividends, distributions, loans or advances to LSB by its subsidiaries could also be subject to taxes or restrictions on dividends or transfers under applicable local law in the jurisdictions in which LSB’s subsidiaries operate.

2. Risks Relating to Our Business

Pandemics or disease outbreaks, such as COVID-19, have and may in the future disrupt our business, which could adversely affect our financial performance.

COVID-19 has evolved into a global pandemic and the full extent of its impact will depend on future developments that are uncertain and cannot be accurately predicted, including new information that may emerge concerning the COVID-19 pandemic and the actions to contain the COVID-19 pandemic or treat its impact. Currently, all of the facilities we own and operate have been designated as essential critical infrastructure based on guidelines issued by the United States Department of Homeland Security's Cybersecurity and Infrastructure Security Agency. Since we produce fertilizer products used by the agriculture industry, as well as chemical products required in a variety of industrial manufacturing processes, LSB has been determined to be a critical service, and therefore, our facilities are remaining in operation despite the evolving global health crisis resulting from the COVID-19 pandemic. However, if additional mandatory closures of businesses are imposed by the federal, state and local governments to control the spread of the virus, these closures could disrupt the operations of our management, business and finance teams. In addition, a significant downturn in global economic growth, or recessionary conditions in major geographic regions, may lead to reduced demand for a portion or all our products. Legislative, regulatory, judicial or social influences related to the COVID-19 pandemic may affect our financial performance and our ability to conduct our business.

An extended period of remote work arrangements due to the COVID-19 pandemic could exacerbate cybersecurity risks. Our business depends on the proper functioning and availability of our information technology platform, including communications and data processing systems. We are also required to effect electronic transmissions with third parties including clients, vendors and others with whom we do business, and with our Board. We believe we have implemented appropriate security measures, controls and procedures to safeguard our information technology systems and to prevent unauthorized access to such systems and any data processed or stored in such systems, and we periodically evaluate and test the adequacy of such systems, measures, controls and procedures and perform third-party risk assessments; however, there can be no guarantee that such systems, measures, controls and procedures will be effective, that we will be able to establish secure capabilities with all of third parties, or that third parties will have appropriate controls in place to protect the confidentiality of our information. Security breaches could expose us to a risk of loss or misuse of our information, litigation and potential liability.

The Omicron variant of COVID-19 began to spread rapidly across the globe in the fourth quarter of fiscal year 2021 and began to affect our business, as well as our customers' and suppliers' business in similar ways as the initial surge of COVID-19. In addition, inflation and supply chain disruptions, in part exacerbated by the spread of the Omicron variant, have impacted companies and consumers in the United States. We have begun to experience increased inventory shipping costs and could see annual price increases from some of our vendors. In light of these trends, our management has taken, and will continue to take, a number of steps aimed to mitigate the impact of the Omicron variant, supply chain disruptions and inflation.

As the COVID-19 pandemic continues to impact communities, our business operations could be disrupted or delayed, and our business, financial condition, and results of operations could be adversely affected.

Terrorist attacks and other acts of violence or war, and natural disasters (such as hurricanes, etc.), have negatively affected and could negatively affect U.S. and foreign companies, the financial markets, the industries where we operate, our operations and our profitability.

Terrorist attacks in the U.S and elsewhere and natural disasters (such as hurricanes or pandemic health crises) have in the past and can in the future negatively affect our operations. We cannot predict further terrorist attacks and natural disasters in the U.S. and elsewhere. These attacks or natural disasters have contributed to economic instability in the U.S. and elsewhere, and further acts of terrorism, violence, war or natural disasters could affect the industries where we operate, our ability to purchase raw materials, our business, results of operations and financial condition. In addition, terrorist attacks and natural disasters may directly affect our physical facilities, especially our chemical facilities, or those of our suppliers or customers and could affect our sales, our production capability and our ability to deliver products to our customers. In the past, hurricanes affecting the Gulf Coast of the U.S. have negatively affected our operations and those of our customers. As previously noted, some scientists have concluded that increasing concentrations of greenhouse gases in the Earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts and floods and other climatic events. If any such effects, whether anthropogenic or otherwise, were to occur in areas where we or our clients operate, they could have an adverse effect on our business, financial condition and results of operations.

A major factor underlying the current high level of demand for our nitrogen-based fertilizer products is the production of ethanol. A decrease in ethanol production or an increase in ethanol imports could have a material adverse effect on our results of operations, financial condition and ability to make cash distributions.

A major factor underlying the solid level of demand for our nitrogen-based fertilizer products is the production of ethanol in the United States and the use of corn in ethanol production. Ethanol production in the United States is highly dependent upon a myriad of federal statutes and regulations and is made significantly more competitive by various federal and state incentives and mandated usage of renewable fuels pursuant to the federal renewable fuel standards ("RFS"). To date, the RFS has been satisfied primarily with fuel ethanol blended into gasoline. However, a number of factors, including the continuing "food versus fuel" debate and studies showing that expanded ethanol usage may increase the level of greenhouse gases in the environment as well as be unsuitable for small engine use, have resulted in calls to reduce subsidies for ethanol, allow increased ethanol imports and to repeal or waive (in whole or in part) the current RFS, any of which could have an adverse effect on corn-based ethanol production, planted corn acreage and fertilizer demand. Therefore, ethanol incentive programs may not be renewed, or if renewed, they may be renewed on terms significantly less favorable to ethanol producers than current incentive programs. Therefore, a decrease in ethanol production or an increase in ethanol imports could have a material adverse effect on our overall business, results of operations, financial condition and liquidity.

We are reliant on a limited number of key facilities.

Our nitrogen production is concentrated in four separate complexes. The suspension of operations at any of these complexes could adversely affect our ability to produce our products and fulfill our commitments and could have a material adverse effect on liquidity, financial condition, results of operations and business.

Seasonality can adversely affect our business.

If seasonal demand is less than we expect, we may be left with excess inventory that will have to be stored (in which case our results of operations will be negatively affected by any related increased storage costs) or liquidated (in which case the selling price may be below our production, procurement and storage costs). The risks associated with excess inventory and product shortages are exacerbated by the volatility of natural gas and nitrogen fertilizer prices and the relatively brief periods during which farmers can apply nitrogen fertilizers. If prices for our products rapidly decrease, we may be subject to inventory write-downs, adversely affecting our operating results. If seasonal demand is greater than we expect, we may experience product shortages, and customers of ours may turn to our competitors for products that they would otherwise have purchased from us.

Weather conditions adversely affect our business.

The products (primarily agricultural) produced and sold by us have been in the past, and could be in the future, materially affected by adverse weather conditions (such as excessive rain or drought) in the primary markets for our fertilizer and related agricultural products. In addition, weather can cause an interruption to the operations of our chemical facilities. Many scientists have concluded that increasing concentrations of greenhouse gases in the Earth’s atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts and floods and other climatic events. These climate changes might also occur as the result of other phenomena that human activity is unable to influence, including changes in solar activity and volcanic activity. Regardless of the cause, if any of these unusual weather events occur during the primary seasons for sales of our agricultural products (March-June and September-November), this could have a material adverse effect on our agricultural sales and our financial condition and results of operations.

Climate Change may adversely affect our business.

Over the course of the past several years, global climate conditions have become increasingly inconsistent, volatile and unpredictable. Many of the regions in which we do business have experienced excessive moisture, cold, drought and/or heat of an unprecedented nature at various times of the year. In some cases, these conditions have either reduced or obviated the need for our products, particularly in the agriculture space, whether pre-plant, at-plant, post-emergent or at harvest. Due to the unpredictable nature of these conditions, growers and distributors appear to have become increasingly conservative in procurement practices and the accumulation of inventory. Further, the random nature of climactic change has made it increasingly difficult to forecast market demand and, consequently, financial performance, from year-to-year. There is no guarantee that climate change will abate in the near future, and it is possible that such change will continue to hinder our ability to forecast sales performance with accuracy and otherwise adversely affect our financial performance.

Our business and customers are sensitive to adverse economic cycles.

Our business can be affected by cyclical factors such as inflation, currency exchange rates, global energy policy and costs, regulatory policies (including tariffs), global market conditions and economic downturns in specific industries. Certain sales are sensitive to the level of activity in the agricultural, mining, automotive and housing industries. Therefore, substantial changes could adversely affect our operating results, liquidity, financial condition and capital resources.

There is intense competition in the markets we serve.

Substantially all of the markets in which we participate are highly competitive with respect to product quality, price, distribution, service, and reliability. We compete with many companies, domestic and foreign, that have greater financial, marketing and other resources. Competitive factors could require us to reduce prices or increase spending on product development, marketing and sales, which could have a material adverse effect on our business, results of operation and financial condition.

We compete with many U.S. producers and producers in other countries, including state-owned and government-subsidized entities. Some competitors have greater total resources and are less dependent on earnings from chemical sales, which make them less vulnerable to industry downturns and better positioned to pursue new expansion and development opportunities. Our competitive position could suffer to the extent we are not able to expand our own resources sufficiently either through investments in new or existing operations or through acquisitions, joint ventures or partnerships. An inability to compete successfully could result in the loss of customers, which could adversely affect our sales and profitability.

An increase of imported agricultural products could adversely affect our business.

Russia, Ukraine and Trinidad have substantial capacity to produce and export fertilizers. Producers in these countries also benefit from below-market prices for natural gas, due to government regulation and other factors.

In addition, producers in China have substantial capacity to produce and export urea. Depending on various factors, including prevailing prices from other exporters, the price of coal, and the price of China’s export tariff, higher volumes of urea from China could be imported into the U.S. at prices that could have an adverse effect on the selling prices of other nitrogen products, including the nitrogen products we manufacture and sell.

A substantial portion of our sales is dependent upon a limited number of customers.

For 2021, ten customers accounted for approximately 47% of our consolidated net sales. The loss of, or a material reduction in purchase levels by, one or more of these customers could have a material adverse effect on our business, results of operations, financial condition and liquidity if we are unable to replace a customer with other sales on substantially similar terms.

A change in the volume of products that our customers purchase on a forward basis, or the percentage of our sales volume that is sold to our customers on a forward basis, could increase our exposure to fluctuations in our profit margins and materially adversely affect our business, financial condition, results of operations and cash flows.

We offer our customers from time-to-time, the opportunity to purchase products from us on a forward basis at prices and delivery dates we propose. Under our forward sales programs, customers generally make an initial cash down payment at the time of order and pay the remaining portion of the contract sales under their usual invoice terms when the performance obligation is satisfied. Forward sales improve our liquidity due to the cash payments received from customers in advance of shipment of the product and allow us to improve our production scheduling and planning and the utilization of our manufacturing and distribution assets. Any cash payments received in advance from customers in connection with forward sales are reflected on our consolidated balance sheets as a current liability until the related performance obligations are satisfied, which can take up to several months. We believe the ability to purchase products on a forward basis is most appealing to our customers during periods of generally increasing prices for nitrogen fertilizers. Our customers may be less willing or even unwilling to purchase products on a forward basis during periods of generally decreasing or stable prices or during periods of relatively high fertilizer prices due to the expectation of lower prices in the future or limited capital resources. In periods of rising fertilizer prices, selling our nitrogen fertilizers on a forward basis may result in lower profit margins than if we had not sold fertilizer on a forward basis. Conversely, in periods of declining fertilizer prices, selling our nitrogen fertilizers on a forward basis may result in higher profit margins than if we had not sold fertilizer on a forward basis. In addition, fixing the selling prices of our products, often months in advance of their ultimate delivery to customers, typically causes our reported selling prices and margins to differ from spot market prices and margins available at the time the performance obligation is satisfied.

Cost and the lack of availability of raw materials could materially affect our profitability and liquidity.

Our sales and profits are heavily affected by the costs and availability of primary raw materials. These primary raw materials are typically subject to considerable price volatility, and recent global supply chain disruptions and increased inflation in the United States have led to further heightened volatility. Historically, when there have been rapid increases in the cost of these primary raw materials, we have sometimes been unable to timely increase our sales prices to cover all of the higher costs incurred. While we periodically enter into futures/forward contracts to economically hedge against price increases in certain of these raw materials, there can be no assurance that we will effectively manage against price fluctuations in those raw materials.

Natural gas represents the primary raw material feedstock in the production of most of our chemical products. Although we enter into contracts with certain customers that provide for the pass-through of raw material costs, we have a substantial amount of sales that do not provide for the pass-through of raw material costs. Also, the spot sales prices of our agricultural products may not correlate to the cost of natural gas but rather reflect market conditions for similar and competing nitrogen sources. This lack of correlation can compromise our ability to recover our full cost to produce the products in this market. As a result, in the future, we may not be able to pass along to all of our customers the full amount of any increases in raw material costs. Future price fluctuations in our raw materials may have an adverse effect on our business, financial condition, liquidity and results of operations.

Additionally, we depend on certain vendors to deliver natural gas and other key components that are required in the production of our products. Any disruption in the supply of natural gas and other key components could result in lost production or delayed shipments.

The price of natural gas in North America and worldwide has been volatile in recent years and had declined on average due in part to the development of significant natural gas reserves, including shale gas, and the rapid improvement in shale gas extraction techniques, such as hydraulic fracturing and horizontal drilling. However, recent disruptions in the global supply chain and increased inflation in the United States have led to reduced availability and increased prices of natural gas in the fourth quarter of fiscal year 2021, and they may continue to have an impact in the near term in fiscal year 2022. Future production of natural gas from shale formations could be reduced by regulatory changes that restrict drilling or hydraulic fracturing or increase its cost or by reduction in oil exploration and development prompted by lower oil prices and resulting in production of less associated natural gas. Additionally, increased demand for natural gas, particularly in the Gulf Coast Region, due to increased industrial demand and increased natural gas exports could result in increased natural gas prices.

We have suspended in the past, and could suspend in the future, production at our chemical facilities due to, among other things, the high cost or lack of availability of natural gas and other key components, which could adversely affect our competitiveness in the markets we serve. Accordingly, our business, financial condition, liquidity and results of operations could be materially affected in the future by the lack of availability of natural gas and other key components and increase costs relating to the purchase of natural gas and other key components.

Our business is subject to risks involving derivatives and the risk that our hedging activities might not be effective.

We may utilize natural gas derivatives to hedge our financial exposure to the price volatility of natural gas, the principal raw material used in the production of nitrogen-based products. We may use futures, financial swaps and option contracts traded in the over-the-counter markets or on exchanges to hedge our risk. Our use of derivatives can result in volatility in reported earnings due to the unrealized mark-to-market adjustments that occur from changes in the value of the derivatives that do not qualify for, or to which we do not apply, hedge accounting. To the extent that our derivative positions lose value, we may be required to post collateral with our counterparties, adversely affecting our liquidity. We have also used fixed-price, physical purchase and sales contracts to hedge our exposure to natural gas price volatility. Hedging arrangements are imperfect and unhedged risks will always exist. In addition, our hedging activities may themselves give rise to various risks that could adversely affect us. For example, we are exposed to counterparty credit risk when our derivatives are in a net asset position. The counterparties to our derivatives are multi-national commercial banks, major financial institutions or large energy companies. Our liquidity could be negatively impacted by a counterparty default on settlement of one or more of our derivative financial instruments or by the trigger of any cross-default provisions or credit support requirements. Additionally, the International Swaps and Derivative Association master netting arrangements for most of our derivative instruments contain credit-risk-related contingent features, such as cross-default and/or acceleration provisions and credit support requirements. In the event of certain defaults or a credit ratings downgrade, our counterparty may request early termination and net settlement of certain derivative trades or may require us to collateralize derivatives in a net liability position. At other times we may not utilize derivatives or derivative strategies to hedge certain risks or to reduce the financial exposure of price volatility. As a result, we may not prevent certain material adverse impacts that could have been mitigated through the use of derivative strategies.

Our transportation and distribution activities rely on third-party providers, which subject us to risks and uncertainties beyond our control that may adversely affect our operations.

We rely on railroad, trucking, pipeline and other transportation service providers to transport raw materials to our manufacturing facilities, to coordinate and deliver finished products to our storage and distribution system and our retail centers and to ship finished products to our customers. These transportation operations, equipment and services are subject to various hazards, including adverse operating conditions, extreme weather conditions, system failures, work stoppages, equipment and personnel shortages, delays, accidents such as spills and derailments and other accidents and operating hazards.

In the event of a disruption of existing transportation or terminaling facilities for our products or raw materials, alternative transportation and terminaling facilities may not have sufficient capacity to fully serve all of our customers or facilities. An extended interruption in the delivery of our products to our customers or the supply of natural gas, ammonia or sulfur to our production facilities could adversely affect sales volumes and margins.

These transportation operations, equipment and services are also subject to environmental, safety, and regulatory oversight. Due to concerns related to accidents, terrorism or increasing concerns regarding transportation of potentially hazardous substances, local, provincial, state and federal governments could implement new regulations affecting the transportation of raw materials or our finished products. If transportation of our products is delayed or we are unable to obtain raw materials as a result of any third party’s failure to operate properly or the other hazards described above, or if new and more stringent regulatory requirements are implemented affecting transportation operations or equipment, or if there are significant increases in the cost of these services or equipment, our revenues and cost of operations could be adversely affected. In addition, we may experience increases in our transportation costs, or changes in such costs relative to transportation costs incurred by our competitors.

Future technological innovation could affect our business.

Future technological innovation, such as the development of seeds that require less crop nutrients, or developments in the application of crop nutrients, if they occur, could have the potential to adversely affect the demand for our products and results of operations.

Cyber security risks could adversely affect our business.

As we continue to increase our dependence on information technologies to conduct our operations, including as a result of remote work environments due to COVID-19, the risks associated with cyber security also increase. We rely on our enterprise resource planning software (“ERP”) and other information systems, among other things, to manage our manufacturing, supply chain, accounting and financial functions. Additionally, third parties on whose systems we place significant reliance for the conduct of our business are also subject to cyber security risks. We are significantly dependent upon internet connectivity and a third-party cloud hosting vendor. We have implemented security procedures and measures in order to protect our information from being vulnerable to theft, loss, damage or interruption from a number of potential sources or events. Although we believe these measures and procedures are appropriate, we may not have the resources or technical sophistication to anticipate, prevent, or recover from rapidly evolving types of cyber-attacks. Compromises to our information systems could have an adverse effect on our business, results of operations, liquidity and financial condition.

We may engage in certain strategic transactions which may adversely affect our financial condition.

An important part of our business strategy is the acquisition of strategic assets or companies. Our management is currently evaluating and pursing certain such opportunities, and from time to time separately provides indications of interest in respect of similar transactions, which may be significant. Any such discussions may or may not result in the consummation of a transaction, and we may not be able to identify or complete any of these potential acquisitions. We cannot predict the effect, if any, that any announcement or consummation of a transaction would have on the price of our securities. While the documents governing our indebtedness include certain restrictions on our ability to finance any acquisitions of new assets, such restrictions contain various exceptions and limitations.

There is no guarantee that any such transactions will be successful or, even if consummated, improve our operating results. We may incur costs, breakage fees or other expenses in connection with any such transactions or may not be able to obtain the necessary financing for such transactions on acceptable terms. Accordingly, any such transactions may ultimately have a material adverse effect on our operating results.

In addition, any future acquisitions could present a number of risks, including:

- the risk of using management time and resources to pursue acquisitions that are not successfully completed;
- the risk of incorrect assumptions regarding the future results of acquired operations or business;
- the risk of failing to integrate the operations or management of any acquired operations or assets successfully and timely; and
- the risk of diversion of management’s attention from existing operations or other priorities.

If we are unsuccessful in integrating acquisitions in a timely and cost-effective manner, our financial condition and results of operations could be adversely affected.

3. Risks Relating to Legal, Regulatory and Compliance Matters

Our operations and the production and handling of our products involve significant risks and hazards.

Our operations are subject to hazards inherent in the manufacture, transportation, storage and distribution of chemical products, including some products that are highly toxic and corrosive. These hazards include, among other things, explosions; fires; severe weather and natural disasters; train derailments, collisions, vessel groundings and other transportation and maritime incidents; leaks and ruptures involving storage tanks, pipelines and rail cars; spills, discharges and releases of toxic or hazardous substances or gases; deliberate sabotage and terrorist incidents; mechanical failures; unscheduled plant downtime; labor difficulties and other risks. Some of these hazards can cause bodily injury and loss of life, severe damage to or destruction of property and equipment and environmental damage and may result in suspension of operations for an extended period of time and/or the imposition of civil or criminal penalties and liabilities. We periodically experience minor releases of ammonia related to leaks from our equipment. Similar events may occur in the future. As a result, such events could have a material adverse effect on our results of operations and financial condition.

Current and future legislative or regulatory requirements affecting our business may result in increased costs and decreased revenues, cash flows and liquidity or could have other negative effects on our business.

Our business is subject to numerous health, safety, security and environmental laws and regulations. The manufacture and distribution of chemical products are activities that entail health, safety and environmental risks and impose obligations under health, safety and environmental laws and regulations, many of which provide for substantial fines and potential criminal sanctions for violations. Although we believe we have established processes to monitor, review and manage our businesses to comply with the numerous health, safety and environmental laws and regulations, we previously were, and in the future, may be, subject to fines, penalties and sanctions for violations and substantial expenditures for cleanup costs and other liabilities relating to the handling, manufacture, use, emission, discharge or disposal of effluents at or from our chemical facilities. Further, a number of our chemical facilities are dependent on environmental permits to operate, the loss or modification of which could have a material adverse effect on their operations and our results of operation and financial condition. These operating permits are subject to modification, renewal and revocation. In addition, third parties may contest our ability to receive or renew certain permits that we need to operate, which can lengthen the application process or even prevent us from obtaining necessary permits. We regularly monitor and review our operations, procedures and policies for compliance with permits, laws and regulations. Despite these compliance efforts, risk of noncompliance or permit interpretation is inherent in the operation of our business.

There can be no assurance as to the amount or timing of future expenditures for environmental compliance or remediation, and actual future expenditures may be different from the amounts we currently anticipate. We try to anticipate future regulatory requirements that might be imposed and plan accordingly to remain in compliance with changing environmental laws and regulations and to minimize the costs of compliance.

Changes to the production equipment at our chemical facilities that are required in order to comply with health, safety and environmental regulations may require substantial capital expenditures.

Explosions and/or losses at other chemical facilities that we do not own (such as the April 2013 explosion in West, Texas) could also result in new or additional legislation or regulatory changes, particularly relating to public health, safety or any of the products manufactured and/or sold by us or the inability on the part of our customers to obtain or maintain insurance as to certain products manufactured and/or sold by us, which could have a negative effect on our revenues, cash flow and liquidity.

In summary, new or changed laws and regulations or the inability of our customers to obtain or maintain insurance in connection with any of our chemical products could have an adverse effect on our operating results, liquidity and financial condition.

We may not have adequate insurance.

While we maintain liability, property and business interruption insurance, including certain coverage for environmental contamination, it is subject to coverage limits and policies that may exclude coverage for some types of damages. Although there may currently be sources from which such coverage may be obtained, the coverage may not continue to be available to us on commercially reasonable terms or the possible types of liabilities that may be incurred by us may not be covered by our insurance. In addition, our insurance carriers may not be able to meet their obligations under the policies, or the dollar amount of the liabilities may exceed our policy limits. Even a partially uninsured claim, if successful and of significant magnitude, could have a material adverse effect on our business, results of operations, financial condition and liquidity.

Furthermore, we are subject to litigation for which we could be obligated to bear legal, settlement and other costs, which may be in excess of any available insurance coverage. If we are required to incur all or a portion of the costs arising out of any litigation or investigation as a result of inadequate insurance proceeds, if any, our business, results of operations, financial condition and liquidity could be materially adversely affected. For further discussion of our litigation, please see “Other Pending, Threatened or Settled Litigation” in Note 9 to the Consolidated Financial Statements included in this report.

We may be required to modify or expand our operating, sales and reporting procedures and to install additional equipment in order to comply with current and possible future government regulations.

The chemical industry in general, and producers and distributors of ammonia and AN specifically, are scrutinized by the government, industry and public on security issues. Under current and proposed regulations, we may be required to incur substantial additional costs relating to security at our chemical facilities and distribution centers, as well as in the transportation of our products. These costs could have a material effect on our results of operations, financial condition, and liquidity. The cost of such regulatory changes, if significant, could lead some of our customers to choose other products over ammonia and AN, which may have a significant adverse effect on our business.

The “Secure Handling of Ammonium Nitrate Act of 2007” was enacted by the U.S. Congress, and subsequently the U.S. Department of Homeland Security (“DHS”) published a notice of proposed rulemaking in 2011. This regulation proposes to require sellers, buyers, their agents and transporters of solid AN and certain solid mixtures containing AN to possess a valid registration issued by DHS, keep certain records, report the theft or unexplained loss of regulated materials, and comply with certain other new requirements. We and others affected by this proposal have submitted appropriate comments to DHS regarding the proposed regulation. It is possible that DHS could significantly revise the requirements currently being proposed. Depending on the provisions of the final regulation to be promulgated by DHS and on our ability to pass these costs to our customers, these requirements may have a negative effect on the profitability of our AN business and may result in fewer distributors who are willing to handle the product. DHS has not finalized this rule, and has indicated that its next action, and the timing of such an action, is undetermined.

On August 1, 2013, U.S. President Obama issued an executive order addressing the safety and security of chemical facilities in response to recent incidents involving chemicals such as the explosion at West, Texas. The President directed federal agencies to enhance existing regulations and make recommendations to the U.S. Congress to develop new laws that may affect our business. In January 2016, the U.S. Chemical Safety and Hazard Investigation Board (“CSB”) released its final report on the West, Texas incident. The CSB report identifies several federal and state regulations and standards that could be strengthened to reduce the risk of a similar incident occurring in the future. While the CSB does not have authority to directly regulate our business, the findings in this report, and other activities taken in response to the West, Texas incident by federal, state, and local regulators may result in additional regulation of our processes and products.

In January 2017, the U.S. Environmental Protection Agency (“EPA”) finalized revisions to its Risk Management Program (“RMP”). The revisions include new requirements for certain facilities to perform hazard analyses, third-party auditing, incident investigations and root cause analyses, emergency response exercises, and to publicly share chemical and process information. Compliance with many of the rule’s new requirements will be required beginning in 2021. The EPA temporarily delayed the rule’s effective date however, the delay was subsequently vacated with an immediate effective date. On December 3, 2018, the EPA published a final rule that incorporates amendments to the RMP under 40 CFR Part 68. However, on November 21, 2019, EPA finalized its Risk Management Program Reconsideration Rule which rescinded third-party auditing, incident investigation and root cause analysis, and the public sharing of specific chemical and process information. The passage of the Reconsideration Rule has reduced the potential negative effect on the profitability of our AN business compared to the January 2017 RMP amendments. The Occupational Safety and Health Administration (“OSHA”) is likewise considering changes to its Process Safety Management standards. In addition, DHS, the

EPA, and the Bureau of Alcohol, Tobacco, Firearms and Explosives updated a joint chemical advisory on the safe storage, handling, and management of AN. While these actions may result in additional regulatory requirements or changes to our operators, it is difficult to predict at this time how these and any other possible regulations, if and when adopted, will affect our business, operations, liquidity or financial results.

Proposed and existing governmental laws and regulations relating to greenhouse gas and other air emissions may subject certain of our operations and customers to significant new costs and restrictions on their operations and may reduce sales of our products.

Our chemical manufacturing facilities use significant amounts of electricity, natural gas and other raw materials necessary for the production of their chemical products that result, or could result, in certain greenhouse gas emissions into the environment. Federal and state legislatures and administrative agencies, including the EPA, are considering the scope and scale of greenhouse gas or other air emission regulation. Legislation and administrative actions have been considered that would regulate greenhouse gas emissions at some point in the future for our facilities, and existing and possible actions have already affected certain of our customers, leading to closure or rate reductions of certain facilities.

In response to findings that emissions of carbon dioxide, methane and other greenhouse gases present an endangerment to public health and the environment, the EPA adopted regulations pursuant to the federal Clean Air Act to reduce greenhouse gas emissions from various sources. For example, the EPA requires certain large stationary sources to obtain preconstruction and operating permits for pollutants regulated under the Prevention of Significant Deterioration and Title V programs of the Clean Air Act. Facilities required to obtain preconstruction permits for such pollutants are also required to meet "best available control technology" standards that are being established by the states. These regulatory requirements could adversely affect our operations and restrict or delay our ability to obtain air permits for new or modified sources.

Although greenhouse gas regulation could: increase the price of the electricity and other energy sources purchased by our chemical facilities; increase costs for natural gas and other raw materials (such as ammonia); potentially restrict access to or the use of certain raw materials necessary to produce our chemical products; and require us to incur substantial expenditures to retrofit our chemical facilities to comply with the proposed new laws and regulations regulating greenhouse gas emissions. Federal, state and local governments may also pass laws mandating the use of alternative energy sources, such as wind power and solar energy, which may increase the cost of energy use in certain of our chemical and other manufacturing operations. For instance, the EPA published a rule, known as the Clean Power Plan, to limit greenhouse gases from electric power plants. The EPA is currently reviewing the Clean Power Plan however, it could result in increased electricity costs due to increased requirements for use of alternative energy sources, and a decreased demand for coal-generated electricity.

Laws, regulations or other issues related to climate change could have a material adverse effect on us.

If we, or other companies with which we do business become subject to laws or regulations related to climate change, it could have a material adverse effect on us. The United States may enact new laws, regulations and interpretations relating to climate change, including potential cap-and-trade systems, carbon taxes and other requirements relating to reduction of carbon footprints and/or greenhouse gas emissions. Other countries have enacted climate change laws and regulations, and the United States has been involved in discussions regarding international climate change treaties. The federal government and some of the states and localities in which we operate have enacted certain climate change laws and regulations and/or have begun regulating carbon footprints and greenhouse gas emissions. Although these laws and regulations have not had any known material adverse effect on us to date, they could result in substantial costs, including compliance costs, monitoring and reporting costs and capital. Furthermore, our reputation could be damaged if we violate climate change laws or regulations. We cannot predict how future laws and regulations, or future interpretations of current laws and regulations, related to climate change will affect our business, results of operations, liquidity and financial condition. Lastly, the potential physical impacts of climate change on our operations are highly uncertain and would be particular to the geographic circumstances in areas in which we operate. These may include changes in rainfall and storm patterns and intensities, water shortages and changing temperatures. Any of these matters could have a material adverse effect on us.

4. Risks Relating to Debt

Despite our current levels of debt, we may still incur more debt ranking senior or equal in right of payment with our existing obligations, including secured debt, which would increase the risks described herein.

The agreements relating to our debt, including the Senior Secured Notes Indenture and the credit agreement governing our Working Capital Revolver Loan, limit but do not prohibit our ability to incur additional debt, including additional secured debt. Notwithstanding the fact that the Senior Secured Notes Indenture and the credit agreement governing our Working Capital Revolver Loan limit our ability to incur additional debt or grant certain liens on our assets, the restrictions on the incurrence of additional indebtedness and liens are subject to a number of important qualifications and exceptions, and the additional indebtedness and liens incurred in compliance with these restrictions could be substantial. If new debt is added to our current debt levels, the related risks that we now face could intensify.

Borrowings under our Working Capital Revolver Loan bear interest at a variable rate, which subjects us to interest rate risk and could cause our debt service obligations to increase.

All of our borrowings under our Working Capital Revolver Loan are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on this variable rate indebtedness would increase even though the amount borrowed remained the same. Although we may enter into interest rate swaps to reduce interest rate volatility, we cannot provide assurances that we will be able to do so or that such swaps will be effective.

5. Risks Relating to Human Capital

Loss of key personnel could negatively affect our business.

Our performance has been and will continue to be dependent upon the efforts of our principal executive officers. We cannot ensure that our principal executive officers will continue to be available. Although we have employment agreements with certain of our principal executive officers, including Mark T. Behrman and Cheryl A. Maguire, we do not have employment agreements with all of our key personnel. The loss of any of our principal executive officers could have a material adverse effect on us. We believe that our future success will depend in large part on our continued ability to attract and retain highly skilled and qualified personnel.

We are subject to collective bargaining agreements with certain employees.

Approximately 33% of our employees are covered by collective bargaining agreements. We may not be able to renew our collective bargaining agreements on terms similar to current terms or renegotiate collective bargaining agreements on terms acceptable to us. The prolonged failure to renew or renegotiate a collective bargaining agreement could result in work stoppages. Additionally, if a collective bargaining agreement is negotiated at higher-than-anticipated cost, absorbing those costs or passing them through to customers in the form of higher prices may make us less competitive.

6. Risks Relating to Shareholders

Certain of our stockholders control a significant amount of our voting stock, and their interests could conflict with interests of other stockholders.

LSB Funding LLC ("LSB Funding"), our largest voting shareholder, owned approximately 54 million shares of our common stock, which represent approximately 61% of the voting power of our common stock as of December 31, 2021, an aggregate of approximately 50 million shares of which were issued to LSB Funding in connection with the Exchange Transaction and the Special Dividend. As a result, LSB Funding could significantly influence our business and affairs if it chooses to use its significant voting power to do so. For instance, LSB Funding would be able to significantly affect most matters brought before the stockholders, including the election of all directors and the approval of mergers and other business combination transactions.

Pursuant to a Board Representation and Standstill Agreement, as amended, LSB Funding has the right to designate three directors on our Board, subject to reduction in certain circumstances. This is in addition to their ability to vote generally in the election of directors. As a result, LSB Funding has significant influence over the election of directors to our Board.

The interests of LSB Funding may conflict with interests of other stockholders. As a result of the voting power and board designation rights of LSB Funding, the ability of other stockholders to influence our management and policies could be limited.

We are subject to a variety of factors that could discourage other parties from attempting to acquire us.

Our certificate of incorporation provides for a staggered Board and, except in limited circumstances, a two-thirds vote of outstanding voting shares to approve a merger, consolidation or sale of all, or substantially all, of our assets. In addition, we have entered into severance agreements with our executive officers and some of the executive officers of certain subsidiaries that provide, among other things, that if, within a specified period of time after the occurrence of a change in control of LSB, these officers are terminated, other than for cause, or the officer terminates his employment for good reason, the officer would be entitled to certain severance benefits. Certain of our preferred stock series and debt instruments also provide special rights in a change of control, including in some cases the ability to be repaid in full or redeemed.

We have authorized and unissued (including shares held in treasury) approximately 60.2 million shares of common stock and approximately 5.2 million shares of preferred stock as of December 31, 2021. These unissued shares could be used by our management to make it more difficult, and thereby discourage an attempt to acquire control of us.

The foregoing provisions and agreements may discourage a third-party tender offer, proxy contest, or other attempts to acquire control of us and could have the effect of making it more difficult to remove incumbent management. In addition, LSB Funding and the Golsen Holders have significant voting power and rights to designate board representatives, all of which may further discourage a third-party tender offer, proxy contest, or other attempts to acquire control of us.

Delaware has adopted an anti-takeover law which, among other things, will delay for three years business combinations with acquirers of 15% or more of the outstanding voting stock of publicly-held companies (such as us), unless:

- prior to such time the Board of the corporation approved the business combination that results in the stockholder becoming an invested stockholder;
- the acquirer owned at least 85% of the outstanding voting stock of such company prior to commencement of the transaction;
- two-thirds of the stockholders, other than the acquirer, vote to approve the business combination after approval thereof by the Board; or
- the stockholders of the corporation amend its articles of incorporation or by-laws electing not to be governed by this provision.

We have not paid cash dividends on our outstanding common stock in many years.

We have not paid cash dividends on our outstanding common stock in many years, and we do not currently anticipate paying cash dividends on our outstanding common stock in the near future. Our Board of Directors (the "Board") has not made a decision whether or not to pay dividends on our common stock in 2022. In addition, there are certain limitations contained in our loan agreements that may limit our ability to pay dividends on our outstanding common stock.

Future issuances or potential issuances of our common stock or preferred stock could adversely affect the price of our common stock and our ability to raise funds in new stock offerings and could dilute the percentage ownership or voting power of our common stockholders.

Future sales of substantial amounts of our common stock, preferred stock or equity-related securities in the public market, or the perception that such sales could occur, could adversely affect prevailing trading prices of our common stock and could dilute the value of common stock held by our existing stockholders. No prediction can be made as to the effect, if any, that future sales of common stock, preferred stock, or equity-related securities, or the availability of shares of common stock for future sale will have on the trading price of our common stock. Such future sales could also significantly reduce the percentage ownership and voting power of our existing common stockholders.

7. General Risk Factors

Deterioration of global market and economic conditions could have a material adverse effect on our business, financial condition, results of operations and cash flow.

A slowdown of, or persistent weakness in, economic activity caused by a deterioration of global market and economic conditions could adversely affect our business in the following ways, among others: conditions in the credit markets could impact the ability of our customers and their customers to obtain sufficient credit to support their operations; the failure of our customers to fulfill their purchase obligations could result in increases in bad debts and affect our working capital; and the failure of certain key suppliers could increase our exposure to disruptions in supply or to financial losses. We also may experience declining demand and falling prices for some of our products due to our customers' reluctance to replenish inventories. The overall impact of a global economic downturn or reduced overall global trade on us is difficult to predict, and our business could be materially adversely impacted.

In addition, conditions in the international market for nitrogen fertilizer significantly influence our operating results. The international market for fertilizers is influenced by such factors as the relative value of the U.S. currency and its impact on the importation of fertilizers, foreign agricultural policies, the existence of, or changes in, import or foreign currency exchange barriers in certain foreign markets and other regulatory policies (including tariffs) of foreign governments, as well as the U.S. laws and policies affecting foreign trade and investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained within this report may be deemed “Forward-Looking Statements” within the meaning of Section 27A of the Securities Act of 1933 (as amended, the “Securities Act”) and Section 21E of the Securities Exchange Act. All statements in this report other than statements of historical fact are Forward-Looking Statements that are subject to known and unknown risks, uncertainties and other factors which could cause actual results and performance of the Company to differ materially from such statements. The words “believe,” “expect,” “anticipate,” “intend,” “plan,” “may,” “could” and similar expressions identify Forward-Looking Statements. Forward-Looking Statements contained herein include, but are not limited to, the following: our ability to invest in projects that will generate best returns for our stockholders;

- our ability to invest in projects that will generate the best returns for our stockholders
- our future liquidity outlook;
- the outlook our chemical products and related markets;
- the amount, timing and effect on the nitrogen market from the current nitrogen expansion projects;
- the effect from the lack of non-seasonal volume;
- our belief that competition is based upon service, price, location of production and distribution sites, and product quality and performance;
- our outlook for the coal industry;
- the availability of raw materials;
- the result of our product and market diversification strategy;
- changes in domestic fertilizer production;
- the increasing output and capacity of our existing production facilities;
- production volumes at our production facilities;
- our ability to moderate risk inherent in agricultural markets;
- the sources to fund our cash needs and how this cash will be used;
- the ability to enter into the additional borrowings;
- the anticipated cost and timing of our capital projects;
- certain costs covered under warranty provisions;
- our ability to pass to our customers cost increases in the form of higher prices;
- our belief as to whether we have sufficient sources for materials and components;
- annual natural gas requirements;
- compliance by our facilities with the terms of our permits;
- the costs of compliance with environmental laws, health laws, security regulations and transportation regulations;
- our belief as to when Turnarounds will be performed and completed;
- expenses in connection with environmental projects;
- the effect of litigation and other contingencies;
- the increase in interest expense;
- our ability to comply with debt servicing and covenants;
- our ability to meet debt maturities or redemption obligations when due;
- the effects of the ongoing COVID-19 pandemic and related response; and
- our beliefs as to whether we can meet all required covenant tests for the next twelve months.

While we believe, the expectations reflected in such Forward-Looking Statements are reasonable, we can give no assurance such expectations will prove to have been correct. There are a variety of factors which could cause future outcomes to differ materially from those described in this report, including, but not limited to, the following:

- changes in general economic conditions, both domestic and foreign;
- material reductions in revenues;
- material changes in interest rates;
- our ability to collect in a timely manner a material amount of receivables;
- increased competitive pressures;
- adverse effects of increases in prices of raw materials;
- changes in federal, state and local laws and regulations, especially environmental regulations or the American Reinvestment and Recovery Act, or in the interpretation of such;
- changes in laws, regulations or other issues related to climate change;
- releases of pollutants into the environment exceeding our permitted limits;
- material increases in equipment, maintenance, operating or labor costs not presently anticipated by us;
- the requirement to use internally generated funds for purposes not presently anticipated;
- the inability to secure additional financing for planned capital expenditures or financing obligations due in the near future;
- our substantial existing indebtedness;
- material changes in the cost of natural gas and certain precious metals;
- limitations due to financial covenants;
- changes in competition;
- the loss of any significant customer;
- increases in cost to maintain internal controls over financial reporting;
- changes in operating strategy or development plans;
- an inability to fund the working capital and expansion of our businesses;
- changes in the production efficiency of our facilities;
- adverse results in our contingencies including pending litigation;
- unplanned downtime at one or more of our chemical facilities;
- changes in production rates at any of our chemical plants;
- an inability to obtain necessary raw materials and purchased components;
- material increases in cost of raw materials;
- material changes in our accounting estimates;
- significant problems within our production equipment;
- fire or natural disasters;
- an inability to obtain or retain our insurance coverage;
- difficulty obtaining necessary permits;
- difficulty obtaining third-party financing;
- risks associated with proxy contests initiated by dissident stockholders;
- changes in fertilizer production;
- reduction in acres planted for crops requiring fertilizer;

- decreases in duties for products we sell resulting in an increase in imported products into the U.S.;
- adverse effects from regulatory policies, including tariffs;
- volatility of natural gas prices;
- price increases resulting from increased inflation;
- weather conditions, including the effects of climate change;
- increases in imported agricultural products;
- global supply chain disruptions;
- other factors described in the MD&A contained in this report; and
- other factors described in "Risk Factors" contained in this report.

Given these uncertainties, all parties are cautioned not to place undue reliance on such Forward-Looking Statements. We disclaim any obligation to update any such factors or to publicly announce the result of any revisions to any of the Forward-Looking Statements contained herein to reflect future events or developments.

Defined Terms

The following is a list of terms used in this report.

ADEQ	-	The Arkansas Department of Environmental Quality.
AN	-	Ammonium nitrate.
ARO	-	Asset retirement obligation.
ASC	-	Accounting Standard Codification.
ASU	-	Accounting Standard Update.
Baytown Facility	-	The nitric acid production facility located in Baytown, Texas.
Board	-	Board of Directors
CAO	-	A consent administrative order.
CARES	-	Coronavirus Aid, Relief, and Economic Security Act.
CEO	-	Chief Executive Officer.
Cherokee Facility	-	Our chemical production facility located in Cherokee, Alabama.
Chevron	-	Chevron Environmental Management Company.
CoC	-	Change of Control
Covestro	-	Covestro L.L.C.
COVID-19	-	The novel coronavirus disease of 2019.
CVR	-	Coffeyville Resources Nitrogen Fertilizers, L.L.C.
D&A	-	Depreciation and amortization.
DEF	-	Diesel Exhaust Fluid.
DHS	-	The U.S. Department of Homeland Security.
EDA	-	El Dorado Ammonia L.L.C.
EDC	-	El Dorado Chemical Company.
EDN	-	El Dorado Nitrogen L.L.C.
EIA	-	U.S. Energy Information Administration
El Dorado Facility	-	Our chemical production facility located in El Dorado, Arkansas.
Environmental and Health Laws	-	Numerous federal, state and local environmental, health and safety laws.
EPA	-	The U.S. Environmental Protection Agency.

EUC	-	Environmental Use Control.
Exchange Agreement	-	A Securities Exchange Agreement between LSB Funding L.L.C. and affiliate of Eldridge L.L.C. and LSB.
Exchange Transaction	-	The exchange of shares of the Series E and Series F Redeemable Preferred for shares of common stock pursuant to the Exchange Agreement.
FASB	-	Financial Accounting Standards Board.
Financial Covenant	-	Certain springing financial covenants associated with the working capital revolver loan.
GAAP	-	U.S. Generally Accepted Accounting Principles.
Global	-	Global Industrial, Inc., a subcontractor asserting mechanics liens for work rendered to LSB and EDC.
Golsen Holders	-	Jack E. Golsen, Barry H. Golsen and certain of their related parties, as defined in the Board Representation and Standstill Agreement, as amended.
Hallowell Facility	-	A chemical facility previously owned by two of our subsidiaries located in Kansas.
HDAN	-	High density ammonium nitrate prills used in the agricultural industry.
Holder	-	LSB Funding L.L.C., the holder of all of the shares of the Series E and Series F Redeemable Preferred.
Indenture	-	The agreement governing the 6.25% Senior Secured Notes.
J. Golsen	-	Jack E. Golsen.
KDHE	-	The Kansas Department of Health and Environment.
Koch Fertilizer	-	Koch Fertilizer L.L.C.
LDAN	-	Low density ammonium nitrate prills used in the mining industry.
Leidos	-	Leidos Constructors L.L.C.
Liquidation Preference	-	The Series E Redeemable Preferred liquidation preference of $1,000 per share plus accrued and unpaid dividends plus the participation rights value.
LSB	-	LSB Industries, Inc.
LSB Funding	-	LSB Funding L.L.C.
MD&A	-	Management’s Discussion and Analysis of Financial Condition and Results of Operations found in Item 7 of this report.
New Notes	-	The senior secured notes issued on October 14, 2021 with an interest rate of 6.250%, which mature in October 2028.
NOL	-	Net Operating Loss.
Note	-	A note in the accompanying notes to the consolidated financial statements.
NPDES	-	National Pollutant Discharge Elimination.
NPK	-	Compound fertilizer products which are a solid granular fertilizer product for which the nutrient content is a combination of nitrogen, phosphorus, and potassium.
ODEQ	-	The Oklahoma Department of Environmental Quality.
Old Notes	-	The notes issued on April 28, 2018 with an interest rate of 9.625%, which mature in May 2023.
PAR	-	Permit Appeal Resolution
PBRS	-	Performance-based restricted stock.
PCC	-	Pryor Chemical Company.
PP&E	-	Plant, property and equipment.
PPP	-	Paycheck Protection Program
Pryor Facility	-	Our chemical production facility located in Pryor, Oklahoma.
Retirement Date	-	Date of retirement of Jack E. Golsen as Executive Chairman of the Board, December 31, 2017.
RFS	-	Federal renewable fuel standards.

