CVR ENERGY INC Form 10-K March 07, 2011

#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

#### Form 10-K

(Mark One) **b** 

### ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2010

OR

o 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: 001-33492

#### **CVR Energy, Inc.**

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 2277 Plaza Drive, Suite 500 Sugar Land, Texas (Address of Principal Executive Offices) 61-1512186 (I.R.S. Employer Identification No.) 77479 (Zip Code)

Registrant s telephone number, including area code: (281) 207-3200

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

**Title of Each Class** 

Name of Each Exchange on Which Registered

The New York Stock Exchange

Common Stock, \$0.01 par value per share

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 b No o

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 o No b

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 b No o.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 or 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 and post such files). Yes o No o.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o Accelerated filer b Non-accelerated filer o Smaller reporting company o (Do not check if a smaller reporting company)

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant computed based on the New York Stock Exchange closing price on June 30, 2010 (the last day of the registrant s second fiscal quarter) was \$228,528,000.

Indicate the number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date.

Class

# Outstanding at March 2, 2011

Common Stock, par value \$0.01 per share

### **Documents Incorporated By Reference**

Document

Proxy Statement for the 2011 Annual Meeting of Stockholders to be held May 18, 2011 86,413,781 shares

**Parts Incorporated** 

Items 10, 11, 12, 13 and 14 of Part III

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#### **GLOSSARY OF SELECTED TERMS**

The following are definitions of certain industry terms used in this Form 10-K.

**2-1-1 crack spread** The approximate gross margin resulting from processing two barrels of crude oil to produce one barrel of gasoline and one barrel of distillate. The 2-1-1 crack spread is expressed in dollars per barrel.

**ammonia** Ammonia is a direct application fertilizer and is primarily used as a building block for other nitrogen products for industrial applications and finished fertilizer products.

**backwardation market** Market situation in which futures prices are lower in succeeding delivery months. Also known as an inverted market. The opposite of contango.

barrel Common unit of measure in the oil industry which equates to 42 gallons.

**blendstocks** Various compounds that are combined with gasoline or diesel from the crude oil refining process to make finished gasoline and diesel fuel; these may include natural gasoline, fluid catalytic cracking unit or FCCU gasoline, ethanol, reformate or butane, among others.

**bpd** Abbreviation for barrels per day.

bulk sales Volume sales through third party pipelines, in contrast to tanker truck quantity sales.

**capacity** Capacity is defined as the throughput a process unit is capable of sustaining, either on a calendar or stream day basis. The throughput may be expressed in terms of maximum sustainable, nameplate or economic capacity. The maximum sustainable or nameplate capacities may not be the most economical. The economic capacity is the throughput that generally provides the greatest economic benefit based on considerations such as feedstock costs, product values and downstream unit constraints.

**catalyst** A substance that alters, accelerates, or instigates chemical changes, but is neither produced, consumed nor altered in the process.

**coker unit** A refinery unit that utilizes the lowest value component of crude oil remaining after all higher value products are removed, further breaks down the component into more valuable products and converts the rest into pet coke.

**common units** The class of interests issued under the limited liability company agreements governing Coffeyville Acquisition LLC, Coffeyville Acquisition II LLC and Coffeyville Acquisition III LLC, which provide for voting rights and have rights with respect to profits and losses of, and distributions from, the respective limited liability companies.

**contango market** Market situation in which prices for future delivery are higher than the current or spot market price of the commodity. The opposite of backwardation.

**corn belt** The primary corn producing region of the United States, which includes Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, Ohio and Wisconsin.

**crack spread** A simplified calculation that measures the difference between the price for light products and crude oil. For example, the 2-1-1 crack spread is often referenced and represents the approximate gross margin resulting from

processing two barrels of crude oil to produce one barrel of gasoline and one barrel of distillate.

distillates Primarily diesel fuel, kerosene and jet fuel.

**ethanol** A clear, colorless, flammable oxygenated hydrocarbon. Ethanol is typically produced chemically from ethylene, or biologically from fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues from crops or wood. It is used in the United States as a gasoline octane enhancer and oxygenate.

**farm belt** Refers to the states of Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Texas and Wisconsin.

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**feedstocks** Petroleum products, such as crude oil and natural gas liquids, that are processed and blended into refined products, such as gasoline, diesel fuel and jet fuel, that are produced by a refinery.

**heavy crude oil** A relatively inexpensive crude oil characterized by high relative density and viscosity. Heavy crude oils require greater levels of processing to produce high value products such as gasoline and diesel fuel.

**independent petroleum refiner** A refiner that does not have crude oil exploration or production operations. An independent refiner purchases the crude oil used as feedstock in its refinery operations from third parties.

**light crude oil** A relatively expensive crude oil characterized by low relative density and viscosity. Light crude oils require lower levels of processing to produce high value products such as gasoline and diesel fuel.

**Magellan** Magellan Midstream Partners L.P., a publicly traded company whose business is the transportation, storage and distribution of refined petroleum products.

**MMBtu** One million British thermal units or Btu: a measure of energy. One Btu of heat is required to raise the temperature of one pound of water one degree Fahrenheit.

**natural gas liquids** Natural gas liquids, often referred to as NGLs, are both feedstocks used in the manufacture of refined fuels and are products of the refining process. Common NGLs used include propane, isobutane, normal butane and natural gasoline.

