

PART I

Items 1 and 2. *Business and Properties*

General

Plains GP Holdings, L.P. is a publicly traded Delaware limited partnership that has elected to be taxed as a corporation for United States federal income tax purposes. PAGP's Class A shares are listed on the Nasdaq Global Select Market ("Nasdaq") under the ticker symbol "PAGP." PAGP does not directly own any operating assets; as of December 31, 2022, its sole source of cash flow is derived from an indirect investment in Plains All American Pipeline, L.P. ("PAA"), a publicly traded Delaware limited partnership, through its limited partner interest in Plains AAP, L.P. ("AAP"). We also own a 100% managing member interest in Plains All American GP LLC ("GP LLC"), a Delaware limited liability company that holds the non-economic general partner interest in AAP.

PAA's business model integrates large-scale supply aggregation capabilities with the ownership and operation of critical midstream infrastructure systems that connect major producing regions to key demand centers and export terminals. As one of the largest midstream service providers in North America, PAA owns an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and natural gas liquids ("NGL") producing basins (including the Permian Basin) and transportation corridors and at major market hubs in the United States and Canada. PAA's assets and the services it provides are primarily focused on crude oil and NGL.

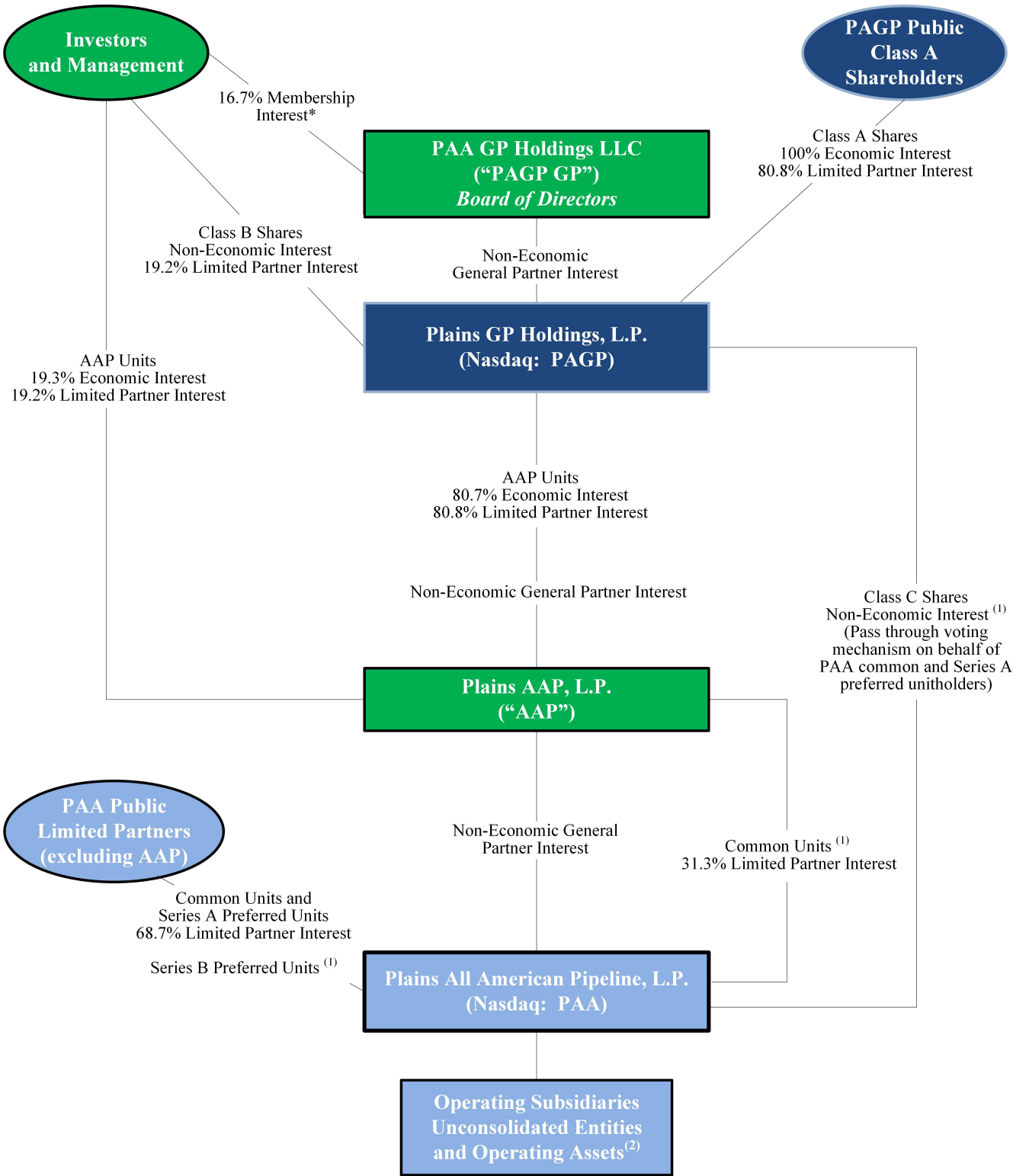
PAA's business is based on the fundamental thesis that hydrocarbons are essential to the security and advancement of human quality of life and will continue to play a major long-term role in the world economy. We further believe that midstream energy infrastructure provides a critical link between energy supply and demand, and is fundamental to the maintenance and advancement of our modern-day standard of living. Acknowledging the need for multiple forms of energy to meet growing world-wide demand, we believe absolute hydrocarbon demand will increase over time, driven by global population growth and a desire to improve quality of life in lesser developed countries throughout the world. Furthermore, we believe existing energy infrastructure will play a critical role in supporting emerging energy and energy transition initiatives. As a result, we believe that midstream energy infrastructure will remain a critical and valuable component of the energy industry value chain.