RMP	-	Risk Management Program.
RSU	-	Restricted stock unit.
SBA	-	U.S. Small Business Administration.
SEC	-	The U.S. Securities and Exchange Commission.
Secured Financing due 2023	-	A secured financing arrangement between EDC and an affiliate of LSB Funding L.L.C. which matures in June 2023.
Secured Financing Agreement due 2025	-	A secured financing arrangement between EDA and an affiliate of LSB Funding L.L.C. which matures in August 2025.
Secured Loan Agreement due 2025	-	A secured loan agreement between EDC and an affiliate of LSB Funding L.L.C. which matures in March 2025.
Secured Promissory Note due 2021	-	A secured promissory note between EDC and a lender which, matured in March 2021.
Senior Secured Notes	-	Senior secured notes with a stated interest rate of 9.625%, which were redeemed in October 2021.
Series B Preferred	-	The Series B 12% cumulative convertible Class C Preferred stock.
Series D Preferred	-	The Series D 6% cumulative convertible Class C preferred stock.
Series E Redeemable Preferred	-	The 14% Series E Redeemable Preferred stock with participating rights and liquidating distributions based on a certain number of shares of our common stock.
Series F Redeemable Preferred	-	The Series F Redeemable Preferred stock with one share to vote as a single class on all matters with our common stock equal to 456,225 shares of our common stock.
SG&A	-	Selling, general and administrative expense.
Special Dividend	-	A stock split in the form of a common stock dividend declared by our Board.
Special Meeting	-	Meeting of our stockholders held during the third quarter of 2021.
Transition Agreement	-	An agreement between Jack E. Golsen and LSB, dated June 30, 2017.
Turnaround	-	A planned major maintenance activity.
UAN	-	Urea ammonia nitrate.
U.S.	-	United States.
USDA	-	United States Department of Agriculture.
WASDE	-	World Agricultural Supply and Demand Estimates Report.
West Fertilizer	-	West Fertilizer Company.
Working Capital Revolver Loan	-	Our secured revolving credit facility.
2005 Agreement	-	A death benefit agreement with Jack E. Golsen.
2008 Plan	-	The 2008 Incentive Stock Plan.
2016 Plan	-	The 2016 Long Term Incentive Plan.
2020 Crop	-	Corn crop marketing year (September 1 - August 31), which began in 2019 and ended in 2020 and primarily relates to corn planted and harvested in 2019.
2021 Crop	-	Corn crop marketing year (September 1 - August 31), which began in 2020 and ended in 2021 and primarily relates to corn planted and harvested in 2020.
2022 Crop	-	Corn crop marketing year (September 1 - August 31), which began in 2021 and will end in 2022 and primarily relates to corn planted and harvested in 2021.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

The following table presents our significant properties for 2021:

Facility	El Dorado Facility	Cherokee Facility	Pryor Facility	Baytown Facility	Chemical Distribution Centers
Location	El Dorado, AR	Cherokee, AL	Pryor, OK	Baytown, TX	(A)
Plant Area (acres)	150	160	47	2	
Site Area (acres)	1,400	1,300	104	(B)	
Site Status	Owned	Owned	Owned	Operating Agreement	(A)
Ammonia Production Capacity (tons)	493,000 (C)	188,000 (D)	246,000 (E)	Not Applicable	

(A) We distribute our agricultural products through 10 wholesale and retail distribution centers, with 9 of the centers located in Texas (8 of which we own and 1 of which we lease); and 1 center located in Missouri (owned).

(B) This facility is located within a chemical production complex owned by Covestro.

(C) The ammonia production capacity is based on optimal 1,350 tons per day of production for the year. The El Dorado Facility did not perform a Turnaround during 2021.

(D) The ammonia production capacity is based on 515 tons per day of production for the year but excludes 40 Turnaround days during 2021.

(E) The ammonia production capacity is based on 675 tons per day of production for the year. The Pryor Facility did not perform a Turnaround during 2021.

For 2021, our facilities produced approximately 765,000 tons of ammonia.

Most of our real property and equipment located at our chemical facilities are being used to secure our long-term debt. All of the properties utilized by our businesses are suitable and adequate to meet the current needs of that business and relate to domestic operations.

ITEM 3. LEGAL PROCEEDINGS

See Legal Matters under Note 9 to the Consolidated Financial Statements included in this report.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is trading on the New York Stock Exchange under the symbol "LXU."

Stockholders

As of February 18, 2022, we had approximately 361 record holders of our common stock. This number does not include investors whose ownership is recorded in the name of their brokerage company.

Equity Compensation Plans

Discussions relating to our equity compensation plans under Item 12 of Part III are incorporated by reference to our definitive proxy statement which we intend to file with the SEC on or before April 29, 2022.

Sale of Unregistered Securities

There were no unregistered sales of equity securities in 2021 that have not been previously reported in a Quarterly Report on Form 10-Q or Current Report on Form 8-K.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following MD&A should be read in conjunction with a review of the other Items included in this Form 10-K and our December 31, 2021 consolidated financial statements included elsewhere in this report. A reference to a “Note” relates to a note in the accompanying notes to the consolidated financial statements. Certain statements contained in this MD&A may be deemed to be forward-looking statements. See “Special Note Regarding Forward-Looking Statements.”

Overview

General

LSB is headquartered in Oklahoma City, Oklahoma and through our subsidiaries, we manufacture and sell chemical products for the agricultural, mining, and industrial markets. We own and operate three multi plant facilities in Cherokee, Alabama, El Dorado, Arkansas and Pryor, Oklahoma, and operate a facility on behalf of Covestro in Baytown, Texas. Our products are sold through distributors and directly to end customers, primarily throughout the U.S. and parts of Mexico and Canada.

Key Operating Initiatives for 2022

We expect our future results of operations and financial condition to benefit from following key initiatives:

- *Investing to improve Environmental, Health &Safety and Reliability at our Facilities to further our Progress Towards Becoming a “Best in Class” Chemical Plant Operator while Supplying our Customers with Products of the Highest Quality.*
  - We believe that our operational progress over the past several years represents proof that high safety standards not only enable us to protect what matters, which is the well-being of our employees, but also translates into improved plant performance. With that in mind, in 2022 we remain acutely focused on our efforts to further the progress we’ve made in creating a high performing safety culture as we advance the safety programs, we have underway and implement new ones. Additionally, we will be investing capital at all three of our facilities to further promote safe and reliable operations in order to build upon the success we have had in implementing enhanced safety programs during the last three years.
  - We have several initiatives currently underway focused on further improving the reliability of our plants which we expect will allow us to produce greater volumes of product for sale, lower our cost of production and increase our overall profitability. These initiatives are focused on operations excellence through enhancements in leadership at certain of our facilities, bolstering our operating procedures, leveraging the technology investments we’ve made for the purpose of advancing the optimization of our asset health monitoring through asset care excellence maintenance programs. Additionally, our product quality program continues to focus on providing products to our customers that meet the highest quality standards.
- *Continue Broadening the Distribution and Optimization of our Product mix.* Over the course of 2021 we were successful in maximizing the production capacity of our plants, and plan to continue to expand the distribution of our products by partnering with customers to take product into different markets while also focusing our efforts to upgrade our margins through the optimization of our product mix.
  - In the first quarter of 2021, we commenced a new long-term nitric acid supply contract with a customer under which we agreed to supply between 70,000 to 100,000 tons of nitric acid per year. We progressively ramped the volume of product supplied to the customer over the course of 2021, and in 2022, we will recognize a full year of sales under this agreement putting us in a sold-out position for nitric acid at our El Dorado facility and achieving our objective to fully utilize our production capacity for this product.
  - We are targeting $10 million to $15 million of capital for margin enhancement projects in 2022 to optimize our storage and distribution capability. Additionally, we are evaluating opportunities to upgrade more of the ammonia we produce into higher value downstream products in order to capture additional margin. We also believe we have opportunities to increase our production volume of certain products through debottlenecking projects and will be analyzing the potential returns from these investments over the course of the year.
- *Development and Implementation of a Strategy to Capitalize on Low Carbon Ammonia and Clean Energy Opportunities.* The reduction of greenhouse gas emissions, particularly related to carbon dioxide, has been, and, we expect will increasingly become a global environmental priority as part of efforts to stem the deleterious effects of climate change. There is increasing evidence from a variety of industry studies to indicate that ammonia can play a significant role in making meaningful progress towards this objective. As a result, we are currently in the process of formulating a strategy to become a producer and marketer of blue and green ammonia and other derivative products over the coming years. Blue ammonia is produced using natural gas and conventional processes but includes the additional stage where the CO2 emissions are captured and permanently stored in deep underground rock formations, resulting in a low carbon emission product that can be sold at a premium to agricultural, industrial, mining, power generation and marine customers seeking to reduce their carbon footprint and potentially capitalize on

government incentives. Green ammonia is ammonia produced using renewable energy to power electrolyzers that extract hydrogen from water, resulting in the zero-carbon production of ammonia that, we believe can, also be sold at a premium to a variety of industries around the world.

Ammonia has been increasingly emerging as one of the most viable alternatives to serve as a hydrogen-based energy source for a variety of applications given its higher energy density and ease of storage relative to hydrogen gas. Blue and green ammonia can be used as zero carbon fuel in the maritime sector, a carbon free fertilizer and as a coal substitute in power generation. If ammonia were to be used for energy consumption globally, some studies have indicated that future demand could equate to five times the amount of current global annual production of ammonia, or approximately 50 times the current seaborne trade. We believe we are well-positioned to capitalize on this opportunity and be market leaders given our potential to retrofit our existing plants rather than investing in greenfield projects, thereby reducing the time to market and the upfront capital expenditures, enhancing the economic attractiveness to such investments. With that said, we will also consider investing in greenfield projects that have the potential to offer attractive returns

- *Pursue Acquisitions of Strategic Assets or Companies.* We are actively engaged in evaluating and pursuing various opportunities to acquire strategic assets or companies (including through mergers), where we believe those acquisitions will enhance the value of the Company and provide attractive returns. Targets under consideration could provide us with geographic expansion, extend an existing product line, add a new product line, leverage our existing ammonia production capabilities, or complement our existing business lines, among other accretive opportunities. We are considering options across our agricultural, industrial and mining business. The opportunities we consider as meeting our investment criteria generally range in value from $200 million to $500 million, although we may consider other attractive opportunities outside of this range. We are also evaluating investments that would add additional production capacity in business lines where we believe the returns will be attractive. We may choose to finance any of the foregoing through the incurrence of additional indebtedness (including through loans or the issuance of debt securities) or the issuance of equity, in each case subject to financial analysis that we believe would support an increase to shareholder value and favorable market conditions at the time of issuance.

We may not successfully implement any or all of these initiatives. In addition, the consummation of any acquisition opportunity is subject to the negotiation of definitive documentation with any counterparties and, if applicable, regulatory approvals, as well as the satisfaction of negotiated closing conditions, none of which can be assured, and there can be no guarantee that any opportunity we choose to pursue will ultimately be consummated. Even if we successfully implement the initiatives, they may not achieve the results that we expect or desire.

Business Developments-2021

Exchange Transaction and Special Common Stock Dividend

On September 27, 2021, we closed a Securities Exchange Transaction (the “Exchange Transaction”) with LSB Funding LLC (the “Holder”), an affiliate of Eldridge, in which we exchanged the shares of Series E and Series F Redeemable Preferred Stock held by the Holder for shares of our common stock. In summary, we exchanged the approximately $310 million liquidation preference of preferred stock held by the Holder into our common stock based on an exchange price of $6.16, which was equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. However, the exchange consideration paid under the Exchange Agreement was reduced by approximately 1.2 million shares, which shares were included in the Special Dividend and received by the Holder. In connection with the transaction, on October 8, 2021, our common stockholders, including the Holder, received the Special Dividend in the form of 0.30 shares of our common stock for every share owned as of the September 24, 2021, the Special Dividend record date. The main benefit of the exchange is that it relieved our Company and our common stockholders from the expensive, compounding burden of the preferred stock dividend, improving the current capital structure.

Reduced Cost of Capital through Debt Refinancing

The Exchange Transaction discussed above prompted the major credit rating agencies, Moody’s and S&P, to upgrade their credit ratings on our debt, which combined with the favorable credit markets, enabled us to complete a refinancing of our senior notes on significantly improved terms, reducing our cost of capital, bolstering our liquidity and extending the maturity of our debt. More specifically, on October 14, 2021, we closed on an offering of $500 million of senior secured notes due 2028, bearing an interest rate of 6.250%, which we used to redeem our $435 million of 9.625% senior notes that were due to mature in 2023, with the balance being used to enhance the liquidity of our balance sheet and for general corporate purposes. The reduction of the rate of interest on our outstanding notes by more than 300 basis points represents a meaningful reduction in our annual cash interest expense and puts us in a position to more aggressively pursue our key operating initiatives discussed above.

Continued Improvement in Product Sales

Selling prices for all of our major products improved over the course of 2021 as compared to the prior year driven by a combination of supply and demand factors. With respect to our agricultural business, corn prices for the vast majority of 2021 sat above levels not seen since 2014, and the current prices exceeding $6 per bushel, are significantly above the $4 per bushel level that we believe represents a very favorable level for farmers to earn significant income on their crops. The strong corn prices over the past year have been driven, in part, by a rebound in the production of ethanol, a gasoline additive that represents approximately 40% of total U.S. corn use annually, as miles driven have returned to near pre-pandemic levels. Also supporting the strong corn pricing over the past year has been Chinese demand for corn for use as feed for swine as part of the nation's efforts to rebuild its swine production in the wake of a virus that dramatically reduced its swine population several years ago. This demand for feed is expected to remain robust as China has moved to large institutional hog farms which consume significant quantities of corn. Globally, corn supplies have been constrained by drought conditions in South America and the Western U.S., which has served to further bolster corn prices. Early forecasts point to U.S. corn acreage to be planted in the 2022-2023 planting season to be approximately 90 to 92 million acres, modestly lower than the 2021-2022 estimate of 93.4 million acres, but still at a very healthy level to support strong demand for fertilizers.

In addition to strong corn pricing, which has prompted farmers to increase fertilizer purchases in order to maximize yields, a series of supply related factors that unfolded over the course of 2021 have served to create a global shortage of ammonia, driving the strong increase in the prices for nitrogen products. This began in February 2021, as winter storm Uri and the resultant severe cold weather experienced in many areas of the U.S. caused many nitrogen producers to idle their plants resulting in a tightening in the supply of nitrogen products headed into the spring planting season. Exacerbating this supply constraint, during the third quarter of 2021 a number of ammonia facilities underwent turnarounds that were originally scheduled for third quarter of 2020 but were postponed due to the COVID-19 pandemic. Additionally, in late August, Hurricane Ida, a Category 4 storm caused production along the U.S. Gulf coast to be shut down for a period of time, further reducing production. Also supporting the strength in fertilizer prices has been the significant increase in the cost of natural gas, the primary feedstock for production of ammonia, which has prompted various producers to cease operations of some facilities, particularly in Europe where natural gas prices have surged to more than $30 per MMBtu, rendering some ammonia plants uneconomical to operate. The resultant decrease in global production of ammonia has fueled further strength in nitrogen-based fertilizer prices, which have thus far materially outstripped the impact to production costs of rising natural gas prices in the U.S. The factors discussed above have led to continued strong pricing into the first quarter of 2022, which we expect to support continued favorable pricing levels over the balance of the year.

As for our industrial and mining products, selling prices have continued to improve as the supply of ammonia remains tight due to strong global demand, curtailed global supply due to rising natural gas prices, numerous global unplanned outages and lower than expected product imports. As a result, the Tampa Ammonia benchmark price increased to, and remains at multi-year high levels, which have translated into higher selling prices for our products as many of our industrial contracts are indexed to this benchmark price. Demand trends for the industrial products we sell, primarily nitric acid and ammonia, have remained robust despite disruptions to certain end markets, such as auto manufacturing which has been constrained due to a shortage of microprocessors, as activity in other markets, such as homebuilding and power generation has remained strong. In addition, our sales of nitric acid increased steadily throughout 2021 pursuant to the new long-term nitric acid supply contract discussed above. Demand for our mining products continues to improve as quarry and construction activity has been elevated due to robust levels of residential, commercial and civil infrastructure buildout along with strong demand for precious metals, including expectations for rising copper production to support the growing domestic production of electric vehicles.

See a more detailed discussion below under "Key Industry Factors."

Long-Term Nitric Acid Supply Contract

During October 2020, EDC entered into a new long-term nitric acid supply contract with a customer. Under the agreement, EDC agreed to supply between 70,000 to 100,000 tons of nitric acid annually, with sales that began in the first quarter of 2021. The initial contract term extends through 2027 but includes automatic one-year renewal terms unless terminated by either party pursuant to the terms of the contract.

PPP Loan Forgiven

In April 2020, we entered into a federally guaranteed Paycheck Protection Program ("PPP") loan for $10 million with a lender pursuant to a new loan program through the U.S. Small Business Administration ("SBA") as the result of the PPP established by the Coronavirus Aid, Relief, and Economic Security ("CARES") Act and amended by the Paycheck Protection Program Flexibility Act of 2020. We have used all of the proceeds from the PPP loan for payroll, rent, utilities, and other specified costs that qualify for loan forgiveness. In April 2021, we submitted the PPP loan forgiveness application to the lender. In June 2021, the PPP loan was fully forgiven by the SBA and lender.

2021 Winter Storm Uri, Natural Gas Curtailment and Settlement of Natural Gas Contracts

On February 12, 2021, the Pryor Facility was taken out of service due to extreme cold weather associated with the winter storm Uri that caused a surge in natural gas prices in the region, along with the curtailment of gas distribution by the operator of the pipeline that supplies natural gas to the facility. On February 21, 2021, this facility began a phased restart and the facility's ammonia plant was in production shortly thereafter.

Also, as a result of unprecedented cold weather conditions, on February 17, 2021, the primary natural gas supplier to our El Dorado Facility asserted a claim of force majeure and materially restricted the supply of gas to the facility. However, effective February 23, 2021, the force majeure was lifted, and the facility's ammonia plant was in production shortly thereafter.

As weather across the middle of the country improved and temperatures warmed, natural gas prices normalized, and supply were restored to levels required for full operation of our facilities.

Notably, our Cherokee Facility was not materially impacted by the extreme cold weather and related natural gas price and supply issues and operated at targeted levels throughout February 2021.

In order to mitigate a portion of the commodity price risk associated with natural gas, we periodically enter into natural gas forward contracts and volume purchase commitments that locked in the cost of certain volumes of natural gas. Prior to this weather event, we had both types of arrangements. During the first quarter of 2021, we settled all of our natural gas forward contracts and certain volume purchase commitments outstanding at that time. As a result of the settlement of these natural gas contracts, we were able to significantly mitigate the impact from lost production, lost sales and higher costs resulting from the impact of the natural gas shortage caused by winter storm Uri.

Key Industry Factors

Supply and Demand

Agricultural

The price at which our agricultural products are ultimately sold depends on numerous factors, including the supply and demand for nitrogen fertilizers which, in turn, depends upon world grain demand and production levels, the cost and availability of transportation and storage, weather conditions, competitive pricing and the availability of imports. Additionally, expansions or upgrades of competitors' facilities and international and domestic political and economic developments continue to play an important role in the global nitrogen fertilizer industry economics, including the impact from the Phase 1 trade agreement between the U.S and China. These factors can affect, in addition to selling prices, the level of inventories in the market which can cause price volatility and affect product margins.

From a farmers' perspective, the demand for fertilizer is affected by the aggregate crop planting decisions and fertilizer application rate decisions of individual farmers. Individual farmers make planting decisions based largely on prospective profitability of a harvest, while the specific varieties and amounts of fertilizer they apply depend on factors such as their financial resources, soil conditions, weather patterns and the types of crops planted.

Additionally, changes in corn prices and those of soybean, cotton and wheat prices, can affect the number of acres of corn planted in a given year, and the number of acres planted will drive the level of nitrogen fertilizer consumption, likely effecting prices.

For 2021 as noted in the table below, the USDA estimates the number of acres of corn planted in the U.S. was approximately 93 million acres, up 3% compared to the 2020 planting season. In addition, the USDA estimates the U.S ending stocks for the 2022 Crop will be approximately 39 million metric tons, a 25% increase from the 2021 Crop. The USDA also is estimating a record yield for the 2022 Crop, up approximately 3% from a year ago.

The following February estimates are associated with the corn market:

	2022 Crop (2021 Harvest) February Report (1)	2021 Crop (2020 Harvest) February Report (1)	Percentage Change (2)	2020 Crop (2019 Harvest) February Report (1)	Percentage Change (3)
U.S. Area Planted *(Million acres)*	93.4	90.7	3.0%	89.7	4.1%
U.S. Yield per Acre *(Bushels)*	177.0	171.4	3.3%	167.5	5.7%
U.S. Production *(Million bushels)*	15,115	14,111	7.1%	13,620	11.0%
U.S. Ending Stocks *(Million metric tons)*	39.1	31.4	24.5%	48.8	(19.9%)
World Ending Stocks *(Million metric tons)*	302.2	292.1	3.5%	306.3	(1.3%)

(1) Information obtained from WASDE report dated February 9, 2022 ("February Report") for the 2021/2022 ("2022 Crop"), 2020/2021 ("2021 Crop") and 2019/2020 ("2020 Crop") corn marketing years. The marketing year is the twelve-month period during which a crop normally is marketed. For example, the marketing year for the current corn crop is from September 1 of the current year to August 31 of the next year. The year begins at the harvest and continues until just before harvest of the following year.
(2) Represents the percentage change between the 2022 Crop amounts compared to the 2021 Crop amounts.
(3) Represents the percentage change between the 2022 Crop amounts compared to the 2020 Crop amounts.

The current USDA corn outlook for the U.S. is for slightly higher production, higher food, seed and industrial use, ethanol and larger ending stocks. From a demand perspective, corn prices remain well above historical 5-year averages and remain significantly higher than $4 per bushel, the level that we believe represent a key threshold as it relates to favorable farmer economics. In addition, domestic corn demand to produce ethanol has rebounded to pre-pandemic levels as the continued roll-out of vaccines has allowed for the re-opening of the vast majority of the U.S. economy, promoting increased mobility and a return to historical levels of gasoline consumption. Most gasoline has 10% ethanol content. Ethanol is commonly made from corn and ethanol production is the largest user of U.S. corn, currently representing roughly 36% of total U.S. corn demand.

The available U.S. supply of ammonia and other nitrogen products has tightened in 2021, primarily as the result of higher demand for such products, in addition to the idling of many nitrogen plants in February 2021 due to the severe cold weather and ongoing industry downtime caused the lingering problems of that event coupled with more turnaround activity in 2021 as many companies chose to delay turnarounds in 2020 as a result of the pandemic and lost production from several hurricane events in 2021. The significant increase in the cost of natural gas, the primary feedstock for production of ammonia, which has prompted various producers to cease operations of some facilities further reducing supplies, particularly in Europe where natural gas prices have surged to more than $30 per MMBtu, rendering some ammonia plants uneconomical to operate.

As a result of these factors discussed above, we have experienced a price rally for fertilizers during 2021, and we expect these price levels will continue into the 2022 spring planting season.

Industrial and Mining

Our industrial products sales volumes are dependent upon general economic conditions primarily in the housing, automotive, and paper industries. According to the American Chemistry Council, the U.S. economic indicators are improving and pointing towards continued improvement in the markets we serve. Our sales prices generally vary with the market price of ammonia or natural gas, as applicable, in our pricing arrangements with customers. See discussion above concerning a new long-term nitric acid supply contract under “Business Developments-2021.”

Our mining products are LDAN and AN solution, which are primary used as AN fuel oil and specialty emulsions for usage in the quarry and the construction industries, for metals mining, and to a lesser extent, for coal. In our mining markets, our sales volumes are typically driven by changes in the overall North American consumption levels of mining products that can be impacted by weather. Demand for our mining products continues to improve as quarry and construction activity has been elevated due to robust levels of residential, commercial and civil infrastructure buildout along with strong demand for precious metals, including expectations for rising copper production to support the growing domestic production of electric vehicles.

Natural Gas Prices

Natural gas is the primary feedstock used to produce nitrogen fertilizers at our manufacturing facilities. In recent years, U.S. natural gas reserves have increased significantly due to, among other factors, advances in extracting shale gas, which has reduced and stabilized natural gas prices, providing North America with a cost advantage over certain imports. As a result, our competitive position and that of other North American nitrogen fertilizer producers has been positively affected.

We historically have purchased natural gas either on the spot market, through forward purchase contracts, or a combination of both and have used forward purchase contracts to lock in pricing for a portion of our natural gas requirements. These forward purchase contracts are generally either fixed-price or index-price, short-term in nature and for a fixed supply quantity. We are able to purchase natural gas at competitive prices due to our connections to large distribution systems and their proximity to interstate pipeline systems. The following table shows the annual volume of natural gas we purchased and the average cost per MMBtu:

	2021	2020
Natural gas volumes (MMBtu in millions)	28.3	30.1
Natural gas average cost per MMBtu	$ 3.51	$ 2.09

Transportation Costs

Costs for transporting nitrogen-based products can be significant relative to their selling price. We continue to evaluate the recent rising costs of rail and truck freight domestically. Since the Magellan ammonia pipeline was permanently shut down in 2020, certain Oklahoma and Texas producers that relied on the pipeline to transport their ammonia are relying on other transportation modes, primarily trucks, but also rail and barge transport. As a result of increases in demand for available trucks to transport ammonia, primarily during the spring and fall planting seasons, higher transportation costs have and could continue to impact our margins, if we were unable to fully pass through these costs to our customers. Additionally, continued truck driver shortages could impact our ability to fulfill customer demand. As a result, we continue to evaluate supply chain efficiencies to reduce or counter the impact of higher logistics costs.

Key Operational Factors

Facility Reliability

Consistent, reliable and safe operations at our chemical plants are critical to our financial performance and results of operations. The financial effects of planned downtime at our plants, including Turnarounds (primarily associated with our ammonia plants), is mitigated through a diligent planning process that considers the availability of resources to perform the needed maintenance and other factors. Unplanned downtime of our plants typically results in lost contribution margin from lost sales of our products, lost fixed cost absorption from lower production of our products and increased costs related to repairs and maintenance. All Turnarounds result in lost contribution margin from lost sales of our products, lost fixed cost absorption from lower production of our products, and increased costs related to repairs and maintenance, which repair, and maintenance costs are expensed as incurred.

Our Cherokee Facility is currently on a three-year ammonia plant Turnaround cycle completing a planned Turnaround during 2021 with the next ammonia plant Turnaround planned in the third quarter of 2024.

Our El Dorado and Pryor Facilities are currently on a three-year ammonia plant Turnaround cycle with both currently scheduled for their next ammonia plant Turnarounds in the third quarter of 2022.

Ammonia Production

Ammonia is the basic product used to produce all of our upgraded products. The ammonia production rates of our plants affect the total cost per ton of each product produced and the overall sales of our products.

Total ammonia production in 2021 was 765,000 tons. For 2022, we are targeting total ammonia production of approximately 780,000 tons to 800,000 tons despite a 30-day Turnaround at our Pryor Facility and a 24-day Turnaround at our El Dorado Facility, which will lower ammonia production during the third quarter by approximately 50,000 tons.

We believe that our focus on continuous improvement in reliability as discussed in key operating initiatives will result in year over year improvement in ammonia production for 2022.

Forward Sales Contracts

We use forward sales of our fertilizer products to optimize our asset utilization, planning process and production scheduling. These sales are made by offering customers the opportunity to purchase product on a forward basis at prices and delivery dates that are agreed upon, with dates typically occurring within 12 months. We use this program to varying degrees during the year depending on market conditions and our view of changing price environments. Fixing the selling prices of our products months in advance of their ultimate delivery to customers typically causes our reported selling prices and margins to differ from spot market prices and margins available at the time of shipment.

Consolidated Results for 2021

Our consolidated net sales for 2021 were $556.2 million compared to $351.3 million for 2020. Our consolidated operating income for 2021 was $101.0 million compared to an operating loss of $15.5 million for 2020. The items affecting our operating results are discussed below and under “Results of Operations.”

Items Affecting Comparability of Results

Selling Prices

Our 2021 average agricultural selling prices for our ammonia, UAN, and HDAN increased 111%, 87% and 46%, respectively, compared to 2020. As discussed above under “Business Developments-2021,” increased demand, higher corn prices and tighter supplies of nitrogen products contributed to the improved pricing.

Our 2021 average industrial selling prices for most of our products were also higher compared to the same period of 2020, primarily driven by the $359 per metric ton increase in the Tampa Ammonia benchmark price, as many of our industrial contracts are indexed to the Tampa Ammonia benchmark price.

Turnaround Activities (2021 only)

When a Turnaround is performed, overall results are negatively impacted. This impact includes lost contribution margin from lost sales, lost fixed cost absorption from lower production, and increased costs associated with repairs and maintenance. The effects of our Turnaround, exclusive of the impacts due to lost ammonia production during the downtime, are shown below:

Facility	2021 Related Period	Turnaround Downtime	Turnaround Expense (In Thousands)	Estimated Lost Ammonia Production (In Tons)
Cherokee	3rd Quarter	40 days	$ 7,976	21,000

Settlement of Natural Gas Contracts (2021 only)

As discussed above under "Business Developments-2021", we settled all of our natural gas forward contracts and certain volume purchase commitments and recognized a realized gain of approximately $6.8 million, which is classified as a reduction to cost of sales. As a result of the settlement of these natural gas contracts, we were able to significantly mitigate the impact from lost production, lost sales and higher costs resulting from the impact of the natural gas shortage caused by the February cold weather event.

Change of Control and Special Dividend (2021 only)

As the result of the Exchange Transaction discussed above under "Business Developments-2021" and in Note 2, Eldridge held over 60% of our outstanding shares of common stock on the closing date of the Exchange Transaction. As a result, a change of control ("CoC") event occurred as defined in certain agreements, including stock-based awards and cash-based awards. As a result, additional expense was recognized due to the CoC event. In addition, pursuant to anti-dilutive terms included in the cash-based awards, the number of units of cash-based awards increased due to the Special Dividend, also resulting in additional expense being recognized. In summary, we recognized approximately $5.0 million in additional expense, of which $1.2 million is classified as cost of sales and $3.8 million is classified as SG&A.

Net Loss on Extinguishments of Debt (2021 only)

As discussed above under "Business Developments-2021" and in Note 5, we redeemed all of the Senior Secured Notes due 2023 and recognized a loss on extinguishment of debt of approximately $20.3 million. Partially offsetting this loss was a gain on extinguishment of debt of $10 million associated with the PPP loan that was fully forgiven by the SBA and lender.

Settlements with Certain Vendors (2020 only)

During 2020, EDC and certain vendors mediated settlements totaling $7.6 million for EDC to recover certain costs associated with our new nitric acid plant at our El Dorado Facility. The construction of this plant was completed and began production in 2016. Of the $7.6 million, approximately $5.7 million is classified as a reduction to cost of sales and approximately $1.9 million is classified as a reduction to PP&E. The recovery amount was applied against the original classification of the underlying costs.

Legal Fees-Leidos

For 2021 and 2020, certain legal fees were approximately $1.9 million and $5.7 million, respectively. These fees relate to claims we are pursuing against Leidos to recover damages and losses associated with the construction of the ammonia plant at the El Dorado Facility as discussed in footnote B of Note 9. Due to the impact from the COVID-19 pandemic, the trial date has been delayed, which resulted in reduced costs in 2021. We are awaiting a new trial date.

Results of Operations

The following Results of Operations should be read in conjunction with our consolidated financial statements for the years ended December 31, 2021 and 2020 and accompanying notes and the discussions under "Overview" and "Liquidity and Capital Resources" included in this MD&A. You should carefully review and consider the information in the MD&A of our 2020 Form 10-K, filed with the SEC on February 25, 2021, for an understanding of our results of operations and liquidity discussions and analysis comparing 2020 to 2019.

We present the following information about our results of operations. Net sales to unaffiliated customers are reported in the consolidated financial statements and gross profit represents net sales less cost of sales. Net sales are reported on a gross basis with the cost of freight being recorded in cost of sales.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

The following table contains certain financial information:

	2021	2020	Change	Percentage Change
	(Dollars In Thousands)			
Net sales:				
Agricultural products	$ 264,502	$ 180,036	$ 84,466	47%
Industrial and mining products	291,737	171,280	120,457	70%
Total net sales	$ 556,239	$ 351,316	$ 204,923	58%
Gross profit:				
Adjusted gross profit (1)	217,515	80,960	136,555	169%
Depreciation and amortization (2)	(68,583)	(69,500)	917	(1)%
Turnaround expense	(9,953)	(76)	(9,877)	
Recovery from settlements with certain vendors (3)	—	5,664	(5,664)	
Total gross profit	138,979	17,048	121,931	715%
Selling, general and administrative expense	38,028	32,084	5,944	19%
Other (income) expense, net	(97)	499	(596)	
Operating income (loss)	101,048	(15,535)	116,583	750%
Interest expense, net	49,378	51,115	(1,737)	(3)%
Net loss on extinguishments of debt	10,259	—	10,259	
Non-operating other expense, net	2,422	10	2,412	
Benefit for income taxes	(4,556)	(4,749)	193	
Net income (loss)	$ 43,545	$ (61,911)	$ 105,456	(170)%
Other information:				
Gross profit percentage (4)	25.0%	4.9%	20.1%	
Adjusted gross profit percentage (4)	39.1%	23.0%	16.1%	
Property, plant and equipment expenditures	$ 35,128	$ 30,471	$ 4,657	15%

(1) Represents a non-GAAP measure since the amount excludes unallocated depreciation and amortization, Turnaround expenses and a recovery from settlements.
(2) Represents amount classified as cost of sales.
(3) See discussion above under "Items Affecting Comparability of Results."
(4) As a percentage of total net sales.

The following tables provide key sales metrics for the agricultural products:

Product (tons sold)	2021	2020	Change	Percentage Change
UAN	440,270	498,738	(58,468)	(12)%
HDAN	265,918	292,679	(26,761)	(9)%
Ammonia	70,331	97,367	(27,036)	(28)%
Other	13,505	18,024	(4,519)	(25)%
Total	790,024	906,808	(116,784)	(13)%

Gross Average Selling Prices (price per ton)	2021	2020	Change	Percentage Change
UAN	$ 281	$ 150	$ 131	87%
HDAN	$ 347	$ 237	$ 110	46%
Ammonia	$ 485	$ 230	$ 255	111%

With respect to sales of industrial and mining products, the following table indicates key operating metrics of our major products:

Product (tons sold)	2021	2020	Change	Percentage Change
Ammonia	234,258	269,485	(35,227)	(13)%
AN, Nitric Acid and Other	442,066	303,787	138,279	46%
Total	676,324	573,272	103,052	18%
Tampa Ammonia Benchmark (price per metric ton)	$ 592	$ 233	$ 359	154%

Net Sales

Agricultural product sales increased driven primarily by higher sales prices for all of our agricultural products partially offset by lower sales volumes of our products resulting from lower production, including ammonia, due to the February 2021 weather event, the completion of a Turnaround at our Cherokee Facility during 2021, and product mix shifts to our industrial and mining products. As discussed above under “Business Developments-2021,” increased demand, higher corn prices, and tighter supplies of nitrogen products contributed to the improved pricing.

Industrial product sales increased primarily from higher sales prices due primarily to higher Tampa Ammonia benchmark pricing and higher nitric acid sales volume due in part to sales beginning in 2021 pursuant to the new long-term nitric acid supply agreement, and product mix shifts. The average Tampa Ammonia pricing was approximately $359 per ton higher compared to the same period in 2020.

Mining products sales improved driven by primarily from increased sales volumes. Demand for our mining products improved as quarry and construction activity has been elevated due to robust levels of residential, commercial and civil infrastructure buildout along with strong demand for precious metals, including expectations for rising copper production to support the growing domestic production of electric vehicles. Also, certain mining sales contracts are linked to natural gas indexes and as the cost of natural gas increases, the pricing for these products increase accordingly.

Gross Profit

As noted in the table above, we recognized a gross profit of $139 million for 2021 compared to $17 million for the same period in 2020, or a $122 million improvement. Overall, our gross profit percentage was 25% for 2021 compared to 5% for 2020. Our adjusted gross profit percentage increased to 39% for 2021 from 23% for 2020.

The increase in gross profit was primarily driven by higher sales prices for our products coupled with an overall increase in sales volume of upgraded industrial and mining products partially offset by lower volumes of our agricultural products. The improvement in gross profit was also partially offset by the net impact of the February weather disruption and overall higher average natural gas costs, which averaged $3.51 per MMBtu for 2021 as compared to $2.09 per MMBtu for 2020 and the impact of the Turnaround completed at our Cherokee Facility as discussed above under “Turnaround Activities”. Also, 2020 included settlements with certain vendors resulting in a recovery of approximately $5.7 million.

Selling, General and Administrative

Our SG&A expenses were $38.0 million for 2021, an increase of $5.9 million compared to 2020. The net increase was primarily driven by approximately $3.8 million of expense due to CoC and anti-dilutive provisions included in certain agreements as discussed above under “Change of Control and Special Dividend.”, approximately $5.4 million associated with short and long-term compensation incentives and other payroll related costs partially offset by lower professional fees of $4.0 million.

Interest Expense, net

Interest expense for 2021 was $49.4 million compared to $51.1 million for 2020. The decrease relates primarily to the interest expense incurred in 2020 associated with a litigation judgment discussed in footnote (B) of Note 9.

Net loss on Extinguishments of Debt

As discussed above under “Business Developments-2021” and in Note 5, during 2021, we redeemed all of the Senior Secured Notes due 2023 and recognized a loss on extinguishment of debt of approximately $20.3 million. Partially offsetting this loss was a gain on extinguishment of debt of $10 million associated with the PPP loan that was fully forgiven by the SBA and lender.

Non-operating Other Expense (Income), net

Non-operating other expense for 2021 was $2.4 million (minimal for 2020). This change primarily relates to the change in fair value of the embedded derivative included in the Series E Redeemable Preferred prior to its extinguishment through the completion of the Exchange Transaction discussed above under “Business Developments-2021”.

Benefit for Income Taxes

The benefit for income taxes for 2021 was $4.6 million compared to $4.7 million for 2020. The resulting effective tax rate for 2021 was (11.7)% on pre-tax income compared to 7.1% for 2020 on pre-tax loss. For 2021, the negative effective tax rate on pre-tax income was driven by the benefit from the exclusion of PPP Loan forgiveness income from taxable income, tax credits, and the impact of adjustments made to valuation allowances, partially offset by the impact of state law changes. For 2020, the effective tax rate was impacted by adjustments made to our valuation allowances. Also see discussion in Note 8.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes our cash flow activities for 2021 and 2020:

	2021	2020	Change
	(In Thousands)		
Net cash flows from operating activities	$ 87,627	$ (2,513)	$ 90,140
Net cash flows from investing activities	$ (34,694)	$ (28,426)	$ (6,268)
Net cash flows from financing activities	$ 12,947	$ 24,412	$ (11,465)

Net Cash Flow from Operating Activities

Net cash provided by operating activities was $87.6 million for 2021 compared to net cash used of $2.5 million for 2020, a change of $90.1 million.

For 2021, net cash provided is the result of a net income of $43.5 million plus adjustments of $68.7 million for depreciation and amortization of PP&E, net loss on extinguishments of debt of $10.3 and other adjustments of $8.4 million and net cash used of $43.3 million primarily from our working capital, including accounts receivable.

For 2020, net cash provided is the result of a net loss of $61.9 million plus adjustments of $69.6 million for depreciation and amortization of PP&E, and other adjustments of $9.4 million less an adjustment of $4.8 million for deferred taxes and net cash used of approximately $14.8 million primarily from our working capital, including accounts payable, accounts receivable and prepaid deposits.

Net Cash Flow from Investing Activities

Net cash used by investing activities was $34.7 million for 2021 compared to $28.4 million for 2020, a change of $6.3 million.

For 2021 and 2020, net cash used relates primarily to expenditures for PP&E.

Net Cash Flow from Financing Activities

Net cash provided by financing activities was $12.9 million for 2021 compared to $24.4 million for 2020, a change of $11.5 million.

For 2021, net cash provided primarily consists of proceeds of $500 million from the New Notes, $16.7 million from insurance premium short-term financing partially offset by $435 million redemption of the Old Notes, payments of debt-related costs of $27.3 million, payments on other long-term debt and short-term financing of $28.0 million, payments of costs of $7.4 million related to the Exchange Transaction, and payments of $6.1 million for other financing activities.

For 2020, net cash provided primarily consists of proceeds of $57.2 million from other long-term debt and insurance premium short-term financing partially offset by payments on other long-term debt and short-term financing of $32.3 million and payments of $0.5 million for other financing activities.

Capitalization

The following is our total current cash, long-term debt and stockholders' equity:

	December 31, 2021	December 31, 2020
	(In Millions)	
Cash and cash equivalents	$ 82.1	$ 16.3
Revolving credit facility and long-term debt:		
Working Capital Revolver Loan	—	—
Senior Secured Notes due 2028 (1)	500.0	—
Senior Secured Notes due 2023 (1)	—	435.0
Secured Financing due 2023	7.7	10.7
Secured Loan Agreement due 2025	5.3	6.8
Secured Financing Agreement due 2025	24.0	28.6
Unsecured Loan Agreement due 2022 (1)	—	10.0
Secured Promissory Note due 2021	—	1.2
Other	0.3	0.5
Unamortized discount and debt issuance costs	(9.7)	(8.6)
Total long-term debt, including current portion, net	527.6	$ 484.2
Series E and F redeemable preferred stock (2)	—	$ 272.1
Total stockholders' equity	460.5	$ 149.6

(1) See discussions above under "Business Developments-2021 relating to the debt agreement.
(2) See discussion above under "Business Developments-2021" and Note 2 relating to the Exchange Transaction associated with the Series E and Series F redeemable preferred stock.

We currently have a revolving credit facility, our Working Capital Revolver Loan, with a borrowing base of $65 million. As of December 31, 2021, our Working Capital Revolver Loan was undrawn and had approximately $61.3 million of availability.

In connection with the implementation of our strategy, we may pursue acquisitions of strategic assets or companies (including through mergers), or additional investment in our production capacity, for which we may require additional funds. We may choose to finance any of the foregoing through the incurrence of additional indebtedness (including through loans or the issuance of debt securities) [or the issuance of equity], in each case subject to market conditions.

We expect capital expenditures to be approximately $65 million for 2022, which includes approximately $15 million for margin enhancement projects. The remaining capital spending is planned for reliability and maintenance capital projects.

We believe that the combination of our cash on hand, the availability on our revolving credit facility, and our cash flow from operations will be sufficient to fund our anticipated liquidity needs for the next twelve months.

Compliance with Long - Term Debt Covenants

As discussed below under "Loan Agreements," the Working Capital Revolver Loan requires, among other things, that we meet certain financial covenants. The Working Capital Revolver Loan does not include financial covenant requirements unless a defined covenant trigger event has occurred and is continuing. As of December 31, 2021, no trigger event had occurred.

Loan Agreements

Senior Secured Notes due 2028 – LSB has $500 million aggregate principal amount of the 6.25% Senior Secured Notes outstanding, as discussed in footnote (B) of Note 7. Interest is to be paid semiannually on May 15th and October 15th. Due to the redemption of the Old Notes, our interest expense is expected to decrease as compared to 2021.

Secured Financing due 2023 – EDC is party to a secured financing arrangement with an affiliate of LSB Funding. Principal and interest are payable in 48 equal monthly installments with a final balloon payment of approximately $3 million due in June 2023.

Secured Loan Agreement due 2025 - EDC is party to a secured loan agreement with an affiliate of LSB Funding. Principal and interest are payable in 60 equal monthly installments through March 2025.

Secured Financing Agreement due 2025 – EDA is party to a secured financing agreement with an affiliate of LSB Funding. Principal and interest are payable in 60 equal monthly installments with a final balloon payment of approximately $5 million due in August 2025.

Working Capital Revolver Loan – At December 31, 2021, the Working Capital Revolver Loan was undrawn and the net credit available for borrowings under our Working Capital Revolver Loan was approximately $61.3 million, based on our eligible collateral, less outstanding standby letters of credit as of that date. Also see discussion above under “Compliance with Long-Term Debt Covenants.

Capital Expenditures – 2021

For 2021, capital expenditures relating to PP&E were $35.1 million, which expenditures include approximately $0.6 million associated with maintaining compliance with environmental laws, regulations and guidelines. The capital expenditures were funded primarily from cash and working capital.

See discussion above under “Capitalization” for our expected annual capital expenditures for 2022.

Expenses Associated with Environmental Regulatory Compliance

We are subject to numerous federal, state and local laws and regulations, including matters regarding environmental, health and safety matters. As a result, we incurred expenses of $3.4 million in 2021 in connection with environmental projects. For 2022, we expect to incur expenses ranging from $3.8 million to $4.2 million in connection with additional environmental projects. However, it is possible that the actual costs could be significantly different than our estimates.

Dividends

See discussions above under “Business Developments-2021” and Notes 1 and 2 regarding the common stock Special Dividend.

We have not paid cash dividends on our outstanding common stock in many years, and we do not currently anticipate paying cash dividends on our outstanding common stock in the near future.

See discussion under Notes 12 and 14 regarding the conversion and payment of the accumulated dividends during 2021 relating to the Series D 6% cumulative convertible Class C preferred stock (the “Series D Preferred”) and Series B 12% cumulative convertible Class C Preferred Stock (the “Series B Preferred”).

Seasonality

We believe fertilizer products sold to the agricultural industry are seasonal while sales into the industrial and mining sectors generally are less susceptible. The selling seasons for agricultural products are primarily during the spring and fall planting seasons, which typically extend from March through June and from September through November in the geographical markets we distribute the majority of our agricultural products. As a result, we typically increase our inventory of fertilizer products prior to the beginning of each planting season in order to meet the demand for our products. In addition, the amount and timing of sales to the agricultural markets depend upon weather conditions and other circumstances beyond our control.

Performance and Payment Bonds

We are contingently liable to sureties in respect of insurance bonds issued by the sureties in connection with certain contracts entered into by subsidiaries in the normal course of business. These insurance bonds primarily represent guarantees of future performance of our subsidiaries. As of December 31, 2021, we have agreed to indemnify the sureties for payments, up to $9.7 million, made by them in respect of such bonds. All of these insurance bonds are expected to expire or be renewed in 2022.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K under the Securities Exchange Act of 1934.

Aggregate Contractual Obligations

As of December 31, 2021, our aggregate contractual obligations are summarized in the following table:

Contractual Obligations	Total	Payments Due in the Year Ending December 31, 2022	2023	2024	2025	2026	Thereafter
				(In Thousands)			
Long-term debt:							
Senior Secured Notes	$ 500,000	$ —	$ —	$ —	$ —	$ —	$ 500,000
Other	37,366	9,454	10,900	7,427	9,585	—	—
Total long-term debt	537,366	9,454	10,900	7,427	9,585	—	500,000
Interest payments on long-term debt (1)	225,326	34,195	33,225	32,464	31,692	31,250	62,500
Capital expenditures (2)	64,500	64,500	—	—	—	—	—
Operating leases	32,258	9,692	7,989	6,298	3,736	2,543	2,000
Firm purchase commitments	24,553	24,553	—	—	—	—	—
Natural gas pipeline commitment (3)	3,060	720	720	720	720	180	—
Other contractual obligations	11,617	3,238	2,388	2,388	1,258	1,258	1,087
Other contractual obligations included in noncurrent accrued and other liabilities (4)	2,500	—	2,500	—	—	—	—
Total	$ 901,180	$ 146,352	$ 57,722	$ 49,297	$ 46,991	$ 35,231	$ 565,587

(1) The estimated interest payments are based on interest rates at December 31, 2021, which debt is all fixed interest rate debt.
(2) Capital expenditures include only the budgeted amounts at December 31, 2021.
(3) Our proportionate share of the minimum costs to ensure capacity relating to a gathering and pipeline system.
(4) The future cash flows relating to the death benefit is based on estimates at December 31, 2021.