**PADD II** Midwest Petroleum Area for Defense District which includes Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.

**plant gate price** the unit price of fertilizer, in dollars per ton, offered on a delivered basis and excluding shipment costs.

petroleum coke (pet coke) A coal-like substance that is produced during the refining process.

refined products Petroleum products, such as gasoline, diesel fuel and jet fuel, that are produced by a refinery.

**sour crude oil** A crude oil that is relatively high in sulfur content, requiring additional processing to remove the sulfur. Sour crude oil is typically less expensive than sweet crude oil.

spot market A market in which commodities are bought and sold for cash and delivered immediately.

**sweet crude oil** A crude oil that is relatively low in sulfur content, requiring less processing to remove the sulfur. Sweet crude oil is typically more expensive than sour crude oil.

**throughput** The volume processed through a unit or a refinery or transported on a pipeline.

**turnaround** A periodically required standard procedure to inspect, refurbish, repair and maintain the refinery or nitrogen fertilizer plant assets. This process involves the shutdown and inspection of major processing units and occurs every four to five years for the refinery and every two years for the nitrogen fertilizer plant.

UAN An aqueous solution of urea and ammonium nitrate used as a fertilizer.

**wheat belt** The primary wheat producing region of the United States, which includes Oklahoma, Kansas, North Dakota, South Dakota and Texas.

**WTI** West Texas Intermediate crude oil, a light, sweet crude oil, characterized by an American Petroleum Institute gravity, or API gravity, between 39 and 41 degrees and a sulfur content of approximately 0.4 weight percent that is used as a benchmark for other crude oils.

**WTS** West Texas Sour crude oil, a relatively light, sour crude oil characterized by an API gravity of between 30 and 32 degrees and a sulfur content of approximately 2.0 weight percent.

yield The percentage of refined products that is produced from crude oil and other feedstocks.

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#### PART I

#### Item 1. Business

CVR Energy, Inc. and, unless the context otherwise requires, its subsidiaries (CVR Energy, the Company, we, us, o our) is an independent petroleum refiner and marketer of high value transportation fuels. In addition, we currently own all of the interests (other than the managing general partner interest and associated incentive distribution rights (the IDRs)) in CVR Partners, LP (the Partnership), a limited partnership which produces nitrogen fertilizers in the form of ammonia and UAN.

Our petroleum business includes a 115,000 bpd complex full coking medium-sour crude oil refinery in Coffeyville, Kansas. In addition to the refinery, we own and operate supporting businesses that include:

a crude oil gathering system with a gathering capacity of approximately 35,000 bpd serving Kansas, Oklahoma, western Missouri, and southwestern Nebraska which is supported by approximately 300 miles of Company owned and leased pipeline;

a rack marketing division supplying product through tanker trucks directly to customers located in close geographic proximity to Coffeyville and Phillipsburg, Kansas and to customers at throughput terminals on Magellan and NuStar Energy, LP s (NuStar) refined products distribution systems;

a 145,000 bpd pipeline system that transports crude oil to our refinery with 1.2 million barrels of associated company-owned storage tanks and an additional 2.7 million barrels of leased storage capacity located at Cushing, Oklahoma; and

storage and terminal facilities for refined fuels and asphalt in Phillipsburg, Kansas.

The nitrogen fertilizer business consists of a nitrogen fertilizer facility in Coffeyville, Kansas that is the only operation in North America that uses a petroleum coke, or pet coke, gasification process to produce nitrogen fertilizer (based on data provided by Blue Johnson & Associates, Inc., Blue Johnson ). The nitrogen fertilizer facility includes a 1,225 ton-per-day ammonia unit, a 2,025 ton-per-day UAN unit and a gasifier complex having a capacity of 84 million standard cubic feet per day. The nitrogen fertilizer business gasifier is a dual-train facility, with each gasifier able to function independently of the other, thereby providing redundancy and improving its reliability. A majority of the ammonia produced by the nitrogen fertilizer plant is further upgraded to UAN, which has historically commanded a premium price over ammonia.

We have two business segments: petroleum and nitrogen fertilizer. For the fiscal years ended December 31, 2010, 2009 and 2008, we generated consolidated net sales of \$4.1 billion, \$3.1 billion and \$5.0 billion, respectively, and operating income of \$93.1 million, \$208.2 million and \$148.7 million, respectively. Our petroleum business generated \$3.9 billion, \$2.9 billion and \$4.8 billion of net sales, for the years ended December 31, 2010, 2009 and 2008, respectively. Our nitrogen fertilizer business generated \$180.5 million, \$208.4 million and \$263.0 million of net sales for the years ended December 31, 2010, 2009 and 2008, respectively. Our petroleum business generated operating income of \$104.6 million, \$170.2 million and \$31.9 million for the years ended December 31, 2010, 2009 and 2008, respectively. Our nitrogen fertilizer business generated operating income of \$20.4 million, \$48.9 million and \$116.8 million for the years ended December 31, 2010, 2009 and 2008, respectively. Our consolidated results of operations include certain other unallocated corporate activities and the elimination of intercompany transactions and, therefore, are not a sum of the operating results of the petroleum and nitrogen fertilizer businesses.