PAA's assets are owned, and its operations are conducted, directly and indirectly through its primary operating subsidiaries. As used in this Form 10-K and unless the context indicates otherwise (taking into account the fact that PAGP has no operating activities apart from those conducted by PAA and its subsidiaries), the terms "Partnership," "Plains," "we," "us," "our," "ours" and similar terms refer to PAGP and its subsidiaries.

References to the "PAGP Entities" include PAA GP Holdings LLC ("PAGP GP"), PAGP, GP LLC, AAP and PAA GP LLC ("PAA GP"). References to the "Plains Entities" include the PAGP Entities and PAA and its subsidiaries.

Organizational Structure

The diagram below shows our organizational structure as of December 31, 2022 in a summarized format:



* The remaining 83.3% membership interest in PAGP GP is owned by PAGP.

- (1) Each Class C share represents a non-economic limited partner interest in us. The number of Class C shares that PAA owns is equal to the number of outstanding PAA common units and Series A Preferred units (“PAA Common Unit Equivalents”) that are entitled to vote, pro rata with the holders of our Class A and Class B shares, for the election of eligible PAGP GP directors. Thus, the Class C shares function as a “pass-through” voting mechanism through which PAA votes at the direction of and as proxy for the PAA common unitholders and Series A preferred unitholders in such director elections. PAA common units held by AAP and PAA Series B preferred units are not entitled to vote in the election of directors.
- (2) PAA holds (i) direct and indirect ownership interests in consolidated operating subsidiaries including, but not limited to, Plains Marketing, L.P., Plains Pipeline, L.P., Plains Midstream Canada ULC (“PMCULC”), Plains Oryx Permian Basin LLC (the “Permian JV”), Cactus II Pipeline LLC (“Cactus II”) and Red River Pipeline Company LLC (“Red River”) and (ii) indirect equity interests in unconsolidated entities including, but not limited to, BridgeTex Pipeline Company, LLC, Capline Pipeline Company LLC, Diamond Pipeline LLC, Eagle Ford Pipeline LLC, Eagle Ford Terminals Corpus Christi LLC, Saddlehorn Pipeline Company, LLC, White Cliffs Pipeline, L.L.C. and Wink to Webster Pipeline LLC.

Our Business Strategy

Unless we directly acquire and hold assets or businesses in the future, our cash flows will be generated solely from the cash distributions we receive on the Class A units of AAP (“AAP units”) we own. AAP currently receives all of its cash flows from distributions on the PAA common units it owns.

Accordingly, our primary business objective is to increase our cash available for distribution to our Class A shareholders through the execution by PAA of its business strategy. In addition, we may facilitate PAA’s growth activities through various means, including, but not limited to, making loans, purchasing equity interests or providing other forms of financial support to PAA.

We maintain a one-to-one relationship between our Class A shares and the underlying PAA common units in which we have an indirect economic interest through our ownership interest in AAP (referred to as “Economic Parity”), such that the number of our outstanding Class A shares equals the number of AAP units we own, which in turn equals the number of PAA common units held by AAP attributable to our ownership interest in AAP.

PAA’s Business Strategy

PAA’s principal business strategy is to provide competitive and efficient midstream infrastructure and logistics services to producers, refiners and other customers. PAA strives to address regional supply and demand imbalances for crude oil and NGL in the United States and Canada by combining the strategic location and capabilities of its transportation, terminalling, storage, processing and fractionation assets with its commercial expertise. PAA intends to execute its strategy by:

- Focusing on operational excellence, continuous improvement and running a safe, reliable, and environmentally and socially responsible operation;
- Using its well positioned network of midstream infrastructure in conjunction with its commercial capabilities to provide its customers with market access, flexibility and value chain solutions, capture market opportunities, address physical market imbalances, mitigate risks and generate and grow sustainable cash flow and margin;
- Optimizing and enhancing its asset portfolio and operations (through disciplined and accretive capital investments and through the pursuit of emerging energy opportunities) to maximize returns on invested capital; and
- Pursuing a balanced, long-term financial strategy that is focused on maintaining an investment grade credit profile and enhancing financial flexibility by making disciplined capital allocation decisions.