New Accounting Pronouncements

Refer to Note 1 for recently adopted and issued accounting standards.

Critical Accounting Policies and Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amount of assets, liabilities, revenues and expenses, and disclosures of contingencies and fair values. It is reasonably possible that the estimates and assumptions utilized as of December 31, 2021, could change in the near term. The more critical areas of financial reporting affected by management's judgment, estimates and assumptions include the following:

Contingencies – Certain conditions may exist which may result in a loss, but which will only be resolved when future events occur. We and our legal counsel assess such contingent liabilities, and such assessment inherently involves an exercise of judgment. If the assessment of a contingency indicates that it is probable that a loss has been incurred, we would accrue for such contingent losses when such losses can be reasonably estimated. If the assessment indicates that a potentially material loss contingency is not probable but reasonably possible, or is probable but cannot be estimated, the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed. Estimates of potential legal fees and other directly related costs associated with contingencies are not accrued but rather are expensed as incurred. Loss contingency liabilities are included in current and noncurrent accrued and other liabilities and are based on current estimates that may be revised in the near term. In addition, we recognize contingent gains when such gains are realized or realizable and earned.

We are involved in various legal matters that require management to make estimates and assumptions as discussed in Note 9.

It is reasonably possible that the actual costs could be significantly different than our estimates.

Regulatory Compliance – As discussed under "Government Laws and Regulations" in Item 1 of this report, we are subject to numerous federal, state, and local laws and regulations, including matters regarding environmental, health and safety matters. We have developed policies and procedures related to regulatory compliance. We must continually monitor whether we have maintained compliance with such laws and regulations and the operating implications, if any, and amount of penalties, fines and assessments that may result from noncompliance. We will also be obligated to manage certain discharge water outlets and monitor groundwater contaminants at our chemical facilities should we discontinue the operations of a facility. However, certain conditions exist which may result in a loss, but which will only be resolved when future events occur relating to these matters. We are involved in various environmental matters that require management to make estimates and assumptions, including matters discussed under footnote A of Note 9. At December 31, 2021 and 2020, liabilities totaling $0.5 million have been accrued relating to these matters. It is also reasonably possible that the estimates and assumptions utilized as of December 31, 2021 could change in the near term. Actual results could differ materially from these estimates and judgments, as additional information becomes known.

Income Tax – As discussed under "Income Taxes" in Note 1 and in Note 8, income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those differences are expected to be recovered or settled. We establish valuation allowances if we believe it is more-likely-than-not that some or all of deferred tax assets will not be realized. Significant judgment is applied in evaluating the need for and the magnitude of appropriate valuation allowances against deferred tax assets. At December 31, 2021 and 2020, our valuation allowance on deferred tax assets was $47.0 million and $64.7 million, respectively.

Series E and Series F Redeemable Preferred - As discussed in Note 1, the Series E and Series F Redeemable Preferred Stocks, prior to their redemption as discussed in Note 2, were redeemable outside our control and therefore were historically classified as temporary/mezzanine equity. These redeemable preferred stocks were recorded at fair value upon issuance, net of issuance costs or discounts. In addition, certain embedded features included in the Series E Redeemable Preferred required bifurcation and were classified as derivative liabilities. The carrying values of the redeemable preferred stocks were being increased by periodic accretions (including the amount for dividends earned but not yet declared or paid) using the interest method so that the carrying amount would equal the redemption value as of the earliest possible redemption date by the holder (October 25, 2023). The accretion was recorded to retained earnings.

As discussed in Note 2, in July 2021, we entered into the Exchange Agreement with the Holder, an affiliate of Eldridge, which Exchange Agreement was voted on and approved by our stockholders at the Special Meeting held in September 2021. Pursuant to the terms of the Exchange Agreement, the Holder exchanged all of the shares of the Series E and Series F Redeemable Preferred into our common stock based on the Liquidation Preference and an exchange price of $6.16, which is equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. The Liquidation Preference primarily consists of $1,000 per share of Series E Redeemable Preferred plus accrued and unpaid dividends plus the participation rights value. However, the exchange consideration paid under the Exchange Agreement would be reduced by approximately 1.2 million shares, which shares were included in the Special Dividend and received by the Holder.

On September 27, 2021, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated. Pursuant to the terms of the Exchange Agreement, the Holder exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

The total fair value of the approximately 49.1 million shares of common stock issued was approximately $531.1 million (based on the average per share price on the date of closing). The fair value of the common stock issued was in excess of the Series E and Series F Redeemable Preferred carrying amount, net of the bifurcated embedded derivative and unamortized issuance costs, by approximately $231.8 million and is treated as a deemed dividend. Because we were in an accumulated deficit position on the closing date, the deemed dividend was charged to capital in excess of par value.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

General

Our results of operations and operating cash flows are affected by changes in market prices of ammonia and natural gas and changes in market interest rates.

Forward Sales Commitments Risk

Periodically, we enter into forward firm sales commitments for products to be delivered in future periods. As a result, we could be exposed to embedded losses should our product costs exceed the firm sales prices at the end of a reporting period. At December 31, 2021, we had no embedded losses associated with sales commitments with firm sales prices.

Commodity Price Risk

A substantial portion of our products and raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change. Since we are exposed to commodity price risk, we periodically enter into contracts to purchase natural gas for anticipated production needs to manage risk related to changes in prices of natural gas commodities. Generally, these contracts are considered normal purchases because they provide for the purchase of natural gas that will be delivered in quantities expected to be used over a reasonable period of time in the normal course of business, these contracts are exempt from the accounting and reporting requirements relating to derivatives. At December 31, 2021, we had no outstanding natural gas contracts, which are accounted for on a mark-to-market basis.

Interest Rate Risk

Generally, we are exposed to variable interest rate risk with respect to our revolving credit facility. As of December 31, 2021, we had no outstanding borrowings on this credit facility and no other variable rate borrowings. We currently do not hedge our interest rate risk associated with these variable interest loans.

The following table presents principal amounts by maturity date and weighted-average interest rates for the periods presented for our debt agreements as of December 31, 2021:

	Years ending December 31, 2022	2023	2024	2025	2026	Thereafter	Total
	(Dollars In Thousands)						
Expected maturities of long-term debt (1):							
Fixed interest rate debt	$ 9,454	$ 10,900	$ 7,427	$ 9,585	$ —	$ 500,000	$ 537,366
Weighted-average interest rate	6.40%	6.36%	6.31%	6.27%	6.25%	6.25%	6.26%

(1) The debt balances and weighted-average interest rate are based on the aggregate amount of debt outstanding as of December 31, 2021.

At December 31, 2021 and 2020, we did not have any financial instruments with fair values materially different from their carrying amounts (which excludes issuance costs, if applicable). The fair value of financial instruments is not indicative of the overall fair value of our assets and liabilities since financial instruments do not include all assets, including intangibles, and all liabilities.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

We have included the financial statements and supplementary financial information required by this item immediately following Part IV of this report and hereby incorporate by reference the relevant portions of those statements and information into this Item 8.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

As of the end of the period covered by this report, we carried out an evaluation, with the participation of our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15 under the Exchange Act). Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. These include controls and procedures designed to ensure that this information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Based upon that evaluation, our Principal Executive Officer and our Principal Financial Officer have concluded that our disclosure controls and procedures were effective. There were no changes to our internal control over financial reporting during the quarter ended December 31, 2021, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining effective internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act). Our internal control system is a process, under the supervision of the Company's Chief Executive Officer and Chief Financial Officer, designed to provide reasonable assurance to our management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013 Framework). Based on our assessment, we believe that, as of December 31, 2021, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm has issued an attestation report on our internal control over financial reporting. This report appears on the following page.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of LSB Industries, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited LSB Industries, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, LSB Industries, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2021 consolidated financial statements of the Company and our report dated February 24, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Oklahoma City, Oklahoma

February 24, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable.

PART III

Item 10, Item 11, Item 12, Item 13 and Item 14 are incorporated by reference to our definitive proxy statement which we intend to file with the SEC on or before April 29, 2022.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements

The following consolidated financial statements of the Company appear immediately following this Part IV:

(a) (2) Financial Statement Schedule

The Company has included the following schedule in this report:

We have omitted all other schedules because the conditions requiring their filing do not exist or because the required information appears in our Consolidated Financial Statements, including the notes to those statements.

(a)(3) Exhibits

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
3(i).1	Restated Certificate of Incorporation of LSB Industries, Inc., dated January 21, 1977, as amended August 27, 1987	Exhibit 3(i).1 to the Company's Form 10-K filed on February 28, 2013
3(i).2	Certificate of Amendment to the Restated Certificate of Incorporation of LSB Industries, dated September 23, 2021	Exhibit 3(i).2 to the Company's Registration Statement on From S-3 filed on November 16, 2021
3(ii).1	Second Amended and Restated Bylaws of LSB Industries, Inc., dated July 19, 2021	Exhibit 3.1 to the Company's Form 8-K filed July 19, 2021
4.1(P)	Specimen Certificate for the Company's Series B Preferred Stock	Exhibit 4.27 to the Company's Registration Statement on Form S-3 No. 33-9848
4.2	Specimen Certificate for the Company's Series D 6% Cumulative, Convertible Class C Preferred Stock	Exhibit 4.3 to the Company's Form 10-K filed March 3, 2011
4.3	Specimen Certificate for the Company's Common Stock	Exhibit 4.3 to the Company's Registration Statement on Form S-3 ASR filed November 16, 2012
4.4	Certificate of Designations of Series E Cumulative Redeemable Class C Preferred Stock of LSB Industries, Inc., dated as of December 4, 2015	Exhibit 4.1 to the Company's Form 8-K filed December 8, 2015
4.5	Certificate of Designations of Series E-1 Cumulative Redeemable Class C Preferred Stock of LSB Industries, Inc., dated as of October 18, 2018	Exhibit 4.1 to the Company's Form 8-K filed October 19, 2018
4.6	Certificate of Correction to Certificate of Designations of the Series E-1 Cumulative Redeemable Class C Preferred Stock of LSB Industries, Inc.	Exhibit 4.1 to the Company's Form 8-K filed November 2, 2018
4.7(a)	Certificate of Amendment to Certificate of Designations of the Series E-1 Cumulative Redeemable Class C Preferred Stock of LSB Industries, Inc.	
4.8	Certificate of Designations of Series F Cumulative Redeemable Class C Preferred Stock of LSB Industries, Inc., dated as of December 4, 2015	Exhibit 4.2 to the Company's Form 8-K filed December 8, 2015
4.9	Certificate of Designations of Series F-1 Redeemable Class C Preferred Stock of LSB Industries, Inc., dated as of October 18, 2018	Exhibit 4.2 to the Company's Form 8-K filed October 19, 2018
4.10	Certificate of Designations of Series G Class C Preferred Stock of LSB Industries, Inc., as filed with the Secretary of State of the State of Delaware on July 6, 2020	Exhibit 3.1 to the Company's Form 8-K filed July 6, 2020
4.11	Section 382 Rights Agreement, dated as of July 6, 2020, between LSB Industries, Inc. and Computershare Trust Company, N.A., as rights agent	Exhibit 4.1 to the Company's Form 8-K filed July 6, 2020
4.12	Indenture, dated August 7, 2013, among LSB Industries, Inc., the guarantors named therein and UMB Bank, n.a., as trustee	Exhibit 4.1 to the Company's Form 8-K filed August 14, 2013
4.13	First Supplemental Indenture, dated as of September 7, 2016, by and among LSB Industries, Inc., the guarantors party thereto and UMB Bank, n.a., as trustee and notes collateral agent	Exhibit 4.1 to the Company's Form 8-K filed October 4, 2016.
4.14	Intercreditor Agreement, dated August 7, 2013, by and among Wells Fargo Capital Finance, Inc., as agent and UMB Bank, n.a., as collateral agent, and acknowledged and agreed to by LSB Industries, Inc. and the other grantors named therein	Exhibit 99.1 to the Company's Form 8-K filed August 14, 2013
4.15	Indenture, dated as of April 25, 2018, among LSB Industries, Inc., the subsidiary guarantors party thereto and Wilmington Trust, National Association, as trustee and collateral agent.	Exhibit 4.1 to the Company's Form 8-K filed April 25, 2018
4.16	Form of 9.625% Senior Secured Notes due 2023 (included in Exhibit 4.1).	Exhibit 4.2 to the Company's Form 8-K filed April 25, 2018

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
4.17(a)	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	
10.1*	Form of Death Benefit Plan Agreement, dated April 1, 1981	Exhibit 10.2 to the Company's Form 10-K filed March 31, 2006
10.2*	LSB Industries, Inc. Outside Directors Stock Purchase Plan, dated May 24, 1999	Exhibit 99.2 to the Company's Form 8-K filed October 23, 2014
10.3*	LSB Industries, Inc. 2008 Incentive Stock Plan, effective June 5, 2008, as amended by First Amendment, effective June 5, 2014	Exhibit 99.3 to the Company's Form 8-K filed June 11, 2014
10.4*	Form of Restricted Stock Agreement	Exhibit 10.3 to the Company's Form 8-K filed January 8, 2016
10.5*	Form of Incentive Stock Option Agreement for 2008 Plan	Exhibit 10.8 to the Company's Form 10-K filed February 29, 2016
10.6*	LSB Industries, Inc. 2016 Long Term Incentive Plan	Exhibit 4.8 to the Company's Form S-8 filed June 28, 2016
10.7*	Form of LSB Industries, Inc. 2016 Long Term Incentive Plan Stock Option Agreement	Exhibit 4.9 to the Company's Form S-8 filed June 28, 2016
10.8*	Form of LSB Industries, Inc. 2016 Long Term Incentive Plan Restricted Stock Unit Agreement (Director Award)	Exhibit 4.10 to the Company's Form S-8 filed June 28, 2016
10.9*	Form of LSB Industries, Inc. 2016 Long Term Incentive Plan Restricted Stock Agreement	Exhibit 4.11 to the Company's Form S-8 filed June 28, 2016
10.10*	Form of Time-Based Restricted Stock Agreement of LSB Industries, Inc.	Exhibit 10.4 to the Company's Form 8-K filed January 3, 2019
10.11*	Form of Performance-Based Restricted Stock Agreement of LSB Industries, Inc.	Exhibit 10.5 to the Company's Form 8-K filed January 3, 2019
10.12*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Mark Behrman	Exhibit 10.12 to the Company's Form 10-K filed February 26, 2019
10.13*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Mark Behrman	Exhibit 10.4 to the Company's Form 10-Q filed October 24, 2018
10.14*	Employment Agreement, dated December 30, 2018, between LSB Industries, Inc. and Mark T. Behrman	Exhibit 10.1 to the Company's Form 8-K filed January 3, 2019
10.15*	Restricted Stock Agreement by and between LSB Industries, Inc. and Mark Behrman, dated as of December 31, 2015	Exhibit 10.17 to the Company's Form 10-K filed February 29, 2016
10.16*	Employment Agreement by and between LSB Industries, Inc. and Daniel D. Greenwell, dated as of December 31, 2015	Exhibit 10.1 to the Company's Form 8-K/A filed January 7, 2016
10.17*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Daniel D. Greenwell	Exhibit 10.3 to the Company's Form 10-Q filed October 24, 2018
10.18*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Daniel D. Greenwell	Exhibit 10.18 to the Company's Form 10-K filed February 26, 2019
10.19*	General Release Agreement by and between LSB Industries, Inc. and Daniel D. Greenwell, dated as of January 14, 2019	Exhibit 10.19 to the Company's Form 10-K filed February 26, 2019
10.20*	Restricted Stock Agreement by and between LSB Industries, Inc. and Daniel D. Greenwell, dated as of December 31, 2015	Exhibit 10.2 to the Company's Form 8-K/A filed January 7, 2016
10.21*	Employment Agreement by and between LSB Industries, Inc. and Michael Foster, dated as of January 5, 2016	Exhibit 10.25 to the Company's Form 10-K filed February 29, 2016
10.22*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Michael J. Foster	Exhibit 10.5 to the Company's Form 10-Q filed October 24, 2018
10.23*	Notice Period Extension Regarding Employment Agreement by and between LSB Industries, Inc. and Michael J. Foster	Exhibit 10.23 to the Company's Form 10-K filed February 26, 2019
10.24*	Employment Agreement, dated December 30, 2018, between LSB Industries, Inc. and Michael J. Foster	Exhibit 10.3 to the Company's Form 8-K filed January 3, 2019
10.25*	Restricted Stock Agreement by and between LSB Industries, Inc. and Michael Foster, dated as of January 5, 2016	Exhibit 10.26 to the Company's Form 10-K filed February 29, 2016

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
10.26*	Employment Agreement by and between LSB Industries, Inc. and John Diesch, executed as of July 21, 2016	Exhibit 10.1 to the Company's Form 8-K filed August 2, 2016
10.27*	Employment Agreement by and between LSB Industries, Inc. and John Diesch, executed as of February 8, 2019	Exhibit 10.1 to the Company's Form 8-K filed February 11, 2019
10.28*	Employment Agreement, dated December 30, 2018, between LSB Industries, Inc. and Cheryl Maguire	Exhibit 10.2 to the Company's Form 8-K filed January 3, 2019
10.29*	Employment Agreement, dated December 20, 2019 and to be effective not later than February 3, 2020, between LSB Industries, Inc. and John Burns	Exhibit 10.30 to the Company's Form 10-K filed February 25, 2019
10.30*	Severance and Change in Control Agreement, dated April 6, 2020, between LSB Industries, Inc. and Kristy Carver	Exhibit 10.1 to the Company's Form 10-Q filed May 7, 2020
10.31*	Form of Retention Bonus Agreement	Exhibit 10.28 to the Company's Form 10-K filed February 29, 2016
10.32	Indemnification Agreement, dated October 14, 2015, by and between the Company and Jack E. Golsen, together with a schedule identifying other substantially identical agreements between the Company and each of the other directors identified on the schedule	Exhibit 10.1 to the Company's Form 8-K filed October 19, 2015
10.33	Indemnification Agreement, dated October 14, 2015 by and between the Company and David M. Shear, together with a schedule identifying other substantially identical agreements between the Company and each of its executive officers identified on the schedule	Exhibit 10.2 to the Company's Form 8-K filed October 19, 2015
10.34	Indemnification Agreement, dated as of December 4, 2015, by and between LSB Industries, Inc. and Jonathan S. Bobb, together with a schedule identifying other substantially identical agreements between the Company and each of the other directors identified on the schedule	Exhibit 10.5 to the Company's Form 8-K filed December 8, 2015
10.35	Asset Purchase Agreement, dated as of December 6, 2002, by and among Energetic Systems Inc. LLC, UTeC Corporation, LLC, SEC Investment Corp. LLC, DetaCorp Inc. LLC, Energetic Properties, LLC, Slurry Explosive Corporation, Universal Tech Corporation, El Dorado Chemical Company, LSB Chemical Corp., LSB Industries, Inc. and Slurry Explosive Manufacturing Corporation, LLC	Exhibit 2.1 to the Company's Form 8-K dated December 27, 2002
10.36	Exhibits and Disclosure Letters to the Asset Purchase Agreement, dated as of December 6, 2002, by and among Energetic Systems Inc. LLC, UTeC Corporation, LLC, SEC Investment Corp. LLC, DetaCorp Inc. LLC, Energetic Properties, LLC, Slurry Explosive Corporation, Universal Tech Corporation, El Dorado Chemical Company, LSB Chemical Corp., LSB Industries, Inc. and Slurry Explosive Manufacturing Corporation, LLC	Exhibit 10.1b to the Company's Form 10-Q filed August 6, 2010
10.37	Ammonia Purchase and Sale Agreement by and between El Dorado Chemical Company and Koch Fertilizer, LLC, dated as of November 2, 2015	Exhibit 10.49 to the Company's Form 10-K filed February 29, 2016 CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED AS IT IS THE SUBJECT OF A COMMISSION ORDER CF #33502, DATED APRIL 4, 2016, GRANTING REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION UNDER THE FREEDOM OF INFORMATION ACT.

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
10.38	Second Amendment to Ammonia Purchase and Sale Agreement Between Koch Fertilizer, LLC and El Dorado Chemical Company, dated as of September 30, 2019	Exhibit 10.1 to the Company's Form 10-Q filed October 29, 2019 CERTAIN CONFIDENTIAL INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED.
10.39	Urea Ammonium Nitrate Purchase and Sale Agreement dated as of March 3, 2016 and effective as of June 1, 2016 between Coffeyville Resources Nitrogen Fertilizers, LLC and Pryor Chemical Company	Exhibit 10.1 to the Company's Form 10-Q filed August 8, 2016 CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED AS IT IS THE SUBJECT OF A COMMISSION ORDER CF #33783. DATED AUGUST 30, 2016, GRANTING REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION UNDER THE FREEDOM OF INFORMATION ACT.
10.40	Stock Purchase Agreement by and among Consolidated Industries L.L.C. The Climate Control Group, Inc., NIBE Energy Systems Inc. and, solely for purposes of Sections 6.8, 6.19 and 11.15 therein, LSB Industries, Inc., and solely for purposes of Section 11.16 therein, NIBE Industrier AB (publ), dated as of May 11, 2016.	Exhibit 10.1 to the Company's Form 8-K filed May 13, 2016
10.41	Contract on the supply of Basic Engineering Package, Detail Engineering Package, Tagged Major Equipment and related Advisory Services, between Weatherly Inc. and El Dorado Chemical Company, dated November 30, 2012	Exhibit 99.2 to the Company's Form 8-K filed December 6, 2012
10.42	Engineering, Procurement and Construction Agreement, dated August 12, 2013, between El Dorado Ammonia L.L.C. and SAIC Constructors, LLC	Exhibit 10.1 to the Company's Form 8-K filed August 15, 2013
10.43	Construction Agreement-DMW2, dated November 6, 2013, between El Dorado Chemical Company and SAIC Constructors, LLC	Exhibit 99.1 to the Company's Form 8-K filed November 12, 2013
10.44	Construction Agreement – NACSAC, dated November 6, 2013, between El Dorado Chemical Company and SAIC Constructors, LLC	Exhibit 99.2 to the Company's Form 8-K filed November 12, 2013
10.45	Engineering, Procurement and Construction Agreement, dated December 31, 2013, between El Dorado Chemical Company and SAIC Constructors, LLC	Exhibit 99.1 to the Company's Form 8-K filed January 7, 2014
10.46	Engineering, Procurement and Construction Contract, Amendment No. 1 dated October 20, 2015, by and between El Dorado Ammonia LLC and SAIC Constructors, LLC	Exhibit 10.1 to the Company's Form 8-K filed October 26, 2015
10.47	Settlement Agreement, dated April 26, 2015, by and among the Company and Starboard Value LP and its certain affiliates and associates	Exhibit 99.1 to the Company's Form 8-K filed April 30, 2015
10.48	Consent Decree, dated May 28, 2014, by and among, LSB Industries, Inc., El Dorado Chemical Co., Cherokee Nitrogen Co., Pryor Chemical Co., El Dorado Nitrogen, L.P., the U.S. Department of Justice, the U.S. Environmental Protection Agency, the Alabama Department of Environmental Management, and the Oklahoma Department of Environment Quality	Exhibit 99.1 to the Company's Form 8-K filed June 3, 2014
10.49	Second Amended and Restated Loan and Security Agreement, dated December 31, 2013, by and among LSB Industries, Inc., each of its subsidiaries that are signatories thereto, the lenders signatories thereto, and Wells Fargo Capital Finance, LLC	Exhibit 4.9 to the Company's Form 10-K filed February 27, 2014

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
10.50	Amendment No. 1 to the Second Amended and Restated Loan and Security Agreement, dated as of June 11, 2015, by and among LSB Industries, Inc. its subsidiaries identified on the signature pages thereof, the lenders identified on the signature pages thereof and Wells Fargo Capital Finance, LLC, as the arranger and administrative agent for the Lenders	Exhibit 99.1 to the Company's Form 8-K filed June 17, 2015
10.51	Amendment No. 2 to the Second Amended and Restated Loan and Security Agreement, dated as of November 9, 2015, by and among LSB Industries, Inc., its subsidiaries identified on the signature pages thereof, the lenders identified on the signature pages thereof, and Wells Fargo Capital Finance, LLC, as the arranger and administrative agent for the Lenders	Exhibit 10.3 to the Company's Form 8-K filed November 16, 2015
10.52	Third Amended and Restated Loan and Security Agreement, dated as of January 17, 2017, by and among LSB Industries, Inc., the subsidiaries of LSB Industries, Inc. party thereto, the lenders party thereto, and Wells Fargo Capital Finance, LLC, as the arranger and administrative agent.	Exhibit 10.1 to the Company's Form 8-K filed January 20, 2017
10.53	First Amendment to Third Amended and Restated Loan and Security Agreement, dated as of April 16, 2018, by and among Wells Fargo Capital Finance, LLC, as the arranger and administrative agent, the lenders party thereto, LSB Industries, Inc. and its subsidiaries identified on the signature pages thereto as borrowers and the Company's subsidiaries identified on the signature pages thereto as guarantors.	Exhibit 10.1 to the Company's Form 8-K filed April 20, 2018
10.54	Second Amendment to Third Amended and Restated Loan and Security Agreement, dated as of February 26, 2019, by and among Wells Fargo Capital Finance, LLC, as the arranger and administrative agent, the lenders party thereto, LSB Industries, Inc. and its subsidiaries identified on the signature pages thereto as borrowers and the Company's subsidiaries identified on the signature pages thereto as guarantors.	Exhibit 4.1 to the Company's Form 8-K filed February 28, 2019
10.55	Third Amendment to Third Amended and Restated Loan and Security Agreement, dated as of April 20, 2020, by and among Wells Fargo Capital Finance, LLC, as the arranger and administrative agent, the lenders party thereto, LSB Industries, Inc. and its subsidiaries identified on the signature pages thereto as borrowers and the Company's subsidiaries identified on the signature pages thereto as guarantors	Exhibit 10.3 to the Company's Form 10-Q filed May 7, 2020
10.56	Consent and Fourth Amendment to Third Amended and Restated Loan and Security Agreement, dated as of September 22, 2021, by and among Wells Fargo Capital Finance, LLC, as the arranger and administrative agent, the lenders party thereto, LSB Industries, Inc. and its subsidiaries identified on the signature pages thereto as borrowers and the Company's subsidiaries identified on the signature pages thereto as guarantors	Exhibit 10.1 to the Company's Form 8-K filed September 27, 2021
10.57	Security Agreement dated as of August 7, 2013, among LSB Industries, Inc. and the other grantors identified therein in favor of UMB Bank, N.A. as Collateral Agent	Exhibit 10.72 to the Company's Form 10-K filed February 29, 2016
10.58	Supplement No. 1 to Security Agreement February 12, 2014 among LSB Industries, Inc. and the other grantors identified therein in favor of UMB Bank, N.A., as Collateral Agent	Exhibit 10.73 to the Company's Form 10-K filed February 29, 2016
10.59	Note Purchase Agreement, dated November 9, 2015, by and among LSB Industries, Inc., the guarantors party thereto and LSB Funding LLC	Exhibit 10.1 to the Company's Form 8-K filed November 16, 2015
10.60	Promissory Note, dated November 9, 2015, by LSB Industries, Inc.	Exhibit 10.2 to the Company's Form 8-K filed November 16, 2015

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
10.61	Joinder Agreement to Intercreditor Agreement, dated November 9, 2015, by and among LSB Funding LLC, Wells Fargo Capital Finance, Inc., as ABL Agent, UMB Bank, N.A., as Notes Agent, LSB Industries, Inc. and the guarantors party thereto	Exhibit 10.4 to the Company's Form 8-K filed November 16, 2015
10.62	Amendment No. 1 to Intercreditor Agreement, dated as of April 25, 2018, among Wells Fargo Capital Finance, LLC, UMB Bank, n.a. and Wilmington Trust, National Association, and acknowledged by LSB Industries, Inc. and the subsidiary guarantors party thereto.	Exhibit 10.1 to the Company's Form 8-K filed April 25, 2018
10.63	Joinder Agreement to Security Agreement, dated November 9, 2015, by and among LSB Funding LLC, UMB Bank, N.A., as Collateral Agent, LSB Industries, Inc. and the guarantors party thereto	Exhibit 10.5 to the Company's Form 8-K filed November 16, 2015
10.64	Board Representation and Standstill Agreement by and among LSB Industries, Inc., LSB Funding LLC, Security Benefit Corporation, Todd Boehly and the Golsen Holders (as defined therein), dated as of December 4, 2015	Exhibit 10.3 to the Company's Form 8-K filed December 8, 2015
10.65	Registration Rights Agreement by and between LSB Industries, Inc. and LSB Funding LLC, dated as of December 4, 2015	Exhibit 10.4 to the Company's Form 8-K filed December 8, 2015
10.66	Letter Agreement, dated as of August 12, 2016, by and among LSB Industries, Inc., LSB Funding LLC and Security Benefit Corporation	Exhibit 10.1 to the Company's Form 8-K filed August 12, 2016
10.67*	Transition Agreement dated June 30, 2017 by and between Jack E. Golsen and LSB Industries, Inc.	Exhibit 10.1 to the Company's Form 8-K filed on June 30, 2017
10.68	Amendment, dated October 26, 2017, to the Board Representation and Standstill Agreement by and between LSB Industries, Inc., LSB Funding LLC, Security Benefit Corporation, Todd Boehly, Jack E. Golsen, Barry H. Golsen, Linda Golsen Rappaport, Golsen Family LLC, SBL LLC and Golsen Petroleum Corp., dated as of December 4, 2015	Exhibit 10.1. to the Company's Form 8-K Filed on October 26, 2017
10.69	Amendment to Board Representation and Standstill Agreement, dated as of October 18, 2018, by and among LSB Industries, Inc., LSB Funding LLC, Security Benefit Corporation, Todd Boehly and the Golsen Holders (as defined therein)	Exhibit 10.2 to the Company's Form 8-K filed October 19, 2018
21.1(a)	Subsidiaries of the Company	
23.1(a)	Consent of Independent Registered Public Accounting Firm	
31.1(a)	Certification of Mark T. Behrman, Chief Executive Officer, pursuant to Sarbanes-Oxley Act of 2002, Section 302	
31.2(a)	Certification of Cheryl A. Maguire, Chief Financial Officer, pursuant to Sarbanes-Oxley Act of 2002, Section 302	
32.1(b)	Certification of Mark T. Behrman, Chief Executive Officer, furnished pursuant to Sarbanes-Oxley Act of 2002, Section 906	
32.2(b)	Certification of Cheryl A. Maguire, Chief Financial Officer, furnished pursuant to Sarbanes-Oxley Act of 2002, Section 906	
101.INS(a)	Inline XBRL Instance Document	
101.SCH(a)	Inline XBRL Taxonomy Extension Schema Document	
101.CAL(a)	Inline XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF(a)	Inline XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB(a)	Inline XBRL Taxonomy Extension Labels Linkbase Document	
101.PRE(a)	Inline XBRL Taxonomy Extension Presentation Linkbase Document	

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	

* Executive Compensation Plan or Arrangement
(a) Filed herewith
(b) Furnished herewith
(P) Paper copy filed

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 24, 2022	By:	/s/ Mark T. Behrman Mark T. Behrman, President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Dated: February 24, 2022	By:	/s/ Mark T. Behrman Mark T. Behrman, President and Chief Executive Officer (Principal Executive Officer) and Director
Dated: February 24, 2022	By:	/s/ Cheryl A. Maguire Cheryl A. Maguire, Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer Officer)
Dated: February 24, 2022	By:	/s/ Richard W. Roedel Richard W. Roedel, Chairman of the Board of Directors
Dated: February 24, 2022	By:	/s/ Jonathan S. Bobb Jonathan S. Bobb, Director
Dated: February 24, 2022	By:	/s/ Barry H. Golsen Barry H. Golsen, Director
Dated: February 24, 2022	By:	/s/ Kanna Kitamura Kanna Kitamura, Director
Dated: February 24, 2022	By:	/s/ Steven L. Packebush Steven L. Packebush, Director
Dated: February 24, 2022	By:	/s/ Diana M. Peninger Diana M. Peninger, Director
Dated: February 24, 2022	By:	/s/ Richard S. Sanders Jr. Richard S. Sanders Jr., Director
Dated: February 24, 2022	By:	/s/ Lynn F. White Lynn F. White, Director

LSB Industries, Inc.

Consolidated Financial Statements
And Schedule for Inclusion in Form 10-K
For the Fiscal Year ended December 31, 2021

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of LSB Industries, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of LSB Industries, Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 24, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

	Extinguishment of preferred stock in exchange for common stock
Description of the Matter	As discussed in Note 2 to the consolidated financial statements, the Company entered into an Exchange Agreement with LSB Funding LLC, requiring approval from the Company's common stockholders, which was subsequently voted on and approved by the Company's common stockholders. Pursuant to the terms of the Exchange Agreement, which closed on September 27, 2021, LSB Funding LLC and the Company agreed to exchange the outstanding Series E-1 and Series F-1 Redeemable Preferred Stock for common stock of the Company at an agreed upon exchange price of $6.16 per common share. In connection with the exchange, each common stockholder prior to the exchange received a special dividend in the form of 0.30 shares of common stock for every share owned as of, September 24, 2021, the dividend record date. The Company applied the related accounting guidance and disclosure requirements, recognizing a deemed dividend of $231.8 million within capital in excess of par value. The deemed dividend increased the reported net loss to arrive at the net loss attributable to common stockholders, which is used in the basic and diluted net loss per share calculation using the two-class method, with retrospective application of the special dividend. Auditing the Company's application of the accounting guidance related to the exchange and special dividend required special consideration, given the non-recurring nature of the transaction and the complexity involved in applying the relevant accounting standards.

How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls relating to the accounting for the exchange and special dividend. To test the accounting for the exchange and special dividend, our audit procedures included, among others, examining the terms of the relevant Exchange Agreement and special dividend, the Company's provisions over change in control activities, reading the minutes and meeting materials of the committees of the board of directors, and performing inquiries of members of management. As part of these procedures, we involved our subject matter resources and evaluated the Company's application of the related accounting guidance to the accounting conclusions and financial statement presentation of equity and the basic and diluted net loss per share.

/s/ Ernst & Young

We have served as the Company's auditor since 1968.

Oklahoma City, Oklahoma

February 24, 2022

LSB Industries, Inc.

Consolidated Balance Sheets

	December 31, 2021	December 31, 2020
	(In Thousands)	
Assets		
Current assets:		
Cash and cash equivalents	**$ 82,144**	$ 16,264
Accounts receivable	**86,902**	42,929
Allowance for doubtful accounts	**(474)**	(378)
Accounts receivable, net	**86,428**	42,551
Inventories:		
Finished goods	**14,688**	17,778
Raw materials	**1,895**	1,795
Total inventories	**16,583**	19,573
Supplies, prepaid items and other:		
Prepaid insurance	**14,244**	12,315
Precious metals	**14,945**	6,787
Supplies	**26,558**	25,288
Other	**2,234**	6,802
Total supplies, prepaid items and other	**57,981**	51,192
Total current assets	**243,136**	129,580
Property, plant and equipment, net	**858,480**	891,198
Other assets:		
Operating lease assets	**27,317**	26,403
Intangible and other assets, net	**3,907**	6,121
	31,224	32,524
	$ 1,132,840	$ 1,053,302

(Continued on following page)

Consolidated Balance Sheets (continued)

	December 31, 2021	December 31, 2020
	(In Thousands)	
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	**$ 49,458**	$ 46,551
Short-term financing	**12,716**	13,576
Accrued and other liabilities	**33,301**	30,367
Current portion of long-term debt	**9,454**	16,801
Total current liabilities	**104,929**	107,295
Long-term debt, net	**518,190**	467,389
Noncurrent operating lease liabilities	**19,568**	19,845
Other noncurrent accrued and other liabilities	**3,030**	6,090
Deferred income taxes	**26,633**	30,939
Commitments and contingencies (Note 8)		
Redeemable preferred stocks:		
Series E 14% cumulative, redeemable Class C preferred stock, no par value, no shares issued or outstanding at December 31, 2021; (210,000 shares issued; 139,768 outstanding; aggregate liquidation preference $278 million at December 31, 2020)	**—**	272,101
Series F redeemable Class C preferred stock, no par value, no shares issued or outstanding at December 31, 2021; (1 share issued and outstanding; aggregate liquidation preference of $100 at December 31, 2020)	—	—
Stockholders' equity:		
Series B 12% cumulative, convertible preferred stock, $100 par value; no shares issued or outstanding at December 31, 2021; (20,000 shares issued and outstanding; aggregate liquidation preference $3.3 million at December 31, 2020)	**—**	2,000
Series D 6% cumulative, convertible Class C preferred stock, no par value; no shares issued or outstanding at December 31, 2021; (1 million shares issued and outstanding; aggregate liquidation preference $1.3 million December 31, 2020)	—	1,000
Common stock, $.10 par value; 150 million shares authorized, 91.1 million shares issued (75 million shares authorized, 39.9 million shares issued at December 31, 2020)	**9,117**	3,993
Capital in excess of par value	**493,161**	197,350
Accumulated deficit	**(31,255)**	(41,487)
	471,023	162,856
Less treasury stock, at cost:		
Common stock, 1.4 million shares (2.1 million shares at December 31, 2020)	**10,533**	13,213
Total stockholders' equity	**460,490**	149,643
	$ 1,132,840	$ 1,053,302

See accompanying notes.

LSB Industries, Inc.

Consolidated Statements of Operations

	Year Ended December 31, 2021	2020	2019
	(In Thousands, Except Per Share Amounts)		
Net sales	**$ 556,239**	$ 351,316	$ 365,070
Cost of sales	**417,260**	334,268	360,085
Gross profit	**138,979**	17,048	4,985
Selling, general and administrative expense	**38,028**	32,084	34,172
Other expense (income), net	**(97)**	499	9,904
Operating income (loss)	**101,048**	(15,535)	(39,091)
Interest expense, net	**49,378**	51,115	46,389
Net loss on extinguishments of debt	**10,259**	—	—
Non-operating other expense (income), net	**2,422**	10	(1,139)
Income (loss) before benefit for income taxes	**38,989**	(66,660)	(84,341)
Benefit for income taxes	**(4,556)**	(4,749)	(20,924)
Net income (loss)	**43,545**	(61,911)	(63,417)
Dividends on convertible preferred stocks	**298**	300	300
Dividends on Series E redeemable preferred stock	**29,914**	35,182	30,729
Accretion of Series E redeemable preferred stock	**1,523**	2,026	1,995
Deemed dividend on Series E and Series F redeemable preferred stocks	**231,812**	—	—
Net loss attributable to common stockholders	**$ (220,002)**	$ (99,419)	$ (96,441)
Basic and diluted net loss per common share	**$ (4.40)**	$ (2.71)	$ (2.65)

See accompanying notes.

LSB Industries, Inc.

Consolidated Statements of Stockholders' Equity

	Common Stock Shares	Treasury Stock-Common Shares	Non-Redeemable Preferred Stock	Common Stock Par Value	Capital in Excess of Par Value	Retained Earnings (Accumulated Deficit)	Treasury Stock-Common	Total
				(In Thousands)				
Balance at December 31, 2018	39,725	(2,438)	$ 3,000	$ 3,972	$ 197,638	$ 153,773	$ (16,186)	$ 342,197
Net loss						(63,417)		(63,417)
Dividend accrued on redeemable preferred stock						(30,729)		(30,729)
Accretion of redeemable preferred stock						(1,995)		(1,995)
Stock-based compensation					2,220			2,220
Issuance of restricted stock, net	176	428		18	(3,887)		2,920	(949)
Balance at December 31, 2019	39,901	(2,010)	3,000	3,990	195,971	57,632	(13,266)	247,327
Net loss						(61,911)		(61,911)
Dividend accrued on redeemable preferred stock						(35,182)		(35,182)
Accretion of redeemable preferred stock						(2,026)		(2,026)
Stock-based compensation					1,761			1,761
Other	25	(65)		3	(382)		53	(326)
Balance at December 31, 2020	39,926	(2,075)	3,000	3,993	197,350	(41,487)	(13,213)	149,643
Net income						**43,545**		**43,545**
Issuance of common stock in exchange for redeemable preferred stocks	**49,066**			**4,907**	**526,232**			**531,139**
Deemed dividend on redeemable preferred stocks					**(231,812)**			**(231,812)**
Dividend accrued on redeemable preferred stock prior to exchange						**(29,914)**		**(29,914)**
Accretion of redeemable preferred stock prior to exchange						**(1,523)**		**(1,523)**
Dividend paid on non-redeemable preferred stock upon conversion						**(1,876)**		**(1,876)**
Conversion of non-redeemable preferred stock into common stock	**1,192**		**(3,000)**	**119**	**2,881**			**—**
Stock-based compensation					**5,516**			**5,516**
Issuance of restricted and unrestricted stock, net	**984**	**700**		**98**	**(7,006)**		**2,680**	**(4,228)**
Balance at December 31, 2021	**91,168**	**(1,375)**	**$ -**	**$ 9,117**	**$ 493,161**	**$ (31,255)**	**$ (10,533)**	**$ 460,490**

See accompanying notes.

LSB Industries, Inc.

Consolidated Statements of Cash Flows

	Year Ended December 31, 2021	2020	2019
	(In Thousands)		
Cash flows from operating activities			
Net income (loss)	**$ 43,545**	$ (61,911)	$ (63,417)
Adjustments to reconcile net income (loss) to net cash provided (used) by operating activities:			
Deferred income taxes	**(4,306)**	(4,778)	(20,895)
Depreciation and amortization of property, plant and equipment	**68,689**	69,581	68,325
Amortization of intangible and other assets	**1,254**	1,260	1,249
Loss associated with assets held for sale	**—**	—	9,701
Charge on extinguishments of debt	**10,259**	—	—
Amortization of debt issuance costs, including discounts and premiums	**6,067**	3,807	3,620
Stock-based compensation	**5,516**	1,761	2,220
Loss (gain) associated with commodity contracts	**(2,706)**	1,613	—
Other	**2,653**	910	(148)
Cash provided (used) by changes in assets and liabilities:			
Accounts receivable	**(42,913)**	(4,702)	8,800
Inventories	**3,261**	3,550	6,092
Supplies, prepaid items and other	**(8,642)**	(6,585)	(933)
Accounts payable	**932**	(6,561)	(7,987)
Other assets and other liabilities	**4,018**	(458)	(4,528)
Net cash provided (used) by operating activities	**87,627**	(2,513)	2,099
Cash flows from investing activities			
Expenditures for property, plant and equipment	**(35,128)**	(30,471)	(36,081)
Proceeds from vendor settlements associated with property, plant and equipment	**—**	1,647	—
Other investing activities	**434**	398	156
Net cash used by investing activities	**(34,694)**	(28,426)	(35,925)

(Continued on following page)

Consolidated Statements of Cash Flows (continued)

	Year Ended December 31, 2021	2020	2019
	(In Thousands)		
Cash flows from financing activities			
Proceeds from revolving debt facility	**$ 12,000**	$ 30,000	$ 5,000
Payments on revolving debt facility	**(12,000)**	(30,000)	(15,000)
Proceeds from 6.25% senior secured notes	**500,000**	—	—
Net proceeds from 9.625% senior secured notes	—	—	35,086
Payments on 9.625% senior secured notes	**(435,000)**	—	—
Proceeds from other long-term debt	**—**	42,570	20,219
Payments on other long-term debt	**(10,472)**	(21,356)	(14,073)
Payments of debt-related costs, including extinguishment costs	**(27,254)**	(124)	(1,065)
Proceeds from short-term financing	**16,689**	14,589	12,179
Payments on short-term financing	**(17,549)**	(10,941)	(10,828)
Payments of costs to exchange redeemable preferred stocks for common stock	**(7,363)**	—	—
Taxes paid on equity awards	**(4,228)**	(326)	(949)
Payments of dividends on non-redeemable preferred stocks	**(1,876)**	—	—
Net cash provided by financing activities	**12,947**	24,412	30,569
Net increase (decrease) in cash and cash equivalents	**65,880**	(6,527)	(3,257)
Cash and cash equivalents at beginning of year	**16,264**	22,791	26,048
Cash and cash equivalents at end of year	**$ 82,144**	$ 16,264	$ 22,791

See accompanying notes.

1. Summary of Significant Accounting Policies

Basis of Consolidation – LSB Industries, Inc. (“LSB”) and its subsidiaries (the “Company”, “we”, “us”, or “our”) are consolidated in the accompanying consolidated financial statements. LSB is a holding company with no significant operations or assets other than cash, cash equivalents, and investments in its subsidiaries. All material intercompany accounts and transactions have been eliminated. Certain prior period amounts reported in our consolidated financial statements and notes thereto have been reclassified to conform to current period presentation.

Nature of Business – We are engaged in the manufacture and sale of chemical products. The chemical products we primarily manufacture, market and sell are ammonia, fertilizer grade AN (“HDAN”) and UAN for agricultural applications, high purity and commercial grade ammonia, high purity AN, sulfuric acids, concentrated, blended and regular nitric acid, mixed nitrating acids, carbon dioxide, and diesel exhaust fluid for industrial applications, and industrial grade AN (“LDAN”) and solutions for the mining industry. We manufacture and distribute our products in four facilities; three of which we own and are located in El Dorado, Arkansas (the “El Dorado Facility”); Cherokee, Alabama (the “Cherokee Facility”); and Pryor, Oklahoma (the “Pryor Facility”); and one of which we operate on behalf of Covestro LLC in Baytown, Texas (the “Baytown Facility”).

Sales to customers include farmers, ranchers, fertilizer dealers and distributors primarily in the ranch land and grain production markets in the United States (“U.S.”); industrial users of acids throughout the U.S. and parts of Canada; and explosive manufacturers in the U.S. and parts of Mexico and Canada.

Use of Estimates – The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Increase in Authorized Shares of Common Stock and a Stock Dividend – In September 2021, LSB held a Special Meeting of Stockholders (the “Special Meeting”). At the Special Meeting, our stockholders approved:

- the issuance and sale of up to approximately 60.4 million shares of common stock of the Company upon the exchange of all of the outstanding shares of Series E and Series F Redeemable Preferred (see discussion of the exchange transaction (“Exchange Transaction” in Note 2);
- amending our restated certificate of incorporation to increase the number of authorized shares of our common stock to 150 million shares of common stock;
- amending the certificate of designations of the Series E Redeemable Preferred to revise the preferential rights of holders of shares of Series E Redeemable Preferred to eliminate the right to participate in connection with the declaration of the proposed common stock dividend with respect to our common stock.