# **Our History**

Our refinery, which began operations in 1906, and the nitrogen fertilizer plant, built in 2000, were operated as components of Farmland Industries, Inc. (Farmland), an agricultural cooperative, and its predecessors until March 3, 2004.

Coffeyville Resources, LLC ( CRLLC ), a subsidiary of Coffeyville Group Holdings, LLC, won a bankruptcy court auction for Farmland s petroleum business and a nitrogen fertilizer plant located in

Coffeyville, Kansas and completed the purchase of these assets on March 3, 2004. Coffeyville Group Holdings, LLC operated our business from March 3, 2004 through June 24, 2005.

On June 24, 2005, Coffeyville Acquisition LLC (CALLC), which was formed by certain funds affiliated with Goldman, Sachs & Co. and Kelso & Company, L.P. (the Goldman Sachs Funds and the Kelso Funds, respectively), acquired all of the subsidiaries of Coffeyville Group Holdings, LLC. CALLC operated our business from June 24, 2005 until CVR Energy s initial public offering in October 2007. CVR Energy was formed in September 2006 as a subsidiary of CALLC in order to consummate an initial public offering of the businesses operated by CALLC. Immediately prior to CVR Energy s initial public offering in October 2007:

CALLC transferred all of its businesses to CVR Energy in exchange for all of CVR Energy s common stock;

CALLC was effectively split into two entities, with the Kelso Funds controlling CALLC and the Goldman Sachs Funds controlling Coffeyville Acquisition II LLC ( CALLC II ) and CVR Energy s senior management receiving an equivalent position in each of the two entities;

we transferred our nitrogen fertilizer business to the Partnership in exchange for all of the partnership interests in the Partnership; and

we sold all of the interests of the managing general partner of the Partnership to Coffeyville Acquisition III LLC ( CALLC III ), an entity owned by our controlling stockholders, at that time, and senior management at fair market value on the date of the transfer.

CVR Energy consummated its initial public offering on October 26, 2007. CVR is subject to the rules and regulations of the New York Stock Exchange ( NYSE ) where its shares are traded under the symbol CVI. At December 31, 2010, approximately 40% of CVR s outstanding shares were beneficially owned by the Goldman Sachs Funds (17%) and Kelso Funds (23%). Subsequent to December 31, 2010, the Goldman Sachs Funds and Kelso Funds completed a sale of shares pursuant to a registered public offering. As a result of this offering, the Goldman Sachs Funds are no longer shareholders of the Company and the Kelso Funds beneficially own approximately 9% of the Company as of the date of this Report.

On December 20, 2010, the Partnership filed a registration statement on Form S-1 (File No. 333-171270) (the

Registration Statement ) to effect an initial public offering of its common units representing limited partner interests. The number of common units to be sold in the offering has not yet been determined. The initial public offering is subject to numerous conditions, including, without limitation, market conditions, pricing, regulatory approvals (including clearance from the Securities and Exchange Commission (SEC)), compliance with contractual obligations, and reaching agreements with underwriters and lenders. Accordingly, the initial public offering may not occur on the terms described in the Registration Statement or at all. The Registration Statement is not effective and is currently under review by the SEC. Any comments issued by the SEC could be material and could require the Partnership to make material changes to the disclosures contained in the Registration Statement and this Form 10-K. We are not making any offers to sell, or soliciting any offers to buy, common units of the Partnership.

#### Organizational Structure and Related Ownership as of March 1, 2011

The following chart illustrates our organizational structure and the organizational structure of the Partnership:

\* CVR GP, LLC, which we refer to as Fertilizer GP, is the managing general partner of CVR Partners, LP. As managing general partner, Fertilizer GP holds incentive distributions rights, or IDRs, which entitle it to receive increasing percentages of the Partnership s quarterly distributions if the Partnership increases its distributions above an amount specified in the limited partnership agreement.

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#### **Petroleum Business**

We operate a 115,000 bpd complex full coking medium-sour crude oil refinery in Coffeyville, Kansas. Our refinery s production capacity represents approximately 15% of our region s output. The facility is situated on approximately 440 acres in southeast Kansas, approximately 100 miles from Cushing, Oklahoma, a major crude oil trading and storage hub.

For the year ended December 31, 2010, our refinery s product yield included gasoline (mainly regular unleaded) (49%), diesel fuel (primarily ultra low sulfur diesel) (41%), and pet coke and other refined products such as NGC (propane, butane), slurry, sulfur and gas oil (10%).

Our petroleum business also includes the following auxiliary operating assets:

*Crude Oil Gathering System.* We own and operate a crude oil gathering system serving Kansas, Oklahoma, western Missouri and southwestern Nebraska. The system has field offices in Bartlesville, Oklahoma and Plainville and Winfield, Kansas. The system is comprised of approximately 300 miles of feeder and trunk pipelines, 95 trucks, and associated storage facilities for gathering sweet Kansas, Nebraska, Oklahoma and Missouri crude oils purchased from independent crude oil producers. We also lease a section of a pipeline from Magellan, which is incorporated into our crude oil gathering system. Our crude oil gathering system has a gathering capacity of approximately 35,000 bpd. Gathered crude oil provides a base supply of feedstock for our refinery and serves as an attractive and competitive supply of crude oil. During 2010, we gathered an average of approximately 31,000 bpd.