In August 2021, our Board of Directors (“Board”) declared a common stock dividend (“Special Dividend”) contingent on the closing of the Exchange Transaction (as defined below). As a result of the stockholders’ approval and the closing of the Exchange Transaction, such Special Dividend was effected in the form of a stock dividend of 0.3 shares of our common stock, for each outstanding share of common stock (exclusive of common stock held in the treasury and the common shares issued as part of the Exchange Transaction), but the Special Dividend was contingent upon the stockholders’ approval of the proposals noted above. As the result of the stockholders’ approval, the Special Dividend was paid through the issuance of approximately 9.1 million shares of common stock on October 8, 2021 to holders of record of common stock, including certain stock-based awards, on September 24, 2021 (the “Record Date”). Our common stock began trading on a stock dividend-adjusted basis on October 13, 2021.

For financial reporting purposes, the Special Dividend is accounted for as a stock split in the form of a stock dividend. As a result, all share and per share information herein has been retroactively adjusted to reflect the Special Dividend.

In addition, pursuant to anti-dilution terms included in cash-based awards that were outstanding on the Record Date, the number of units of cash-based awards increased due to the Special Dividend. As a result, additional expense was recognized due to the Special Dividend. See additional discussion relating to these cash-based awards in Note 2.

1. Summary of Significant Accounting Policies (continued)

Redeemable Preferred Stocks – Our redeemable preferred stocks, prior to their redemption as discussed in Note 2, were redeemable outside our control and therefore were historically classified as temporary/mezzanine equity. The redeemable preferred stocks were recorded at fair value upon issuance, net of issuance costs or discounts. In addition, certain embedded features ("embedded derivative") included in the Series E Redeemable Preferred required bifurcation and were classified as derivative liabilities. The carrying values of the redeemable preferred stocks were being increased since issuance by periodic accretions (including the amount for dividends earned but not yet declared or paid) using the interest method so that the carrying amount would equal the redemption value as of the earliest possible redemption date by the holder. The accretion was recorded to retained earnings/accumulated deficit. However, in September 2021, our redeemable preferred stocks were exchanged into our common stock as discussed in Note 2. As a result, the change in classification of the redeemable preferred stocks from temporary/mezzanine equity to permanent equity was considered an extinguishment. In conjunction with the extinguishment of the redeemable preferred stocks, the then current fair value of the bifurcated embedded derivative was applied to the carrying value of the redeemable preferred stocks at the time of the extinguishment.

Equity Awards – Equity award transactions with employees are measured based on the estimated fair value of the equity awards issued. For equity awards with service conditions that have a graded vesting period, we recognize compensation cost on a straight-line basis over the requisite service period for the entire award. Forfeitures are accounted for as they occur. We may issue new shares of common stock or may use treasury shares associated with the equity awards.

See additional discussion relating to certain equity awards impacted by the Exchange Transaction in Note 11.

Cash and Cash Equivalents – Investments, which consist of highly liquid investments with original maturities of three months or less, are considered cash equivalents.

Accounts Receivable – Our accounts receivable is stated at net realizable value. This value includes an appropriate allowance for estimated uncollectible accounts to reflect any loss anticipated on accounts receivable balances. Our estimate is based on historical experience and periodic assessment of outstanding accounts receivable, particularly those accounts that are past due (based upon the terms of the sale). Our periodic assessment of our accounts receivable is based on our best estimate of amounts that are not recoverable. Any contract assets consist of receivables from contracts with customers. Our accounts receivable primarily relate to these contract assets and are presented in our consolidated balance sheets.

Sales to our customers are generally unsecured. Credit is extended to customers based on an evaluation of the customer's financial condition and other factors. Customer payments are generally due thirty to sixty days after the invoice date. Concentrations of credit risk with respect to trade receivables are monitored and this risk is reduced due to short-term payment terms relating to most of our significant customers. Six customers (including their affiliates) account for approximately 50% of our total net receivables at December 31, 2021.

Inventories – Inventories are stated at the lower of cost (determined using the first-in, first-out ("FIFO") basis) or net realizable value, which is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, transportation or disposal. Finished goods include material, labor, and manufacturing overhead costs.

Inventory reserves associated with cost exceeding net realizable value were not material at December 31, 2021 and 2020.

Property, Plant and Equipment – Property, plant and equipment ("PP&E") are stated at cost, net of accumulated depreciation amortization ("D&A"). Leases meeting finance lease criteria are capitalized in PP&E. Major renewals and improvements that increase the life, value, or productive capacity of assets are capitalized in PP&E while maintenance, repairs and minor renewals are expensed as incurred. In addition, maintenance, repairs and minor renewal costs relating to planned major maintenance activities ("Turnarounds") are expensed as they are incurred. All long-lived assets relate to domestic operations.

Fully depreciated assets are retained in PP&E and accumulated D&A accounts until disposal. When PP&E is retired, sold, or otherwise disposed, the asset's carrying amount and related accumulated D&A is removed from the accounts and any gain or loss is included in other income or expense.

For financial reporting purposes, depreciation of the costs of PP&E is primarily computed using the straight-line method over the estimated useful lives of the assets. No provision for depreciation is made on construction in progress or capital spare parts until such time as the relevant assets are put into service.

In general, assets held for sale are reported at the lower of the carrying amounts of the assets or fair values less costs to sell.

1. Summary of Significant Accounting Policies (continued)

Impairment of Long-Lived Assets – Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset (asset group) may not be recoverable. An asset's fair value must be determined when the carrying amount of an asset (asset group) exceeds the estimated undiscounted future cash flows expected to result from the use of the asset (asset group) and/or its eventual disposition. If assets to be held and used are considered to be impaired, the impairment to be recognized is the amount by which the carrying amounts of the assets exceed the fair values of the assets as measured by the present value of future net cash flows expected to be generated by the assets or their appraised value. In general, and depending on the event or change in circumstances, our asset groups are reviewed for impairment on a facility-by-facility basis (such as the Cherokee, El Dorado or Pryor Facility).

In addition, if the event or change in circumstance relates to the probable sale of an asset (or group of assets), the specific asset (or group of assets) is reviewed for impairment.

Leases – We determine if an arrangement is a lease at inception or modification of a contract and classify each lease as either an operating or finance lease based on the terms of the contract. We reassess lease classification subsequent to commencement upon a change to the expected lease term or a modification to the contract. A contract contains a lease if the contract conveys the right to control the use of the identified property or equipment, explicitly or implicitly, for a period of time in exchange for consideration. Control of an underlying asset is conveyed if we obtain the rights to direct the use of and obtain substantially all of the economic benefit from the use of the underlying asset.

An operating lease asset represents our right to use the underlying asset as a lessee for the lease term and an operating lease liability represent our obligation to make lease payments arising from the lease. Currently, most of our leases are classified as operating leases and primarily relate to railcars, other equipment and office space. Our leases that are classified as finance leases and other leases under which we are the lessor are not material. Variable payments are excluded from the present value of lease payments and are recognized in the period in which the payment is made. Our current leases do not contain residual value guarantees. Most of our leases do not include options to extend or terminate the lease prior to the end of the term. Leases with a term of 12 months or less are not recognized in the balance sheet.

Since our leases generally do not provide an implicit rate, we use our incremental borrowing rate based on the lease term and other information available at the commencement date in determining the present value of lease payments. Lease expense is recognized on a straight-line basis over the applicable lease term.

Concentration of Credit Risks for Cash and Cash Equivalents and Sales – Financial instruments relating to cash and cash equivalents potentially subject us to concentrations of credit risk. These financial instruments were held by financial institutions within the U.S. None of the financial instruments held within U.S. were in excess of the federally insured limits.

Net sales to one customer, Koch Fertilizer LLC ("Koch Fertilizer"), represented approximately 15%, 10% and 11% of our total net sales for 2021, 2020 and 2019, respectively. Net sales to one customer, Coffeyville Resources Nitrogen Fertilizer, LLC ("CVR"), represented approximately 12%, 13% and 9% of our total net sales for 2021, 2020 and 2019, respectively.

Accrued Insurance Liabilities – We are self-insured up to certain limits for group health, workers' compensation and general liability claims. Above these limits, we have commercial stop-loss insurance coverage for our contractual exposure on group health claims and statutory limits under workers' compensation obligations. We also carry umbrella insurance of $100 million for most general liability and auto liability risks. We have a separate $50 million insurance policy covering pollution liability at our chemical facilities. Additional pollution liability coverage for our other facilities is provided in our general liability and umbrella policies.

Our accrued self-insurance liabilities are based on estimates of claims, which include the reported incurred claims amounts plus the reserves established by our insurance adjustors and/or estimates provided by attorneys handling the claims, if any, up to the amount of our self-insurance limits. In addition, our accrued insurance liabilities include estimates of incurred, but not reported, claims based on historical claims experience. The determination of such claims and the appropriateness of the related liability is periodically reviewed and revised, if needed. Changes in these estimated liabilities are charged to operations. Potential legal fees and other directly related costs associated with insurance claims are not accrued but rather are expensed as incurred. Accrued insurance claims are included in accrued and other liabilities. It is reasonably possible that the actual development of claims could be different than our estimates.

1. Summary of Significant Accounting Policies (continued)

Executive Benefit Agreements – We are party to certain benefit agreements with certain key former executives. Costs associated with these individual benefit agreements are accrued based on the estimated remaining service period when such benefits become probable, or they will be paid. Total costs accrued equal the present value of specified payments to be made after benefits become payable.

Income Taxes – Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the enactment date. We establish valuation allowances if we believe it is more-likely-than-not that some or all of deferred tax assets will not be realized. Significant judgment is applied in evaluating the need for and the magnitude of appropriate valuation allowances against deferred tax assets.

In addition, we do not recognize a tax benefit unless we conclude that it is more likely than not that the benefit will be sustained on audit by the relevant taxing authorities based solely on the technical merits of the associated tax position. If the recognition threshold is met, we recognize a tax benefit measured at the largest amount of the tax benefit that, in our judgment, is greater than 50% likely to be realized. We record interest related to unrecognized tax positions in interest expense and penalties in operating other expense.

Income tax benefits associated with amounts that are deductible for income tax purposes are recorded through the statement of operations. These benefits are principally generated from the vesting of restricted stock. We reduce income tax expense for investment tax credits in the period the credit arises and is earned.

Contingencies – Certain conditions may exist which may result in a loss, but which will only be resolved when future events occur. We and our legal counsel assess such contingent liabilities, and such assessment inherently involves an exercise of judgment. If the assessment of a contingency indicates that it is probable that a loss has been incurred, we would accrue for such contingent losses when such losses can be reasonably estimated. If the assessment indicates that a potentially material loss contingency is not probable but reasonably possible, or is probable but cannot be estimated, the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed. Estimates of potential legal fees and other directly related costs associated with contingencies are not accrued but rather are expensed as incurred. Loss contingency liabilities are included in current and noncurrent accrued and other liabilities and are based on current estimates that may be revised in the near term. In addition, we recognize contingent gains when such gains are realized or when the contingencies have been resolved (generally at the time a settlement has been reached).

Asset Retirement Obligations – In general, we record the estimated fair value of an asset retirement obligation ("ARO") associated with tangible long-lived assets in the period it is incurred and when there is sufficient information available to estimate the fair value. An ARO associated with long-lived assets is a legal obligation under existing or enacted law, statute, written or oral contract or legal construction. AROs, which are initially recorded based on estimated discounted cash flows, are accreted to full value over time through charges to cost of sales. In addition, we capitalize the corresponding asset retirement cost as PP&E, which cost is depreciated or depleted over the related asset's respective useful life. We do not have any assets restricted for the purpose of settling our AROs.

Revenue Recognition and Other Information

Revenue Recognition and Performance Obligations

We determine revenue recognition through the following steps:

- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, we satisfy a performance obligation.

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Generally, satisfaction occurs when control of the promised goods is transferred to the customer or as services are rendered or completed in exchange for consideration in an amount for which we expect to be entitled. Generally, control is transferred when the preparation for shipment of the product to a customer has been completed. Most of our contracts contain a single performance obligation with the promise to transfer a specific product.

Most of our revenue is recognized from performance obligations satisfied at a point in time, however, we have a performance obligation to perform certain services that are satisfied over a period of time. Revenue is recognized from this type of performance obligation as services are rendered and are based on the amount for which we have a right to invoice, which reflects the amount of expected consideration that corresponds directly with the value of the services performed.

1. Summary of Significant Accounting Policies (continued)

Transaction Price Constraints and Variable Consideration

For most of our contracts with customers, the transaction price from the inception of a contract is constrained to a short period of time (generally one month) as these contracts contain terms with variable consideration related to both price and quantity. These contract prices are often based on commodity indexes (such as NYMEX natural gas index) published monthly and the contract quantities are typically based on estimated ranges. The quantities become fixed and determinable over a period of time as each sale order is received from the customer.

The nature of our contracts also gives rise to other types of variable consideration, including volume discounts and rebates, make-whole provisions, other pricing concessions, and short-fall charges. We estimate these amounts based on the expected amount to be provided to customers, which result in a transaction price adjustment reducing revenue (net sales) with the offset increasing contract or refund liabilities. These estimates are based on historical experience, anticipated performance and our best judgment at the time. We reassess these estimates on a quarterly basis.

The aforementioned constraints over transaction prices in conjunction with the variable consideration included in our material contracts prevent a practical assignment of a specific dollar amount to performance obligations at the beginning and end of the period. Therefore, we have applied the variable consideration allocation exception.

Future revenues to be earned from the satisfaction of performance obligations will be recognized when control transfers as goods are loaded and weighed or services are performed over the remaining duration of our contracts.

Practical Expedients and Other Information

We have applied the following practical expedients:

- to recognize revenue in the amount we have the right to invoice relating to certain services that are performed for customers and, not disclosing the value of unsatisfied performance obligations related to such services.
- not disclosing the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.
- not adjusting the promised amount of consideration for the effects of a significant financing component if we expect the financing time period to be one year or less.
- expense as incurred any incremental costs of obtaining a contract if the associated period of benefit is one year or less.

All net sales and long-lived assets relate to domestic operations for the periods presented. In addition, net sales to non-U.S. customers were not material.

Recognition of Incentive Tax Credits (Other Than Credits Associated with Income Taxes) – If an incentive tax credit relates to a recovery of taxes (other than income taxes) incurred, we recognize the incentive tax credit when it is probable and reasonably estimable. If an incentive tax credit relates to an amount in excess of taxes incurred, the incentive tax credit is a contingent gain, which we recognize the incentive tax credit when it is realized or when the contingencies have been resolved (generally at the time a settlement has been reached). Amounts recoverable from the taxing authorities, if any, are included in accounts receivable. The same financial statement classification is used for an incentive tax credit as the associated tax incurred.

At December 31, 2020, our incentive tax credits receivable totaled $1.4 million (minimal at December 31, 2021).

Recognition of Insurance Recoveries – If an insurance claim relates to a recovery of our losses, we recognize the recovery when it is probable and reasonably estimable. If our insurance claim relates to a contingent gain, we recognize the recovery when it is realized or when the contingencies have been resolved (generally at the time a settlement has been reached). Amounts recoverable from our insurance carriers, if any, are included in accounts receivable. An insurance recovery in excess of recoverable costs relating to a business interruption claim, if any, is a reduction to cost of sales.

Cost of Sales – Cost of sales includes materials, labor and overhead costs, including depreciation, to manufacture the products sold plus inbound freight, purchasing and receiving costs, inspection costs, internal transfer costs, loading and handling costs, warehousing costs, railcar lease costs and outbound freight. Maintenance, repairs and minor renewal costs relating to Turnarounds are included in cost of sales as they are incurred. Precious metals used as a catalyst and consumed during the manufacturing process are included in cost of sales. Recoveries and gains from precious metals and business interruption insurance claims, if any, are reductions to cost of sales.

Selling, General and Administrative Expense – Selling, general and administrative expense ("SG&A") includes costs associated with the sales, marketing and administrative functions. Such costs include personnel costs, including benefits, professional fees, office and occupancy costs associated with the sales, marketing and administrative functions. Also included in SG&A are any distribution fees paid to third parties to distribute our products.

1. Summary of Significant Accounting Policies (continued)

Derivatives, Hedges and Financial Instruments – Derivatives are recognized in the balance sheet and are measured at fair value. Changes in fair value of derivatives are recorded in results of operations unless the normal purchase or sale exceptions apply, or hedge accounting is elected.

The fair value amounts recognized for our derivative contracts executed with the same counterparty under a master netting arrangement may be offset. We have the choice to offset or not, but that choice must be applied consistently. A master netting arrangement exists if the reporting entity has multiple contracts with a single counterparty that are subject to a contractual agreement that provides for the net settlement of all contracts through a single payment in a single currency in the event of default on or termination of any one contract. Offsetting the fair values recognized for the derivative contracts outstanding with a single counterparty results in the net fair value of the transactions being reported as an asset or a liability in the balance sheet. When applicable, we present the fair values of our derivative contracts under master netting agreements using a gross fair value presentation.

Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date:

Level 1 - Valuations of contracts classified as Level 1 are based on quoted prices in active markets for identical contracts.

Level 2 - Valuations of contracts classified as Level 2 are based on quoted prices for similar contracts and valuation inputs other than quoted prices that are observable for these contracts.

Level 3 - Valuations of assets and liabilities classified as Level 3 are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement.

At December 31, 2021 and 2020, we did not have any financial instruments with fair values materially different from their carrying amounts (which excludes issuance costs, if applicable). The fair value of financial instruments is not indicative of the overall fair value of our assets and liabilities since financial instruments do not include all assets, including intangibles, and all liabilities.

Income (Loss) per Common Share – Net income (loss) attributable to common stockholders is computed by adjusting net income (loss) by the amount of dividends and dividend requirements (including the deemed dividend discussed in Note 2) on preferred stocks and the accretion of redeemable preferred stocks, if applicable. Basic loss per common share is computed by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding, excluding contingently issuable common shares (unvested restricted stock), if applicable. For periods we earn net income, a proportional share of net income is allocated to participating securities, if applicable, determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the “two-class method”). Certain securities (Series E Redeemable Preferred prior to the Exchange Transaction and restricted stock units) participate in dividends declared on our common stock and are therefore considered to be participating securities.

Participating securities have the effect of diluting both basic and diluted income per common share during periods of net income. For periods we incur a net loss, no loss is allocated to participating securities because they have no contractual obligation to share in our losses. Diluted loss per common share is computed after giving consideration to the dilutive effect of our potential common stock instruments that are outstanding during the period, except where such non-participating securities would be anti-dilutive.

Segment Information - We operate in one principal business segment – our chemical business.

Recently Adopted Accounting Pronouncement

ASU 2019-12 – In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes,* which affects general principles within Topic 740, Income Taxes. The amendments of ASU 2019-12 are meant to simplify and reduce the cost of accounting for income taxes. The ASU removes certain exceptions to the general framework and also seeks to simplify and/or clarify accounting for income taxes by adding certain requirements that would simplify GAAP for financial statement preparers. On January 1, 2021, we adopted ASU 2019-12, which did not have a material impact on our consolidated financial statements or related disclosures.

1. Summary of Significant Accounting Policies (continued)

Recently Issued Accounting Pronouncements

ASU 2020-06 - In August 2020, the FASB issued ASU 2020-06, *Debt-Debt with Conversion and other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's own Equity (Subtopic 815-40)*. This ASU addresses the complexity associated with applying GAAP to certain financial instruments with characteristics of liabilities and equity. The ASU includes amendments to the guidance on convertible instruments and the derivative scope exception for contracts in an entity's own equity and simplifies the accounting for convertible instruments which include beneficial conversion features or cash conversion features by removing certain separation models. Additionally, the ASU requires entities to use the "if-converted" method when calculating diluted earnings per share for convertible instruments. This ASU will be effective for us on January 1, 2024; however, early adoption is permitted, which began January 1, 2021. We are evaluating the timing and the effect of our pending adoption of this ASU on our consolidated financial statements and related disclosures at this time.

ASU 2020-04 – In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides optional guidance for a limited time to ease the potential accounting burden associated with transitioning away from reference rates such as LIBOR that are expected to be discontinued. This ASU provides exceptions and optional expedients for applying GAAP to contract modifications, hedging relationships, and other transactions that reference LIBOR or other reference rates to be discontinued as a result of reference rate reform. They do not apply to modifications made or hedges entered into or evaluated after December 31, 2022, unless the hedging relationships existed as of that date and optional expedients for them were elected and retained through the end of the hedging relationship. This ASU became effective upon issuance. We continue to evaluate the effect of this ASU and plan to utilize this relief for our debt agreements that include LIBOR rates.

2. Redeemable Preferred Stocks

Series E and Series F Redeemable Preferred Exchanged for Common Stock

In July 2021, we entered into a Securities Exchange Agreement (the “Exchange Agreement”) with LSB Funding (the “Holder”), an affiliate of Eldridge Industries, LLC and other affiliates (together “Eldridge”), which Exchange Agreement was voted on and approved by our stockholders at the Special Meeting as discussed in Note 1. Pursuant to the terms of the Exchange Agreement, the Holder would exchange all of the shares of the Series E and Series F Redeemable Preferred into our common stock based on the liquidation preference (“Liquidation Preference”), at the time of the exchange, and an exchange price of $6.16, which is equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. The Liquidation Preference primarily consists of $1,000 per share of Series E Redeemable Preferred plus accrued and unpaid dividends and the participation rights value.

On September 27, 2021, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated. Pursuant to the terms of the Exchange Agreement, the Holder exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

The total fair value of the approximately 49.1 million shares of common stock issued was approximately $531.1 million (based on the average per share price on the date of closing). The fair value of the common stock issued was in excess of the Series E and Series F Redeemable Preferred carrying amount, net of the bifurcated embedded derivative and unamortized issuance costs, by approximately $231.8 million and is treated as a deemed dividend. Because we were in an accumulated deficit position on the closing date, the deemed dividend was charged to capital in excess of par value.

Changes in our Series E and Series F Redeemable Preferred are as follows:

	Series E Redeemable Preferred		Accrued Liability-Embedded Derivative	Series F Redeemable Preferred	
	Shares	Amount	Amount	Shares	Amount
			(Dollars In Thousands)		
Balance at December 31, 2020	139,768	$ 272,101	$ 1,029	1	$ —
Accretion relating to liquidation preference on preferred stock	—	814		—	—
Accretion for discount and issuance costs on preferred stock	—	709		—	—
Accumulated dividends	—	29,914		—	—
Change in fair value of embedded derivative	—	—	2,258	—	—
Costs relating to exchange transaction	—	(7,497)		—	—
Exchange of preferred stock for common stock	(139,768)	(296,041)	(3,287)	(1)	—
Balance at December 31, 2021	—	$ —	$ —	—	$ —

Change of Control

As the result of the Exchange Transaction discussed above, Eldridge held over 60% of our outstanding shares of common stock on the closing date. As a result, a change of control (“CoC”) event occurred as defined in certain equity award agreements discussed in Note 11 and in certain cash-based award agreements.

Pursuant to the terms of the cash-based awards outstanding as of the CoC event, all such awards immediately vested and approximately $5.4 million was paid. As a result of the vesting, we recognized an additional $2.0 million expense, of which $0.7 million is classified as cost of sales and $1.3 million is classified as SG&A.

3. Loss per Common Share

The following table sets forth the computation of basic and diluted net loss per common share:

	2021	2020	2019
	(In Thousands, Except Per Share Amounts)		
Numerator:			
Net income (loss)	**$ 43,545**	$ (61,911)	$ (63,417)
Adjustments for basic and diluted net loss per common share:			
Dividend requirements on Series E Redeemable Preferred	**(29,914)**	(35,182)	(30,729)
Deemed dividend on Series E and Series F Redeemable Preferred	**(231,812)**	—	—
Dividend and dividend requirements on Series B Preferred	**(239)**	(240)	(240)
Dividend and dividend requirements on Series D Preferred	**(59)**	(60)	(60)
Accretion of Series E Redeemable Preferred	**(1,523)**	(2,026)	(1,995)
Numerator for basic and diluted net loss per common share	**$ (220,002)**	$ (99,419)	$ (96,441)
Denominator:			
Denominator for basic and diluted net loss per common share - adjusted weighted-average shares (1)	**49,963**	36,664	36,455
Basic and diluted net loss per common share	**$ (4.40)**	$ (2.71)	$ (2.65)

(1) All periods exclude the weighted-average shares of unvested restricted stock that are contingently issuable.

The following weighted-average shares of securities were not included in the computation of diluted net loss per common share as their effect would have been antidilutive:

	2021	2020	2019
	(In Thousands)		
Restricted stock and stock units	**1,531**	1,588	938
Stock options	**13**	138	138
Series E redeemable preferred stock - embedded derivative	**—**	304	304
Convertible preferred stocks	**—**	1,192	1,192
	1,544	3,222	2,572

4. Property, Plant and Equipment

	Average useful lives (1)	December 31, 2021	2020
		(In Thousands)	
Machinery, equipment and automotive	**25**	**$ 1,244,617**	$ 1,213,359
Buildings and improvements	**26**	**44,814**	44,123
Land improvements	**35**	**8,271**	8,223
Furniture, fixtures and store equipment	**5**	**1,156**	1,080
Construction in progress	**N/A**	**15,298**	18,389
Capital spare parts	**N/A**	**26,744**	26,894
Land	**N/A**	**4,567**	4,567
		1,345,467	1,316,635
Less accumulated depreciation and amortization		**486,987**	425,437
		$ 858,480	$ 891,198

(1) Weighted average useful lives as of December 31, 2021.

Machinery, equipment and automotive primarily includes the categories of property and equipment and estimated useful lives as follows: processing plants and plant infrastructure (15-30 years); certain processing plant components (3-10 years); and trucks, automobiles, trailers, and other rolling stock (4-7 years).

5. Current and Noncurrent Accrued and Other Liabilities

	December 31, 2021	December 31, 2020
	(In Thousands)	
Accrued payroll and benefits	**$ 9,794**	5,837
Accrued interest	**8,397**	$ 8,669
Current portion of operating lease liabilities	**7,755**	6,706
Accrued death and other executive benefits	**2,514**	2,539
Accrued health and worker compensation insurance claims	**1,272**	1,179
Other	**6,599**	11,527
	36,331	36,457
Less noncurrent portion	**3,030**	6,090
Current portion of accrued and other liabilities	**$ 33,301**	$ 30,367

6. Asset Retirement Obligations

We own the land on which our owned plants operate, limiting asset retirement obligations at our owned chemical facilities. However, we have various legal requirements related to operations at our chemical facilities mainly for the disposal of wastewater generated at certain of these facilities. At December 31, 2021 and 2020, our accrued liability for AROs was $100,000. However, the facilities and some of the water related assets have an indeterminate life and as a result there is insufficient information to estimate the fair value for certain of our AROs. We will continue to review these obligations and record a liability when a reasonable estimate of the fair value can be made.

7. Long-Term Debt

	December 31, 2021	December 31, 2020
	(In Thousands)	
Working Capital Revolver Loan, with a current interest rate of 3.75% (A)	**$ —**	$ —
Senior Secured Notes due 2028 (B)	**500,000**	—
Senior Secured Notes due 2023 (B)	**—**	435,000
Secured Financing due 2023, with an interest rate of 8.32% (C)	**7,712**	10,715
Secured Loan Agreement due 2025, with an interest rate of 8.75% (D)	**5,328**	6,834
Secured Financing Agreement due 2025, with an interest rate of 8.75% (E)	**23,987**	28,636
Unsecured Loan Agreement due 2022, with an interest rate of 1.00% (F)	**—**	10,000
Secured Promissory Note due 2021	**—**	1,221
Other	**339**	432
Unamortized debt issuance costs	**(9,722)**	(8,648)
	527,644	484,190
Less current portion of long-term debt (G)	**9,454**	16,801
Long-term debt due after one year, net (G)	**$ 518,190**	$ 467,389

7. Long-Term Debt (continued)

(A) Our revolving credit facility, as amended (the “Working Capital Revolver Loan”), provides for advances up to $65 million (the “Maximum Revolver Amount”), based on specific percentages of eligible accounts receivable and inventories and up to $10 million of letters of credit, the outstanding amount of which reduces the available for borrowing under the Working Capital Revolver Loan. At December 31, 2021, our available borrowings under our Working Capital Revolver Loan were approximately $61.3 million, based on our eligible collateral, less outstanding letters of credit and loan balance. The maturity date of the Working Capital Revolver Loan is on the earlier of (i) the date that is 90 days prior to the earliest stated maturity date of the Senior Secured Notes (unless refinanced or repaid) and (ii) February 26, 2024. Subject to certain conditions and subject to lender approval, the Maximum Revolver Amount may increase up to an additional $10 million. The Working Capital Revolver Loan also provides for a springing financial covenant (the “Financial Covenant”), which requires that, if the borrowing availability is less than 10.0% of the total revolver commitments, then the borrowers must maintain a minimum fixed charge coverage ratio of not less than 1.00 to 1.00. **The Financial Covenant, if triggered, is tested monthly.**

Interest accrues on outstanding borrowings under the Working Capital Revolver Loan at a rate equal to, at our election, either (a) LIBOR for an interest period selected by us plus an applicable margin equal to 1.50% per annum or 1.75% per annum, depending on borrowing availability under the Working Capital Revolver Loan, or (b) Wells Fargo Capital Finance’s prime rate plus an applicable margin equal to 0.50% per annum or 0.75% per annum, depending on borrowing availability under the Working Capital Revolver Loan. Interest is paid quarterly, if applicable.

The Working Capital Revolver Loan contains customary covenants including limitations on asset sales, liens, debt incurrence, restricted payments, investments, dividends and transactions with affiliates.

The Working Capital Revolver Loan includes customary events of default. Upon the occurrence of any event of default, the obligations under the Working Capital Revolver Loan may be accelerated and the revolver commitments may be terminated.

Obligations under the Working Capital Revolver Loan are secured by a first priority security interest in substantially all of our current assets, including accounts receivable and inventory, subject to certain customary exceptions.

Also, the lender provided LSB a consent to close the Exchange Transaction discussed in Note 2 and to allow for the payment of dividends to the holders of the Series B and Series D Preferred discussed in Note 12.

(B) On October 14, 2021, LSB completed the issuance and sale of $500 million in aggregate principal amount of its 6.25% Senior Secured Notes due 2028 (the “New Notes”). The New Notes were issued pursuant to an indenture, dated as of October 14, 2021 (the “Indenture”), by and among the LSB, the subsidiary guarantors named therein, and Wilmington Trust, National Association, a national banking association, as trustee and collateral agent. The New Notes were issued at a price equal to 100% of their face value. Most of the proceeds from the New Notes were used to redeem all of our existing Senior Secured Notes due 2023 (the "Old Notes"), to pay related transaction fees, and the remaining portion to be used for general corporate purposes. The redemption was completed by the trustee on October 29, 2021.

The Old Notes were redeemed in accordance with the contractual terms and was accounted for as an extinguishment of debt. As a result, we recognized a loss on extinguishment of debt of approximately $20.3 million in 2021, primarily consisting of the contractual redemption premium paid and the expensing of unamortized debt issuance costs associated with the Old Notes.

The New Notes mature on October 15, 2028, ranking senior in right of payment to all of our debt that is expressly subordinated in right of payment to the notes, and will rank pari passu in right of payment with all of our liabilities that are not so subordinated, including the Working Capital Revolver Loan. LSB’s obligations under the New Notes are jointly and severally guaranteed by the subsidiary guarantors named in the Indenture on a senior secured basis.

Interest on the New Notes accrues at a rate of 6.25% per annum and is payable semi-annually in arrears on May 15 and October 15 of each year, beginning on May 15, 2022.

Pursuant to the Indenture, LSB may redeem the New Notes at its option, in whole or in part, at certain redemption prices, including a “make-whole” premium, as set forth in the Indenture but also includes redemption requirements associated with a change of control (as defined in the Indenture). The New Notes do not have any conversion features. In addition, the Indenture contains customary covenants that limit, among other things, LSB and certain of its subsidiaries’ ability to engage in certain transactions and also provides for customary events of default (subject in certain cases to customary grace and cure periods). Generally, if an event of default occurs and is continuing, the trustee or holders of at least 25% in principal amount of the then outstanding New Notes may declare the principal of and accrued but unpaid interest on all the New Notes to be due and payable.

7. Long-Term Debt (continued)

LSB may redeem the New Notes at its option, in whole or in part, subject to the payment of a premium of 3.125% of the principal amount so redeemed, in the case of any optional redemption on or after October 15, 2024. If LSB experiences a change of control, it must offer to purchase the New Notes at 101% of their principal amount, plus accrued and unpaid interest, if any, to but excluding the date of purchase.

The Indenture contains covenants that limit, among other things, LSB and certain of its subsidiaries' ability to (1) incur additional indebtedness; (2) declare or pay dividends, redeem stock or make other distributions to stockholders; (3) make other restricted payments, including investments; (4) create dividend and other payment restrictions affecting its subsidiaries; (5) create liens or use assets as security in other transactions; (6) merge or consolidate, or sell, transfer, lease or dispose of all or substantially all of our assets; and (7) enter into transactions with affiliates. Further, during any such time when the New Notes are rated investment grade by each of Moody's Investors Service, Inc. and Standard & Poor's Investors Ratings Services and no Default (as defined in the Indenture) has occurred and is continuing, certain of the covenants will be suspended with respect to the New Notes.

Obligations in respect of the New Notes are secured by a first priority security interest in substantially all of our fixed assets, subject to certain customary exceptions.

(C) El Dorado Chemical Company ("EDC"), one of our subsidiaries, is party to a secured financing arrangement with an affiliate of LSB Funding. Principal and interest are payable in 48 equal monthly installments with a final balloon payment of approximately $3 million due in June 2023.

(D) EDC is party to a secured loan agreement with an affiliate of LSB Funding. Principal and interest will be payable in 60 equal monthly installments through March 2025.

(E) In August 2020, El Dorado Ammonia L.L.C. ("EDA"), one of our subsidiaries, entered into a $30 million secured financing arrangement with an affiliate of LSB Funding. Beginning in September 2020, principal and interest are payable in 60 equal monthly installments with a final balloon payment of approximately $5 million due in August 2025. This financing arrangement is secured by an ammonia storage tank and is guaranteed by LSB.

(F) In April 2020, LSB entered into a federally guaranteed loan agreement ("PPP loan") for $10 million with a lender pursuant to a new loan program through the U.S. Small Business Administration ("SBA") as the result of the Paycheck Protection Program ("PPP") established by the Coronavirus Aid, Relief, and Economic Security ("CARES") Act and amended by the Paycheck Protection Program Flexibility Act of 2020. We applied ASC 470, *Debt*, to account for the PPP loan. We have used all of the proceeds from the PPP loan for payroll, rent, utilities, and other specified costs that qualify for loan forgiveness. In April 2021, we submitted the PPP loan forgiveness application to the lender. In June 2021, the PPP loan was fully forgiven by the SBA and lender. As a result, we recognized a gain on extinguishment of debt of $10 million in 2021.

(G) Maturities of long-term debt for each of the five years after December 31, 2021 are as follows (in thousands):

2022	$	9,454
2023		10,900
2024		7,427
2025		9,585
2026		—
Thereafter		500,000
Less: Debt issuance costs		9,722
	$	527,644

8. Income Taxes

Benefit for income taxes are as follows:

	2021	2020	2019
		(In Thousands)	
Current:			
Federal	**$ —**	$ (4)	$ —
State	**(250)**	33	(29)
Total Current	**$ (250)**	$ 29	$ (29)
Deferred:			
Federal	**$ (6,217)**	$ (4,631)	$ (14,739)
State	**1,911**	(147)	(6,156)
Total Deferred	**$ (4,306)**	$ (4,778)	$ (20,895)
Benefit for income taxes	**$ (4,556)**	$ (4,749)	$ (20,924)

The current benefit for federal income taxes shown above includes federal income tax after the consideration of permanent and temporary differences between income for GAAP and tax purposes. The current benefit for state income taxes includes state income tax and provisions for uncertain income tax positions, and other similar adjustments.

The deferred tax provision (benefit) results from the recognition of changes in our prior year deferred tax assets and liabilities, and the utilization of state NOL carryforwards and other temporary differences. We reduce income tax expense for tax credits in the year they arise and are earned. At December 31, 2021, our gross amount of tax credits available to offset state income taxes was $4.2 million ($3.4 million net of federal benefit). Most of these tax credits carryforward for 9 years and begin expiring in 2022. The gross amount of federal tax credits was $8.1 million. These credits carryforward for 20 years and begin expiring in 2034.

In 2021, we utilized approximately $64 million and $56 million of federal and state NOL carryforwards, respectively, to reduce tax liabilities (minimal in 2020 and 2019). At December 31, 2021, we have remaining federal and state tax NOL carryforwards of $592 million and $798 million, respectively. The federal NOL carryforwards begin expiring in 2033 and the state NOL carryforwards began expiring in 2021.

We considered both positive and negative evidence in our determination of the need for valuation allowances for the deferred tax assets associated with federal and state NOLs and federal credits and in conjunction with the IRC Section 382 limitation. Information evaluated includes our financial position and results of operations for the current and preceding years, the availability of deferred tax liabilities and tax carrybacks, as well as an evaluation of currently available information about future years. Valuation allowances are reflective of our quarterly analysis of the four sources of taxable income, including the calculation of the reversal of existing tax assets and liabilities, the impact of annual utilization limitations of interest expense and net operating losses and our results of operations. Based on our analysis, we believe that it is more-likely-than-not that a portion of our federal and state deferred tax assets will not be able to be utilized. Information relating to our valuation allowance are included in the tables below. In 2021, the provision for income taxes includes the reversal of approximately $13 million of federal valuation allowance and $4 million of state valuation allowance primarily due to current year income.

8. Income Taxes (continued)

Deferred tax assets and liabilities include temporary differences and carryforwards as follows:

	December 31, 2021	December 31, 2020
	(In Thousands)	
Deferred compensation	**$ 2,390**	$ 2,106
Other accrued liabilities	**1,721**	2,142
Lease liability	**6,710**	6,471
Interest expense carryforward	**27,928**	36,165
Net operating loss	**159,213**	170,362
Other	**12,030**	10,255
Less valuation allowance on deferred tax assets	**(46,968)**	(64,655)
Total deferred tax assets	**$ 163,024**	$ 162,846
Property, plant and equipment	**(178,535)**	(183,335)
Right-of-use-assets	**(6,709)**	(6,508)
Prepaid and other insurance reserves	**(4,413)**	(3,942)
Total deferred tax liabilities	**$ (189,657)**	$ (193,785)
Net deferred tax liabilities	**$ (26,633)**	$ (30,939)

All of our income (loss) before taxes relates to domestic operations. Detailed below are the differences between the amount of the provision (benefit) for income taxes and the amount which would result from the application of the federal statutory rate to "Income (loss) before benefit for income taxes."

	2021	2020	2019
		(In Thousands)	
Provision (benefit) for income taxes at federal statutory rate	**$ 8,187**	$ (13,999)	$ (17,712)
State current and deferred income tax provision (benefit)	**1,833**	(5,094)	(5,282)
Valuation allowance - Federal	**(13,400)**	8,758	2,739
Valuation allowance - State	**(4,286)**	4,308	2,961
State tax law changes	**7,360**	(660)	(4,388)
Tax credits	**(2,835)**	—	—
PPP loan forgiveness	**(2,456)**	—	—
Other	**1,041**	1,938	758
Benefit for income taxes	**$ (4,556)**	$ (4,749)	$ (20,924)

A reconciliation of the beginning and ending amount of uncertain tax positions is as follows:

	2021	2020	2019
		(In Thousands)	
Balance at beginning of year	**$ 464**	$ 519	$ 577
Additions based on tax positions related to the current year	**—**	—	—
Reductions for tax positions of prior years	**(464)**	(55)	(58)
Balance at end of year	**$ —**	$ 464	$ 519

We expect that the amount of unrecognized tax benefits may change as the result of ongoing operations, the outcomes of audits, and the expiration of statute of limitations. This change is not expected to have a significant effect on our results of operations or financial condition. For 2021, 2020, and 2019, if recognized, the effect on the effective tax rate from unrecognized tax benefits would be insignificant.

8. Income Taxes (continued)

We record interest related to unrecognized tax positions in interest expense and penalties in operating other expense. For 2021, 2020 and 2019, the amounts for interest and penalties associated with unrecognized tax positions were minimal. At December 31, 2021, there was no accrued interest or penalties (minimal at December 31, 2020).

LSB and certain of its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state jurisdictions. With few exceptions, the 2018-2021 years remain open for all purposes of examination by the U.S. Internal Revenue Service ("IRS") and other major tax jurisdictions. Additionally, the 2013-2017 years remain subject to examination for determining the amount of net operating loss and other carryforwards.

9. Commitments and Contingencies

Purchase and Sales Commitments – We have the following significant purchase and sales commitments.

UAN supply agreement – The Pryor Chemical Company ("PCC") is party to an agreement with CVR. CVR has the exclusive right (but not the obligation) to purchase all the tons of UAN that are produced by PCC with certain limitations. If CVR fails to take delivery of certain tons, PCC pursuant to the terms of the agreement may immediately sell such unpurchased product to a third-party without restriction. The current term of the agreement expires in June 2022, but includes automatic renewals for one or more additional one-year terms unless terminated by either party. However, CVR may unilaterally terminate the agreement upon 180 days' advance written notice of termination to PCC; provided, however, that each party's rights and obligations pertaining to UAN that CVR committed to purchase before such advance notice will survive termination. Additionally, PCC can terminate the agreement upon 90 days' advance written notice of termination to CVR; provided, however, that each party's rights and obligations pertaining to UAN that PCC committed to sell prior to such advance notice will survive termination.

Ammonia supply agreement – EDC is party to an agreement, as amended, with Koch Fertilizer under which Koch Fertilizer agrees to purchase, with minimum purchase requirements, the ammonia that (a) will be produced at the El Dorado Facility and (b) a portion that is in excess of EDC's needs as defined. As amended, the term of the agreement expires in June 2023 but automatically continues for one or more additional one-year terms unless terminated by either party by delivering a notice of termination at least nine months prior to the end of term in effect.

Nitric acid supply agreement – EDC is party to an agreement with a customer to supply nitric acid. Under the agreement, EDC agreed to supply between 70,000 to 100,000 tons of nitric acid annually. The initial contract term began in 2021 and extends through 2027 but includes automatic one-year renewal terms unless terminated by either party in writing 180 days before the current contract expiration date.

Settlements, Outstanding Natural Gas Purchase Commitments, and Other – During several days in February 2021, the Pryor Facility was taken out of service after extreme cold weather caused a surge in natural gas prices in the region, along with the curtailment of gas distribution by the operator of the pipeline that supplies natural gas to the facility. Also, as a result of unprecedented cold weather conditions, the primary natural gas supplier to our El Dorado Facility asserted a claim of force majeure and materially restricted the supply of gas to the facility. In order to mitigate a portion of the commodity price risk associated with natural gas, we periodically enter into natural gas forward contracts and volume purchase commitments that locked in the cost of certain volumes of natural gas. Prior to this weather event, we had both types of arrangements. During 2021, as a result of the extreme conditions previously described, we settled all of our natural gas forward contracts and certain volume purchase commitments at that time and recognized a realized gain of approximately $6.8 million, which includes the realized gain discussed under "Natural Gas Contracts" in Note 10 and is classified as a reduction to cost of sales.

During 2020, EDC and certain vendors mediated settlements for EDC to recover certain costs associated with a nitric acid plant at our El Dorado Facility. The construction of this plant was completed, and the plant began production in 2016. As a result of the settlements, the vendors paid EDC $4.3 million, provided parts totaling $0.3 million and have agreed to provide services and parts totaling $2.5 million, which amount, or portion thereof, may be paid in cash at the option of the vendors. At December 31, 2021 and 2020, approximately $2.0 million and $2.5 million, respectively, is included in noncurrent accounts receivable (classified as a noncurrent other asset) associated with these settlements. As part of the settlements, EDC paid the vendors $2.7 million to settle $3.2 million of invoices that were held in our accounts payable. As a result, the recovery from these settlements recognized during 2020 includes approximately $5.7 million classified as a reduction to cost of sales and approximately $1.9 million classified as a reduction to PP&E.

At December 31, 2021 certain of our natural gas contracts qualify as normal purchases under GAAP and thus are not mark-to-market, which contracts included volume purchase commitments with fixed costs of approximately 5.4 million MMBtus of natural gas. These contracts extend through March 2022 at a weighted-average cost of $4.53 per MMBtu ($24.6 million) and a weighted-average market value of $3.87 per MMBtu ($21.0 million).

9. Commitments and Contingencies (continued)

In addition, we had standby letters of credit outstanding of approximately $2.6 million at December 31, 2021.

Wastewater Pipeline Operating Agreement – EDC is party to an operating agreement for the right to use a pipeline to dispose its wastewater. EDC is contractually obligated to pay a portion of the operating costs of the pipeline, as incurred, which portion is estimated to be $100,000 to $150,000 annually. The initial term of the operating agreement is through December 2053.

Performance and Payment Bonds – We are contingently liable to sureties in respect of certain insurance bonds issued by the sureties in connection with certain contracts entered into by certain subsidiaries in the normal course of business. These insurance bonds primarily represent guarantees of future performance of our subsidiaries. As of December 31, 2021, we have agreed to indemnify the sureties for payments, up to $9.7 million, made by them in respect of such bonds. All of these insurance bonds are expected to expire or be renewed in 2022.

Employment and Severance Agreements - We have employment and severance agreements with several of our officers. The agreements, as amended, provide for annual base salaries, bonuses and other benefits commonly found in such agreements. In the event of termination of employment due to a change in control (as defined in the agreements), the agreements provide for payments aggregating $9.9 million at December 31, 2021. Also see Note 14-Related Party Transactions.

Legal Matters - Following is a summary of certain legal matters involving the Company:

A. Environmental Matters

Our facilities and operations are subject to numerous federal, state and local environmental laws and to other laws regarding health and safety matters (collectively, the "Environmental and Health Laws"), many of which provide for certain performance obligations, substantial fines and criminal sanctions for violations. Certain Environmental and Health Laws impose strict liability as well as joint and several liability for costs required to remediate and restore sites where hazardous substances, hydrocarbons or solid wastes have been stored or released. We may be required to remediate contaminated properties currently or formerly owned or operated by us or facilities of third parties that received waste generated by our operations regardless of whether such contamination resulted from the conduct of others or from consequences of our own actions that were in compliance with all applicable laws at the time those actions were taken.

In addition, claims for damages to persons or property, including natural resources, may result from the environmental, health and safety effects of our operations.

There can be no assurance that we will not incur material costs or liabilities in complying with such laws or in paying fines or penalties for violation of such laws. Our insurance may not cover all environmental risks and costs or may not provide sufficient coverage if an environmental claim is made against us. The Environmental and Health Laws and related enforcement policies have in the past resulted, and could in the future result, in significant compliance expenses, cleanup costs (for our sites or third-party sites where our wastes were disposed of), penalties or other liabilities relating to the handling, manufacture, use, emission, discharge or disposal of hazardous or toxic materials at or from our facilities or the use or disposal of certain of its chemical products. Further, a number of our facilities are dependent on environmental permits to operate, the loss or modification of which could have a material adverse effect on their operations and our financial condition.

Historically, significant capital expenditures have been incurred by our subsidiaries in order to comply with the Environmental and Health Laws, and significant capital expenditures are expected to be incurred in the future. We will also be obligated to manage certain discharge water outlets and monitor groundwater contaminants at our facilities should we discontinue the operations of a facility.

As of December 31, 2021, our accrued liabilities for environmental matters totaled approximately $0.5 million relating primarily to the matters discussed below. Estimates of the most likely costs for our environmental matters are generally based on preliminary or completed assessment studies, preliminary results of studies, or our experience with other similar matters. It is reasonably possible that a change in the estimate of our liability could occur in the near term. Also, see discussion in Note 6 – Asset Retirement Obligations.

1. Discharge Water Matters

Each of our manufacturing facilities generates process wastewater, which may include cooling tower and boiler water quality control streams, contact storm water and miscellaneous spills and leaks from process equipment. The process water discharge, storm-water runoff and miscellaneous spills and leaks are governed by various permits generally issued by the respective state environmental agencies as authorized and overseen by the U.S. Environmental Protection Agency. These permits limit the type and amount of effluents that can be discharged and control the method of such discharge.

9. Commitments and Contingencies (continued)

In 2017, the Pryor Chemical Company ("PCC") filed a Permit Renewal Application for its Non-Hazardous Injection Well Permit at the Pryor Facility. Although the Injection Well Permit expired in 2018, PCC continues to operate the injection well pending the Oklahoma Department of Environmental Quality ("ODEQ") action on the Permit Renewal Application. PCC and ODEQ are engaged in ongoing discussions related to the renewal of the injection well to address the wastewater stream.

Our El Dorado Facility is subject to a National Pollutant Discharge Elimination System ("NPDES") permit issued by the Arkansas Department of Environmental Quality ("ADEQ") in 2004. In 2010, the ADEQ issued a draft NPDES permit renewal for the El Dorado Facility, which contained more restrictive discharge limits than the previous 2004 permit. During 2017, ADEQ issued a final NPDES permit with new dissolved mineral limits; however, EDC filed an appeal, and a Permit Appeal Resolution ("PAR") was signed in 2018. EDC is in compliance with the revised permit limits agreed upon in the PAR.

In 2006, the El Dorado Facility entered into a Consent Administrative Order ("CAO") that recognizes the presence of nitrate contamination in the shallow groundwater. The CAO required EDC to perform semi-annual groundwater monitoring, continue operation of a groundwater recovery system, submit a human health and ecological risk assessment, and submit a remedial action plan.

The risk assessment was submitted in 2007. In 2015, the ADEQ stated that El Dorado Chemical was meeting the requirements of the CAO and should continue semi-annual monitoring. Subsequent to the PAR mentioned previously, a new CAO was signed in 2018, which required an Evaluation Report of the data and effectiveness of the groundwater remedy for nitrate contamination. During 2019, the Evaluation Report was submitted to the ADEQ and the ADEQ approved the report. No liability has been established at December 31, 2021, in connection with this ADEQ matter.

2. Other Environmental Matters

In 2002, certain of our subsidiaries sold substantially all of their operating assets relating to a Kansas chemical facility (the "Hallowell Facility") but retained ownership of the real property where the facility is located. Our subsidiary retained the obligation to be responsible for, and perform the activities under, a previously executed consent order to investigate the surface and subsurface contamination at the real property, develop a corrective action strategy based on the investigation, and implement such strategy. In addition, certain of our subsidiaries agreed to indemnify the buyer of such assets for these environmental matters.

As the successor to a prior owner of the Hallowell Facility, Chevron Environmental Management Company ("Chevron") has agreed in writing, within certain limitations, to pay and has been paying one-half of the costs of the investigation and interim measures relating to this matter as approved by the Kansas Department of Health and Environment (the "KDHE"), subject to reallocation.

During this process, our subsidiary and Chevron retained an environmental consultant that prepared and performed a corrective action study work plan as to the appropriate method to remediate the Hallowell Facility. During 2020, the KDHE selected a remedy of annual monitoring and the implementation of an Environmental Use Control ("EUC"). This remedy primarily relates to long-term surface and groundwater monitoring to track the natural decline in contamination and is subject to a 5-year re-evaluation with the KDHE.

The final remedy, including the EUC, the finalization of the cost estimates and any required financial assurances remains under discussion with the KDHE, but continues to be delayed due to the impact from the COVID-19 pandemic. Pending the results from our discussions regarding the final remedy, we continue to accrue our allocable portion of costs primarily for the additional testing, monitoring and risk assessments that could be reasonably estimated, which amount is included in our accrued liabilities for environmental matters discussed above. The estimated amount is not discounted to its present value. As more information becomes available, our estimated accrual will be refined, as necessary.

B. Other Pending, Threatened or Settled Litigation

In 2013, an explosion and fire occurred at the West Fertilizer Co. ("West Fertilizer") located in West, Texas, causing death, bodily injury and substantial property damage. West Fertilizer is not owned or controlled by us, but West Fertilizer was a customer of EDC, and purchased AN from EDC from time to time. LSB and EDC received letters from counsel purporting to represent subrogated insurance carriers, personal injury claimants and persons who suffered property damages informing LSB and EDC that their clients are conducting investigations into the cause of the explosion and fire to determine, among other things, whether AN manufactured by EDC and supplied to West Fertilizer was stored at West Fertilizer at the time of the explosion and, if so, whether such AN may have been one of the contributing factors of the explosion. Initial lawsuits filed named West Fertilizer and another supplier of AN as defendants.

9. Commitments and Contingencies (continued)

In 2014, EDC and LSB were named as defendants, together with other AN manufacturers and brokers that arranged the transport and delivery of AN to West Fertilizer, in the case styled *City of West, Texas vs. CF Industries, Inc., et al.*, in the District Court of McLennan County, Texas. The plaintiffs allege, among other things, that LSB and EDC were negligent in the production and marketing of fertilizer products sold to West Fertilizer, resulting in death, personal injury and property damage. EDC retained a firm specializing in cause and origin investigations with particular experience with fertilizer facilities, to assist EDC in its own investigation. LSB and EDC placed its liability insurance carrier on notice, and the carrier is handling the defense for LSB and EDC concerning this matter.

Our product liability insurance policies have aggregate limits of general liability totaling $100 million, with a self-insured retention of $250,000, which retention limit has been met relating to the West Fertilizer matter. In August 2015, the trial court dismissed plaintiff's negligence claims against us, and EDC based on a duty to inspect but allowed the plaintiffs to proceed on claims for design defect and failure to warn.

Subsequently, we and EDC have entered into confidential settlement agreements (with approval of our insurance carriers) with several plaintiffs that had claimed wrongful death and bodily injury and insurance companies asserting subrogation claims for damages from the explosion. While these settlements resolve the claims of a number of the claimants in this matter, we continue to be party to litigation related to the explosion. We continue to defend these lawsuits vigorously and we are unable to estimate a possible range of loss at this time if there is an adverse outcome in this matter. As of December 31, 2021, no liability reserve has been established in connection with this matter, except for the unpaid portion of the settlement agreements discussed above.

In 2015, we and EDA received formal written notice from Global Industrial, Inc. ("Global") of Global's intention to assert mechanic liens for labor, service, or materials furnished under certain subcontract agreements for the improvement of the new ammonia plant ("Ammonia Plant") at our El Dorado Facility. Global was a subcontractor of Leidos Constructors, LLC ("Leidos"), the general contractor for EDA for the construction for the Ammonia Plant. Leidos terminated the services of Global with respect to their work performed at our El Dorado Facility.

LSB and EDA are pursuing the recovery of any damage or loss caused by Global's work performed through their contract with Leidos at our El Dorado Facility. In March 2016, EDC and LSB were served a summons in a case styled *Global Industrial, Inc. d/b/a Global Turnaround vs. Leidos Constructors, LLC et al.*, in the Circuit court of Union County, Arkansas, wherein Global sought damages under breach of contract and other claims. At the time of the summons, our accounts payable included invoices totaling approximately $3.5 million related to the claims asserted by Global but such invoices were not approved by Leidos for payment. We have requested indemnification from Leidos under the terms of our contracts, which they have denied. As a result, we are seeking reimbursement of legal expenses from Leidos under our contracts. We also seek damages from Leidos for their wrongdoing during the expansion, including breach of contract, fraud, professional negligence, and gross negligence.

During 2018, the court bifurcated the case into: (1) Global's claims against Leidos and LSB, and (2) the cross-claims between Leidos and LSB. Part (1) of the case was tried in the court. In March 2020, the court rendered an interim judgment and issued its final judgment in April 2020. In summary, the judgment awarded Global (i) approximately $7.4 million (including the $3.5 million discussed above) for labor, service, and materials furnished relating to the Ammonia Plant, (ii) approximately $1.3 million for prejudgment interest, and (iii) a claim of lien on certain property and the foreclosure of the lien to satisfy these obligations. In addition, post-judgment interest will accrue at the annual rate of 4.25% until paid. During 2020, this judgment impacted our consolidated statement of operations as follows:

- additional depreciation expense of $0.5 million classified as cost of sales; and
- prejudgment and post-judgment interest expense totaling $1.6 million.

We have filed a notice of intent to appeal, and the court entered a stay of the judgment pending appeal.

LSB intends to vigorously prosecute its claims against Leidos and vigorously contest the cross-claims in Part (2) of the matter. Due to the impact from the COVID-19 pandemic, the trial date for Part (2) of the matter has been delayed and we are awaiting a new trial date.

No liability was established at December 31, 2021 or 2020, in connection with the cross-claims in Part (2) of the matter, except for certain invoices held in accounts payable.

We are also involved in various other claims and legal actions (including matters involving gain contingencies). It is possible that the actual future development of claims could be different from our estimates but, after consultation with legal counsel, we believe that changes in our estimates will not have a material effect on our business, financial condition, results of operations or cash flows.

10. Derivatives, Hedges and Financial Instruments

For the periods presented, the following significant instruments are accounted for on a fair value basis:

Natural Gas Contracts

Periodically, we entered into certain forward natural gas contracts (“natural gas contracts”), which are accounted for on a mark-to-market basis. We utilize these natural gas contracts as economic hedges for risk management purposes but are not designated as hedging instruments. At December 31, 2020, our natural gas contracts included 7.3 million MMBtu of natural gas, that extended through December 2021, but these contracts were settled during the first quarter of 2021, primarily due to the weather event discussed in Note 9. At December 31, 2021, we had no outstanding natural gas contracts. At December 31, 2020, the fair value of the natural gas contracts included approximately $0.1 million (classified as a current asset) and approximately $1.3 million (classified as a current liability). The valuations of the natural gas contracts are classified as Level 2. The valuation inputs included the contractual weighted-average cost of $2.65 per MMBtu and the weighted-average market value of $2.49 per MMBtu.

For 2021, we recognized a gain of $2.7 million (including a realized gain of $1.5 million). For 2020, we recognized a $1.6 million loss (none for 2019), which amount included an unrealized loss of $1.2 million attributed to natural gas contracts still held at the reporting date. The gain is classified as a reduction of cost of sales and the loss is classified as cost of sales.

Embedded Derivative

As discussed in Note 2, the Series E Redeemable Preferred was exchanged for our common stock during 2021. As a result, certain bifurcated embedded redemption features and participation rights value (“embedded derivative”) included as a part of the terms of the Series E Redeemable Preferred were extinguished. Prior to the completion of the Exchange Transaction, the embedded derivative was classified as a liability.

At December 31, 2020, the fair value of the embedded derivative was approximately $1.0 million (classified as a noncurrent liability). We estimated that the contingent redemption features had fair value since we estimate that a portion of the shares of this preferred stock would be redeemed prior to October 25, 2023, the earliest redemption date by the holder. For certain other embedded features, we estimated no fair value based on our assessment that there was a remote probability that these features would be exercised.

The fair value of the embedded derivative was valued using discounted cash flow models and primarily based on the difference in the present value of estimated future cash flows with no redemptions prior to October 25, 2023, compared to certain estimated redemptions during the same period and applying the effective dividend rate of the Series E Redeemable Preferred. At December 31, 2020, the fair value of the embedded derivative included the valuation of the participation rights, which was based on the equivalent of 303,646 shares of our common stock at $3.39 per share.

The valuations of the embedded derivative were classified as Level 3. This derivative was valued using market information, management’s redemption assumptions, the underlying number of shares as defined in the terms of the Series E Redeemable Preferred, and the market price of our common stock.

For 2021, we recognized a loss of $2.3 million (including a realized loss of $3.3 million) due to the change in fair value of the embedded derivative through the date of the Exchange Transaction.

For 2020 and 2019, we recognized unrealized gains of approximately $0.1 million and $0.5 million, respectively, due to the change in fair value of the embedded derivative. These gains and loss are included in non-operating other income and expense.

There was no Level 3 transfer activity during 2021, 2020 or 2019.

11. Stockholders' Equity

2016 Long Term Incentive Plan – During 2016, our Board adopted our 2016 Long Term Incentive Plan, which plan was approved by our shareholders at our annual meeting of shareholders held on June 2, 2016. During 2021, the 2016 Long Term Incentive Plan was amended as approved by our shareholders at our annual meeting of shareholders held on May 14, 2021 (together, the "2016 Plan"). No awards may be granted under the 2016 Plan on and after the tenth anniversary of its effective date.

After the effective date of the 2016 Plan, no further awards can be granted under our 2008 Incentive Stock Plan (the "2008 Plan"). Any awards that remain outstanding under the 2008 Plan will continue to be governed by the respective plan's terms and the terms of the specific award agreement, as applicable.

The maximum aggregate number of shares reserved and available for issuance under the 2016 Plan shall not exceed 5,750,000 shares plus any shares that become available for reissuance under the share counting provisions of the 2008 Plan following the effective date of the 2016 Plan, subject to adjustment (including additional shares relating to the Special Dividend) as permitted under the 2016 Plan. Shares subject to any award that is canceled, forfeited, expires unexercised, settled in cash in lieu of common stock or otherwise terminated without a delivery of shares to a participant will again be available for awards under the 2016 Plan to the extent allowable by law. Under the 2016 Plan, awards may be made to employees, directors and consultants (for services rendered) of LSB or our subsidiaries subject to limitations as defined by the 2016 Plan.

The 2016 Plan is administered by the compensation committee (the "Committee") of our Board. Our Board or the Committee may amend the 2016 Plan, except that if any applicable statute, rule or regulation requires shareholder approval with respect to any amendment of the 2016 Plan, then to the extent so required, shareholder approval will be obtained. Shareholder approval will also be obtained for any amendment that would increase the number of shares stated as available for issuance under the 2016 Plan.

All share information has been retroactively adjusted to reflect the Special Dividend as discussed in Note 2.

The following may be granted by the Committee under the 2016 Plan:

Stock Awards, Restricted Stock, Restricted Stock Units, and Other Awards – The Committee may grant awards of restricted stock, restricted stock units, and other stock and cash-based awards, which may include the payment of stock in lieu of cash (including cash payable under other incentive or bonus programs) or the payment of cash (which may or may not be based on the price of our common stock).

Stock Appreciation Rights ("SARs") – The Committee may grant SARs as a right in tandem with the number of shares underlying stock options granted under the 2016 Plan or on a stand-alone basis. SARs are the right to receive payment per share of the SAR exercised in stock or in cash equal to the excess of the share's fair market value, as defined in the 2016 Plan, on the date of exercise over its fair market value on the date the SAR was granted. Exercise of a SAR issued in tandem with stock options will result in the reduction of the number of shares underlying the related stock option to the extent of the SAR exercise.

Stock Options – The Committee may grant either incentive stock options or non-qualified stock options. The Committee sets option exercise prices and terms, except that the exercise price of a stock option may be no less than 100% of the fair market value, as defined in the 2016 Plan, of the shares on the date of grant. At the time of grant, the Committee will have sole discretion in determining when stock options are exercisable and when they expire, except that the term of a stock option cannot exceed 10 years subject to certain conditions.

Stock Incentive Plans - The following information relates to our long-term incentive plans:

	December 31, 2021	
	2016 Plan	**2008 Plan**
Maximum number of securities for issuance	5,750,000	
Number of awards available to be granted (1)	2,800,002	
Number of unvested restricted stock/performance-based restricted stock/restricted stock units outstanding	1,900,986	—
Number of options outstanding	—	13,000
Number of options exercisable	—	13,000

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(1) Includes 2008 and 2016 Plan shares canceled, forfeited, expired unexercised, which became available for reissuance under the 2016 Plan.

11. Stockholders' Equity (continued)

Restricted Stock and Restricted Stock Units – During the three years presented below, the Committee approved various grants under the 2016 Plan of shares of restricted stock to certain executives and employees. These shares have vesting provisions including vesting at the end of each one-year period at the rate of one-third per year for three years, vesting 100% at the end of three years, and vesting 100% at the end of one year. The unvested restricted shares carry dividend and voting rights. Sales of these shares are restricted prior to the date of vesting. Pursuant to the terms of the underlying restricted stock agreements, unvested restricted shares will immediately vest upon the occurrence of a change in control (as defined by the agreement), termination without cause or death.

During 2021, the Committee approved the grant of shares of restricted stock and performance-based restricted stock ("PBRS") to certain executives and the grant of shares of restricted stock units to certain employees. Pursuant to the terms of the performance-based awards outstanding as of the CoC event associated with the Exchange Transaction discussed in Note 2, additional shares of restricted stock were issued including the satisfaction of certain performance conditions above the target performance level. Upon the CoC event, such restricted stock is subject only to the time-based vesting conditions set forth in the applicable award agreement and the 2016 Plan. The shares discussed above are reflected in the 2021 information below.

During 2020, the Committee approved the grant of shares of restricted stock and PBRS to a certain executive. These shares are reflected in the 2020 information below.

On December 31, 2019, the Committee approved the grant of approximately 358,000 shares of performance-based restricted stock to certain executives. Key information to finalize the performance targets and range of vesting shares was approved by the Board during February 2020, which is the grant date for financial reporting purposes. The terms of this PBRS grant are discussed below and these PBRS shares are reflected in the 2020 information below.

During the three years presented below, the Committee approved the grant of shares of RSU to our non-employee directors for payment of a portion of their director fees under the 2016 Plan. Each RSU represents a right to receive one share of our common stock following the grant date and are non-forfeitable. Vesting occurs upon the earliest to occur: (i) the director's separation from service, (ii) the first anniversary of the grant date (for the 2021 and 2020 grants), (iii) the third anniversary of the grant date (for 2019 grant), or (iv) the occurrence of a change of control, as defined by the agreement. Based on terms of the RSU agreements, the grant date fair value was recognized as stock-based compensation expense (SG&A) on the grant date in each respective year. Pursuant to the terms of these RSU awards outstanding as of the CoC event associated with the Exchange Transaction discussed in Note 2, all such awards immediately vested.

A summary of restricted stock activity during 2021 is presented below:

	Restricted Stock		Performance-Based Restricted Stock		Restricted Stock Units	
	Shares	Weighted-Average Grant Date Fair Value	Shares	Weighted-Average Grant Date Fair Value	Shares	Weighted-Average Grant Date Fair Value
Unvested outstanding beginning of year	445,472	$ 3.48	686,005	$ 3.77	388,908	$ 1.62
Granted	799,500	$ 3.55	675,532	$ 3.09	327,188	$ 5.05
Vested	(295,993)	$ 3.20	(598,536)	$ 4.66	(490,866)	$ 2.34
Cancelled or forfeited	—	$ —	(20,737)	$ 4.89	(15,487)	$ 5.04
Unvested outstanding end of year	948,979	$ 2.78	742,264	$ 2.67	209,743	$ 5.04

11. Stockholders' Equity (continued)

	Restricted Stock		
	2021	**2020**	**2019**
Shares of restricted stock granted	**799,500**	40,479	371,743
Total fair value of restricted stock granted	**$ 2,183,000**	$ 87,000	$ 1,223,000
Weighted-average fair value per restricted stock granted during year	**$ 3.55**	$ 2.15	$ 3.29
Stock-based compensation expense - Cost of sales	**$ 107,000**	$ 62,000	$ 255,000
Stock-based compensation expense - SG&A	**$ 1,645,000**	$ 1,078,000	$ 1,263,000
Income tax benefit	**$ (430,000)**	$ (279,000)	$ (374,000)
Total weighted-average remaining vesting period in years	**1.84**	1.61	2.18
Total fair value of restricted stock vested during the year	**$ 2,729,000**	$ 578,000	$ 1,917,000

	Performance-Based Restricted Stock		
	2021 (1)	**2020 (1)**	**2019 (1)**
Shares of PBRS granted	**675,532**	398,134	287,871
Total fair value of PBRS granted	**$ 2,480,000**	$ 980,000	$ 1,608,000
Weighted-average fair value per PBRS granted during year	**$ 3.09**	$ 2.46	$ 5.59
Stock-based compensation expense - Cost of sales	**$ 103,000**	$ —	$ 53,000
Stock-based compensation expense - SG&A	**$ 2,938,000**	$ 218,000	$ 290,000
Income tax benefit	**$ (747,000)**	$ (53,000)	$ (84,000)
Total weighted-average remaining vesting period in years	**1.56**	1.57	1.85
Total fair value of PBRS vested during the year	**$ 6,671,000**	$ —	$ —

	Restricted Stock Units		
	2021	**2020**	**2019**
Shares of RSU granted	**327,188**	301,361	41,383
Total fair value of RSU granted	**$ 1,653,000**	$ 255,000	$ 187,000
Weighted-average fair value per RSU granted during year	**$ 5.05**	$ 0.85	$ 4.53
Stock-based compensation expense - Cost of sales	**$ 161,000**	**$ —**	$ 53,000
Stock-based compensation expense - SG&A	**$ 562,000**	$ 255,000	$ 187,000
Income tax benefit	**$ (178,000)**	$ (63,000)	$ (46,000)
Total weighted-average remaining vesting period in years	**2.42**	0.48	1.57
Total fair value of RSU vested during the year	**$ 2,209,000**	$ 16,000	$ 41,000

(1) Upon the CoC event associated with the Exchange Transaction during 2021, such PBRS is subject only to the time-based vesting conditions set forth in the applicable award agreement and the 2016 Plan.

Stock Options – No stock options have been granted under the 2016 Plan during the three years presented below. As it relates to stock options granted under the 2008 plan, the exercise price of the outstanding options granted were equal to the market value of our common stock at the date of grant and vested at the end of each one-year period at the rate of 16.5% per year for the first five years and the remaining unvested options vested at the end of the sixth year. The fair value for of the stock options granted under the 2008 Plan were estimated, using an option pricing model, as of the date of the grant, which date was also the service inception date.

A summary of stock option activity in 2021 is presented below:

	2021	
	Shares	**Weighted-Average Exercise Price**
Outstanding at beginning of year	158,600	$ 26.04
Granted	—	$ —
Exercised	—	$ —
Forfeited or expired	(145,600)	$ 26.07
Outstanding at end of year	13,000	$ 25.66
Exercisable at end of year	13,000	$ 25.66

11. Stockholders' Equity (continued)

	2021	2020	2019
Stock-based compensation expense - Cost of sales	**$ —**	$ 106,000	$ 122,000
Stock-based compensation expense - SG&A	**$ —**	$ 42,000	$ 50,000
Income tax benefit	**$ —**	$ (36,000)	$ (42,000)
Total intrinsic value of options exercised during the year	**$ —**	$ —	$ —
Total fair value of options vested during the year	**$ —**	$ —	$ —
Total intrinsic value of options outstanding at end of year	**$ —**	$ —	$ —
Total intrinsic value of options exercisable at end of year	**$ —**	$ —	$ —
Total weighted-average remaining vesting period in years	**—**	—	0.49
Total weighted-average remaining contractual life period in years (options outstanding)	**2.92**	2.64	3.61
Total weighted-average remaining contractual life period in years (options exercisable)	**2.92**	2.64	3.47

Stock-based Compensation Expense Not Yet Recognized – At December 31, 2021, the total stock-based compensation expense not yet recognized is $4,079,000, relating to all forms of non-vested equity awards, which we will be amortizing (subject to adjustments for actual forfeitures) through the respective remaining vesting periods through June 2024.

Reserved Shares of Common Stock – As of December 31, 2021, we have reserved 0.2 million shares of common stock issuable upon vesting of equity awards pursuant to their respective terms.

NOL Rights Agreement - On July 6, 2020, we entered into the Section 382 Rights Agreement (the "NOL Rights Agreement"), dated as of July 6, 2020, between LSB and Computershare Trust Company, N.A., as rights agent. During 2021, the NOL Rights Agreement was ratified by our shareholders at our annual meeting of shareholders held on May 14, 2021.

The purpose of the NOL Rights Agreement is to facilitate our ability to preserve our NOLs and other tax attributes in order to be able to offset potential future income taxes for federal income tax purposes. Our ability to use these NOLs and other tax attributes would be substantially limited if we experience an "ownership change," as defined in Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"). A company generally experiences an ownership change if the percentage of the value of its stock owned by certain 5% shareholders, as defined in Section 382 of the Code, increases by more than 50% points over a rolling three-year period. The NOL Rights Agreement is intended to reduce the likelihood of an ownership change under Section 382 of the Code by deterring any person (as defined in the NOL Rights Agreement) or group of affiliated or associated persons ("Group") from acquiring beneficial ownership of 4.9% or more of our outstanding common shares.

The rights issued under the NOL Rights Agreement will expire on the earliest to occur of (i) the close of business on the day following the certification of the voting results of our 2021 annual meeting of stockholders, or other duly held stockholders' meeting, (ii) the date on which our Board determines in its sole discretion that (x) the NOL Rights Agreement is no longer necessary for the preservation of material valuable NOLs or tax attributes or (y) the NOLs and tax attributes have been fully utilized and may no longer be carried forward and (iii) the close of business on July 6, 2023.

Our Board may, in its discretion, determine that a person, entity or a certain transaction is exempt from the operation of the NOL Rights Agreement or amend the terms of the rights.

This summary description of the NOL Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement filed as an exhibit to our Current Report on Form 8-K filed on July 6, 2020.

12. Non-Redeemable Preferred Stock

In 2021, certain of the Golsen Holders who held all of the outstanding shares of Series B 12% Cumulative, Convertible Preferred Stock, par value $100 ("Series B Preferred") and Series D 6% Cumulative, Convertible Class C Preferred Stock, no par value ("Series D Preferred") provided notice to convert all of their shares of Series B Preferred and Series D Preferred into approximately 1.2 million shares of our common stock, pursuant to the terms of these securities. Pursuant to the terms of these securities, our Board declared and we paid the accumulated dividends totaling approximately $1.9 million on the Series B and Series D Preferred. As a result, no shares of the Series B Preferred and Series D Preferred remain outstanding. See further discussion concerning the Series B and Series D Preferred in Note 14.

Other – At December 31, 2021, we are authorized to issue an additional 250,000 shares of $100 par value preferred stock and an additional 5,000,000 shares of no-par value preferred stock. Upon issuance, our Board will determine the specific terms and conditions of such preferred stock.

13. Executive Benefit Agreement, Employee Savings Plans and Collective Bargaining Agreements

We are party to a death benefit agreement ("2005 Agreement") with Jack E. Golsen ("J. Golsen"), who retired as discussed in Note 14-Related Party Transactions.

The 2005 Agreement provides that, upon J. Golsen's death, we will pay to the designated beneficiary, a lump-sum payment of $2,500,000 to be funded from the net proceeds received by us under certain life insurance policies on his life that are owned by us. We are obligated to keep in existence life insurance policies with a total face amount of no less than $2,500,000 of the stated death benefit.

The following table includes information about this agreement:

	December 31, 2021	December 31, 2020
	(In Thousands)	
Total undiscounted death benefit	**$ 2,500**	$ 2,500
Total accrued death benefit	**$ 2,514**	$ 2,539

The accrued executive benefit under the 2005 Agreement is included in noncurrent accrued and other liabilities. We accrue for such liabilities when they become probable and discount the liabilities to their present value.

To assist us in funding the 2005 Agreement and for other business reasons, we purchased life insurance policies on various individuals in which we are the beneficiary. Some of these life insurance policies have cash surrender values that we have borrowed against. The net cash surrender values of these policies are included in other assets.

The following table summarizes certain information about these life insurance policies.

	December 31, 2021	December 31, 2020
	(In Thousands)	
Total face value of life insurance policies	**$ 4,500**	$ 4,500
Total cash surrender values of life insurance policies	**$ 1,863**	$ 1,796
Loans on cash surrender values	**(1,642)**	(1,703)
Net cash surrender values	**$ 221**	$ 93

	2021	2020	2019
		(In Thousands)	
Cost of life insurance premiums	**$ 215**	$ 215	$ 215
Increase in cash surrender values	**(69)**	(69)	(70)
Net cost of life insurance premiums included in SG&A	**$ 146**	$ 146	$ 145

Employee Savings Plans - We sponsor a savings plan under Section 401(k) of the Internal Revenue Code under which participation is available to substantially all full-time employees. Beginning in January 2019, we began matching 50% of an employee's contribution, up to 6%, for substantially all full-time employees. Prior to 2019, we did not contribute to this plan except for certain employees. For 2021, 2020 and 2019, the amounts contributed to this plan were $986,000, $1,022,000, and $997,000, respectively.

Collective Bargaining Agreements - As of December 31, 2021, we employed 545 persons, 180 of whom are represented by unions under agreements, including agreements being negotiated, that expire in July 2022 through July 2024.

14. Related Party Transactions

As discussed in Note 2, as the result of the stockholders' approval, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated on September 27, 2021. Pursuant to the terms of the Exchange Agreement, LSB Funding exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

14. Related Party Transactions (continued)

After considering the Special Dividend, LSB Funding holds approximately 54.4 million shares of our outstanding common stock, or 60% of our outstanding common stock.

As discussed in Note 1, our Board declared the Special Dividend that was paid through the issuance of approximately 9.1 million shares of common stock in October 2021, which amount included approximately 1.2 million shares to LSB Funding and approximately 0.7 million shares to certain of the Golsen Holders. In addition, pursuant to the anti-dilution terms of the Series B and Series D Preferred, which shares were held by certain of the Golsen Holders, the conversion ratio of the Series B Preferred increased to 43.3333 to 1 from 33.3333 to 1 and the Series D Preferred increased to 0.325 to 1 from 0.25 to 1. See Note 12 for the discussion regarding the conversion of the Series B and Series D Preferred into our common stock and the payment of the accumulated dividends on these securities.

As of December 31, 2021, we have three separate outstanding financing arrangements by an affiliate of LSB Funding as discussed in footnotes (C), (D) and (E) of Note 7. In addition, an affiliate of LSB Funding held $50 million of our Old Notes, which Old Notes were redeemed with the proceeds from the New Notes as discussed in footnote (B) of Note 7. An affiliate of LSB Funding holds $30 million of the New Notes.

Pursuant to the terms of the Board Representation and Standstill Agreement, as amended, our Board includes two directors that are employees of affiliates of LSB Funding. During 2021, 2020 and 2019, we incurred director fees associated with these directors totaling approximately $0.3 million for each respective year.

During 2021, 2020 and 2019, we incurred director fees associated with Barry H. Golsen totaling approximately $0.1 million for each respective year.

As the result of J. Golsen informing the Board of his election to retire as Executive Chairman effective December 31, 2017, we determined not to extend the employment agreement with J. Golsen beyond its then current term that expired on December 31, 2017 (the “Retirement Date”) and, in accordance with the terms his employment agreement, delivered a notice of non-renewal to J. Golsen. Following the Retirement Date, J. Golsen serves as Chairman Emeritus of our Board.

During 2017, we entered into a transition agreement (the “Transition Agreement”) with J. Golsen that commenced on January 1, 2018 and ends upon the earlier of his death or a change in control as defined in the agreement. During the term, J. Golsen will receive an annual cash retainer of $480,000 and an additional monthly amount of $4,400 to cover certain expenses. In accordance with the terms of the Transition Agreement, we will also reimburse J. Golsen for his cost of certain medical insurance coverage until his death. Effective as of the Retirement Date, the severance agreement that was in force with J. Golsen was terminated. In consideration for his services, including as Chairman Emeritus, we will pay J. Golsen a one-time payment equal to $2,320,000 upon the consummation of a change in control, as defined in the agreement, should one occur prior to his death.

15. Supplemental Cash Flow Information

The following provides additional information relating to cash flow activities:

	2021	2020	2019
		(In Thousands)	
Cash payments (refunds) for:			
Interest on long-term debt and other, net of capitalized interest	**$ 43,583**	$ 45,730	$ 42,184
Income taxes, net	**$ (182)**	$ (312)	$ (65)
Noncash investing and financing activities:			
Accounts receivable, supplies, other assets, accounts payable and accrued liabilities associated with additions of property, plant and equipment	**$ 17,649**	$ 16,286	$ 18,350
Extinguishment of PPP loan	**$ 10,000**	$ —	$ —
Series E and Series F Redeemable Preferred and related dividends, accretion, and embedded derivative exchanged for common stock, net of related costs in accounts payable	**$ 306,690**	$ 37,208	$ 32,724
Series B and Series D preferred converted into common stock	**$ 3,000**	$ —	$ —

16. Net Sales

Disaggregated Net Sales

As discussed in Note 1, we primarily derive our revenues from the sales of various chemical products. The following table presents our net sales disaggregated by our principal markets, which disaggregation is consistent with other financial information utilized or provided outside of our consolidated financial statements:

	2021	2020	2019
		(In Thousands)	
Net sales:			
Agricultural products	**$ 264,502**	$ 180,036	$ 187,641
Industrial products	**234,496**	133,024	139,643
Mining products	**57,241**	38,256	37,786
Total net sales	**$ 556,239**	$ 351,316	$ 365,070

Other Information

Although most of our contracts have an original expected duration of one year or less, for our contracts with a duration greater than one year at contract inception, the average remaining expected duration was approximately 18 months at December 31, 2021.

Liabilities associated with contracts with customers (contract liabilities) primarily relate to deferred revenue and customer deposits associated with cash payments received in advance from customers for volume shortfall charges and product shipments. We had approximately $1.6 million and $2.5 million of contract liabilities as of December 31, 2021 and 2020, respectively. During 2021, revenues of $2.5 million were recognized and included in the balance at the beginning of the period.

At December 31, 2021, we have remaining performance obligations with certain customer contracts, excluding contracts with original durations of less than one year and contracts with variable consideration for which we have elected the practical expedient for consideration recognized in revenue as invoiced. The remaining performance obligations totals approximately $77 million, of which approximately 39% of this amount relates to 2022 through 2024, approximately 29% relates to 2025 through 2026, with the remainder thereafter.

17. Leases

Information related to our leases are presented below:

	2021	2020	2019
	(Dollars In Thousands)		
Components of lease expense:			
Operating lease cost	$ 9,998	$ 7,611	$ 7,270
Short-term lease cost	2,243	4,372	2,665
Other cost (1)	157	75	64
Total lease cost	$ 12,398	$ 12,058	$ 9,999
Supplemental cash flow information related to leases:			
Operating cash flows from operating leases	$ 10,290	$ 7,782	$ 7,677
Operating cash flows from finance leases	33	15	16
Financing cash flows from finance leases	92	45	61
Cash paid for amounts included in the measurement of lease liabilities	$ 10,415	$ 7,842	$ 7,754
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 9,549	$ 17,064	$ 5,967
Other lease-related information:			
Weighted-average remaining lease term - operating leases (in years)	4.0	4.3	4.6
Weighted-average remaining lease term - finance leases (in years)	3.2	4.1	3.8
Weighted-average discount rate - operating leases	8.44%	8.26%	8.70%
Weighted-average discount rate - finance leases	8.69%	8.65%	8.94%

(1) Includes variable and finance lease costs.

At December 31, 2021, future minimum operating lease payments due under ASC 842 are summarized by fiscal year in the table below:

	Operating Leases
	(In thousands)
2022	$ 9,692
2023	7,989
2024	6,298
2025	3,736
2026	2,543
Thereafter	2,000
Total lease payments	32,258
Less imputed interest	(4,935)
Present value of lease liabilities	$ 27,323

As of December 31, 2021, we did not have any executed operating leases with lease terms greater than one year that have not yet commenced.

LSB Industries, Inc.
Supplementary Information
Quarterly Financial Data (Unaudited)

Summarized unaudited quarterly financial data for 2021 and 2020 are as follows.

	Three months ended March 31	June 30	September 30	December 31
	(In Thousands, Except Per Share Amounts)			
2021				
Net sales	$ 98,116	$ 140,696	$ 127,199	$ 190,228
Gross profit (1)	$ 8,060	$ 35,008	$ 17,447	$ 78,464
Net income (loss) (1) (2)	$ (13,279)	$ 23,670	$ (8,928)	$ 42,082
Net income (loss) attributable to common stockholders (A)	$ (23,376)	$ 12,646	$ (251,504)	$ 42,009
Basic income (loss) per common share	$ (0.63)	$ 0.34	$ (6.39)	$ 0.49
Diluted income (loss) per common share	$ (0.63)	$ 0.32	$ (6.39)	$ 0.47
2020				
Net sales	$ 83,411	$ 105,033	$ 73,969	$ 88,903
Gross profit (loss) (1)	$ 2,551	$ 19,021	$ (1,059)	$ (3,465)
Net loss (1) (2)	$ (19,452)	$ (365)	$ (20,402)	$ (21,692)
Net loss attributable to common stockholders	$ (28,338)	$ (9,634)	$ (29,874)	$ (31,573)
Basic and diluted loss per common share	$ (0.77)	$ (0.26)	$ (0.81)	$ (0.86)

(A) See Notes 2 and 3 concerning a deemed dividend associated with the Exchange Transaction, which was consummated during the third quarter of 2021.

(1) The following income (expense) items impacted gross profit (loss) and net income (loss):

	Three months ended March 31	June 30	September 30	December 31
	(In Thousands)			
Turnaround expense: (A)				
2021	$ (140)	$ (707)	$ (7,976)	$ (1,130)
2020	$ —	$ (11)	$ (34)	$ (31)
Gain (loss) on natural gas forward contracts				
2021	$ 2,706	$ —	$ —	$ —
2020	$ (714)	$ 31	$ 513	$ (1,443)
Compensation expense due to CoC event				
2021	$ —	$ —	$ (1,221)	$ —
Recovery from settlements with certain vendors				
2020	$ —	$ 5,664	$ —	$ —

(2) The following income (expense) items impacted net income (loss):

	March 31	June 30	September 30	December 31
Legal fees associated with Leidos matter				
2021	$ (886)	$ (441)	$ (271)	$ (296)
2020	$ (3,287)	$ (955)	$ (901)	$ (572)
Compensation expense due to CoC event				
2021	$ —	$ —	$ (3,786)	$ —
Gain (loss) on extinguishments of debt				
2021	$ —	$ 10,000	$ —	$ (20,259)
Interest expense associated with Global judgment				
2021	$ (78)	$ (79)	$ (80)	$ (80)
2020	$ (1,327)	$ (79)	$ (80)	$ (80)
Gain (loss) associated with embedded derivative				
2021	$ (436)	$ (716)	$ (1,106)	$ —
2020	$ 637	$ 120	$ (141)	$ (561)
Benefit (provision) for income taxes				
2021	$ (42)	$ 248	$ (19)	$ 4,369
2020	$ 339	$ 1,299	$ 1,370	$ 1,741

(A) Turnaround expenses do not include the impact on operating results relating to lost absorption or reduced margins due to the associated plants being shut down.

LSB Industries, Inc.

Schedule II - Valuation and Qualifying Accounts

Years ended December 31, 2021, 2020, and 2019

(In Thousands)

Description (1)	Balance at Beginning of Year	Additions-Charges to (Recovery of) Costs and Expenses	Deductions-Write-offs/Costs Incurred	Balance at End of Year
Accounts receivable - allowance for doubtful accounts:				
2021	$ 378	$ 96	$ —	$ 474
2020	$ 261	$ 141	$ 24	$ 378
2019	$ 351	$ 175	$ 265	$ 261
Deferred tax assets - valuation allowance:				
2021	$ 64,655	$ (17,687)	$ —	$ 46,968
2020	$ 51,589	$ 13,471	$ 405	$ 64,655
2019	$ 45,626	$ 8,279	$ 2,316	$ 51,589

(1) Reduction in the consolidated balance sheet from the related assets to which the reserve applies.

Other valuation and qualifying accounts are detailed in our notes to consolidated financial statements.

CERTIFICATE OF AMENDMENT
TO
CERTIFICATE OF DESIGNATIONS OF
SERIES E-1 CUMULATIVE REDEEMABLE CLASS C PREFERRED STOCK
OF
LSB INDUSTRIES, INC.

LSB Industries, Inc., a corporation organized and existing under the Delaware General Corporation Law (the "**Corporation**"), DOES HEREBY CERTIFY**:**

FIRST: That the name of the corporation is LSB Industries, Inc., and that the Corporation was originally incorporated pursuant to the General Corporation Law on January 21, 1977.

SECOND: That a Certificate of Designations of Series E-1 Cumulative Redeemable Class C Preferred Stock was filed with the Secretary of State of the State of Delaware on October 18, 2018, as subsequently corrected by the Certificate of Correction of Series E-1 Cumulative Redeemable Class C Preferred Stock filed with the Secretary of State of the State of Delaware on November 1, 2018 (together the "**Certificate of Designations**").

THIRD: That a resolution setting forth this proposed amendment to the Certificate of Designations was duly approved by the Board of Directors of the Corporation (the "Board") on July 19, 2021, where in the Board declared the amendment to be advisable and recommended that the stockholders of the Corporation likewise adopt and approve the amendment.

FOURTH: That the holders of a majority of the outstanding capital stock of the Corporation and each class of stock of the Corporation entitled to vote on the matter have approved and authorized this proposed amendment at a meeting of the stockholders held on September 22, 2021 or by written consent in accordance with the Delaware General Corporation Law and the Corporation's certificate of incorporation and bylaws.

FIFTH: That this proposed amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporate Law of the State of Delaware.

SIXTH: Paragraph (c) of Section 4 of the Certificate of Designations is hereby amended and restated to read as follows:

> "**(c) Participating Dividends.** Subject to Section 4(a) and 4(b), in addition to the dividends accruing on the Series E-1 pursuant to Section 4(a), if the Corporation declares or pays a dividend or distribution on the Common Stock, whether such dividend or distribution is payable in cash, securities or other property, the Corporation shall simultaneously declare and pay a dividend on the Series E-1 on a pro rata basis with the Common Stock in an aggregate amount equal to such dividend or distribution payable with respect to the Participation Common Stock; provided, however, that no such dividend shall be declared or become payable in respect of the Dividend (as defined in Section 4.5 of the Securities Exchange Agreement dated as of July 19, 2021 by and between the Corporation and LSB Funding LLC)."

SEVENTH: No other provisions of the Certificate of Designations are amended or changed by this amendment.

I, THE UNDERSIGNED, being the President of the Corporation, hereby declare and certify that this is my act and deed and the facts herein stated are true, and accordingly, I have executed this Certificate of Amendment to the Certificate of Designations on this September 23, 2021.

/s/ Mark T. Behrman
By: Mark T. Behrman
Title: President & CEO

Exhibit 4.17

DESCRIPTION OF REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

LSB Industries, Inc. (the "Company") has two classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (i) common stock, par value $0.10 per share ("Common Stock"), and (ii) preferred stock purchase rights (the "Rights").

DESCRIPTION OF COMMON STOCK

The following description of the Common Stock is based upon the Company's Restated Certificate of Incorporation as currently in effect (the "Certificate of Incorporation"), the Company's Second Amended and Restated Bylaws (the "Bylaws" and, together with our Certificate of Incorporation, our "Charter Documents") and applicable provisions of law. We have summarized certain portions of the Certificate of Incorporation and Bylaws below. The summary is not complete and is subject to, and is qualified in its entirety by express reference to, the provisions of the Company's Certificate of Incorporation and Bylaws, each of which is filed as an exhibit to the Annual Report on Form 10-K of which this exhibit is a part.

Authorized Capital Stock

The Company's authorized capital stock consists of 150,000,000 shares of Common Stock, $0.10 par value per share, 250,000 shares of Preferred Stock, $100 par value per share, and 5,000,000 shares have been designated as Class C Preferred Stock, no par value (both "Preferred Stock").

Common Stock

Common Stock Outstanding. The outstanding shares of the Common Stock are duly authorized, validly issued, fully paid and nonassessable.

Voting Rights. Each holder of shares of Common Stock is entitled to one vote for each share, in person or by proxy, at any and all meetings of the Stockholders of the Company, on all propositions before such meetings.

Dividend Rights. Subject to preferential dividend rights of any other class or series of stock, the holders of Common Stock are entitled to receive dividends, including dividends of stock, if, as and when declared by the Company's board of directors, subject to any limitations applicable by law and to the rights of the holders, if any, of the Company's preferred stock.

Other Rights and Restrictions. Subject to the preferential rights of any other class or series of stock, all shares of our Common Stock have equal dividend, distribution, liquidation and other rights, and have no preference, appraisal or exchange rights, except for any appraisal rights provided by Delaware law. Furthermore, holders of our Common Stock have no conversion, sinking fund or redemption rights, or preemptive rights to subscribe for any of our securities. Our Certificate of Incorporation and Bylaws do not restrict the ability of a holder of our Common Stock to transfer the holder's shares of our Common Stock.

The rights, powers, preferences and privileges of holders of our Common Stock are subject to, and may be adversely affected by, the rights of holders of shares of our outstanding preferred stock and of any series of preferred stock which we may designate and issue in the future.

Listing: Our common stock is listed on the New York Stock Exchange under the symbol "LXU."

Preferred Stock

Under the Certificate of Incorporation, the Preferred Stock may be issued from time to time in one or more series, each of such series to have such designations, preference and relative, participating, optional, voting or other special rights and qualifications, limitations or restrictions thereof as are stated and expressed in a resolution or resolutions providing for the issue of such series as determined and adopted by the Board of Directors.