*Phillipsburg Terminal.* We own storage and terminalling facilities for refined fuels in Phillipsburg, Kansas. The asphalt storage and terminalling facilities are used to receive, store and redeliver asphalt for another oil company for a fee pursuant to an asphalt services agreement.

*Pipelines.* We own a proprietary pipeline system capable of transporting approximately 145,000 bpd of crude oil from Caney, Kansas to our refinery. Crude oils sourced outside of our proprietary gathering system are delivered by common carrier pipelines into various terminals in Cushing, Oklahoma, where they are blended and then delivered to Caney, Kansas via a pipeline owned by Plains Pipeline L.P. (Plains). We also own associated crude oil storage tanks with a capacity of approximately 1.2 million barrels located outside our refinery.

Our refinery s complexity allows us to optimize the yields (the percentage of refined product that is produced from crude oil and other feedstocks) of higher value transportation fuels (gasoline and diesel). Complexity is a measure of a refinery s ability to process lower quality crude oil in an economic manner. As a result of key investments in our refining assets, our refinery s complexity score has increased to 12.9 from 12.2, and we have achieved significant increases in our refinery crude oil throughput rate over historical levels. Our higher complexity provides us the flexibility to increase our refining margin over comparable refiners with lower complexities.

### Feedstocks Supply

Our refinery has the capability to process blends of a variety of crude oil ranging from heavy sour to light sweet crude oil. Currently, our refinery processes crude oil from a broad array of sources. We have access to foreign crude oil from Latin America, South America, West Africa, the Middle East, the North Sea and Canada. We purchase domestic crude oil from Kansas, Oklahoma, Nebraska, Texas, North Dakota, Missouri, and offshore deepwater Gulf of Mexico production. While crude oil has historically constituted over 90% of our feedstock inputs during the last five years, other feedstock inputs include normal butane, natural gasoline, alky feed, naphtha, gas oil and vacuum tower bottoms.

Crude oil is supplied to our refinery through our wholly-owned gathering system and by pipeline. We have continued to increase the number of barrels of crude oil supplied through our crude oil gathering system in 2010 and it now has the capacity of supplying approximately 35,000 bpd of crude oil to the refinery. For 2010, the gathering system supplied approximately 27% of the refinery s crude oil demand. Locally produced crude oils are delivered to the refinery at a discount to WTI, and although slightly heavier and more sour,

offer good economics to the refinery. These crude oils are light and sweet enough to allow us to blend higher percentages of lower cost crude oils such as heavy sour Canadian crude oil while maintaining our target medium sour blend with an API gravity of between 28 and 36 degrees and between 0.9% and 1.2% sulfur. Crude oils sourced outside of our proprietary gathering system are delivered to Cushing, Oklahoma by various pipelines including Seaway, Basin and Spearhead and subsequently to Coffeyville via the Plains pipeline and our own 145,000 bpd proprietary pipeline system. Beginning in March 2011, crude oils were also delivered through the Keystone pipeline.

For the year ended December 31, 2010, our crude oil supply blend was comprised of approximately 79% light sweet crude oil, 7% medium/light sour crude oil and 14% heavy sour crude oil. The light sweet crude oil includes our locally gathered crude oil.

For 2010, we obtained approximately 73% of the crude oil for our refinery, under a Crude Oil Supply Agreement, as amended (the Supply Agreement ) with Vitol Inc. (Vitol) that expires December 31, 2012. Under the Supply Agreement, Vitol supplies us with crude oil and intermediation logistics, which helps us reduce our inventory position and mitigate crude oil pricing risk.

### Marketing and Distribution

We focus our petroleum product marketing efforts in the central mid-continent and Rocky Mountain areas because of their relative proximity to our refinery and their pipeline access. We engage in rack marketing, which is the supply of product through tanker trucks directly to customers located in close geographic proximity to our refinery and Phillipsburg terminal and to customers at throughput terminals on Magellan s and NuStar s refined products distribution systems. For the year ended December 31, 2010, approximately 36% of the refinery s products were sold through the rack system directly to retail and wholesale customers while the remaining 64% was sold through pipelines via bulk spot and term contracts. We make bulk sales (sales into third party pipelines) into the mid-continent markets via Magellan and into Colorado and other destinations utilizing the product pipeline networks owned by Magellan, Enterprise Products Operating, L.P. (Enterprise ) and NuStar.

### Customers

Customers for our petroleum products include other refiners, convenience store companies, railroads and farm cooperatives. We have bulk term contracts in place with many of these customers, which typically extend from a few months to one year in length. For the year ended December 31, 2010, QuikTrip Corporation and Growmark, Inc. accounted for approximately 14% and 11%, respectively, of our petroleum business sales and approximately 66% of our petroleum sales were made to our ten largest customers. We sell bulk products based on industry market related indices such as Platts, Oil Price Information Service (OPIS) or at a spot market price based on a Group 3 differential to the New York Mercantile Exchange (NYMEX). Through our rack marketing division, the rack sales are at daily posted prices which are influenced by the NYMEX, competitor pricing and Group 3 spot market differentials.

# Competition

Our petroleum business competes primarily on the basis of price, reliability of supply, availability of multiple grades of products and location. The principal competitive factors affecting our refining operations are cost of crude oil and other feedstock costs, refinery complexity, refinery efficiency, refinery product mix and product distribution and transportation costs. The location of our refinery provides us with a reliable supply of crude oil and a transportation cost advantage over our competitors. We primarily compete against seven refineries operated in the mid-continent region. In addition to these refineries, our crude oil refinery in Coffeyville, Kansas competes against trading companies, as well as other refineries located outside the region that are linked to the mid-continent market through an extensive product pipeline system. These competitors include refineries located near the U.S. Gulf Coast and the

Texas panhandle region. Our refinery competition also includes branded, integrated and independent oil refining companies, such as BP, Conoco Phillips, Frontier, Gary-Williams, Holly, NCRA, Valero and Shell.

#### Seasonality

Our petroleum business experiences seasonal effects as demand for gasoline products is generally higher during the summer months than during the winter months due to seasonal increases in highway traffic and road construction work. Demand for diesel fuel during the winter months also decreases due to winter agricultural work declines. As a result, our results of operations for the first and fourth calendar quarters are generally lower than for those for the second and third calendar quarters. In addition, unseasonably cool weather in the summer months and/or unseasonably warm weather in the winter months in the markets in which we sell our petroleum products can impact the demand for gasoline and diesel fuel.

#### **Nitrogen Fertilizer Business**

The nitrogen fertilizer business operates the only nitrogen fertilizer plant in North America that utilizes a pet coke gasification process to produce nitrogen fertilizer.

### Raw Material Supply

The nitrogen fertilizer facility s primary input is pet coke. During the past five years, over 70% of the nitrogen fertilizer business pet coke requirements on average were supplied by our adjacent crude oil refinery. Historically the nitrogen fertilizer business has obtained the remainder of its pet coke requirements from third parties such as other Midwestern refineries or pet coke brokers at spot prices. If necessary, the gasifier can also operate on low grade coal as an alternative, which provides an additional raw material source. There are significant supplies of low grade coal within a 60-mile radius of the nitrogen fertilizer plant.

Pet coke is produced as a by-product of the refinery s coker unit process. In order to refine heavy or sour crude oils, which are lower in cost and more prevalent than higher quality crude oil, refiners use coker units which enable refiners to further upgrade heavy crude oil.

The nitrogen fertilizer business plant is located in Coffeyville, Kansas, which is part of the Midwest pet coke market. The Midwest pet coke market is not subject to the same level of pet coke price variability as is the Gulf Coast pet coke market. Given the fact that the majority of the nitrogen fertilizer business pet coke suppliers are located in the Midwest, the nitrogen fertilizer business geographic location gives it a significant freight cost advantage over its Gulf Coast pet coke market competitors.

Linde, Inc. (Linde) owns, operates, and maintains the air separation plant that provides contract volumes of oxygen, nitrogen, and compressed dry air to the gasifier for a monthly fee. The nitrogen fertilizer business provides and pays for all utilities required for operation of the air separation plant. The agreement with Linde expires in 2020.

The nitrogen fertilizer business imports start-up steam for the nitrogen fertilizer plant from our crude oil refinery, and then exports steam back to the crude oil refinery once all units in the nitrogen fertilizer plant are in service. Monthly charges and credits are recorded with steam valued at the natural gas price for the month.

### Nitrogen Production and Plant Reliability

The nitrogen fertilizer plant was completed in 2000 and, based upon data supplied by Blue Johnson, is the newest nitrogen fertilizer plant built in North America. The nitrogen fertilizer plant has two separate gasifiers to provide redundancy and reliability. The plant uses a gasification process to convert pet coke to high purity hydrogen for subsequent conversion to ammonia. The nitrogen fertilizer plant is capable of processing approximately 1,400 tons per day of pet coke from our crude oil refinery and third party sources and converting it into approximately 1,225 tons per

day of ammonia. A majority of the ammonia is converted to approximately 2,025 tons per day of UAN. Typically 0.41 tons of ammonia is required to produce one ton of UAN.

The nitrogen fertilizer business schedules and provides routine maintenance to its critical equipment using its own maintenance technicians. Pursuant to a Technical Services Agreement with General Electric, which licenses the gasification technology to the nitrogen fertilizer business, General Electric experts provide

technical advice and technological updates from their ongoing research as well as other licensees operating experiences. The pet coke gasification process is licensed from General Electric pursuant to a license agreement that is fully paid. The license grants the nitrogen fertilizer business perpetual rights to use the pet coke gasification process on specified terms and conditions.

### Distribution, Sales and Marketing

The primary geographic markets for the nitrogen fertilizer business fertilizer products are Kansas, Missouri, Nebraska, Iowa, Illinois, Colorado and Texas. The nitrogen fertilizer business markets the ammonia products to industrial and agricultural customers and the UAN products to agricultural customers. The demand for nitrogen fertilizers occurs during three key periods. The highest level of ammonia demand is traditionally in the spring pre-plant period, from March through May. The second-highest period of demand occurs during fall pre-plant period in late October and November. The summer wheat pre-plant period occurs in August and September. In addition, smaller quantities of ammonia are sold in the off-season to fill available storage at the dealer level.