Anti-Takeover Effects of Delaware Law, Our Certificate of Incorporation and Our Bylaws

Some provisions of Delaware law, our Certificate of Incorporation and our Bylaws contain provisions that could make the following transactions more difficult: acquisitions of us by means of a tender offer, a proxy contest or otherwise or removal of our incumbent officers and directors. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with us. We believe that the benefits of increased protection and our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

Delaware Law

Section 203 of the DGCL prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board of directors before the date the interested stockholder attained that status;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after such time the business combination is approved by the board of directors and authorized at a meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

An interested stockholder is defined as a person who, together with any affiliates or associates of such person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting shares of a Delaware corporation. The term “business combination” is broadly defined to include a broad array of transactions, including mergers, consolidations, sales or other dispositions of assets having a total value in excess of 10% of the consolidated assets of the corporation or all of the outstanding stock of the corporation, and some other transactions that would increase the interested stockholder’s proportionate share ownership in the corporation.

Our Certificate of Incorporation and Our Bylaws

Provisions of our Certificate of Incorporation and our Bylaws may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock.

Among other things, our Certificate of Incorporation and Bylaws:

- provide for the division of the Board into three classes, each class consisting as nearly as possible of one-third of the whole. The term of office of one class of directors expires each year; with each class of directors elected for a term of three years and until the stockholders elect their qualified successors;

- provide that all vacancies, including newly created directorships, may, except as otherwise required by law or, if applicable, the rights of holders of a series of preferred stock, be filled by a majority of directors then in office, even if less than a quorum, or by the sole remaining director;

- provide that our Certificate of Incorporation and Bylaws may be amended by the affirmative vote of the holders of at least two-thirds of our then outstanding voting stock;

- provide that special meetings of our stockholders may only be called by our chairman or by a majority of the directors then in office;

- provide that the affirmative vote of the holders of not less than two-thirds of the outstanding voting stock of the Company voting as a single class shall be required for the approval or authorization of any (i) merger or consolidation of the Company with or into any other corporation, or (ii) sale, lease or exchange of all or substantially all of the assets of the Company to or with any other corporation, person or entity; provided, however, that such two-thirds voting requirement shall not be applicable if (a) the Company is merged with a corporation in which at least two-thirds of the outstanding shares of each class of stock of such corporation is owned by the Company, or (b) if a transaction described in clauses (i) or (ii) above has been approved by a vote of at least a majority of the members of the board of directors of the Company. If such two-thirds voting requirement of the outstanding voting stock of the Company shall not be applicable under the provisions of clauses (a) or (b) above, then in such event transactions specified in (i) or (ii) above shall require only such affirmative vote as is required by law, regulation or any other provision of our Certificate of Incorporation; and

- provide that our Bylaws can be amended by our board of directors.

DESCRIPTION OF PREFERRED STOCK PURCHASE RIGHTS

The following description of the Rights is not complete and is subject to, and is qualified in its entirety by reference to, the full text and provisions of the Section 382 Rights Agreement, dated as of July 6, 2020, between the Company and Computershare Trust company, N.A., as rights agent, a copy of which is filed as an exhibit to the Annual Report on Form 10-K of which this exhibit is a part.

Distribution Date; Exercisability; Expiration

Initially, the Rights will be attached to all certificates representing outstanding shares of Common Stock (the “Common Shares”) (or other evidence of book-entry or other uncertificated ownership) and no separate certificates evidencing the Rights (“Right Certificates”) will be issued. Until the Distribution Date (as defined below), the Rights will be transferred with and only with the Common Shares. As long as the Rights are attached to the Common Shares, the Company will issue one Right with each new Common Share so that all such Common Shares will have Rights attached (subject to certain limited exceptions).

The Rights will separate and begin trading separately from the Common Shares, and Right Certificates will be caused to evidence the Rights, on the earlier to occur of (i) the Close of Business (as such term is defined in the Rights Agreement) on the tenth day following a public announcement, or the public disclosure of facts indicating, that a Person or group of affiliated or associated Persons has acquired Beneficial Ownership of 4.9% or more of the outstanding Common Shares (an “Acquiring Person”) (or, in the event that the Board of Directors determines to effect an exchange in accordance with Section 24 of the Rights Agreement and the Board of Directors determines that a later date is advisable, then such later date) and (ii) the Close of Business on the tenth Business Day (as such term is defined in the Rights Agreement) (or such later date as may be determined by action of the Board of Directors prior to such time as any Person becomes an Acquiring Person) following the commencement of a tender offer or exchange offer the consummation of which would result in the Beneficial Ownership by a Person or group of 4.9% or more of the outstanding Common Shares (the earlier of such dates, the “Distribution Date”). As soon as practicable after the Distribution Date, unless the Rights are recorded in book-entry or other uncertificated form, the Company will prepare and cause the Right Certificates to be sent to each record holder of Common Shares as of the Distribution Date.

An “Acquiring Person” will not include (i) the Company, (ii) any Subsidiary (as such term is defined in the Rights Agreement) of the Company, (iii) any employee benefit plan of the Company or of any Subsidiary of the Company, (iv) any entity holding Common Shares for or pursuant to the terms of any such employee benefit plan or (v) any Person who or which, together with all Affiliates and Associates (as such terms are defined in the Rights Agreement) of such Person, at the time of the first public announcement of the Rights Agreement, is a Beneficial Owner of 4.9% or more of the Common Shares then outstanding (a “Grandfathered Stockholder”). However, if a Grandfathered Stockholder becomes, after such time, the Beneficial Owner of any additional Common Shares (regardless of whether, thereafter or as a result thereof, there is an increase, decrease or no change in the percentage of Common Shares then outstanding Beneficially Owned (as such term is defined in the Rights Agreement) by such Grandfathered Stockholder) then such Grandfathered Stockholder shall be deemed to be an Acquiring Person unless, upon such acquisition of Beneficial Ownership of additional Common Shares, such person is not the Beneficial Owner of 4.9% or more of the Common Shares then outstanding. In addition, upon the first decrease of a Grandfathered Stockholder’s Beneficial Ownership below 4.9%, such Grandfathered Stockholder will no longer be deemed to be a Grandfathered Stockholder. In the event that after the time of the first public announcement of the Rights Agreement, any agreement, arrangement or understanding pursuant to which any Grandfathered Stockholder is deemed to be the Beneficial Owner of Common Shares expires, is settled in whole or in part, terminates or no longer confers any benefit to or imposes any obligation on the Grandfathered Stockholder, any direct or indirect replacement, extension or substitution of such agreement, arrangement or understanding with respect to the same or different Common Shares that confers Beneficial Ownership of Common Shares shall be considered the acquisition of Beneficial Ownership of additional Common Shares by the Grandfathered Stockholder and render such Grandfathered Stockholder an Acquiring Person for purposes of the Rights Agreement unless, upon such acquisition of Beneficial Ownership of additional Common Shares, such person is not the Beneficial Owner of 4.9% or more of the Common Shares then outstanding.

“Beneficial Ownership” is defined in the Rights Agreement to include any securities (i) which a Person or any of such Person’s Affiliates or Associates (a) actually owns (directly or indirectly) or would be deemed to actually or constructively own for purposes of Section 382 of the Code or the Treasury Regulations (as such terms are defined in the Rights Agreement) promulgated thereunder, including any coordinated acquisition of securities by any Persons who have a formal or informal understanding with respect to such acquisition (to the extent ownership of such securities would be attributed to such Persons under Section 382 of the Code and the Treasury Regulations promulgated thereunder), (b) beneficially owns, directly or indirectly, within the meaning of Rules 13d-3 or 13d-5 promulgated under the Exchange Act or (c) has the right or ability to vote, or the right to acquire, pursuant to any agreement, arrangement or understanding (except under limited circumstances), (ii) which are directly or indirectly Beneficially Owned by any other Person with which a Person has any agreement, arrangement or understanding for the purpose of acquiring, holding or voting such securities, or obtaining, changing or influencing control of the Company or (iii) which are the subject of, or reference securities for, or that underlie, certain derivative positions of any Person or any of such Person's Affiliates or Associates; *provided*, that a Person shall not be deemed to be the Beneficial Owner of, or to Beneficially Own, (x) securities tendered pursuant to a tender or exchange offer made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the Exchange Act until such tendered securities are accepted for purchase or exchange or (y) any shares of the Company's Preferred Stock or Class C Preferred Stock (other than the Preferred Shares).

The Rights are not exercisable until the Distribution Date. The Rights will expire on the earliest to occur of (i) the Close of Business on the day following the certification of the voting results of the Company's 2021 annual meeting of stockholders, if at such stockholder meeting or any other meeting of stockholders of the Company duly held prior to such meeting, a proposal to ratify the Rights Agreement has not been passed by the requisite vote of the Company's stockholders, (ii) the date on which the Board of Directors determines in its sole discretion that (x) the Rights Agreement is no longer necessary for the preservation of material valuable NOLs or Tax Attributes or (y) the NOLs and Tax Attributes have been fully utilized and may no longer be carried forward and (iii) the Close of Business on July 6, 2023 (the "Final Expiration Date").

Exempt Persons and Transactions

The Board of Directors may, in its sole and absolute discretion, determine that a Person is exempt from the Rights Agreement (an "Exempt Person"), so long as such determination is made prior to such time as such Person becomes an Acquiring Person. Any Person will cease to be an Exempt Person if the Board of Directors makes a contrary determination with respect to such Person regardless of the reason therefor. In addition, the Board of Directors may, in its sole and absolute discretion, exempt any transaction from triggering the Rights Agreement, so long as the determination in respect of such exemption is made prior to such time as any Person becomes an Acquiring Person. Any Person, together with all Affiliates and Associates of such Person, who proposes to acquire 4.9% or more of the outstanding Common Shares may apply to the Board of Directors in advance for an exemption in accordance with and pursuant to the terms of the Rights Agreement.

Flip-in Event

If a Person or group becomes an Acquiring Person at any time after the date of the Rights Agreement (with certain limited exceptions), the Rights will become exercisable for Common Shares having a value equal to two times the exercise price of the Right. From and after the announcement that any Person has become an Acquiring Person, if the Rights evidenced by a Right Certificate are or were acquired or Beneficially Owned by an Acquiring Person or any Associate or Affiliate of an Acquiring Person, such Rights shall become void, and any holder of such Rights shall thereafter have no right to exercise such Rights. If the Board of Directors so elects, the Company may deliver upon payment of the exercise price of a Right an amount of cash, securities or other property equivalent in value to the Common Shares issuable upon exercise of a Right.

Exchange

At any time after any Person becomes an Acquiring Person, the Board of Directors may exchange the Rights (other than Rights owned by any Person which have become void), in whole or in part, at an exchange ratio of one Common Share per Right (subject to adjustment). The Company may issue, transfer or deposit such Common Shares (or other property as permitted under the Rights Agreement) to or into a trust or other entity created upon such terms as the Board of Directors may determine and may direct that all holders of Rights receive such Common Shares or other property only from the trust or other entity. In the event that the Board of Directors determines, before the Distribution Date, to effect an exchange, the Board of Directors may delay the occurrence of the Distribution Date to such time as it deems advisable.

Flip-over Event

If, at any time after a Person becomes an Acquiring Person, (i) the Company consolidates with, or merges with, any other Person (or any Person consolidates with, or merges with, the Company) and, in connection with such consolidation or merger, all or part of the Common Shares are or will be changed into or exchanged for stock or other securities of any other Person or cash or any other property or (ii) 50% or more of the Company's consolidated assets or Earning Power (as defined in the Rights Agreement) is sold, then proper provision will be made so that each holder of a Right will thereafter have the right to receive, upon the exercise thereof at the then current exercise price of the Right, that number of shares of common stock of the acquiring company which at the time of such transaction will have a market value of two times the exercise price of the Right.

Redemption

At any time prior to the earlier to occur of (i) the Close of Business on the tenth day following the Stock Acquisition Date (as defined in the Rights Agreement) (or, if the tenth day following the Stock Acquisition Date occurs before the Record Date, the Close of Business on the Record Date) and (ii) the Final Expiration Date, the Board of Directors may redeem the Rights in whole, but not in part, at a price of $0.001 per Right (the "Redemption Price"). The redemption of the Rights may be made effective at such time, on such basis and with such conditions as the Board of Directors in its sole discretion may establish. Immediately upon any redemption of the Rights, the right to exercise the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

Amendment

The terms of the Rights may be amended by the Board of Directors without the consent of the holders of the Rights, except that at any time after the Close of Business on the tenth day following the Stock Acquisition Date (or, if the tenth day following the Stock Acquisition Date occurs before the Record Date, the Close of Business on the Record Date), no such amendment may adversely affect the interests of the holders of the Rights (other than the Acquiring Person and its Affiliates and Associates).

Preferred Stock Rights

Each one-thousandth of a Preferred Share will entitle the holder thereof to the same dividends and liquidation rights as if the holder held one Common Share and will be treated the same as a Common Share in the event of a merger, consolidation or other share exchange.

Rights of Holders

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends.

Exhibit 21.1

LSB INDUSTRIES, INC.
SUBSIDIARY LISTING
December 31, 2021

LSB INDUSTRIES, INC. (Direct subsidiaries in bold italics)

LSB Chemical L.L.C. (f/k/a/ LSB Chemical Corp.)
- Cherokee Nitrogen L.L.C. (f/k/a Cherokee Nitrogen Company)
- El Dorado Chemical Company
  - EDC Ag Products Company L.L.C.
  - Chemex I Corp. (f/k/a Slurry Explosive Corporation)
  - El Dorado Ammonia L.L.C.
- El Dorado Nitrogen L.L.C. (f/k/a El Dorado Nitric L.L.C., f/k/a El Dorado Nitric Company, f/k/a El Dorado Nitrogen Company, f/k/a LSB Nitrogen Corporation, f/k/a LSB Import Corp.)
- Pryor Chemical Company (f/k/a Pryor Plant Chemical Company, f/k/a LSB Financial Corp.)
  - TRISON Construction, Inc.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement (Form S-8 No. 333-153103) pertaining to the LSB Industries, Inc. 2008 Incentive Stock Plan or any combination of the foregoing;

2. Registration Statement (Form S-8 No. 333-199864) pertaining to the LSB Industries, Inc. 2008 Incentive Stock Plan, as amended by the First Amendment;

3. Registration Statement (Form S-8 No. 333-209838) pertaining to the LSB Industries, Inc. 2008 Incentive Plan, as amended;

4. Registration Statement (Form S-8 No. 333-212281) pertaining to the LSB Industries, Inc. 2016 Long Term Incentive Plan, as amended;

5. Registration Statement (Form S-3 No. 333-228139) of LSB Industries, Inc.

6. Registration Statement (Form S-8 No. 333-256573) pertaining to the LSB Industries, Inc. 2016 Long Term Incentive Plan, as amended and restated;

7. Registration Statement (Form S-3 No. 333-261131) of LSB Industries, Inc.

of our reports dated February 24, 2022, with respect to the consolidated financial statements of LSB Industries, Inc. and the effectiveness of internal control over financial reporting of LSB Industries, Inc. included in this Annual Report (Form 10-K) of LSB Industries, Inc. for the year ended December 31, 2021.

/s/ Ernst & Young

Oklahoma City, Oklahoma
February 24, 2022

Exhibit 31.1

CERTIFICATION

I, Mark T. Behrman, certify that:

1. I have reviewed this annual report on Form 10-K of LSB Industries, Inc. (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in this case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Mark T. Behrman
Mark T. Behrman
President, Chief Executive Officer and
Director

Exhibit 31.2

CERTIFICATION

I, Cheryl A. Maguire, certify that:

1. I have reviewed this annual report on Form 10-K of LSB Industries, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in this case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Cheryl A. Maguire
Cheryl A. Maguire
Executive Vice President
and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of LSB Industries, Inc. (“LSB”) on Form 10-K for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”). I, Mark T. Behrman, President and Chief Executive Officer of LSB, certify pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of LSB.

/s/ Mark T. Behrman
Mark T. Behrman
President, Chief Executive Officer
(Principal Executive Officer) and
Director

February 24, 2022

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of LSB Industries, Inc. (“LSB”) on Form 10-K for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Cheryl A. Maguire, Senior Vice President and Chief Financial Officer of LSB, certify pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of LSB.

/s/ Cheryl A. Maguire
Cheryl A. Maguire
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

February 24, 2022

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein and not for any other purpose.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ________ to ________

Commission file number 1-7677

LSB Industries, Inc.
(Exact name of Registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**73-1015226** **(I.R.S. Employer Identification No.)**
3503 NW 63rd Street, Suite 500, Oklahoma City, Oklahoma **(Address of principal executive offices)**	**73116** **(Zip Code)**

(Registrant's telephone number, including area code) (405) 235-4546

Not applicable
(Former name, former address and former fiscal year, if changed since last report.)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value $.10	**LXU**	**New York Stock Exchange**
Preferred Stock Purchase Rights	**N/A**	**New York Stock Exchange**

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
☒ Yes ☐ No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).
☒ Yes ☐ No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of “large accelerated filer”, “accelerated filer”, “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
☐ Yes ☒ No

The number of shares outstanding of the Registrant's common stock was 88,824,475 shares as of October 27, 2021.

FORM 10-Q OF LSB INDUSTRIES, INC.

TABLE OF CONTENTS

PART I
FINANCIAL INFORMATION

Item 1. Financial Statements

LSB INDUSTRIES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Information at September 30, 2021 is unaudited)

	September 30, 2021	December 31, 2020
	(In Thousands)	
Assets		
Current assets:		
Cash and cash equivalents	$ 32,855	$ 16,264
Accounts receivable	66,082	42,929
Allowance for doubtful accounts	(377)	(378)
Accounts receivable, net	65,705	42,551
Inventories:		
Finished goods	16,536	17,778
Raw materials	1,670	1,795
Total inventories	18,206	19,573
Supplies, prepaid items and other:		
Prepaid insurance	1,879	12,315
Precious metals	10,670	6,787
Supplies	26,011	25,288
Other	7,629	6,802
Total supplies, prepaid items and other	46,189	51,192
Total current assets	162,955	129,580
Property, plant and equipment, net	869,497	891,198
Other assets:		
Operating lease assets	28,308	26,403
Intangible and other assets, net	13,784	6,121
	42,092	32,524
	$ 1,074,544	$ 1,053,302

(Continued on following page)

LSB INDUSTRIES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (continued)
(Information at September 30, 2021 is unaudited)

	September 30, 2021	December 31, 2020
	(In Thousands)	
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 73,658	$ 46,551
Short-term financing	1,083	13,576
Accrued and other liabilities	50,772	30,367
Current portion of long-term debt	9,249	16,801
Total current liabilities	134,762	107,295
Long-term debt, net	460,637	467,389
Noncurrent operating lease liabilities	20,704	19,845
Other noncurrent accrued and other liabilities	4,040	6,090
Deferred income taxes	31,333	30,939
Commitments and contingencies (Note 6)		
Redeemable preferred stocks:		
Series E 14% cumulative, redeemable Class C preferred stock, no par value, no shares issued or outstanding at September 30, 2021; (210,000 shares issued; 139,768 outstanding; aggregate liquidation preference $278 million at December 31, 2020)	—	272,101
Series F redeemable Class C preferred stock, no par value, no shares issued or outstanding at September 30, 2021; (1 share issued and outstanding; aggregate liquidation preference of $100 at December 31, 2020)	—	—
Stockholders' equity:		
Series B 12% cumulative, convertible preferred stock, $100 par value; 20,000 shares issued and outstanding; aggregate liquidation preference of $3.4 million ($3.3 million at December 31, 2020)	2,000	2,000
Series D 6% cumulative, convertible Class C preferred stock, no par value; 1,000,000 shares issued and outstanding; aggregate liquidation preference of $1.4 million ($1.3 million at December 31, 2020)	1,000	1,000
Common stock, $.10 par value; 150 million shares authorized, 90 million shares issued (75 million shares authorized, 40 million shares issued at December 31, 2020)	8,983	3,991
Capital in excess of par value	489,107	197,352
Accumulated deficit	(71,461)	(41,487)
	429,629	162,856
Less treasury stock, at cost:		
Common stock, 1 million shares (2.1 million shares at December 31, 2020)	6,561	13,213
Total stockholders' equity	423,068	149,643
	$ 1,074,544	$ 1,053,302

See accompanying notes.

LSB INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
	(In Thousands, Except Per Share Amounts)			
Net sales	$ 127,199	$ 73,969	$ 366,011	$ 262,413
Cost of sales	109,752	75,028	305,496	241,900
Gross profit (loss)	17,447	(1,059)	60,515	20,513
Selling, general and administrative expense	11,600	7,068	28,938	25,578
Other expense, net	474	875	217	240
Operating income (loss)	5,373	(9,002)	31,360	(5,305)
Interest expense, net	12,956	12,554	37,618	38,509
Gain on extinguishment of debt	—	—	(10,000)	—
Non-operating other expense (income), net	1,326	216	2,466	(587)
Income (loss) before provision (benefit) for income taxes	(8,909)	(21,772)	1,276	(43,227)
Provision (benefit) for income taxes	19	(1,370)	(187)	(3,008)
Net income (loss)	(8,928)	(20,402)	1,463	(40,219)
Dividends on convertible preferred stocks	75	75	225	225
Dividends on Series E redeemable preferred stock	10,190	8,889	29,914	25,885
Accretion of Series E redeemable preferred stock	499	508	1,523	1,517
Deemed dividend on Series E and Series F redeemable preferred stocks	231,812	—	231,812	—
Net loss attributable to common stockholders	$ (251,504)	$ (29,874)	$ (262,011)	$ (67,846)
Basic and dilutive net loss per common share	$ (6.39)	$ (0.81)	$ (6.94)	$ (1.85)

See accompanying notes.

LSB INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock Shares	Treasury Stock-Common Shares	Non-Redeemable Preferred Stock	Common Stock Par Value	Capital in Excess of Par Value	Retained Earnings (Accumulated Deficit)	Treasury Stock-Common	Total
				(In Thousands)				
Balance at December 31, 2020	39,926	(2,075)	$ 3,000	$ 3,991	$ 197,352	$ (41,487)	$ (13,213)	$ 149,643
Net loss						(13,279)		(13,279)
Dividend accrued on redeemable preferred stock						(9,511)		(9,511)
Accretion of redeemable preferred stock						(511)		(511)
Stock-based compensation					713			713
Issuance of restricted stock	250	835		25	(5,335)		5,310	—
Other		(5)					(18)	(18)
Balance at March 31, 2021	40,176	(1,245)	3,000	4,016	192,730	(64,788)	(7,921)	127,037
Net income						23,670		23,670
Dividend accrued on redeemable preferred stock						(10,213)		(10,213)
Accretion of redeemable preferred stock						(513)		(513)
Stock-based compensation					1,062			1,062
Issuance of unrestricted stock	80	267		$ 8	(1,708)		1,700	—
Other		(5)			-		(28)	(28)
Balance at June 30, 2021	40,256	(983)	3,000	4,024	192,084	(51,844)	(6,249)	141,015
Net loss						(8,928)		(8,928)
Issuance of common stock in exchange for redeemable preferred stocks	49,066			4,907	526,232			531,139
Deemed dividend on redeemable preferred stocks					(231,812)			(231,812)
Dividend accrued on redeemable preferred stock prior to exchange						(10,190)		(10,190)
Accretion of redeemable preferred stock prior to exchange						(499)		(499)
Stock-based compensation					2,553			2,553
Issuance of restricted and unrestricted stock	520			52	(52)			—
Other		(35)			102		(312)	(210)
Balance at September 30, 2021	89,842	(1,018)	$ 3,000	$ 8,983	$ 489,107	$ (71,461)	$ (6,561)	$ 423,068
Balance at December 31, 2019	39,901	(2,010)	$ 3,000	$ 3,989	$ 195,972	$ 57,632	$ (13,266)	$ 247,327
Net loss						(19,452)		(19,452)
Dividend accrued on redeemable preferred stock						(8,307)		(8,307)
Accretion of redeemable preferred stock						(504)		(504)
Stock-based compensation					495			495
Other	19	30		2	(358)		292	(64)
Balance at March 31, 2020	39,920	(1,980)	3,000	3,991	196,109	29,369	(12,974)	219,495
Net loss						(365)		(365)
Dividend accrued on redeemable preferred stock						(8,689)		(8,689)
Accretion of redeemable preferred stock						(505)		(505)
Stock-based compensation					684			684
Other	6	14			(90)		90	—
Balance at June 30, 2020	39,926	(1,966)	3,000	3,991	196,703	19,810	(12,884)	210,620
Net loss						(20,402)		(20,402)
Dividend accrued on redeemable preferred stock						(8,889)		(8,889)
Accretion of redeemable preferred stock						(508)		(508)
Stock-based compensation					447			447
Balance at September 30, 2020	39,926	(1,966)	$ 3,000	$ 3,991	$ 197,150	$ (9,989)	$ (12,884)	$ 181,268

See accompanying notes.

LSB INDUSTRIES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
	(In Thousands)	
Cash flows from operating activities		
Net income (loss)	$ 1,463	$ (40,219)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Deferred income taxes	394	(3,054)
Gain on extinguishment of debt	(10,000)	—
Depreciation and amortization of property, plant and equipment	51,380	51,957
Amortization of intangible and other assets	944	946
Stock-based compensation	4,328	1,626
Other	3,184	3,630
Cash provided (used) by changes in assets and liabilities:		
Accounts receivable	(22,130)	(1,860)
Inventories	1,637	3,661
Prepaid insurance	10,436	10,359
Accounts payable	9,432	(11,269)
Accrued interest	10,321	12,083
Accrued payroll and benefits	9,938	1,434
Other assets and other liabilities	(5,856)	(4,579)
Net cash provided by operating activities	65,471	24,715
Cash flows from investing activities		
Expenditures for property, plant and equipment	(26,101)	(22,230)
Proceeds from vendor settlements associated with property, plant and equipment	—	1,647
Other investing activities	382	364
Net cash used by investing activities	(25,719)	(20,219)
Cash flows from financing activities		
Proceeds from revolving debt facility	12,000	30,000
Payments on revolving debt facility	(12,000)	(30,000)
Proceeds from other long-term debt	—	42,570
Payments on other long-term debt	(7,726)	(18,397)
Payments of debt-related costs	(611)	(124)
Payments on short-term financing	(12,493)	(9,178)
Payments of costs to exchange redeemable preferred stocks for common stock	(2,076)	—
Other financing activities	(255)	(64)
Net cash provided (used) by financing activities	(23,161)	14,807
Net increase in cash and cash equivalents	16,591	19,303
Cash and cash equivalents at beginning of period	16,264	22,791
Cash and cash equivalents at end of period	$ 32,855	$ 42,094

See accompanying notes.

1. Summary of Significant Accounting Policies

For a complete discussion of our significant accounting policies, refer to the notes to our audited consolidated financial statements included in our Form 10-K for the year ended December 31, 2020 ("2020 Form 10-K"), filed with the Securities and Exchange Commission ("SEC") on February 25, 2021.

Basis of Consolidation – LSB Industries, Inc. ("LSB") and its subsidiaries (the "Company," "we," "us," or "our") are consolidated in the accompanying condensed consolidated financial statements. LSB is a holding company with no significant operations or assets other than cash, cash equivalents, and investments in its subsidiaries. All material intercompany accounts and transactions have been eliminated. Certain prior period amounts reported in our consolidated financial statements and notes thereto have been reclassified to conform to current period presentation, including all share and per share information relating to the stock split in the form of a stock dividend discussed below.

Nature of Business – We are engaged in the manufacture and sale of chemical products. The chemical products we primarily manufacture, market and sell are ammonia, fertilizer grade AN ("HDAN") and UAN for agricultural applications, high purity and commercial grade ammonia, high purity AN, sulfuric acids, concentrated, blended and regular nitric acid, mixed nitrating acids, carbon dioxide, and diesel exhaust fluid for industrial applications, and industrial grade AN ("LDAN") and solutions for the mining industry. We manufacture and distribute our products in four facilities; three of which we own and are located in El Dorado, Arkansas (the "El Dorado Facility"); Cherokee, Alabama (the "Cherokee Facility"); and Pryor, Oklahoma (the "Pryor Facility"); and one of which we operate on behalf of a global chemical company in Baytown, Texas**.**

Sales to customers include farmers, ranchers, fertilizer dealers and distributors primarily in the ranch land and grain production markets in the United States ("U.S."); industrial users of acids throughout the U.S. and parts of Canada; and explosive manufacturers in the U.S. and parts of Mexico and Canada.

In our opinion, the unaudited condensed consolidated financial statements of the Company as of September 30, 2021 and for the three and nine months ended September 30, 2021 and 2020 include all adjustments and accruals, consisting of normal, recurring accrual adjustments, which are necessary for a fair presentation of the results for the interim periods. These interim results are not necessarily indicative of results for a full year due, in part, to the seasonality of our sales of agricultural products and the timing of performing our major plant maintenance activities. Our selling seasons for agricultural products are primarily during the spring and fall planting seasons, which typically extend from March through June and from September through November.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles ("GAAP") have been condensed or omitted in this Form 10-Q pursuant to the rules and regulations of the SEC. These condensed consolidated financial statements should be read in connection with our audited consolidated financial statements and notes thereto included in our 2020 Form 10-K.

Use of Estimates – The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Increase in Authorized Shares of Common Stock and a Stock Dividend - During the third quarter of 2021, LSB held a Special Meeting of Stockholders (the "Special Meeting"). At the Special Meeting, our stockholders approved:

- the issuance and sale of up to approximately 60.4 million shares of common stock of the Company upon the exchange of all of the outstanding shares of Series E and Series F Redeemable Preferred (see discussion of the exchange transaction ("Exchange Transaction" in Note 2);
- amending our restated certificate of incorporation to increase the number of authorized shares of our common stock to 150 million shares of common stock;
- amending the certificate of designations of the Series E Redeemable Preferred to revise the preferential rights of holders of shares of Series E Redeemable Preferred to eliminate the right to participate in connection with the declaration of the proposed common stock dividend with respect to our common stock.

1. Summary of Significant Accounting Policies (continued)

In August 2021, our Board of Directors ("Board") declared a common stock dividend ("Special Dividend") contingent on the closing of the Exchange Transaction (as defined below). As a result of the stockholders' approval and the closing of the Exchange Transaction, such Special Dividend was effected in the form of a stock dividend of 0.3 shares of our common stock, for each outstanding share of common stock (exclusive of common stock held in the treasury and the common shares issued as part of the Exchange Transaction), but the Special Dividend was contingent upon the stockholders' approval of the proposals noted above. As the result of the stockholders' approval, the Special Dividend was paid through the issuance of approximately 9.1 million shares of common stock on October 8, 2021 to holders of record of common stock, including certain stock-based awards, on September 24, 2021 (the "Record Date"). Our common stock began trading on a stock dividend-adjusted basis on October 13, 2021. See additional discussion in Note 13 – Subsequent Events.

For financial reporting purposes, the Special Dividend is accounted for as a stock split in the form of a stock dividend. As a result, all share and per share information herein has been retroactively adjusted to reflect the Special Dividend.

In addition, pursuant to anti-dilution terms included in outstanding cash-based awards, the number of units of cash-based awards increased due to the Special Dividend. As a result, additional expense was recognized due to the Special Dividend. In summary, we recognized approximately $1.3 million expense, of which $0.5 million is classified as cost of sales and $0.8 million is classified as SG&A. See additional discussion relating to these cash-based awards in Note 2.

Redeemable Preferred Stocks – Our redeemable preferred stocks that were redeemable outside of our control were classified as temporary/mezzanine equity. The redeemable preferred stocks were recorded at fair value upon issuance, net of issuance costs or discounts. In addition, certain embedded features ("embedded derivative") included in the Series E Redeemable Preferred required bifurcation and were classified as derivative liabilities. The carrying values of the redeemable preferred stocks were being increased since issuance by periodic accretions (including the amount for dividends earned but not yet declared or paid) using the interest method so that the carrying amount would equal the redemption value as of the earliest possible redemption date by the holder. The accretion was recorded to retained earnings/accumulated deficit. However, during the third quarter of 2021, our redeemable preferred stocks were exchanged into our common stock as discussed in Note 2. As a result, the change in classification of the redeemable preferred stocks from temporary/mezzanine equity to permanent equity was considered an extinguishment. In conjunction with the extinguishment of the redeemable preferred stocks, the then current fair value of the bifurcated embedded derivative was applied to the carrying value of the redeemable preferred stocks at the time of the extinguishment.

Equity Awards – Equity award transactions with employees are measured based on the estimated fair value of the equity awards issued. For equity awards with service conditions that have a graded vesting period, we recognize compensation cost on a straight-line basis over the requisite service period for the entire award. Forfeitures are accounted for as they occur. We may issue new shares of common stock or may use treasury shares associated with the equity awards.

In January 2021, the compensation committee of our Board of Directors approved the grant of 799,499 shares of time-based restricted stock and 284,810 shares of performance-based restricted stock to certain executives under our 2016 Long Term Incentive Plan. The number of shares has been retroactively adjusted to reflect the Special Dividend as discussed above. The time-based restricted stock shares will vest at the end of each one-year period at the rate of one-third per year for three years, vesting 100% at the end of three years. See Note 2 concerning performance-based restricted stock awards. The unvested restricted shares carry dividend and voting rights contingent upon the vesting and lapsing of restriction. Sales of these shares are restricted prior to the date of vesting. Pursuant to the terms of the underlying restricted stock agreements, unvested restricted shares may immediately vest upon the occurrence of a change in control (as defined by agreement), termination without cause or death.

See additional discussion relating to equity awards in Note 2.

Income Taxes – Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the enactment date. We establish valuation allowances if we believe it is more-likely-than-not that some or all of deferred tax assets will not be realized. Significant judgment is applied in evaluating the need for and the magnitude of appropriate valuation allowances against deferred tax assets.

In addition, we do not recognize a tax benefit unless we conclude that it is more likely than not that the benefit will be sustained on audit by the relevant taxing authorities based solely on the technical merits of the associated tax position. If the recognition threshold is met, we recognize a tax benefit measured at the largest amount of the tax benefit that, in our judgment, is greater than 50% likely to be realized.

We reduce income tax expense for investment tax credits in the period the credit arises and is earned.

1. Summary of Significant Accounting Policies (continued)

Contingencies – Certain conditions may exist which may result in a loss, but which will only be resolved when future events occur. We and our legal counsel assess such contingent liabilities, and such assessment inherently involves an exercise of judgment. If the assessment of a contingency indicates that it is probable that a loss has been incurred, we would accrue for such contingent losses when such losses can be reasonably estimated. If the assessment indicates that a potentially material loss contingency is not probable but reasonably possible, or is probable but cannot be estimated, the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed. Estimates of potential legal fees and other directly related costs associated with contingencies are not accrued but rather are expensed as incurred. Loss contingency liabilities are included in current and noncurrent accrued and other liabilities and are based on current estimates that may be revised in the near term. In addition, we recognize contingent gains when such gains are realized or when the contingencies have been resolved (generally at the time a settlement has been reached).

Derivatives, Hedges and Financial Instruments – Derivatives are recognized in the balance sheet and are measured at fair value. Changes in fair value of derivatives are recorded in results of operations unless the normal purchase or sale exceptions apply, or hedge accounting is elected.

The fair value amounts recognized for our derivative contracts executed with the same counterparty under a master netting arrangement may be offset. We have the choice to offset or not, but that choice must be applied consistently. A master netting arrangement exists if the reporting entity has multiple contracts with a single counterparty that are subject to a contractual agreement that provides for the net settlement of all contracts through a single payment in a single currency in the event of default on or termination of any one contract. Offsetting the fair values recognized for the derivative contracts outstanding with a single counterparty results in the net fair value of the transactions being reported as an asset or a liability in the balance sheet. When applicable, we present the fair values of our derivative contracts under master netting agreements using a gross fair value presentation.

Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date:

Level 1 - Valuations of contracts classified as Level 1 are based on quoted prices in active markets for identical contracts.

Level 2 - Valuations of contracts classified as Level 2 are based on quoted prices for similar contracts and valuation inputs other than quoted prices that are observable for these contracts.

Level 3 - Valuations of assets and liabilities classified as Level 3 are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement.

At September 30, 2021, and December 31, 2020, we did not have any financial instruments with fair values materially different from their carrying amounts (which excludes issuance costs, if applicable). The fair value of financial instruments is not indicative of the overall fair value of our assets and liabilities since financial instruments do not include all assets, including intangibles, and all liabilities.

Revenue Recognition

Revenue Recognition and Performance Obligations

We determine revenue recognition through the following steps:

- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, we satisfy a performance obligation.

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Generally, satisfaction occurs when control of the promised goods is transferred to the customer or as services are rendered or completed in exchange for consideration in an amount for which we expect to be entitled. Generally, control is transferred when the preparation for shipment of the product to a customer has been completed. Most of our contracts contain a single performance obligation with the promise to transfer a specific product.

1. Summary of Significant Accounting Policies (continued)

Most of our revenue is recognized from performance obligations satisfied at a point in time, however, we have a performance obligation to perform certain services that are satisfied over a period of time. Revenue is recognized from this type of performance obligation as services are rendered and are based on the amount for which we have a right to invoice, which reflects the amount of expected consideration that corresponds directly with the value of the services performed.

Transaction Price Constraints and Variable Consideration

For most of our contracts with customers, the transaction price from the inception of a contract is constrained to a short period of time (generally one month) as these contracts contain terms with variable consideration related to both price and quantity. These contract prices are often based on commodity indexes (such as NYMEX natural gas index) published monthly and the contract quantities are typically based on estimated ranges. The quantities become fixed and determinable over a period of time as each sale order is received from the customer.

The nature of our contracts also gives rise to other types of variable consideration, including volume discounts and rebates, make-whole provisions, other pricing concessions, and short-fall charges. We estimate these amounts based on the expected amount to be provided to customers, which result in a transaction price adjustment reducing revenue (net sales) with the offset increasing contract or refund liabilities. These estimates are based on historical experience, anticipated performance and our best judgment at the time. We reassess these estimates on a quarterly basis.

The aforementioned constraints over transaction prices in conjunction with the variable consideration included in our material contracts prevent a practical assignment of a specific dollar amount to performance obligations at the beginning and end of the period. Therefore, we have applied the variable consideration allocation exception.

Future revenues to be earned from the satisfaction of performance obligations will be recognized when control transfers as goods are loaded and weighed or services are performed over the remaining duration of our contracts.

Income (Loss) per Common Share – Net income (loss) attributable to common stockholders is computed by adjusting net income (loss) by the amount of dividends and dividend requirements (including the deemed dividend discussed in Note 2) on preferred stocks and the accretion of redeemable preferred stocks, if applicable. Basic loss per common share is computed by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding, excluding contingently issuable common shares (unvested restricted stock), if applicable. For periods we earn net income, a proportional share of net income is allocated to participating securities, if applicable and dilutive, determined by dividing total weighted average participating securities by the sum of the total weighted average common shares and participating securities (the “two-class method”). Certain securities (Series E Redeemable Preferred prior to the Exchange Transaction and restricted stock units) participate in dividends declared on our common stock and are therefore considered to be participating securities.

Participating securities have the effect of diluting both basic and diluted income per common share during periods of net income. For periods we incur a net loss, no loss is allocated to participating securities because they have no contractual obligation to share in our losses. Diluted loss per common share is computed after giving consideration to the dilutive effect of our potential common stock instruments that are outstanding during the period, except where such non-participating securities would be anti-dilutive.

1. Summary of Significant Accounting Policies (continued)

Recently Adopted Accounting Pronouncement

ASU 2019-12 – In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which affects general principles within Topic 740, Income Taxes. The amendments of ASU 2019-12 are meant to simplify and reduce the cost of accounting for income taxes. The ASU removes certain exceptions to the general framework and also seeks to simplify and/or clarify accounting for income taxes by adding certain requirements that would simplify GAAP for financial statement preparers. On January 1, 2021, we adopted ASU 2019-12, which did not have a material impact on our condensed consolidated financial statements or related disclosures.

Recently Issued Accounting Pronouncements

ASU 2020-06 - In August 2020, the FASB issued ASU 2020-06, *Debt-Debt with Conversion and other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's own Equity (Subtopic 815-40)*. This ASU addresses the complexity associated with applying GAAP to certain financial instruments with characteristics of liabilities and equity. The ASU includes amendments to the guidance on convertible instruments and the derivative scope exception for contracts in an entity's own equity and simplifies the accounting for convertible instruments which include beneficial conversion features or cash conversion features by removing certain separation models. Additionally, the ASU requires entities to use the "if-converted" method when calculating diluted earnings per share for convertible instruments. This ASU will be effective for us on January 1, 2024; however, early adoption is permitted beginning January 1, 2021. We are evaluating the timing and the effect of our pending adoption of this ASU on our consolidated financial statements and related disclosures at this time.

ASU 2020-04 – In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides optional guidance for a limited time to ease the potential accounting burden associated with transitioning away from reference rates such as LIBOR that are expected to be discontinued. This ASU provides exceptions and optional expedients for applying GAAP to contract modifications, hedging relationships, and other transactions that reference LIBOR or other reference rates to be discontinued as a result of reference rate reform. They do not apply to modifications made or hedges entered into or evaluated after December 31, 2022, unless the hedging relationships existed as of that date and optional expedients for them were elected and retained through the end of the hedging relationship. This ASU became effective upon issuance. We continue to evaluate the effect of this ASU and plan to utilize this relief for our debt agreements that include LIBOR rates.

2. Redeemable Preferred Stocks Exchanged for Common Stock

Series E and Series F Redeemable Preferred Exchanged for Common Stock

In July 2021, we entered into a Securities Exchange Agreement (the “Exchange Agreement”) with LSB Funding (the “Holder”), an affiliate of Eldridge Industries, LLC and other affiliates (together “Eldridge”), which Exchange Agreement was voted on and approved by our stockholders at the Special Meeting as discussed in Note 1. Pursuant to the terms of the Exchange Agreement, the Holder would exchange all of the shares of the Series E and Series F Redeemable Preferred into our common stock based on the liquidation preference (“Liquidation Preference”), at the time of the exchange, and an exchange price of $6.16, which is equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. The Liquidation Preference primarily consists of $1,000 per share of Series E Redeemable Preferred plus accrued and unpaid dividends and the participation rights value.

On September 27, 2021, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated. Pursuant to the terms of the Exchange Agreement, the Holder exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

The total fair value of the approximately 49.1 million shares of common stock issued was approximately $531.1 million (based on the average per share price on the date of closing). The fair value of the common stock issued was in excess of the Series E and Series F Redeemable Preferred carrying amount, net of the bifurcated embedded derivative and unamortized issuance costs, by approximately $231.8 million and is treated as a deemed dividend. Because we were in an accumulated deficit position on the closing date, the deemed dividend was charged to capital in excess of par value.

Changes in our Series E and Series F Redeemable Preferred (including the bifurcated embedded derivative discussed in Note 7) are as follows:

	Series E Redeemable Preferred			Series F Redeemable Preferred	
	Redeemable preferred stocks		Accrued Liability-Embedded Derivative	Redeemable preferred stocks	
	Shares	Amount	Amount	Shares	Amount
			(Dollars In Thousands)		
Balance at December 31, 2020	139,768	$ 272,101	$ 1,029	1	$ —
Accretion relating to liquidation preference on preferred stock		814			—
Accretion for discount and issuance costs on preferred stock		709			—
Accumulated dividends		29,914			—
Change in fair value of embedded derivative			2,258		—
Costs relating to exchange transaction		(7,497)			
Exchange of preferred stock for common stock	(139,768)	(296,041)	(3,287)	(1)	—
Balance at September 30, 2021	—	$ —	$ —	—	$ —

2. Redeemable Preferred Stocks Exchanged for Common Stock (continued)

Change of Control

As the result of the Exchange Transaction discussed above, Eldridge held over 60% of our outstanding shares of common stock on the closing date. As a result, a change of control ("CoC") event occurred as defined in certain agreements, including the following:

Performance-Based Restricted Stock

Pursuant to the terms of the performance-based awards outstanding as of the CoC event, approximately 300,000 shares of restricted stock were issued including the satisfaction of certain performance conditions above the target performance level. Such restricted stock is subject to the time-based vesting conditions set forth in the applicable award agreement and the 2016 Long Term Incentive Plan. Due to the issuance of the restricted stock, we recognized an additional $1.7 million of stock-based compensation (classified as SG&A).

Cash-Based Awards

Pursuant to the terms of the cash-based awards outstanding as of the CoC event, all such awards immediately vested. As a result of the vesting, we recognized an additional $2.0 million expense, of which $0.7 million is classified as cost of sales and $1.3 million is classified as SG&A. At September 30, 2021 and December 31, 2020, our liability for these cash-based awards was approximately $5.4 million and $0.4 million, respectively.

3. Loss Per Common Share

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(Dollars In Thousands, Except Per Share Amounts)			
Numerator:				
Net income (loss)	$ (8,928)	$ (20,402)	$ 1,463	$ (40,219)
Adjustments for basic income (loss) per common share:				
Dividend requirements on Series E Redeemable Preferred	(10,190)	(8,889)	(29,914)	(25,885)
Deemed dividend on Series E and Series F Redeemable Preferred	(231,812)	—	(231,812)	—
Dividend requirements on Series B Preferred	(60)	(60)	(180)	(180)
Dividend requirements on Series D Preferred	(15)	(15)	(45)	(45)
Accretion of Series E Redeemable Preferred	(499)	(508)	(1,523)	(1,517)
Numerator for basic and diluted net loss per common share	$ (251,504)	$ (29,874)	$ (262,011)	$ (67,846)
Denominator:				
Denominator for basic and diluted net income (loss) per common share - adjusted weighted-average shares (1)	39,351,875	36,675,477	37,752,342	36,654,416
Basic and diluted net loss per common share	$ (6.39)	$ (0.81)	$ (6.94)	$ (1.85)

(1) Excludes the weighted-average shares of unvested restricted stock that are contingently issuable.