Ammonia and UAN are distributed by truck or by railcar. If delivered by truck, products are sold on a freight-on-board basis, and freight is normally arranged by the customer. The nitrogen fertilizer business leases a fleet of railcars for use in product delivery. The nitrogen fertilizer business also negotiates with distributors that have their own leased railcars to utilize these assets to deliver products. The nitrogen fertilizer business owns all of the truck and rail loading equipment at our nitrogen fertilizer facility. The nitrogen fertilizer business operates two truck loading and four rail loading racks for each of ammonia and UAN, with an additional four rail loading racks for UAN.

The nitrogen fertilizer business markets agricultural products to destinations that produce the best margins for the business. The UAN market is primarily located near the Union Pacific Railroad lines or destinations that can be supplied by truck. The ammonia market is primarily located near the Burlington Northern Santa Fe or Kansas City Southern Railroad lines or destinations that can be supplied by truck. By securing this business directly, the nitrogen fertilizer business reduces its dependence on distributors serving the same customer base, which enables the nitrogen fertilizer business to capture a larger margin and allows it to better control its product distribution. Most of the agricultural sales are made on a competitive spot basis. The nitrogen fertilizer business also offers products on a prepay basis for in-season demand. The heavy in-season demand periods are spring and fall in the corn belt and summer in the wheat belt. The wheat belt is the primary wheat producing region of the United States, which includes Kansas, North Dakota, Oklahoma, South Dakota and Texas. Some of the industrial sales are spot sales, but most are on annual or multi-year contracts.

The nitrogen fertilizer business uses forward sales of fertilizer products to optimize its 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 it proposes. The nitrogen fertilizer business uses this program to varying degrees during the year and between years depending on market conditions and has the flexibility to increase or decrease forward sales depending on management s view as to whether price environments will be increasing or decreasing. Fixing the selling prices of nitrogen fertilizer business reported selling prices and margins to differ from spot market prices and margins available at the time of shipment. Cash received as a result of prepayments is recognized on the balance sheet upon receipt along with a corresponding liability. Revenue, associated with prepaid sales, is recognized at the time the product is delivered to the customer.

### Customers

The nitrogen fertilizer business sells ammonia to agricultural and industrial customers. Based upon a three-year average, the nitrogen fertilizer business has sold approximately 87% of the ammonia it produces to agricultural

customers primarily located in the mid-continent area between North Texas and Canada, and approximately 13% to industrial customers. Agricultural customers include distributors such as MFA, United Suppliers, Inc., Brandt Consolidated Inc., Gavilon Fertilizers LLC, Transammonia, Inc., Agri Services

of Brunswick, LLC, Interchem, and CHS Inc. Industrial customers include Tessenderlo Kerley, Inc., National Cooperative Refinery Association, and Dyno Nobel, Inc. The nitrogen fertilizer business sells UAN products to retailers and distributors. Given the nature of its business, and consistent with industry practice, the nitrogen fertilizer business does not have long-term minimum purchase contracts with any of its customers.

For the years ended December 31, 2010, 2009 and 2008, the top five ammonia customers in the aggregate represented 44.2%, 43.9% and 54.7% of the nitrogen fertilizer business ammonia sales, respectively, and the top five UAN customers in the aggregate represented 43.3%, 44.2% and 37.2% of the nitrogen fertilizer business UAN sales, respectively. Approximately 12%, 15% and 13% of the nitrogen fertilizer business aggregate sales for the years ended December 31, 2010, 2009, and 2008, respectively, were made to Gavilon Fertilizers LLC. Additionally, approximately 10% of the nitrogen fertilizer business aggregate sales for the year ended December 31, 2010 were made to United Suppliers, Inc.

# Competition

Competition in the nitrogen fertilizer industry is dominated by price considerations. However, during the spring and fall application seasons, farming activities intensify and delivery capacity is a significant competitive factor. The nitrogen fertilizer business maintains a large fleet of leased rail cars and seasonally adjusts inventory to enhance its manufacturing and distribution operations.

Domestic competition, mainly from regional cooperatives and integrated multinational fertilizer companies, is intense due to customers sophisticated buying tendencies and production strategies that focus on cost and service. Also, foreign competition exists from producers of fertilizer products manufactured in countries with lower cost natural gas supplies. In certain cases, foreign producers of fertilizer who export to the United States may be subsidized by their respective governments. The nitrogen fertilizer business major competitors include Agrium, Koch Nitrogen, Potash Corporation and CF Industries.

Based on Blue Johnson data regarding total U.S. demand for UAN and ammonia, we estimate that the nitrogen fertilizer plant s UAN production in 2010 represented approximately 5.1% of the total U.S. demand and that the net ammonia produced and marketed at Coffeyville represented less than 1% of the total U.S. demand.

### Seasonality

Because the nitrogen fertilizer business primarily sells agricultural commodity products, its business is exposed to seasonal fluctuations in demand for nitrogen fertilizer products in the agricultural industry. As a result, the nitrogen fertilizer business typically generates greater net sales in the first half of each calendar year, which we refer to as the planting season, and our net sales tend to be lower during the second half of each calendar year, which we refer to as the fill season. In addition, the demand for fertilizers is affected by the aggregate crop planting decisions and fertilizer application rate decisions of individual farmers who make planting decisions based largely on the prospective profitability of a harvest. The specific varieties and amounts of fertilizer they apply depend on factors like crop prices, farmers current liquidity, soil conditions, weather patterns and the types of crops planted.

### **Environmental Matters**

The petroleum and nitrogen fertilizer businesses are subject to extensive and frequently changing federal, state and local, environmental and health and safety laws and regulations governing the emission and release of hazardous substances into the environment, the treatment and discharge of waste water, the storage, handling, use and transportation of petroleum and nitrogen products, and the characteristics and composition of gasoline and diesel fuels. These laws and regulations, their underlying regulatory requirements and the enforcement thereof impact our

petroleum business and operations and the nitrogen fertilizer business and operations by imposing:

restrictions on operations or the need to install enhanced or additional controls;

the need to obtain and comply with permits and authorizations;

liability for the investigation and remediation of contaminated soil and groundwater at current and former facilities (if any) and off-site waste disposal locations; and

specifications for the products marketed by our petroleum business and the nitrogen fertilizer business, primarily gasoline, diesel fuel, UAN and ammonia.

Our operations require numerous permits and authorizations. Failure to comply with these permits or environmental laws generally could result in fines, penalties or other sanctions or a revocation of our permits. In addition, the laws and regulations to which we are subject are often evolving and many of them have become more stringent or have become subject to more stringent interpretation or enforcement by federal or state agencies. The ultimate impact on our business of complying with evolving laws and regulations is not always clearly known or determinable due in part to the fact that our operations may change over time and certain implementing regulations for laws, such as the federal Clean Air Act, have not yet been finalized, are under governmental or judicial review or are being revised. These laws and regulations could result in increased capital, operating and compliance costs.

The principal environmental risks associated with our businesses are outlined below.

### The Federal Clean Air Act

The federal Clean Air Act and its implementing regulations, as well as the corresponding state laws and regulations that regulate emissions of pollutants into the air, affect our petroleum operations and the nitrogen fertilizer business both directly and indirectly. Direct impacts may occur through the federal Clean Air Act s permitting requirements and/or emission control requirements relating to specific air pollutants, as well as the requirement to maintain a risk management program to help prevent accidental releases, of certain hazardous substances. The federal Clean Air Act indirectly affects our petroleum operations and the nitrogen fertilizer business by extensively regulating the air emissions of sulfur dioxide (SQ), volatile organic compounds, nitrogen oxides and other compounds, including those emitted by mobile sources, which are direct or indirect users of our products.

Some or all of the standards promulgated pursuant to the federal Clean Air Act, or any future promulgations of standards, may require the installation of controls or changes to our petroleum operations or the nitrogen fertilizer facilities in order to comply. If new controls or changes to operations are needed, the costs could be significant. These new requirements, other requirements of the federal Clean Air Act, or other presently existing or future environmental regulations could cause us to expend substantial amounts to comply and/or permit our facilities to produce products that meet applicable requirements.

The regulation of air emissions under the federal Clean Air Act requires that we obtain various construction and operating permits and incur capital expenditures for the installation of certain air pollution control devices at our petroleum and nitrogen fertilizer operations when regulations change or we add new or modify our equipment. Various regulations specific to our operations have been implemented, such as National Emission Standard for Hazardous Air Pollutants, New Source Performance Standards and New Source Review/Prevention of Significant Deterioration (NSR). We have incurred, and expect to continue to incur, substantial capital expenditures to maintain compliance with these and other air emission regulations that have been promulgated or may be promulgated or revised in the future.

In March 2004, Coffeyville Resources Refining & Marketing, LLC (CRRM) and Coffeyville Resources Terminal, LLC (CRT) entered into a Consent Decree (the Consent Decree) with the U.S Environmental Protection Agency (the EPA) and the Kansas Department of Health and Environment (the KDHE) to resolve air compliance concerns raised by the EPA and KDHE related to Farmland s prior ownership and operation of our crude oil refinery and Phillipsburg

terminal facilities. As a result of an agreement to install certain controls and implement certain operational changes, the EPA and KDHE agreed not to impose civil penalties, and provided a release from liability for Farmland s alleged noncompliance with the issues addressed by the Consent Decree. Under the Consent Decree, CRRM agreed to install controls to reduce emissions of  $SO_2$ , nitrogen oxides and particulate matter from its fluid catalytic cracking unit (FCCU) by January 1, 2011. In addition, pursuant to the Consent Decree, CRRM and CRT assumed cleanup obligations at the

Coffeyville refinery and the Phillipsburg terminal facilities. The remaining costs of complying with the Consent Decree are expected to be approximately \$49 million, of which approximately \$47 million is expected to be capital expenditures which does not include the cleanup obligations for historic contamination at the site that are being addressed pursuant to administrative orders issued under the Resource Conservation and Recovery Act (RCRA). To date, CRRM and CRT have materially complied with the Consent Decree. On June 30, 2009, CRRM submitted a force majeure notice to the EPA and KDHE in which CRRM indicated that it may be unable to meet the Consent Decree s January 1, 2011 deadline related to the installation of controls on the FCCU because of delays caused by the June/July 2007 flood. In February 2010, CRRM and the EPA agreed to a fifteen month extension of the January 1, 2011, deadline for the installation of controls which was approved by the Court as a material modification to the existing Consent Decree. Pursuant to this agreement, CRRM would offset any incremental emissions resulting from the delay by providing additional controls to existing emission sources over a set timeframe.