3. Loss Per Common Share (continued)

The following weighted-average shares of securities were not included in the computation of diluted net loss per common share as their effect would have been antidilutive:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Restricted stock and stock units	2,426,419	1,719,451	2,211,674	1,619,381
Convertible preferred stocks	1,191,666	1,191,666	1,191,666	1,191,666
Series E Redeemable Preferred - embedded derivative	—	303,646	—	303,646
Stock options	64,318	138,843	64,318	138,843
	3,682,403	3,353,606	3,467,658	3,253,536

4. Current and Noncurrent Accrued and Other Liabilities

	September 30, 2021	December 31, 2020
	(In Thousands)	
Accrued interest	$ 19,145	$ 8,669
Accrued payroll and benefits	15,775	5,837
Current portion of operating lease liabilities	7,720	6,706
Accrued death and other executive benefits	2,521	2,539
Deferred revenue	474	1,890
Series E Redeemable Preferred - embedded derivative	—	1,029
Other	9,177	9,787
	54,812	36,457
Less noncurrent portion	4,040	6,090
Current portion of accrued and other liabilities	$ 50,772	$ 30,367

5. Long-Term Debt

Our long-term debt consists of the following:

	September 30, 2021	December 31, 2020
	(In Thousands)	
Working Capital Revolver Loan, with a current interest rate of 3.75% (A)	$ —	$ —
Senior Secured Notes due 2023, with an interest rate of 9.625% (B)	435,000	435,000
Secured Financing due 2023, with an interest rate of 8.32% (C)	8,485	10,715
Secured Loan Agreement due 2025, with an interest rate of 8.75% (D)	5,807	6,834
Secured Financing due 2025, with an interest rate of 8.75% (E)	25,457	28,636
Unsecured Loan Agreement due 2022 (F)	—	10,000
Secured Promissory Note due 2021	—	1,221
Other	363	432
Unamortized discount, net of premium and debt issuance costs	(5,226)	(8,648)
	469,886	484,190
Less current portion of long-term debt	9,249	16,801
Long-term debt due after one year, net	$ 460,637	$ 467,389

5. Long-Term Debt (continued)

(A) Our revolving credit facility, as amended (the "Working Capital Revolver Loan"), provides for advances up to $65 million (the "Maximum Revolver Amount"), based on specific percentages of eligible accounts receivable and inventories and up to $10 million of letters of credit, the outstanding amount of which reduces the available for borrowing under the Working Capital Revolver Loan. At September 30, 2021, our available borrowings under our Working Capital Revolver Loan were approximately $48.2 million, based on our eligible collateral, less outstanding letters of credit and loan balance. The maturity date of the Working Capital Revolver Loan is on the earlier of (i) the date that is 90 days prior to the earliest stated maturity date of the Senior Secured Notes (unless refinanced or repaid) and (ii) February 26, 2024. Subject to certain conditions and subject to lender approval, the Maximum Revolver Amount may increase up to an additional $10 million. The Working Capital Revolver Loan also provides for a springing financial covenant (the "Financial Covenant"), which requires that, if the borrowing availability is less than 10.0% of the total revolver commitments, then the borrowers must maintain a minimum fixed charge coverage ratio of not less than 1.00 to 1.00. The Financial Covenant, if triggered, is tested monthly.

Also, the lender provided LSB a consent to close the Exchange Transaction discussed in Note 2 and to allow for a payment of dividends not to exceed $2 million to the holders of the Series B and Series D Preferred, if and when declared by the Board.

(B) The Senior Secured Notes were scheduled to mature on May 1, 2023; however, on September 29, 2021, we distributed a notice of redemption, which notice was contingent to the closing of the new senior secured notes, with a redemption date of October 29, 2021, and such redemption occurred with the closing of new senior secured notes as discussed in Note 13 – Subsequent Events. Because the Senior Secured Notes were redeemed with the proceeds from the new senior secured notes and such redemption occurred prior to the issuance of these condensed consolidation financial statements, the carrying amount of the Senior Secured Notes remains classified as noncurrent.

(C) El Dorado Chemical Company ("EDC"), one of our subsidiaries, is party to a secured financing arrangement with an affiliate of LSB Funding. Principal and interest are payable in 48 equal monthly installments with a final balloon payment of approximately $3 million due in June 2023.

(D) EDC is party to a secured loan agreement with an affiliate of LSB Funding. Principal and interest are payable in 60 equal monthly installments through March 2025.

(E) In August 2020, El Dorado Ammonia L.L.C. ("EDA"), one of our subsidiaries, entered into a $30 million secured financing arrangement with an affiliate of LSB Funding. Beginning in September 2020, principal and interest are payable in 60 equal monthly installments with a final balloon payment of approximately $5 million due in August 2025. This financing arrangement is secured by an ammonia storage tank and is guaranteed by LSB.

(F) In April 2020, LSB entered into a federally guaranteed loan agreement ("PPP loan") for $10 million with a lender pursuant to a new loan program through the U.S. Small Business Administration ("SBA") as the result of the Paycheck Protection Program ("PPP") established by the Coronavirus Aid, Relief, and Economic Security ("CARES") Act and amended by the Paycheck Protection Program Flexibility Act of 2020. We applied ASC 470, *Debt*, to account for the PPP loan. We have used all of the proceeds from the PPP loan for payroll, rent, utilities, and other specified costs that qualify for loan forgiveness. In April 2021, we submitted the PPP loan forgiveness application to the lender. In June 2021, the PPP loan was fully forgiven by the SBA and lender. As a result, we recognized a gain on extinguishment of debt of $10 million during the second quarter of 2021**.**

6. Commitments and Contingencies

Settlements and Outstanding Natural Gas Purchase Commitments – During several days in February 2021, the Pryor Facility was taken out of service after extreme cold weather caused a surge in natural gas prices in the region, along with the curtailment of gas distribution by the operator of the pipeline that supplies natural gas to the facility. Also, as a result of unprecedented cold weather conditions, the primary natural gas supplier to our El Dorado Facility asserted a claim of force majeure and materially restricted the supply of gas to the facility. In order to mitigate a portion of the commodity price risk associated with natural gas, we periodically enter into natural gas forward contracts and volume purchase commitments that locked in the cost of certain volumes of natural gas. Prior to this weather event, we had both types of arrangements. During the first quarter of 2021, as a result of the extreme conditions previously described, we settled all of our natural gas forward contracts and certain volume purchase commitments and recognized a realized gain of approximately $6.8 million, which includes the realized gain discussed under "Natural Gas Contracts" in Note 7 and is classified as a reduction to cost of sales.

At September 30, 2021, certain of our natural gas contracts qualify as normal purchases under GAAP and thus are not mark-to-market, which contracts included volume purchase commitments with fixed costs of approximately 4.8 million MMBtus of natural gas. These contracts extend through February 2022 at a weighted-average cost of $3.84 per MMBtu ($18.4 million) and a weighted-average market value of $5.55 per MMBtu ($26.6 million).

6. Commitments and Contingencies (continued)

Settlements of Gain Contingencies - During 2020, EDC and certain vendors mediated settlements for EDC to recover certain costs associated with a nitric acid plant at our El Dorado Facility. The construction of this plant was completed, and the plant began production in 2016. As a result, the recovery from these settlements recognized during 2020, includes approximately $5.7 million classified as a reduction to cost of sales and approximately $1.9 million classified as a reduction to PP&E.

Legal Matters - Following is a summary of certain legal matters involving the Company:

A. Environmental Matters

Our facilities and operations are subject to numerous federal, state and local environmental laws and to other laws regarding health and safety matters (collectively, the "Environmental and Health Laws"), many of which provide for certain performance obligations, substantial fines and criminal sanctions for violations. Certain Environmental and Health Laws impose strict liability as well as joint and several liability for costs required to remediate and restore sites where hazardous substances, hydrocarbons or solid wastes have been stored or released. We may be required to remediate contaminated properties currently or formerly owned or operated by us or facilities of third parties that received waste generated by our operations regardless of whether such contamination resulted from the conduct of others or from consequences of our own actions that were in compliance with all applicable laws at the time those actions were taken.

In addition, claims for damages to persons or property, including natural resources, may result from the environmental, health and safety effects of our operations.

There can be no assurance that we will not incur material costs or liabilities in complying with such laws or in paying fines or penalties for violation of such laws. Our insurance may not cover all environmental risks and costs or may not provide sufficient coverage if an environmental claim is made against us. The Environmental and Health Laws and related enforcement policies have in the past resulted, and could in the future result, in significant compliance expenses, cleanup costs (for our sites or third-party sites where our wastes were disposed of), penalties or other liabilities relating to the handling, manufacture, use, emission, discharge or disposal of hazardous or toxic materials at or from our facilities or the use or disposal of certain of its chemical products. Further, a number of our facilities are dependent on environmental permits to operate, the loss or modification of which could have a material adverse effect on their operations and our financial condition.

Historically, significant capital expenditures have been incurred by our subsidiaries in order to comply with the Environmental and Health Laws, and significant capital expenditures are expected to be incurred in the future. We will also be obligated to manage certain discharge water outlets and monitor groundwater contaminants at our facilities should we discontinue the operations of a facility.

As of September 30, 2021, our accrued liabilities for environmental matters totaled approximately $0.5 million relating primarily to the matters discussed below. Estimates of the most likely costs for our environmental matters are generally based on preliminary or completed assessment studies, preliminary results of studies or our experience with other similar matters. It is reasonably possible that a change in the estimate of our liability could occur in the near term.

1. Discharge Water Matters

Each of our manufacturing facilities generates process wastewater, which may include cooling tower and boiler water quality control streams, contact storm water and miscellaneous spills and leaks from process equipment. The process water discharge, storm-water runoff and miscellaneous spills and leaks are governed by various permits generally issued by the respective state environmental agencies as authorized and overseen by the U.S. Environmental Protection Agency. These permits limit the type and amount of effluents that can be discharged and control the method of such discharge.

In 2017, the Pryor Chemical Company ("PCC") filed a Permit Renewal Application for its Non-Hazardous Injection Well Permit at the Pryor Facility. Although the Injection Well Permit expired in 2018, PCC continues to operate the injection well pending the Oklahoma Department of Environmental Quality ("ODEQ") action on the Permit Renewal Application. PCC and ODEQ are engaged in ongoing discussions related to the renewal of the injection well to address the wastewater stream.

Our El Dorado Facility is subject to a National Pollutant Discharge Elimination System ("NPDES") permit issued by the Arkansas Department of Environmental Quality ("ADEQ") in 2004. In 2010, the ADEQ issued a draft NPDES permit renewal for the El Dorado Facility, which contained more restrictive discharge limits than the previous 2004 permit. During 2017, ADEQ issued a final NPDES permit with new dissolved mineral limits; however, EDC filed an appeal, and a Permit Appeal Resolution ("PAR") was signed in 2018. EDC is in compliance with the revised permit limits agreed upon in the PAR.

6. Commitments and Contingencies (continued)

In 2006, the El Dorado Facility entered into a Consent Administrative Order ("CAO") that recognizes the presence of nitrate contamination in the shallow groundwater. The CAO required EDC to perform semi-annual groundwater monitoring, continue operation of a groundwater recovery system, submit a human health and ecological risk assessment, and submit a remedial action plan.

The risk assessment was submitted in 2007. In 2015, the ADEQ stated that El Dorado Chemical was meeting the requirements of the CAO and should continue semi-annual monitoring. Subsequent to the PAR mentioned previously, a new CAO was signed in 2018, which required an Evaluation Report of the data and effectiveness of the groundwater remedy for nitrate contamination. During 2019, the Evaluation Report was submitted to the ADEQ and the ADEQ approved the report. No liability has been established at September 30, 2021, in connection with this ADEQ matter.

2. Other Environmental Matters

In 2002, certain of our subsidiaries sold substantially all of their operating assets relating to a Kansas chemical facility (the "Hallowell Facility") but retained ownership of the real property where the facility is located. Our subsidiary retained the obligation to be responsible for, and perform the activities under, a previously executed consent order to investigate the surface and subsurface contamination at the real property, develop a corrective action strategy based on the investigation, and implement such strategy. In addition, certain of our subsidiaries agreed to indemnify the buyer of such assets for these environmental matters.

As the successor to a prior owner of the Hallowell Facility, Chevron Environmental Management Company ("Chevron") has agreed in writing, within certain limitations, to pay and has been paying one-half of the costs of the investigation and interim measures relating to this matter as approved by the Kansas Department of Health and Environment (the "KDHE"), subject to reallocation.

During this process, our subsidiary and Chevron retained an environmental consultant that prepared and performed a corrective action study work plan as to the appropriate method to remediate the Hallowell Facility. During 2020, the KDHE selected a remedy of annual monitoring and the implementation of an Environmental Use Control ("EUC"). This remedy primarily relates to long-term surface and groundwater monitoring to track the natural decline in contamination and is subject to a 5-year re-evaluation with the KDHE.

The final remedy, including the EUC, the finalization of the cost estimates and any required financial assurances remains under discussion with the KDHE, but continues to be delayed due to the impact from the COVID-19 pandemic. Pending the results from our discussions regarding the final remedy, we continue to accrue our allocable portion of costs primarily for the additional testing, monitoring and risk assessments that could be reasonably estimated, which amount is included in our accrued liabilities for environmental matters discussed above.

The estimated amount is not discounted to its present value. As more information becomes available, our estimated accrual will be refined, as necessary.

B. Other Pending, Threatened or Settled Litigation

In 2013, an explosion and fire occurred at the West Fertilizer Co. ("West Fertilizer") located in West, Texas, causing death, bodily injury and substantial property damage. West Fertilizer is not owned or controlled by us, but West Fertilizer was a customer of EDC, and purchased AN from EDC from time to time. LSB and EDC received letters from counsel purporting to represent subrogated insurance carriers, personal injury claimants and persons who suffered property damages informing LSB and EDC that their clients are conducting investigations into the cause of the explosion and fire to determine, among other things, whether AN manufactured by EDC and supplied to West Fertilizer was stored at West Fertilizer at the time of the explosion and, if so, whether such AN may have been one of the contributing factors of the explosion. Initial lawsuits filed named West Fertilizer and another supplier of AN as defendants.

In 2014, EDC and LSB were named as defendants, together with other AN manufacturers and brokers that arranged the transport and delivery of AN to West Fertilizer, in the case styled *City of West, Texas vs. CF Industries, Inc., et al.*, in the District Court of McLennan County, Texas. The plaintiffs allege, among other things, that LSB and EDC were negligent in the production and marketing of fertilizer products sold to West Fertilizer, resulting in death, personal injury and property damage. EDC retained a firm specializing in cause and origin investigations with particular experience with fertilizer facilities, to assist EDC in its own investigation. LSB and EDC placed its liability insurance carrier on notice, and the carrier is handling the defense for LSB and EDC concerning this matter.

Our product liability insurance policies have aggregate limits of general liability totaling $100 million, with a self-insured retention of $250,000, which retention limit has been met relating to the West Fertilizer matter. In 2015, the trial court dismissed plaintiff's negligence claims against us, and EDC based on a duty to inspect but allowed the plaintiffs to proceed on claims for design defect and failure to warn.

6. Commitments and Contingencies (continued)

Subsequently, we and EDC have entered into confidential settlement agreements (with approval of our insurance carriers) with several plaintiffs that had claimed wrongful death and bodily injury and insurance companies asserting subrogation claims for damages from the explosion. While these settlements resolve the claims of a number of the claimants in this matter, we continue to be party to litigation related to the explosion. We continue to defend these lawsuits vigorously and we are unable to estimate a possible range of loss at this time if there is an adverse outcome in this matter as to EDC. As of September 30, 2021, no liability reserve has been established in connection with this matter, except for the unpaid portion of the settlement agreements discussed above.

In 2015, we and EDA received formal written notice from Global Industrial, Inc. ("Global") of Global's intention to assert mechanic liens for labor, service, or materials furnished under certain subcontract agreements for the improvement of the new ammonia plant ("Ammonia Plant") at our El Dorado Facility. Global was a subcontractor of Leidos Constructors, LLC ("Leidos"), the general contractor for EDA for the construction for the Ammonia Plant. Leidos terminated the services of Global with respect to their work performed at our El Dorado Facility.

LSB and EDA are pursuing the recovery of any damage or loss caused by Global's work performed through their contract with Leidos at our El Dorado Facility. In March 2016, EDC and LSB were served a summons in a case styled *Global Industrial, Inc. d/b/a Global Turnaround vs. Leidos Constructors, LLC et al.,* in the Circuit court of Union County, Arkansas, wherein Global sought damages under breach of contract and other claims. At the time of the summons, our accounts payable included invoices totaling approximately $3.5 million related to the claims asserted by Global but such invoices were not approved by Leidos for payment. We have requested indemnification from Leidos under the terms of our contracts, which they have denied. As a result, we are seeking reimbursement of legal expenses from Leidos under our contracts. We also seek damages from Leidos for their wrongdoing during the expansion, including breach of contract, fraud, professional negligence, and gross negligence.

During 2018, the court bifurcated the case into: (1) Global's claims against Leidos and LSB, and (2) the cross-claims between Leidos and LSB. Part (1) of the case was tried in the court. In March 2020, the court rendered an interim judgment and issued its final judgment in April 2020. In summary, the judgment awarded Global (i) approximately $7.4 million (including the $3.5 million discussed above) for labor, service, and materials furnished relating to the Ammonia Plant, (ii) approximately $1.3 million for prejudgment interest, and (iii) a claim of lien on certain property and the foreclosure of the lien to satisfy these obligations. In addition, post-judgment interest will accrue at the annual rate of 4.25% until paid. During the first nine months of 2020, this judgment impacted our condensed consolidated statement of operations as follows:

- additional depreciation expense of $0.5 million classified as cost of sales; and
- prejudgment and post-judgment interest expense totaling $1.4 million.

We have filed a notice of intent to appeal, and the court entered a stay of the judgment pending appeal.

LSB intends to vigorously prosecute its claims against Leidos and vigorously contest the cross-claims in Part (2) of the matter. Due to the impact from the COVID-19 pandemic, the trial date for Part (2) of the matter has been delayed and we are awaiting a new trial date.

No liability was established at September 30, 2021, or December 31, 2020, in connection with the cross-claims in Part (2) of the matter, except for certain invoices held in accounts payable.

We are also involved in various other claims and legal actions (including matters involving gain contingencies). It is possible that the actual future development of claims could be different from our estimates but, after consultation with legal counsel, we believe that changes in our estimates will not have a material effect on our business, financial condition, results of operations or cash flows.

7. Derivatives, Hedges and Financial Instruments

For the periods presented, the following significant instruments are accounted for on a fair value basis:

Natural Gas Contracts

Periodically, we entered into certain forward natural gas contracts ("natural gas contracts"), which are accounted for on a mark-to-market basis. We are utilizing these natural gas contracts as economic hedges for risk management purposes but are not designated as hedging instruments. At December 31, 2020, our natural gas contracts included 7.3 million MMBtu of natural gas, that extended through December 2021, but these contracts were settled during the first quarter of 2021, primarily due to the weather event discussed in Note 6. At September 30, 2021, we had no outstanding natural gas contracts. The valuations of the natural gas contracts are classified as Level 2. At December 31, 2020, the fair value of the natural gas contracts included approximately $0.1 million (classified as a current asset) and approximately $1.3 million (classified as a current liability). The valuation inputs included the contractual weighted-average cost of $2.65 per MMBtu and the weighted-average market value of $2.49 per MMBtu.

7. Derivatives, Hedges and Financial Instruments (continued)

For the nine months ended September 30, 2021, we recognized a gain of $2.7 million (including a realized gain of $1.5 million), all of which was recognized in the first quarter. For the three and nine months ended September 30, 2020, we recognized a $0.5 million gain and a loss of $0.2, respectively. The gain is classified as a reduction of cost of sales and the loss is classified as cost of sales.

Embedded Derivative

As discussed in Note 2, the Series E Redeemable Preferred was exchanged for our common stock during September 2021. As a result, certain bifurcated embedded redemption features and participation rights value (“embedded derivative”) included as a part of the terms of the Series E Redeemable Preferred were extinguished. Prior to the completion of the Exchange Transaction, the embedded derivative was classified as a liability.

At December 31, 2020, the fair value of the embedded derivative was approximately $1.0 million (classified as a noncurrent liability). We estimated that the contingent redemption features had fair value since we estimate that a portion of the shares of this preferred stock would be redeemed prior to October 25, 2023, the earliest redemption date by the holder. For certain other embedded features, we estimated no fair value based on our assessment that there was a remote probability that these features would be exercised.

The fair value of the embedded derivative was valued using discounted cash flow models and primarily based on the difference in the present value of estimated future cash flows with no redemptions prior to October 25, 2023, compared to certain estimated redemptions during the same period and applying the effective dividend rate of the Series E Redeemable Preferred. At December 31, 2020, the fair value of the embedded derivative included the valuation of the participation rights, which was based on the equivalent of 303,646 shares of our common stock at $3.39 per share.

The valuations of the embedded derivative were classified as Level 3. This derivative was valued using market information, management’s redemption assumptions, the underlying number of shares as defined in the terms of the Series E Redeemable Preferred, and the market price of our common stock.

For the three and nine months ended September 30, 2021, we recognized a loss of approximately $1.1 million and $2.3 million (including a realized loss of $3.3 million), respectively, due to the change in fair value of the embedded derivative through the date of the Exchange Transaction. For the three and nine months ended September 30, 2020, we recognized an unrealized loss of approximately $0.1 million and an unrealized gain of approximately $0.6 million, respectively, due to the change in fair value of the embedded derivative. The gain and loss are included in non-operating other income and expense.

There was no Level 3 transfer activity for the nine months ended September 30, 2021.

8. Income Taxes

Provision (benefit) for income taxes is as follows:

	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
	(In Thousands)			
Current:				
Federal	$ —	$ (4)	$ —	$ (4)
State	(119)	27	(581)	50
Total Current	$ (119)	$ 23	$ (581)	$ 46
Deferred:				
Federal	$ 135	$ (1,188)	$ (2)	$ (3,079)
State	3	(205)	396	25
Total Deferred	$ 138	$ (1,393)	$ 394	$ (3,054)
Provision (benefit) for income taxes	$ 19	$ (1,370)	$ (187)	$ (3,008)

For the three and nine months ended September 30, 2021 and 2020, the current provision (benefit) for state income taxes shown above includes regular state income tax, provisions for uncertain state income tax positions, the impact of state tax law changes and other similar adjustments.

8. Income Taxes (continued)

Our estimated annual effective tax rate for 2021 includes the impact of permanent tax differences including but not limited to PPP loan forgiveness, limits on deductible compensation, state tax law changes, and valuation allowances.

We considered both positive and negative evidence in our determination of the need for valuation allowances for deferred tax assets. Information evaluated includes our financial position and results of operations for the current and preceding years, the availability of deferred tax liabilities and tax carrybacks, as well as an evaluation of currently available information about future years. Valuation allowances are reflective of our quarterly analysis of the four sources of taxable income, including the calculation of the reversal of existing tax assets and liabilities, the impact of financing activities and our quarterly results. Based on our analysis, we currently believe that it is more-likely-than-not that a portion of our federal deferred tax assets will not be able to be utilized. However, we estimate a $7.9 million reduction in the related valuation allowance associated with these federal deferred tax assets will be recorded during 2021. We have also determined it is more-likely-than-not that a portion of our state deferred tax assets will not be able to be utilized. However, we estimate a $5.9 million reduction in the related valuation allowance associated with these state deferred tax assets will be recorded during 2021.

We will continue to evaluate both the positive and negative evidence on a quarterly basis in determining the need for a valuation allowance with respect to our deferred tax assets. Changes in positive and negative evidence, including differences between estimated and actual results, could result in changes in the valuation of our deferred tax assets that could have a material impact on our consolidated financial statements. Changes in existing tax laws could also affect actual tax results and the realization of deferred tax assets over time.

The tax benefit for the nine months ended September 30, 2021 was $0.2 million (15% benefit on pre-tax income). The negative effective tax rate is primarily due to near break-even pre-tax book income and permanent tax differences including but not limited to PPP loan forgiveness and limits on deductible compensation, state tax law changes, and valuation allowances. The tax benefit for the nine months ended September 30, 2020 was $3.0 million (7% benefit on pre-tax loss). The effective tax rate is less than the statutory tax rate primarily due to the impact of the valuation allowances.

LSB and certain of its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state jurisdictions. With few exceptions, the 2017-2020 years remain open for all purposes of examination by the U.S. Internal Revenue Service and other major tax jurisdictions. Additionally, the 2013-2016 years remain subject to examination for determining the amount of net operating loss and other carryforwards.

9. Non-Redeemable Preferred Stock

Series Non-Redeemable B Preferred – The 20,000 shares of Series B 12% cumulative, convertible preferred stock ("Series B Preferred"), $100 par value, are convertible, in whole or in part, into 866,666 shares of our common stock (43.3333 shares of common stock for each share of preferred stock) at any time at the option of the holder and entitle the holder to one vote per share. The Series B Preferred provides for annual cumulative dividends of 12% ($12.00 per share) from date of issue, payable when and as declared. All of the outstanding shares of the Series B Preferred are owned by the Golsen Holders and an immediate family member.

Series Non-Redeemable D Preferred – The 1,000,000 shares of Series D 6% cumulative, convertible Class C preferred stock ("Series D Preferred") have no par value and are convertible, in whole or in part, into 325,000 shares of our common stock (0.325 share of common stock for 1 share of preferred stock) at any time at the option of the holder. Dividends on the Series D Preferred are cumulative and payable annually in arrears at the rate of 6% per annum ($0.06 per share) of the liquidation preference of $1.00 per share. Each holder of the Series D Preferred shall be entitled to .875 votes per share. All of the outstanding shares of Series D Preferred are owned by the Golsen Holders and an immediate family member.

See discussions concerning dividends on the Series B and Series D Preferred in Note 11 – Related Party Transactions.

10. Net Sales

Disaggregated Net Sales

As discussed in Note 1, we primarily derive our revenues from the sales of various chemical products. The following table presents our net sales disaggregated by our principal markets, which disaggregation is consistent with other financial information utilized or provided outside of our condensed consolidated financial statements:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
	(In Thousands)			
Net sales:				
Agricultural products	$ 51,102	$ 31,986	$ 162,523	$ 138,441
Industrial acids and other chemical products	63,920	32,372	164,803	97,137
Mining products	12,177	9,611	38,685	26,835
Total net sales	$ 127,199	$ 73,969	$ 366,011	$ 262,413

Other Information

Although most of our contracts have an original expected duration of one year or less, for our contracts with a duration greater than one year at contract inception, the average remaining expected duration was approximately 12 months at September 30, 2021.

Liabilities associated with contracts with customers (contract liabilities) primarily relate to deferred revenue and customer deposits associated with cash payments received in advance from customers for volume shortfall charges and product shipments. We had approximately $1.7 million and $2.5 million of contract liabilities as of September 30, 2021 and December 31, 2020, respectively. For the three and nine months ended September 30, 2021, revenues of $0.6 million and $2.2 million, respectively, were recognized and included in the balance at the beginning of the respective period. For the three and nine months ended September 30, 2020, revenues of $0.6 million and $1.5 million, respectively, were recognized and included in the balance at the beginning of the respective period.

11. Related Party Transactions

As discussed in Note 2, as the result of the stockholders' approval, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated on September 27, 2021. Pursuant to the terms of the Exchange Agreement, LSB Funding exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

As discussed in Note 1, our Board declared the Special Dividend that was paid through the issuance of approximately 9.1 million shares of common stock in October 2021, which amount included approximately 1.2 million shares to LSB Funding and approximately 0.7 million shares to the Golsen Holders. In addition, pursuant to the anti-dilution terms of the Series B and Series D Preferred, the conversion ratio of the Series B Preferred increased to 43.3333 to 1 from 33.3333 to 1 and the Series D Preferred increased to 0.325 to 1 from 0.25 to 1 as discussed in Note 9. The Golsen Holders and an immediate family member hold all outstanding shares of the Series B and Series D Preferred, which accumulated dividends on such shares totaled approximately $1.8 million at September 30, 2021.

After considering the Special Dividend, LSB Funding holds approximately 54.4 million shares of our outstanding common stock, or 60% of our outstanding common stock.

As of September 30, 2021, we have three separate outstanding financing arrangements by an affiliate of LSB Funding as discussed in footnotes (D), (E) and (F) of Note 5. Also, an affiliate of LSB Funding held $50 million of our Senior Secured Notes discussed in footnote (B) of Note 5, which Senior Secured Notes were redeemed with the proceeds from the new senior secured notes as discussed in Note 13. An affiliate of LSB Funding holds $30 million of the new senior secured notes.

12. Supplemental Cash Flow Information

The following provides additional information relating to cash flow activities:

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
	(In Thousands)	
Cash refunds for:		
Income taxes, net	$ (183)	$ (319)
Noncash investing and financing activities:		
Accounts receivable, supplies, other assets, accounts payable and accrued liabilities associated with additions of property, plant and equipment	$ 20,321	$ 12,974
Series E and Series F Redeemable Preferred and related dividends, accretion, and embedded derivative exchanged for common stock, net of related costs in accounts payable	$ 301,403	$ 27,402
Extinguishment of PPP loan	$ 10,000	$ —
Accounts payable associated with debt-related costs	$ 8,870	$ —

13. Subsequent Events

Special Dividend

During October 2021, LSB paid the Special Dividend through the issuance of approximately 9.1 million shares of common stock as discussed in Note 1.

Senior Secured Notes due 2028

On October 14, 2021, LSB completed a private offering of $500 million in aggregate principal amount of its 6.250% Senior Secured Notes due 2028 (the “Notes”).

The Notes were issued at a price equal to 100% of their face value and pursuant to an indenture, dated as of October 14, 2021 (the “Indenture”), by and among the LSB, the subsidiary guarantors named therein, and a trustee and collateral agent. In addition, the Notes were issued in a transaction exempt from the registration requirements under the Securities Act of 1933 (the “Securities Act”) and are being resold to eligible purchasers in reliance on Rule 144A under the Securities Act and to non-U.S. persons in accordance with Regulation S under the Securities Act.

The Notes will mature on October 15, 2028 and rank senior in right of payment to all of our debt that is expressly subordinated in right of payment to the notes, and will rank pari passu in right of payment with all of our liabilities that are not so subordinated, including the Working Capital Revolver Loan. LSB’s obligations under the Notes are jointly and severally guaranteed by the subsidiary guarantors named in the Indenture on a senior secured basis. Interest on the Notes accrues at a rate of 6.250% per annum and is payable semi-annually in arrears on May 15 and October 15 of each year, beginning on May 15, 2022, to the holders of record on the immediately preceding May 1 and October 1.

13. Subsequent Events (continued)

Pursuant to the Indenture, LSB may redeem the Notes at its option, in whole or in part, at certain redemption prices, including a “make-whole” premium, as set forth in the Indenture but also includes redemption requirements associated with a change of control. In addition, the Indenture contains customary covenants that limit, among other things, LSB and certain of its subsidiaries’ ability to engage in certain transactions and also provides for customary events of default (subject in certain cases to customary grace and cure periods). Generally, if an event of default occurs and is continuing, the trustee or holders of at least 25% in principal amount of the then outstanding Notes may declare the principal of and accrued but unpaid interest on all the Notes to be due and payable.

This summary description of the Indenture and Notes does not purport to be complete and is qualified in its entirety by reference to the Indenture and the form of the Notes included as exhibits to our Current Report on Form 8-K, filed on October 15, 2021.

The net proceeds from the Notes were used to redeem $435 million in aggregate principal amount of the Senior Secured Notes, representing all of the Senior Secured Notes outstanding, to pay related transaction fees, expenses and premiums and, to the extent of any remaining net proceeds, will be used for general corporate purposes.

On September 29, 2021, LSB issued a conditional notice of redemption to redeem all of the Existing Notes (the “Redemption”), conditioned on the closing of the offering of the Notes, which condition was satisfied as of October 14, 2021.

Also on October 14, 2021, LSB satisfied and discharged its obligations under the indenture governing the Senior Secured Notes by irrevocably depositing with the trustee for the Senior Secured Notes funds sufficient to redeem the Senior Secured Notes in full and to pay related fees and expenses.

The Redemption was completed by the trustee on October 29, 2021.

We are currently evaluating the impact on our financial statements as the result of the debt financing transaction discussed above.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") should be read in conjunction with a review of the other Items included in this Form 10-Q and our September 30, 2021 condensed consolidated financial statements included elsewhere in this report. A reference to a "Note" relates to a note in the accompanying notes to the condensed consolidated financial statements. This MD&A reflects our operating results, unless otherwise noted. Certain statements contained in this MD&A may be deemed to be forward-looking statements. See "Special Note Regarding Forward-Looking Statements."

Overview

General

LSB is headquartered in Oklahoma City, Oklahoma and through its subsidiaries, manufactures and sells chemical products for the agricultural, mining, and industrial markets. We own and operate facilities in Cherokee, Alabama, El Dorado, Arkansas and Pryor, Oklahoma, and operate a facility on behalf of a global chemical company in Baytown, Texas. Our products are sold through distributors and directly to end customers primarily throughout the U.S. and parts of Mexico and Canada.

Key Operating Initiatives for 2021

We believe our future results of operations and financial condition will depend significantly on our ability to successfully implement the following key initiatives:

- *Continue Focusing on Becoming a "Best in Class" Chemical Plant Operator with Respect to Safe, Reliable Operations that Produce the Highest Quality Products.*
    - We believe that high safety standards are critical and a precursor to improved plant performance. With that in mind, we have implemented and are currently managing enhanced safety programs at our facilities that focus on improving our safety culture, which will reduce risks and improve our safety performance.
    - We have several initiatives underway that we believe will improve the overall reliability of our plants and allow us to produce more products for sale while lowering our cost of production. Those initiatives are focused on, operations excellence through enhancements in the operating procedure program, asset health monitoring optimization and asset care excellence maintenance programs, and product quality programs focused on providing products to the customer that meet the highest quality standards.
- *Continue Broadening the Distribution and optimization of our Product mix.* To further leverage our plants current production capacity, we are continuing to expand the distribution of our industrial and mining products by partnering with customers to take product into different markets while also focusing our efforts to upgrade our margins through the optimization of our product mix.
    - In the first quarter of 2021, we commenced a new long-term nitric acid supply contract with a customer. Under the agreement, we agreed to supply between 70,000 to 100,000 tons of nitric acid per year This contract advances our focus to leverage underutilized nitric acid production capacity at our El Dorado Facility.
    - We also executed a new contract to capture and sell carbon dioxide out of our El Dorado Facility, where our customer is building a guest plant. We expect to begin sales under this agreement in the fourth quarter of 2021.
    - We are evaluating our next phase of margin enhancement opportunities to optimize our storage and distribution capability, as well as, to upgrade ammonia into further downstream production to capture additional margin.
- *Development of a Strategy to Capitalize on Ammonia Opportunities in a Renewable Energy Focused Economy***.** As there is a heightened global focus on significantly increasing the use of renewable energy to reduce carbon emissions, we are currently developing a strategy to enter the market for low-carbon or no carbon ammonia, a rapidly emerging trend referred to as "blue-green ammonia." Many studies have shown that ammonia is the best carrier for hydrogen, given higher energy content and relative ease of storage via hydrogen gas. Ammonia can also be used as zero carbon fuel in the maritime sector, a carbon free fertilizer and as a coal substitute in energy constrained countries. If ammonia were to be used for energy consumption globally, this would equate to five times the amount of current global annual production of ammonia, or approximately 50 times the current seaborne trade. We believe we are well-placed to partake in this opportunity given our ability to retrofit our existing plants rather than investing in greenfield projects, thereby reducing the time to market and the upfront capital expenditures, which will help the overall economics.
- *Evaluate Acquisitions of Strategic Assets or Companies.* We are evaluating opportunities to acquire strategic assets or companies, mergers with other companies and investment in additional production capacity where we believe those acquisitions, mergers or expansion of production capacity will enhance the value of the Company and provide appropriate returns.

We may not successfully implement any or all of these initiatives. Even if we successfully implement the initiatives, they may not achieve the results that we expect or desire.

Recent Business Developments

Exchange Transaction and Special Common Stock Dividend

On September 27, 2021, we closed a Securities Exchange Transaction (the “Exchange Transaction”) with LSB Funding LLC (the “Holder”), an affiliate of Eldridge, in which we exchanged the shares of Series E and Series F Redeemable Preferred Stock held by the Holder for shares of our common stock. In summary, we exchanged the approximately $310 million liquidation preference of preferred stock held by the Holder into our common stock based on an exchange price of $6.16, which was equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. However, the exchange consideration paid under the Exchange Agreement was reduced by approximately 1.2 million shares, which shares were included in the Special Dividend and received by the Holder. In connection with the transaction, on October 8, 2021, our common stockholders, including the Holder, received a special dividend in the form of 0.30 shares of our common stock for every share owned as of the September 24, 2021, special dividend record date. The main benefit of the exchange is that it relieved our Company and our common stockholders from the expensive, compounding burden of the preferred stock dividend, improving the current capital structure.

Reduced Cost of Capital through Debt Refinancing

The Exchange Transaction discussed above prompted the major credit rating agencies, Moody’s and S&P to upgrade their credit ratings on our debt, which combined with the favorable credit markets, enabled us to complete a refinancing of our senior notes on significantly improved terms, reducing our cost of capital, bolstering our liquidity and extending the maturity of our debt. More specifically, on October 14, 2021 we closed on an offering of $500 million of senior secured notes due 2028, bearing an interest rate of 6.250%, which we used to redeem our $435 million of 9.625% senior notes that were due to mature in 2023, with the balance being used to enhance the liquidity of our balance sheet and for general corporate purposes. The reduction of the rate of interest on our outstanding notes by more than 300 basis points represents a meaningful reduction in our annual cash interest expense and puts us in a position to more aggressively pursue our key operating initiatives discussed above.

Continued Improvement in Product Sales

Driven by several supply and demand factors, selling prices for all of our major products continued to improve during the third quarter of 2021 compared to the same quarter of 2020. As for our agricultural business, corn prices, while lower than in the second quarter of 2021, remain well above price levels for more than seven years leading up to 2021, and importantly, sit significantly higher than $4 per bushel, the level that we believe represent a key threshold as it relates to favorable farmer economics. Chinese demand for corn continues to be strong as China continues to rebuild their swine population following the swine flu, which decimated the swine population several years ago. This demand for feed is expected to remain robust as China has moved to large institutional hog farms for which the demand for feed is significant. In addition, domestic corn demand to produce ethanol has rebounded to pre-pandemic levels as the continued roll-out of vaccines has allowed for the re-opening of the vast majority of the U.S. economy, promoting increased mobility and a return to historical levels of gasoline consumption. Additionally, in February 2021, winter storm Uri and the resultant severe cold weather experienced in many areas of the U.S. that caused many nitrogen producers to idle their plants resulting in a tightening in the supply of nitrogen products headed into the spring planting season. Also supporting the strength in fertilizer prices has been the significant increase in the cost of natural gas, the primary feedstock for production of ammonia, which has prompted various producers to cease operations of some facilities, particularly in Europe where natural gas prices have surged to more than $20 per MMBtu, rendering some ammonia plants uneconomical to operate. The resultant decrease in global production of ammonia has fueled further strength in nitrogen-based fertilizer prices, which has thus far materially outstripped the impact to production costs of rising natural gas prices in the U.S. The factors discussed above has led to continued strong pricing into the fourth quarter, which we expect to persist throughout 2021 and into 2022.

As for our industrial and mining products, selling prices continued to improve as the supply of ammonia remained tight due to strong global demand, curtailed global supply due to rising natural gas prices, numerous global unplanned outages and lower than expected product imports. As a result, the Tampa Ammonia benchmark price increased, which in turn, increased our selling prices as many of our industrial contracts are indexed to this benchmark price. In addition, sales of nitric acid increased pursuant to the new long-term nitric acid supply contract discussed above. Also, demand for our mining products continued to improve due to increased mining activities.

See a more detailed discussion below under “Key Industry Factors.”

Key Industry Factors

Supply and Demand

Agricultural

Sales of our agricultural products were approximately 40% of our total net sales for the third quarter of 2021. The price at which our agricultural products are ultimately sold depends on numerous factors, including the supply and demand for nitrogen fertilizers which, in turn, depends upon world grain demand and production levels, the cost and availability of transportation and storage, weather conditions, competitive pricing and the availability of imports. Additionally, expansions or upgrades of competitors' facilities and international and domestic political and economic developments continue to play an important role in the global nitrogen fertilizer industry economics, including the impact from the Phase 1 trade agreement between the U.S. and China. These factors can affect, in addition to selling prices, the level of inventories in the market which can cause price volatility and affect product margins.

From a farmer's perspective, the demand for fertilizer is affected by the aggregate crop planting decisions and fertilizer application rate decisions of individual farmers. Individual farmers make planting decisions based largely on prospective profitability of a harvest, while the specific varieties and amounts of fertilizer they apply depend on factors such as their financial resources, soil conditions, weather patterns and the types of crops planted.

Additionally, changes in corn prices, as well as soybean, cotton and wheat prices, can affect the number of acres of corn planted in a given year, and the number of acres planted will drive the level of nitrogen fertilizer consumption, likely affecting prices.

According to the October Report, farmers planted approximately 93 million acres of corn in 2021, up 3 percent compared to the 2020 planting season. In addition, the USDA estimates the U.S. ending stocks for the 2022 Crop will be approximately 38 million metric tons, a 12% increase from the 2021 Crop. The UDSA also is estimating a record yield for the 2022 Crop, up approximately 3% from a year ago.

The following October 2021 estimates are associated with the corn market:

	2022 Crop (2021 Harvest) October Report (1)	2021 Crop (2020 Harvest) October Report (1)	Percentage Change (2)	2020 Crop (2019 Harvest) October Report (1)	Percentage Change (3)
U.S. Area Planted *(Million acres)*	93.3	90.7	2.9%	89.7	4.0%
U.S. Yield per Acre *(Bushels)*	176.5	171.4	3.0%	167.5	5.4%
U.S. Production *(Million bushels)*	15,019	14,111	6.4%	13,620	10.3%
U.S. Ending Stocks *(Million metric tons)*	38.1	34.1	11.7%	48.8	(21.9%)
World Ending Stocks *(Million metric tons)*	301.7	290.0	4.0%	306.1	(1.4%)

1. Information obtained from WASDE reports dated October 12, 2021 ("October Report") for the 2021/2022 ("2022 Crop"), 2020/2021 ("2021 Crop") and 2019/2020 ("2020 Crop") corn marketing years. The marketing year is the twelve-month period during which a crop normally is marketed. For example, the marketing year for the current corn crop is from September 1 of the current year to August 31 of the next year. The year begins at the harvest and continues until just before harvest of the following year.
2. Represents the percentage change between the 2022 Crop amounts compared to the 2021 Crop amounts.
3. Represents the percentage change between the 2022 Crop amounts compared to the 2020 Crop amounts.

The current USDA corn outlook for the U.S. compared to the July Report is for slightly higher production, lower feed and residual use, and larger ending stocks. From a demand perspective, corn prices, while lower than in the second quarter of 2021, remain well above prices levels for more than seven years leading up to 2021, remaining significantly higher than $4 per bushel, the level that we believe represent a key threshold as it relates to favorable farmer economics. In addition, domestic corn demand to produce ethanol has rebounded to pre-pandemic levels as the continued roll-out of vaccines has allowed for the re-opening of the vast majority of the U.S. economy, promoting increased mobility and a return to historical levels of gasoline consumption. Most gasoline has 10% ethanol content. Ethanol is commonly made from corn and ethanol production is the largest user of U.S. corn, currently representing roughly 35% of total U.S. corn demand.

The available U.S. supply of ammonia and other nitrogen products has tightened in 2021 to date, primarily as the result of higher demand for such products, in addition to the idling of many nitrogen plants in February 2021 due to the severe cold weather and ongoing industry downtime caused the lingering problems of that event coupled with more turnaround activity in 2021 as many companies chose to delay turnarounds in 2020 as a result of the pandemic and lost production from several hurricane events in 2021.

As a result of these factors discussed above, we have experienced a price rally for fertilizers over the last several months, which we expect will continue for the remainder of 2021, compared to the same period of 2020.

Industrial and Mining

Sales of our industrial products were approximately 50% of our total net sales for the third quarter of 2021. Our industrial products sales volumes are dependent upon general economic conditions primarily in the housing, automotive, and paper industries. According to the American Chemistry Council, the U.S. economic indicators are improving and pointing towards continued improvement in the markets we serve. Our sales prices generally vary with the market price of ammonia or natural gas, as applicable, in our pricing arrangements with customers.

Sales of our mining products were approximately 10% of our total net sales for the third quarter of 2021. Our mining products are LDAN and AN solution, which are primarily used as AN fuel oil and specialty emulsions for usage in the quarry and the construction industries, for metals mining, and to a lesser extent, for coal. In our mining markets, our sales volumes are typically driven by changes in the overall North American consumption levels of mining products that can be impacted by weather. Metals prices continue to improve in 2021 as producers continue to extract as much as possible. This improvement includes an increase in copper mining, driven primarily by demand for electric vehicles. We believe our plants are well located to support the more stable quarry and construction industries and the metals mining industries.

Natural Gas Prices

Natural gas is the primary feedstock used to produce nitrogen fertilizers at our manufacturing facilities. In recent years, U.S. natural gas reserves have increased significantly due to, among other factors, advances in extracting shale gas, which has reduced and stabilized natural gas prices, providing North America with a cost advantage over certain imports. As a result, our competitive position and that of other North American nitrogen fertilizer producers has been positively affected.

We historically have purchased natural gas either on the spot market, through forward purchase contracts, or a combination of both and have used forward purchase contracts to lock in pricing for a portion of our natural gas requirements. These forward purchase contracts are generally either fixed-price or index-price, short-term in nature and for a fixed supply quantity. We are able to purchase natural gas at competitive prices due to our connections to large distribution systems and their proximity to interstate pipeline systems. The following table shows the volume of natural gas we purchased and the average cost per MMBtu:

	Three Months Ended September 30,	
	2021	2020
Natural gas volumes (MMBtu in millions)	6.6	7.4
Natural gas average cost per MMBtu	$ 3.71	$ 1.98

Transportation Costs

Costs for transporting nitrogen-based products can be significant relative to their selling price. For example, ammonia is a hazardous gas at ambient temperatures and must be transported in specialized equipment, which is more expensive than other forms of nitrogen fertilizers. In recent years, a significant amount of the ammonia consumed annually in the U.S. was imported. Therefore, nitrogen fertilizers prices in the U.S. are influenced by the cost to transport product from exporting countries, giving domestic producers who transport shorter distances an advantage. However, we continue to evaluate the recent rising costs of rail and truck freight domestically. Since the Magellan ammonia pipeline was permanently shut down in 2020, certain Oklahoma and Texas producers that relied on the pipeline to transport their ammonia are relying on other transportation modes, primarily trucks, but also rail and barge transport. As a result of increases in demand for trucks to transport ammonia, primarily during the spring and fall planting seasons, higher transportation costs have and could continue to impact our margins, if we were unable to fully pass through these costs to our customers. Additionally, continued truck driver shortages could impact our ability to fulfill customer demand. As a result, we continue to evaluate supply chain efficiencies to reduce or counter the impact of higher logistics costs.

Key Operational Factors

Facility Reliability

Consistent, reliable and safe operations at our chemical plants are critical to our financial performance and results of operations. The financial effects of planned downtime at our plants, including Turnarounds (primarily associated with our ammonia plants), is mitigated through a diligent planning process that considers the availability of resources to perform the needed maintenance and other factors. Unplanned downtime of our plants typically results in lost contribution margin from lost sales of our products, lost fixed cost absorption from lower production of our products and increased costs related to repairs and maintenance. All Turnarounds result in lost contribution margin from lost sales of our products, lost fixed cost absorption from lower production of our products, and increased costs related to repairs and maintenance, which repair, and maintenance costs are expensed as incurred.