In the meantime, CRRM has been negotiating with the EPA and KDHE to replace the current Consent Decree, including the fifteen month extension, with a global settlement under the national petroleum refining initiative. Over the course of the last decade, the EPA has embarked on a national Petroleum Refining Initiative alleging industry-wide noncompliance with four marquee issues under the Clean Air Act: New Source Review, Flaring, Leak Detection and Repair, and Benzene Waste Operations NESHAP. The Petroleum Refining Initiative has resulted in most refiners entering into consent decrees imposing civil penalties and requiring substantial expenditures for pollution control and enhanced operating procedures. The EPA has indicated that it will seek to have all refiners enter into global settlements pertaining to all marquee issues. Our current Consent Decree covers some, but not all, of the marquee issues. We have been negotiating with EPA about expanding our existing Consent Decree obligations to include all of the marquee issues under the Petroleum Refining Initiative and agreement in principle on most of the issues, including an agreement to further delay the installation of controls on the FCCU. Under the global settlement, we may be required to pay a civil penalty, but our incremental capital expenditures would not be material and would be limited primarily to the retrofit and replacement of heaters and boilers over a five to seven year timeframe.

# **Release Reporting**

Our facilities periodically experience releases of hazardous substances and extremely hazardous substances. If we fail to properly report the release or if the release violates the law or our permits, it could cause us to become the subject of a government enforcement action or third party claims. For example, the nitrogen fertilizer facility periodically experiences minor releases of hazardous and extremely hazardous substances from our equipment. It experienced more significant releases in August 2007 due to the failure of a high pressure pump and in August and September 2010 due to a heat exchanger leak and a UAN vessel rupture. Such releases are reported to the EPA and relevant state and local agencies. Government enforcement or third party claims relating to releases of hazardous or extremely hazardous substances could result in significant expenditures and liability.

The release of hazardous substances or extremely hazardous substances into the environment is subject to release reporting requirements under federal and state environmental laws. On February 24, 2010, we received a letter from the United States Department of Justice on behalf of the EPA seeking a \$900,000 penalty under the Comprehensive Environmental Response, Compensation, and Liability Act and the Emergency Planning and Community Right to Know Act related to alleged late and incomplete reporting of air releases by CRRM that occurred between June 13, 2004 and April 10, 2008. The Company has reviewed and intends to contest these allegations. In the interim, we have entered into a tolling agreement relating to EPA s allegations.

# Fuel Regulations

*Tier II, Low Sulfur Fuels.* In February 2000, the EPA promulgated the Tier II Motor Vehicle Emission Standards Final Rule for all passenger vehicles, establishing standards for sulfur content in gasoline that were required to be met by 2006. In addition, in January 2001, the EPA promulgated its on-road diesel regulations, which required a 97% reduction in the sulfur content of diesel fuel sold for highway use by June 1, 2006, with full compliance by January 1, 2010.

In February 2004, the EPA granted us approval under a hardship waiver that deferred meeting final Ultra Low Sulfur Gasoline (ULSG) standards until January 1, 2011 in exchange for our meeting Ultra Low Sulfur Diesel (ULSD) requirements by January 1, 2007. We completed all the requirements of our waiver by February 28, 2011.

As a result of the 2007 flood, our refinery exceeded the annual average sulfur standard mandated by our hardship waiver. The EPA agreed to modify certain provisions of our hardship waiver, which gave CRRM short-term flexibility on sulfur content and we agreed to meet the final ULSG annual average standard in 2010. We met the required sulfur standards under our hardship waiver for 2010.

### Mobile Source Air Toxic II Emissions

In 2007, the EPA promulgated the Mobile Source Air Toxic II (MSAT II) rule that requires the reduction of benzene in gasoline by 2011. CRRM is considered a small refiner under the MSAT II rule and compliance with the rule is extended until 2015 for small refiners. Capital expenditures to comply with the rule are expected to be approximately \$10.0 million.

### **Renewable Fuel Standards**

In February 2010, the EPA finalized changes to the Renewable Fuel Standards (RFS) which require the total volume of renewable transportation fuels sold or introduced in the U.S. to reach 12.95 billion gallons in 2010 and rise to 36 billion gallons by 2022. Due to mandates in the RFS2 requiring increasing volumes of renewable fuels to replace petroleum products in the U.S. motor fuel market, there may be a decrease in demand for petroleum products. In addition, CRRM may be impacted by increased capital expenses and production costs to accommodate mandated renewable fuel volumes to the extent that these increased costs cannot be passed on to the consumers. CRRM s small refiner status under the RFS expired on December 31, 2010. Beginning on January 1, 2011, CRRM will be required to blend renewable fuels into its gasoline and diesel fuel or purchase renewable energy credits, known as Renewable Identification Numbers (RINs), in lieu of blending.

# Greenhouse Gas Emissions

Currently, various legislative and regulatory measures to address greenhouse gas emissions (including carbon dioxide (CQ), methane and nitrous oxides) are in various phases of discussion or imple