Our Cherokee Facility is currently on a three-year ammonia plant Turnaround cycle completing a planned Turnaround during the third quarter of 2021 with the next ammonia plant Turnaround planned in the third quarter of 2024.

Our El Dorado and Pryor Facilities are currently on a three-year ammonia plant Turnaround cycle with both currently scheduled for their next ammonia plant Turnarounds in the third quarter of 2022.

Ammonia Production

Ammonia is the basic product used to produce all of our upgraded products. The ammonia production rates of our plants affect the total cost per ton of each product produced and the overall sales of our products.

For 2021, we are targeting total ammonia production of approximately 770,000 tons to 780,000 tons despite the Turnaround performed at our Cherokee Facility, which lowered ammonia production during the third quarter by approximately 21,000 tons.

We believe that our focus on continuous improvement in reliability as discussed in key operating initiatives will result in year over year improvement in ammonia production for 2021.

Forward Sales Contracts

We use forward sales of our fertilizer products to optimize our asset utilization, planning process and production scheduling. These sales are made by offering customers the opportunity to purchase product on a forward basis at prices and delivery dates that are agreed upon, with dates typically occurring within 12 months. We use this program to varying degrees during the year depending on market conditions and our view of changing price environments. Fixing the selling prices of our products months in advance of their ultimate delivery to customers typically causes our reported selling prices and margins to differ from spot market prices and margins available at the time of shipment.

Consolidated Results of the Third Quarter of 2021

Our consolidated net sales for the third quarter of 2021 were $127.2 million compared to $74.0 million for the same period in 2020. Our consolidated operating income for the third quarter of 2021 was $5.4 million compared to an operating loss of $9.0 million for the same period in 2020. The items impacting our operating results are discussed in more detail below and under "Results of Operations."

Items Affecting Comparability of Results of the Third Quarter

Selling Prices

For the third quarter of 2021, average agricultural selling prices for our ammonia, UAN and HDAN increased 188%, 128% and 66%, respectively, compared to the third quarter of 2020. As discussed above under "Recent Business Developments," increased demand, higher corn prices and tighter supplies of nitrogen products contributed to the improved pricing.

For the third quarter of 2021, average industrial selling prices for most of our products were also higher compared to the same period of 2020, primarily driven by the $403 per metric ton increase in the Tampa Ammonia benchmark price, as many of our industrial contracts are indexed to the Tampa Ammonia benchmark price.

Turnaround Activities (2021 only)

When a Turnaround is performed, overall results are negatively impacted. This impact includes lost contribution margin from lost sales, lost fixed cost absorption from lower production, and increased costs associated with repairs and maintenance. The effects of our Turnaround, exclusive of the impacts due to lost production during the downtime, are shown below:

Facility	2021 Related Period	Turnaround Downtime	Turnaround Expense (In Thousands)	Estimated Lost Production (In Tons)
Cherokee	3rd Quarter	40 days	$ 7,976	21,000

Change of Control and Special Dividend (2021 only)

As the result of the Exchange Transaction discussed above under Recent Business Developments and in Note 2, Eldridge held over 60% of our outstanding shares of common stock on the closing date of the Exchange Transaction. As a result, a change of control ("CoC") event occurred as defined in certain agreements, including stock-based awards and cash-based awards. As a result, additional expense was recognized due to the CoC event. In addition, pursuant to anti-dilutive terms included in the cash-based awards, the number of units of cash-based awards increased due to the Special Dividend, also resulting in additional expense being recognized. In summary, we recognized approximately $5.0 million expense, of which $1.2 million is classified as cost of sales and $3.8 million is classified as SG&A.

Results of Operations

The following Results of Operations should be read in conjunction with our condensed consolidated financial statements for the three and nine months ended September 30, 2021 and 2020 and accompanying notes and the discussions under "Overview" and "Liquidity and Capital Resources" included in this MD&A.

We present the following information about our results of operations. Net sales to unaffiliated customers are reported in the condensed consolidated financial statements and gross profit (loss) represents net sales less cost of sales. Net sales are reported on a gross basis with the cost of freight being recorded in cost of sales.

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

The following table contains certain financial information:

	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Change	Percentage Change
	(Dollars In Thousands)			
Net sales:				
Agricultural products	$ 51,102	$ 31,986	$ 19,116	60%
Industrial and mining products	76,097	41,983	34,114	81%
Total net sales	$ 127,199	$ 73,969	$ 53,230	72%
Gross profit (loss):				
Adjusted gross profit (1)	$ 43,056	$ 16,337	$ 26,719	164%
Depreciation and amortization (2)	(17,633)	(17,362)	(271)	2%
Turnaround expense	(7,976)	(34)	(7,942)	
Total gross profit (loss)	17,447	(1,059)	18,506	
Selling, general and administrative expense	11,600	7,068	4,532	64%
Other expense, net	474	875	(401)	
Operating income (loss)	5,373	(9,002)	14,375	160%
Interest expense, net	12,956	12,554	402	3%
Non-operating other expense, net	1,326	216	1,110	
Provision (benefit) for income taxes	19	(1,370)	1,389	
Net loss	$ (8,928)	$ (20,402)	$ 11,474	(56)%
Other information:				
Gross profit (loss) percentage (3)	13.7%	(1.4)%	15.1%	
Adjusted gross profit percentage (3)	33.8%	22.1%	11.7%	
Property, plant and equipment expenditures	$ 11,252	$ 4,277	$ 6,975	163%

(1) Represents a non-GAAP measure since the amount excludes unallocated depreciation, amortization and Turnaround expenses.
(2) Represents amount classified as cost of sales.
(3) As a percentage of the total net sales.

The following tables provide key operating metrics for the agricultural products:

Product (tons sold)	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Change	Percentage Change
UAN	82,556	140,524	(57,968)	(41)%
HDAN	37,011	27,800	9,211	33%
Ammonia	14,100	20,181	(6,081)	(30)%
Other	2,394	2,824	(430)	(15)%
Total	136,061	191,329	(55,268)	(29)%

Gross Average Selling Prices (price per ton)	Three Months Ended September 30, 2021	2020	Change	Percentage Change
UAN	$ 315	$ 138	$ 177	128%
HDAN	$ 384	$ 232	$ 152	66%
Ammonia	$ 552	$ 192	$ 360	188%

With respect to sales of industrial and mining products, the following table indicates key operating metrics of our major products:

Product (tons sold)	Three Months Ended September 30, 2021	2020	Change	Percentage Change
Ammonia	65,901	68,366	(2,465)	(4)%
AN, Nitric Acid and Other	101,540	74,753	26,787	36%
Total	167,441	143,119	24,322	17%
Tampa Ammonia Benchmark (price per metric ton)	$ 610	$ 207	$ 403	195%

Net Sales

Net sales of our agricultural products increased during the third quarter of 2021 compared to the prior year period driven by stronger pricing for UAN, ammonia and HDAN. Partially offsetting the benefit of stronger pricing was lower sales volumes for UAN and ammonia caused by the Turnaround completed at our Cherokee Facility during the third quarter of 2021 and more sales out of inventory in the third quarter of 2020 as a result of higher inventory levels headed into the period. Agricultural sales were also impacted by a shift in product mix as we continue our focus on the industrial products business.

Net sales of our industrial and mining products increased as a result of higher pricing related to a rise in the Tampa ammonia benchmark price, to which many of our industrial contracts are tied. Also benefitting industrial sales was the ramp up of a new nitric acid offtake agreement along with the continued recovery of demand from several key end markets including automotive, home building quarry and construction, precious metals mining and power generation, which have now exceeded pre-pandemic demand levels.

Gross Profit

As noted in the table above, we recognized a gross profit of $17.4 million for the third quarter of 2021 compared to a gross loss of $1.1 million for the same period in 2020, or an $18.5 million improvement. Overall, our gross profit percentage was 13.7% compared to a gross loss percentage of 1.4% for the same period in 2020. Our adjusted gross profit percentage increased to 33.8% for the third quarter of 2021 from 22.1% for the third quarter of 2020.

The increase in gross profit was primarily driven by higher sales prices for our products coupled with increased sales volume of HDAN partially offset by lower volumes of UAN, ammonia and upgraded industrial and mining products. The improvement in gross profit was partially offset by overall higher average natural gas costs which averaged $3.71 per MMBtu for the third quarter of 2021 as compared to $1.98 per MMBtu for the third quarter of 2020 and the impact of the Turnaround completed at our Cherokee Facility as discussed above under "Turnaround Activities".

Selling, General and Administrative

Our SG&A expenses were $11.6 million for the third quarter of 2021, an increase of $4.5 million compared to the same period in 2020. The net increase was primarily driven by approximately $3.8 million of expense due to CoC and anti-dilutive provisions included in certain agreements as discussed above under "Change of Control and Special Dividend".

Non-operating Other Expense, net

Non-operating other expense for the third quarter of 2021 was $1.3 million compared to $0.2 million for the same period in 2020 or a change of $1.1 million. This change primarily relates to the change in fair value of the embedded derivative included in the Series E Redeemable Preferred prior to its extinguishment through the completion of the Exchange Transaction discussed above under "Recent Business Developments".

Provision (Benefit) for Income Taxes

The provision for income taxes for the third quarter of 2021 was minimal compared to a benefit for income taxes of $1.4 million for the same period of 2020. For both periods, the effective tax rate is less than the statutory rate primarily due to the impact of the PPP loan forgiveness, state tax law changes and valuation allowances. Also see discussion in Note 8.

Nine Months Ended September 30, 2021 Compared to Nine Month Ended September 30, 2020

The following table contains certain financial information:

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020	Change	Percentage Change
	(Dollars In Thousands)			
Net sales:				
Agricultural products	$ 162,523	$ 138,441	$ 24,082	17%
Industrial and mining products	203,488	123,972	79,516	64%
Total net sales	$ 366,011	$ 262,413	$ 103,598	39%
Gross profit:				
Adjusted gross profit by market (1)	$ 120,652	$ 66,793	$ 53,859	81%
Depreciation and amortization (2)	(51,314)	(51,899)	585	(1)%
Turnaround expense	(8,823)	(45)	(8,778)	
Recovery from settlements with certain vendors	—	5,664	(5,664)	
Total gross profit	60,515	20,513	40,002	195%
Selling, general and administrative expense	28,938	25,578	3,360	13%
Other expense, net	217	240	(23)	
Operating income (loss)	31,360	(5,305)	36,665	(691)%
Interest expense, net	37,618	38,509	(891)	(2)%
Gain on extinguishment of debt	(10,000)	—	(10,000)	
Non-operating other expense (income), net	2,466	(587)	3,053	
Benefit for income taxes	(187)	(3,008)	2,821	
Net income (loss)	$ 1,463	$ (40,219)	$ 41,682	104%
Other information:				
Gross profit percentage (3)	16.5%	7.8%	8.7%	
Adjusted gross profit percentage (3)	33.0%	25.5%	7.5%	
Property, plant and equipment expenditures	$ 26,101	$ 22,230	$ 3,871	17%

(1) Represents a non-GAAP measure since the amount excludes unallocated depreciation, amortization, Turnaround expenses, and a recovery from settlements.
(2) Represents amount classified as cost of sales.
(3) As a percentage of the total net sales.

The following tables provide key operating metrics for the agricultural products:

Product (tons sold)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020	Change	Percentage Change
UAN	313,794	367,073	(53,279)	(15)%
HDAN	189,712	221,692	(31,980)	(14)%
Ammonia	53,192	69,074	(15,882)	(23)%
Other	11,772	15,027	(3,255)	(22)%
Total	568,470	672,866	(104,396)	(16)%

Gross Average Selling Prices (price per ton)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020	Change	Percentage Change
UAN	$ 234	$ 153	$ 81	53%
HDAN	$ 297	$ 250	$ 47	19%
Ammonia	$ 397	$ 233	$ 164	70%

With respect to sales of industrial and mining products, the following table indicates key operating metrics of our major products:

Product (tons sold)	Nine Months Ended September 30, 2021	2020	Change	Percentage Change
Ammonia	176,597	201,002	(24,405)	(12)%
AN, Nitric Acid and Other	336,032	215,177	120,855	56%
Total	512,629	416,179	96,450	23%
Tampa Ammonia Benchmark (price per metric ton)	$ 505	$ 231	$ 274	119%

Net Sales

Agricultural product sales increased driven primarily by higher sales prices for all of our agricultural products partially offset by lower sales volumes of our products resulting from lower production, including ammonia, due to the February 2021 weather event, the completion of a Turnaround at our Cherokee Facility during the third quarter of 2021, and product mix shifts to our industrial and mining products. As discussed above under “Recent Business Developments,” increased demand, higher corn prices, and tighter supplies of nitrogen products contributed to the improved pricing.

Industrial product sales increased primarily from higher sales prices due primarily to higher Tampa Ammonia benchmark pricing and higher nitric acid sales volume due in part to sales beginning in 2021 pursuant to the new long-term nitric acid supply agreement, and product mix shifts. The average Tampa Ammonia pricing was approximately $274 per ton higher compared to the same period in 2020.

Mining products sales improved driven by primarily from increased sales volumes. Demand for mining products has improved, especially relating to metals mining as expanding electric vehicle market is driving the need for copper. Also, certain mining sales contracts are linked to natural gas indexes and as the cost of natural gas increases, the pricing for these products increase accordingly.

Gross Profit

As noted in the table above, we recognized a gross profit of $60.5 million for the first nine months of 2021 compared to $20.5 million for the same period in 2020, or a $40.0 million improvement. Overall, our gross profit percentage was 16.5% compared to 7.8% for the same period in 2020. Our adjusted gross profit percentage increased to 33.0% for the first nine months of 2021 from 25.5% for the first nine months of 2020.

The increase in gross profit was primarily driven by higher sales prices for our products coupled with an overall increase in sales volume of upgraded industrial and mining products partially offset by lower volumes of our agricultural products. The improvement in gross profit was also partially offset by the net impact of the February weather disruption and overall higher average natural gas costs, which averaged $3.20 per MMBtu for the first nine months of 2021 as compared to $1.96 per MMBtu for the same period of 2020 and the impact of the Turnaround completed at our Cherokee Facility as discussed above under “Turnaround Activities”. The first nine months of 2020 also included settlements with certain vendors resulting in a recovery of approximately $5.7 million.

Selling, General and Administrative

Our SG&A expenses were $28.9 million for the first nine months of 2021, an increase of $3.4 million compared to the same period in 2020. The net increase was primarily driven by approximately $3.8 million of expense due to CoC and anti-dilutive provisions included in certain agreements as discussed above under “Change of Control and Special Dividend.”, approximately $2.3 million associated with short and long-term compensation incentives and other payroll related costs partially offset by lower professional fees of $4.0 million.

Interest Expense, net

Interest expense for the first nine months of 2021 was $37.6 million compared to $38.5 million for the same period in 2020. The decrease relates primarily to the interest expense incurred during the first nine months of 2020 associated with a litigation judgment discussed in footnote (B) of Note 6.

Gain on Extinguishment of Debt – PPP Loan Forgiven

As discussed in Note 5 in June 2021, the PPP loan was fully forgiven by the SBA and lender. As a result, we recognized a gain on extinguishment of debt of $10 million for the second quarter of 2021.

Non-operating Other Expense (Income), net

Non-operating other expense for the first nine months of 2021 was $2.5 million compared to non-operating income of $0.6 million for the same period in 2020 or a change of $3.1 million. This change primarily relates to the change in fair value of the embedded derivative included in the Series E Redeemable Preferred prior to its extinguishment through the completion of the Exchange Transaction discussed above under “Recent Business Developments”.

Benefit for Income Taxes

The benefit for income taxes for the first nine months of 2021 was $0.2 million compared to $3.0 million for the same period in 2020. For both periods, the effective tax rate is less than the statutory rate primarily due to the impact of the PPP loan forgiveness, state tax law changes and valuation allowances. Also see discussion in Note 8.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes our cash flow activities for the nine months ended September 30:

	2021	2020	Change
		(In Thousands)	
Net cash flows from operating activities	$ 65,471	$ 24,715	$ 40,756
Net cash flows from investing activities	$ (25,719)	$ (20,219)	$ (5,500)
Net cash flows from financing activities	$ (23,161)	$ 14,807	$ (37,968)

Net Cash Flow from Operating Activities

Net cash provided by operating activities was $65.5 million for first nine months of 2021 compared to $24.7 million for the same period of 2020, a change of $40.8 million.

For the first nine months of 2021, the net cash provided is the result of net income of $1.5 million plus adjustments of $51.4 million for depreciation and amortization of PP&E, other adjustments of $8.8 million less $10.0 million for a gain on extinguishment of debt, and net cash provided of $13.8 million primarily from our working capital.

For the first nine months of 2020, the net cash provided is the result of a net loss of $40.2 million plus adjustments of $52 million for depreciation and amortization of PP&E and other adjustments of $6.2 million less an adjustment of $3.1 million for deferred taxes and net cash provided of $9.8 million primarily from our working capital.

Net Cash Flow from Investing Activities

Net cash used by investing activities was $25.7 million for the first nine months of 2021 compared to $20.2 million for the same period of 2020, a change of $5.5 million.

For the first nine months of 2021 and 2020, the net cash used relates primarily to expenditures for PP&E.

Net Cash Flow from Financing Activities

Net cash used by financing activities was $23.2 million for the first nine months of 2021 compared to net cash provided of $14.8 million for the same period of 2020, a change of $38.0 million.

For the first nine months of 2021, the net cash used primarily consists of payments on other long-term debt and short-term financing of $20.2 million, payments of $2.6 million for equity and debt-related cost and $0.3 million for other financing activities.

For the first nine months of 2020, the net cash provided primarily consists of proceeds of $42.6 million from other long-term debt partially offset by payments on other long-term debt and short-term financing of $27.6 million and payments of $0.2 million for other financing activities.

Capitalization

The following is our total current cash, long-term debt, redeemable preferred stock and stockholders' equity:

	September 30, 2021	December 31, 2020
	(In Millions)	
Cash and cash equivalents	$ 32.9	$ 16.3
Long-term debt:		
Working Capital Revolver Loan	$ —	$ —
Senior Secured Notes due 2023 (1)	435.0	435.0
Secured Financing due 2023	8.5	10.7
Secured Loan Agreement due 2025	5.8	6.8
Secured Financing due 2025	25.5	28.6
Unsecured Loan Agreement due 2022	—	10.0
Secured Promissory Note due 2021	—	1.2
Other	0.3	0.5
Unamortized discount and debt issuance costs	(5.2)	(8.6)
Total long-term debt, including current portion, net	$ 469.9	$ 484.2
Series E and Series F redeemable preferred stocks (1)	$ —	$ 272.1
Total stockholders' equity (1)	$ 423.1	$ 149.6

(1) See discussion above under "Recent Business Developments" and Note 2 relating to the Exchange Transaction associated with the Series E and Series F redeemable preferred stock and debt refinancing completed in October.

We currently have a revolving credit facility, our Working Capital Revolver Loan, with a borrowing base of $65 million. As of September 30, 2021, our Working Capital Revolver Loan was undrawn and had approximately $48.2 million of availability.

For the full year of 2021, we expect capital expenditures to be approximately $35 million to $40 million, which includes approximately $5 million for margin enhancement projects. The remaining capital spending is planned for reliability and maintenance capital projects.

We believe that the combination of our cash on hand, the availability on our revolving credit facility, and our cash flow from operations will be sufficient to fund our anticipated liquidity needs for the next twelve months.

Compliance with Long - Term Debt Covenants

As discussed below in Note 5, the Working Capital Revolver Loan requires, among other things, that we meet certain financial covenants. The Working Capital Revolver Loan does not include financial covenant requirements unless a defined covenant trigger event has occurred and is continuing. As of September 30, 2021, no trigger event had occurred.

Loan Agreements

Senior Secured Notes – As discussed in Note 13, an October 14, 2021, LSB completed a private offering of $500 million in aggregate principal amount of its 6.250% Senior Secured Notes due 2028 (the "Notes").

The Notes were issued at a price equal to 100% of their face value and pursuant to an indenture, dated as of October 14, 2021, and will mature on October 15, 2028 and rank senior in right of payment to all of our debt that is expressly subordinated in right of payment to the notes, and will rank pari passu in right of payment with all of our liabilities that are not so subordinated, including the Working Capital Revolver Loan. Our obligations under the Notes are jointly and severally guaranteed by the subsidiary guarantors named in the Indenture on a senior secured basis. Interest on the Notes accrues at a rate of 6.250% per annum and is payable semi-annually in arrears on May 15 and October 15 of each year, beginning on May 15, 2022, to the holders of record on the immediately preceding May 1 and October 1.

The net proceeds from the Notes were used to redeem $435 million in aggregate principal amount of the Senior Secured Notes due 2023 (the "Existing Notes"), representing all of the notes outstanding, to pay related transaction fees, expenses and premiums and, to the extent of any remaining net proceeds, for general corporate purposes.

We previously issued a conditional notice of redemption on September 29, 2021, to redeem all of the Existing Notes (the "Redemption"), conditioned on the closing of the offering of the Notes, which condition was satisfied as of October 14, 2021. The Redemption was completed by the trustee on October 29, 2021.

Also on October 14, 2021, LSB satisfied and discharged its obligations under the indenture governing the Existing Notes by irrevocably depositing with the trustee for the Existing Notes funds sufficient to redeem the Existing Notes in full and to pay related fees and expenses.

We are currently evaluating the impact on our financial statements as the result of the debt transaction discussed above.

Secured Financing due 2023 – EDC is party to a secured financing arrangement with an affiliate of LSB Funding. Principal and interest are payable in 48 equal monthly installments with a final balloon payment of approximately $3 million due in June 2023.

Secured Loan Agreement due 2025 - EDC is party to a secured loan agreement with an affiliate of LSB Funding. Principal and interest are payable in 60 equal monthly installments through March 2025.

Secured Financing due 2025 – EDA is party to a $30 million secured financing arrangement with an affiliate of LSB Funding. Principal and interest are payable in 60 equal monthly installments with a final balloon payment of approximately $5 million due in August 2025.

Working Capital Revolver Loan – At September 30, 2021, our Working Capital Revolver Loan was undrawn and had approximately $48.2 million of availability, based on our eligible collateral, less outstanding letters of credit as of that date. Also see discussion above under "Compliance with Long-Term Debt Covenants."

Capital Expenditures – First Nine Months of 2021

For the first nine months of 2021, capital expenditures relating to PP&E were $26.1 million. The capital expenditures were funded primarily from cash and working capital.

See discussion above under "Capitalization" for our expected capital expenditures.

Expenses Associated with Environmental Regulatory Compliance

We are subject to specific federal and state environmental compliance laws, regulations and guidelines. As a result, we incurred expenses of $2.6 million during the first nine months of 2021 in connection with environmental projects. For the remainder of 2021, we expect to incur expenses ranging from $0.9 million to $1.1 million in connection with additional environmental projects. However, it is possible that the actual costs could be significantly different than our estimates.

Dividends

See discussions above under "Recent Business Developments" and Notes 1 and 13 regarding the common stock Special Dividend.

We have not paid cash dividends on our outstanding common stock in many years, and we do not currently anticipate paying cash dividends on our outstanding common stock in the near future.

Dividends on the Series D 6% cumulative convertible Class C preferred stock (the "Series D Preferred") and Series B 12% cumulative convertible Class C Preferred Stock (the "Series B Preferred") are payable annually, only when declared by our Board, as follows:

- $0.06 per share on our outstanding non-redeemable Series D Preferred for an aggregate dividend of $60,000, and
- $12.00 per share on our outstanding non-redeemable Series B Preferred for an aggregate dividend of $240,000.

As of September 30, 2021, the amount of accumulated dividends on the Series D Preferred and Series B Preferred totaled approximately $1.8 million. All shares of the Series D Preferred and Series B Preferred are owned by the Golsen Holders and an immediate family member. There are no optional or mandatory redemption rights with respect to the Series B Preferred or Series D Preferred.

The lender of our Working Capital Revolver Loan has provided LSB a consent to allow for a payment of dividends not to exceed $2 million to the holders of the Series B and Series D Preferred, if and when declared by the Board.

Seasonality

We believe fertilizer products sold to the agricultural industry are seasonal, while sales into the industrial and mining sectors generally are less susceptible to seasonal fluctuations. The selling seasons for agricultural products are primarily during the spring and fall planting seasons, which typically extend from March through June and from September through November in the geographical markets where we distribute the majority of our agricultural products. As a result, we typically increase our inventory of fertilizer products prior to the beginning of each planting season in order to meet the demand for our products. In addition, the amount and timing of sales to the agricultural markets depend upon weather conditions and other circumstances beyond our control.

Performance and Payment Bonds

We are contingently liable to sureties in respect of insurance bonds issued by the sureties in connection with certain contracts entered into by subsidiaries in the normal course of business. These insurance bonds primarily represent guarantees of future performance of our subsidiaries. As of September 30, 2021, we have agreed to indemnify the sureties for payments, up to $9.7 million, made by them in respect of such bonds. These insurance bonds are expected to expire or be renewed later in 2021.

New Accounting Pronouncements

Refer to Note 1 for recently issued accounting standards.

Critical Accounting Policies and Estimates

See "Critical Accounting Policies and Estimates," Item 7 of our 2020 Form 10-K. In addition, the preparation of financial statements requires us to make estimates and assumptions that affect the reported amount of assets, liabilities, revenues and expenses, and disclosures of contingencies and fair values, including, but not limited to, various environmental and legal matters, including matters discussed under footnote A and the lawsuit styled *City of West, Texas vs. CF Industries, Inc., et al.*, discussed under "Other Pending, Threatened or Settled Litigation" of Note 6.

Series E and Series F Redeemable Preferred - As discussed in Note 1, the Series E and Series F Redeemable Preferred that were redeemable outside of our control were classified as temporary/mezzanine equity. These redeemable preferred stocks were recorded at fair value upon issuance, net of issuance costs or discounts. In addition, certain embedded features included in the Series E Redeemable Preferred required bifurcation and were classified as derivative liabilities. The carrying values of the redeemable preferred stocks were being increased by periodic accretions (including the amount for dividends earned but not yet declared or paid) using the interest method so that the carrying amount would equal the redemption value as of the earliest possible redemption date by the holder (October 25, 2023). The accretion was recorded to retained earnings. However, during the third quarter of 2021, our redeemable preferred stocks were exchanged into our common stock as discussed in below.

As discussed in Note 2, in July 2021, we entered into the Exchange Agreement with the Holder, an affiliate of Eldridge, which Exchange Agreement was voted on and approved by our stockholders at the Special Meeting held in September 2021. Pursuant to the terms of the Exchange Agreement, the Holder would exchange all of the shares of the Series E and Series F Redeemable Preferred into our common stock based on the Liquidation Preference and an exchange price of $6.16, which is equal to the 30-day volume weighted average price as of the date of the Exchange Agreement. The Liquidation Preference primarily consists of $1,000 per share of Series E Redeemable Preferred plus accrued and unpaid dividends plus the participation rights value. However, the exchange consideration paid under the Exchange Agreement would be reduced by approximately 1.2 million shares, which shares were included in the Special Dividend and received by the Holder.

On September 27, 2021, the closing of the Exchange Agreement occurred, and the Exchange Transaction was consummated. Pursuant to the terms of the Exchange Agreement, the Holder exchanged all of the shares of the Series E and Series F Redeemable Preferred for approximately 49.1 million shares of our common stock.

The total fair value of the approximately 49.1 million shares of common stock issued was approximately $531.1 million (based on the average per share price on the date of closing). The fair value of the common stock issued was in excess of the Series E and Series F Redeemable Preferred carrying amount, net of the bifurcated embedded derivative and unamortized issuance costs, by approximately $231.8 million and is treated as a deemed dividend. Because we were in an accumulated deficit position on the closing date, the deemed dividend was charged to capital in excess of par value.

Income Taxes - Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those differences are expected to be recovered or settled. We establish valuation allowances if we believe it is more-likely-than-not that some or all of deferred tax assets will not be realized. Significant judgment is applied in evaluating the need for and the magnitude of appropriate valuation allowances against deferred tax assets.

It is also reasonably possible that the estimates and assumptions utilized as of September 30, 2021 could change in the near term. Actual results could differ materially from these estimates and judgments, as additional information becomes known.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K under the Exchange Act.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

General

Our results of operations and operating cash flows are impacted by changes in market prices of ammonia and natural gas and changes in market interest rates.

Forward Sales Commitments Risk

Periodically, we enter into forward firm sales commitments for products to be delivered in future periods. As a result, we could be exposed to embedded losses should our product costs exceed the firm sales prices at the end of a reporting period. At September 30, 2021, we had no embedded losses associated with sales commitments with firm sales prices.

Commodity Price Risk

A substantial portion of our products and raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change. Since we are exposed to commodity price risk, we periodically enter into contracts to purchase natural gas for anticipated production needs to manage risk related to changes in prices of natural gas commodities. Generally, these contracts are considered normal purchases because they provide for the purchase of natural gas that will be delivered in quantities expected to be used over a reasonable period of time in the normal course of business, these contracts are exempt from the accounting and reporting requirements relating to derivatives. At September 30, 2021, we had no outstanding natural gas contracts, which are accounted for on a mark-to-market basis.

Interest Rate Risk

Generally, we are exposed to variable interest rate risk with respect to our revolving credit facility. As of September 30, 2021, we had no outstanding borrowings on this credit facility and no other variable rate borrowings. We currently do not hedge our interest rate risk associated with our variable interest loan.

Item 4. Controls and Procedures

The Company maintains disclosure controls and procedures as defined in Rule 13a-15 under the Exchange Act designed to provide reasonable assurance that the information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. These include controls and procedures designed to ensure that this information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Management, with the participation of the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures as of September 30, 2021. Based on this evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of September 30, 2021, at the reasonable assurance level.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained within this report may be deemed "Forward-Looking Statements" within the meaning of Section 27A of the Securities Act of 1933 (as amended, the "Securities Act") and Section 21E of the Securities Exchange Act. All statements in this report other than statements of historical fact are Forward-Looking Statements that are subject to known and unknown risks, uncertainties and other factors which could cause actual results and performance of the Company to differ materially from such statements. The words "believe," "expect," "anticipate," "intend," "plan," "may," "could" and similar expressions identify Forward-Looking Statements. Forward-Looking Statements contained herein include, but are not limited to, the following:

- the impact of LSB Funding and its affiliate Eldridge holding a majority of our common stock;
- our ability to invest in projects that will generate the best returns for our stockholders;
- the impact from the COVID-19 pandemic;
- our future liquidity outlook;
- the outlook of our chemical products and related markets;
- the amount, timing and effect on the nitrogen market from the recent nitrogen expansion projects;
- the effect from the lack of non-seasonal volume;
- our belief that competition is based upon service, price, location of production and distribution sites, and product quality and performance;
- our outlook for the industrial and mining industries;
- the availability of raw materials;
- our ability to broaden the distribution of our products, including our ability to leverage our nitric acid production capacity at our El Dorado Facility;
- our ability to develop a strategy to capitalize on ammonia opportunities;
- changes in domestic fertilizer production;
- the increasing output and capacity of our production facilities;
- on-stream rates at our production facilities;
- our ability to moderate risk inherent in agricultural markets;
- the sources to fund our cash needs and how this cash will be used;
- the ability to enter into the additional borrowings;
- the anticipated cost and timing of our capital projects;
- certain costs covered under warranty provisions;
- our ability to pass to our customers cost increases in the form of higher prices;
- our belief as to whether we have sufficient sources for materials and components;
- annual natural gas requirements;
- compliance by our facilities with the terms of our permits;
- the costs of compliance with environmental laws, health laws, security regulations and transportation regulations;
- our belief as to when Turnarounds will be performed and completed;
- expenses in connection with environmental projects;
- the effect of litigation and other contingencies;
- the increase in interest expense;
- our ability to comply with debt servicing and covenants;
- our ability to meet debt maturities or redemption obligations when due; and
- our beliefs as to whether we can meet all required covenant tests for the next twelve months.

While we believe the expectations reflected in such Forward-Looking Statements are reasonable, we can give no assurance such expectations will prove to have been correct. There are a variety of factors which could cause future outcomes to differ materially from those described in this report, including, but not limited to, the following:

- changes in the ownership percentage of Eldridge and its affiliate, LSB Funding, resulting in them no longer holding a majority of our outstanding common stock;
- changes associated with the COVID-19 pandemic and governmental and related responses;
- changes in general economic conditions, both domestic and foreign;
- material reductions in revenues;

- material changes in interest rates;
- our ability to collect in a timely manner a material amount of receivables;
- increased competitive pressures;
- adverse effects on increases in prices of raw materials;
- changes in federal, state and local laws and regulations, including environmental regulations, or in the interpretation of such;
- changes in laws, regulations or other issues related to climate change;
- releases of pollutants into the environment exceeding our permitted limits;
- material increases in equipment, maintenance, operating or labor costs not presently anticipated by us;
- the requirement to use internally generated funds for purposes not presently anticipated;
- the inability to secure additional financing for planned capital expenditures or financing obligations due in the near future;
- our substantial existing indebtedness;
- material changes in the cost of natural gas and certain precious metals;
- limitations due to financial covenants;
- changes in competition;
- the loss of any significant customer;
- changes in operating strategy or development plans;
- our inability to adequately evaluate potential acquisitions of strategic assets or companies;
- an inability to fund the working capital and expansion of our businesses;
- our inability to improve our capital structure and overall cost of capital;
- changes in the production efficiency of our facilities;
- adverse results in our contingencies including pending litigation;
- unplanned downtime at one or more of our chemical facilities;
- changes in production rates at any of our chemical plants;
- an inability to obtain necessary raw materials and purchased components;
- material increases in cost of raw materials;
- material changes in our accounting estimates;
- significant problems within our production equipment;
- fire or natural disasters;
- an inability to obtain or retain our insurance coverage;
- difficulty obtaining necessary permits;
- difficulty obtaining third-party financing;
- risks associated with proxy contests initiated by dissident stockholders;
- changes in fertilizer production;
- reduction in acres planted for crops requiring fertilizer;
- decreases in duties for products we sell resulting in an increase in imported products into the U.S.;
- adverse effects from regulatory policies, including tariffs;
- volatility of natural gas prices;
- weather conditions;
- increases in imported agricultural products; and
- other factors described in “Risk Factors” in our Form 10-K for the year ended December 31, 2020.

Given these uncertainties, all parties are cautioned not to place undue reliance on such Forward-Looking Statements. We disclaim any obligation to update any such factors or to publicly announce the result of any revisions to any of the Forward-Looking Statements contained herein to reflect future events or developments.

The following is a list of terms used in this report.

ADEQ	- The Arkansas Department of Environmental Quality.
AN	- Ammonium nitrate.
ASC	- Accounting Standard Codification.
ASU	- Accounting Standard Update.
Board	- Board of Directors
CAO	- A consent administrative order.
CARES	- Coronavirus Aid, Relief, and Economic Security Act.
Cherokee Facility	- Our chemical production facility located in Cherokee, Alabama.
Chevron	- Chevron Environmental Management Company.
CoC	- Change of Control
COVID-19	- The novel coronavirus disease of 2019.
EDA	- El Dorado Ammonia L.L.C.
EDC	- El Dorado Chemical Company.
El Dorado Facility	- Our chemical production facility located in El Dorado, Arkansas.
Eldridge	- Eldridge Industries, LLC, an affiliate of LSB Funding
Environmental and Health Laws	- Numerous federal, state and local environmental, health and safety laws.
EUC	- Environmental Use Control.
Exchange Agreement	- A Securities Exchange Agreement between LSB Funding L.L.C. and affiliate of Eldridge L.L.C. and LSB.
Exchange Transaction	- The exchange of shares of the Series E and Series F Redeemable Preferred for shares of common stock pursuant to the Exchange Agreement.
FASB	- Financial Accounting Standards Board.
Financial Covenant	- Certain springing financial covenants associated with the working capital revolver loan.
GAAP	- U.S. Generally Accepted Accounting Principles.
Global	- Global Industrial, Inc., a subcontractor asserting mechanics liens for work rendered to LSB and EDC.
Golsen Holders	- Jack E. Golsen, Barry H. Golsen, and certain of their related parties identified as beneficial owners of our securities.
Hallowell Facility	- A chemical facility previously owned by two of our subsidiaries located in Kansas.
HDAN	- High density ammonium nitrate prills used in the agricultural industry.
Holder	- LSB Funding L.L.C., the holder of all of the shares of the Series E and Series F Redeemable Preferred.
KDHE	- The Kansas Department of Health and Environment.
LDAN	- Low density ammonium nitrate prills used in the mining industry.
Leidos	- Leidos Constructors L.L.C.
Liquidation Preference	- The Series E Redeemable Preferred liquidation preference of $1,000 per share plus accrued and unpaid dividends plus the participation rights value.
LSB	- LSB Industries, Inc.
LSB Funding	- LSB Funding L.L.C.
MD&A	- Management's Discussion and Analysis of Financial Condition and Results of Operations.
Note	- A note in the accompanying notes to the condensed consolidated financial statements.
Notes	- The senior secured notes issued on October 14, 2021 with an interest rate of 6.250%, which mature in October 2028.
Notes Trustee	- Wilmington Trust and National Association as trustee and collateral agent.
NPDES	- National Pollutant Discharge Elimination System.
ODEQ	- The Oklahoma Department of Environmental Quality.
PAR	- Permit Appeal Resolution.
PCC	- Pryor Chemical Company.
PP&E	- Plant, property and equipment.

PPP	- Paycheck Protection Program.
Pryor Facility	- Our chemical production facility located in Pryor, Oklahoma.
Purchaser	- LSB Funding L.L.C.
SBA	- Small Business Administration.
SEC	- The U.S. Securities and Exchange Commission.
Secured Financing due 2023	- A secured financing arrangement between EDC and an affiliate of LSB Funding L.L.C. which matures in June 2023.
Secured Financing due 2025	- A secured financing arrangement between EDA and an affiliate of LSB Funding L.L.C. which matures in August 2025.
Secured Loan Agreement due 2025	- A secured loan agreement between EDC and an affiliate of LSB Funding L.L.C. which matures in March 2025.
Secured Promissory Note due 2021	- A secured promissory note between EDC and a lender which, matured in March 2021.
Senior Secured Notes	- Senior secured notes with a stated interest rate of 9.625%, which were redeemed in October 2021.
Series B Preferred	- The Series B 12% cumulative convertible Class C Preferred stock.
Series D Preferred	- The Series D 6% cumulative convertible Class C preferred stock.
Series E Redeemable Preferred	- The 14% Series E-1 Redeemable Preferred stock with participating rights and liquidating distributions based on a certain number of shares of our common stock.
Series F Redeemable Preferred	- The Series F-1 Redeemable Preferred stock with one share to vote as a single class on all matters with our common stock equal to 456,225 shares of our common stock.
SG&A	- Selling, general and administrative expense.
Special Dividend	- A stock split in the form of a common stock dividend declared by our Board.
Special Meeting	- Meeting of our stockholders held during the third quarter of 2021.
Turnaround	- A planned major maintenance activity.
UAN	- Urea ammonium nitrate.
U.S.	- United States.
USDA	- United States Department of Agriculture.
WASDE	- World Agricultural Supply and Demand Estimates Report.
West Fertilizer	- West Fertilizer Company.
Working Capital Revolver Loan	- Our secured revolving credit facility.
2020 Crop	- Corn crop marketing year (September 1 - August 31), which began in 2019 and ended in 2020 and primarily relates to corn planted and harvested in 2019.
2021 Crop	- Corn crop marketing year (September 1 - August 31), which began in 2020 and ended in 2021 and primarily relates to corn planted and harvested in 2020.
2022 Crop	- Corn crop marketing year (September 1 - August 31), which began in 2021 and will end in 2022 and primarily relates to corn planted and harvested in 2021.

PART II
OTHER INFORMATION

Item 1. Legal Proceedings

Other Litigation

We are from time to time subject to various legal proceedings and claims arising in the ordinary course of business, including, but not limited to, examinations by the Internal Revenue Service. For further discussion of our legal matters, see "Note 6—Commitments and Contingencies—Legal Matters" in the Notes to the Condensed Consolidated Financial Statements in this Form 10-Q.

Item 1A. Risk Factors

The information to be reported under this Item is not required for smaller reporting companies.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable

Item 3. Defaults upon Senior Securities

Not applicable

Item 4. Mine Safety Disclosures

Not applicable

Item 5. Other Information

Not applicable

Item 6. Exhibits

See "Index to Exhibits" on page 44.

Index to Exhibits Item

Exhibit Number	Exhibit Title	Incorporated by Reference to the Following
3(i)	Restated Certificate of Incorporation of LSB Industries, Inc., dated January 21, 1977, as amended August 27, 1987	Exhibit 3(i).1 to the Company's Form 10-K filed on February 28, 2013
3(ii)	Second Amended and Restated Bylaws of LSB Industries, Inc., dated July 19, 2021	Exhibit 3.1 to the Company's Form 8-K filed July 19, 2021
3.1	Certificate of Designations of Series G Class C Preferred Stock of LSB Industries, Inc., as filed with the Secretary of State of the State of Delaware on July 6, 2020	Exhibit 3.1 to the Company's Form 8-K filed July 6, 2020
10.1	Securities Exchange Agreement, dated July 19, 2021, by and between LSB Industries, Inc. and LSB Funding LLC	Exhibit 10.1 to the Company's Form 8-K filed July 19, 2021
10.2	Consent and Fourth Amendment to Third Amended and Restated Loan and Security Agreement, dated as of September 22, 2021, by and among Wells Fargo Capital Finance, LLC, as the arranger and administrative agent, the lenders party thereto, LSB Industries, Inc. and its subsidiaries identified on the signature pages thereto as borrowers and the Company's subsidiaries identified on the signature pages thereto as guarantors	Exhibit 10.1 to the Company's Form 8-K filed September 27, 2021
10.3(a)	Written Consent of LSB Funding, LLC approving of the incurrence of indebtedness by LSB Industries, Inc., dated September 22, 2021, provided pursuant to the Securities Exchange Agreement, dated as of July 19, 2021, between LSB Industries, Inc. and LSB Funding, LLC	
10.4	Amendment and Waiver to Board Representation and Standstill Agreement, dated as of September 27, 2021, by and among the Company, the Holder and the other parties thereto	Exhibit 10.1 to the Company's Form 8-K filed September 27, 2021
31.1(a)	Certification of Mark T. Behrman, Chief Executive Officer, pursuant to Sarbanes-Oxley Act of 2002, Section 302	
31.2(a)	Certification of Cheryl A. Maguire, Chief Financial Officer, pursuant to Sarbanes-Oxley Act of 2002, Section 302	
32.1(b)	Certification of Mark T. Behrman, Chief Executive Officer, furnished pursuant to Sarbanes-Oxley Act of 2002, Section 906	
32.2(b)	Certification of Cheryl A. Maguire, Chief Financial Officer, furnished pursuant to Sarbanes-Oxley Act of 2002, Section 906	
101.INS(a)	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.	
101.SCH(a)	Inline XBRL Taxonomy Extension Schema Document	
101.CAL(a)	Inline XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF(a)	Inline XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB(a)	Inline XBRL Taxonomy Extension Labels Linkbase Document	
101.PRE(a)	Inline XBRL Taxonomy Extension Presentation Linkbase Document	
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	

(a) Filed herewith
(b) Furnished herewith
* Management contract or compensatory plan or arrangement

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Company has caused the undersigned, duly authorized, to sign this report on its behalf on this 2nd day of November 2021.

LSB INDUSTRIES, INC.

/s/ Cheryl A. Maguire

Cheryl A. Maguire
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 10.3

LSB Funding LLC 600
Steamboat Road
Greenwich, CT 06830

September 22, 2021

LSB Industries, Inc.
3503 NW 63rd Street, Suite 500 Oklahoma City,
Oklahoma 73116 Attention: Mark Behrman

Re: Consents Pursuant to Section 4 of the Securities Exchange Agreement Dear Mr. Behrman:

Reference is made to the Securities Exchange Agreement by and between LSB Industries Inc., a Delaware corporation (the "Company"), and LSB Funding LLC, a Delaware limited liability company ("LSB Funding"), dated as of July 19, 2021 (the "Agreement"). Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to them in the Agreement.

LSB Funding hereby provides its prior written consent pursuant to Section 4.1 and Section 4.12 of the Agreement to refinance the Company's current $435,000,000 of Indebtedness in the form of secured bonds through the incurrence by the Company and its subsidiaries of up to $500,000,000 of Indebtedness in the form of secured bonds (the "New Notes") and all encumbrances on any assets of the Company or any of its subsidiaries associated therewith. The consent granted herein is conditioned upon the Company successfully negotiating the following terms, at a minimum, in its refinancing of the existing secured bonds:

(1) the tenor of the New Notes runs for at least seven (7) years from the date of issuance,
(2) the interest rate for the New Notes does not exceed six percent (6%), and
(3) terms of the New Notes allow the Company to incur unlimited additional debt so long as the Fixed Charge Coverage Ratio (as defined in the Description of Notes in the offering memorandum for the New Notes (the "Description of the Notes")) shall be equal to or greater than 2:1 and the Secured Leverage Ratio (as defined in the Description of Notes) does not exceed 5.5:1.

Nothing in this consent amends, modifies or waives any of the consent rights or any other provisions of the Agreement.

LSB Funding hereby consents to any and all actions required in connection with the preceding paragraph, which consent is provided for all purposes of Section 4.1 and Section 4.12 of the Agreement.

This consent letter shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of laws provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdictions other than those of the State of Delaware. This consent letter shall not operate as a waiver of any right, power or remedy of LSB Funding under the Agreement or affect LSB Funding's right to demand compliance with the terms and conditions of the Agreement, except as specifically consented to hereby.

[Signature page immediately follows]

Very truly yours, LSB
FUNDING LLC

By: /s/ Todd L. Boehly
Name: Todd L. Boehly
Title: Chief Executive Officer

Exhibit 31.1

CERTIFICATION

I, Mark T. Behrman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of LSB Industries, Inc. (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in this case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 2, 2021

/s/ Mark T. Behrman

Mark T. Behrman
President, Chief Executive Officer
and Director

Exhibit 31.2

CERTIFICATION

I, Cheryl A. Maguire, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of LSB Industries, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in this case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2021

/s/ Cheryl A. Maguire

Cheryl A. Maguire
Executive Vice President
and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of LSB Industries, Inc. (“LSB”) on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”). I, Mark T. Behrman, President and Chief Executive Officer of LSB, certify pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of LSB.

/s/ Mark T. Behrman
Mark T. Behrman
President, Chief Executive Officer
(Principal Executive Officer) and
Director

November 2, 2021

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of LSB Industries, Inc. (“LSB”) on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Cheryl A. Maguire, Senior Vice President and Chief Financial Officer of LSB, certify pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of LSB.

/s/ Cheryl A. Maguire
Cheryl A. Maguire
Executive Vice President
and Chief Financial Officer
(Principal Financial Officer)

November 2, 2021

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein and not for any other purpose.