We believe PAA’s successful execution of this strategy will enable it to generate and grow sustainable earnings and cash flow, and will position PAA to maintain an investment grade credit profile and increase returns to equity holders over time, while also continuing to migrate leverage lower.

PAA’s Competitive Strengths

We believe that the following competitive strengths position PAA to successfully execute its principal business strategy:

- *PAA owns a strategically located, geographically diverse and interconnected large-scale asset base that provides operational flexibility and commercial optionality.* The majority of PAA's primary transportation assets are in crude oil service, are located in well-established crude oil producing regions (with PAA's largest asset presence in the Permian Basin) and other transportation corridors and are connected, directly or indirectly, with PAA's terminals and facilities assets. The majority of PAA's terminals and facilities assets are located at major trading locations and premium markets that serve as gateways to major North American refinery and distribution markets and key export terminals where PAA has strong business relationships. In addition, PAA's pipeline, rail, truck and storage assets provide PAA's customers and PAA with significant flexibility and optionality to satisfy demand and balance markets, and participate in emerging energy opportunities.
- *PAA's full-service integrated model and long-term focus attracts a broad, diverse and high-quality customer base that supports sustainable fee-based cash flow generation.* PAA's strategically located and interconnected asset base enables it to provide its customers with a wide variety of services, including supply aggregation, quality segregation, flow assurance and market access. PAA focuses on building long-term relationships and alignment of interests with its customers. PAA believes this approach has helped it build a high-quality portfolio of customers and contracts (including long-term, third-party transportation contracts and acreage dedication contracts) that provide long-term volume support for its assets and, in turn, support long-term fee-based cash flow generation from its assets.
- *PAA possesses specialized crude oil and NGL market knowledge.* We believe PAA's business relationships with participants in various phases of the crude oil and NGL distribution chain, from producers to refiners, as well as PAA's own industry expertise (including PAA's knowledge of North American crude oil and NGL flows), provide PAA with extensive market insight and an understanding of the North American physical crude oil and NGL markets that enables PAA to provide value chain solutions for its customers.
- *PAA's merchant activities provide it with the opportunity to realize incremental margins.* We believe the variety of its merchant activities provides PAA with a low-risk opportunity to generate incremental margin, the amount of which may vary depending on market conditions (such as differentials and certain competitive factors).
- *PAA has the financial, strategic and technical skills needed to execute strategic transactions that support its business and financial objectives, including joint ventures, joint ownership arrangements, acquisitions and divestitures.* Since 2016 through December 31, 2022, PAA has consummated over 10 joint venture and/or joint ownership arrangements, including the Permian JV formation completed in October 2021, and completed more than \$4.6 billion of divestitures of non-core assets and/or strategic sales of partial interests in selected assets.
- *PAA has an experienced management team whose interests are aligned with those of its equity holders.* PAA's executive management team has an average of 30+ years of experience spanning across all sectors of the energy industry, as well as investment banking, and an average of over 15 years of experience with PAA or its predecessors and affiliates. In addition, through their ownership of PAA equity interests and grants of long-term equity incentive awards, PAA's management team has a vested interest in PAA's continued success that is aligned with the interests of PAA's equity holders.

Our Financial Strategy

Our financial strategy is designed to be complementary to PAA's financial and business strategies. Our only cash-generating assets consist of our limited partner interest in AAP, which currently receives all of its cash flows from distributions on the PAA common units it owns.

We have entered into an Omnibus Agreement with the Plains Entities which provides for (i) our ability to issue additional Class A shares and use the net proceeds therefrom to purchase a like number of AAP units from AAP, and the corresponding ability of AAP to use the net proceeds therefrom to purchase a like number of PAA common units from PAA and (ii) our ability to lend proceeds of any future indebtedness we incur to AAP, and AAP's corresponding ability to lend such proceeds to PAA, in each case on substantially the same terms as we incur.

Accordingly, we may access the equity capital markets from time to time to enhance the financial position of PAA and its ability to compete for incremental capital opportunities (including organic investments and third-party acquisitions) to drive future growth. We currently do not intend to incur any indebtedness in the near term. We would expect to fund direct acquisitions made by us, if any, with a combination of debt and equity.

PAA's Financial Strategy

PAA's financial strategy and long-term capital allocation framework is focused on generating meaningful multi-year free cash flow and improving shareholder returns by (i) increasing returns of capital to equity holders, primarily through increased distributions, (ii) making disciplined accretive investments and (iii) maintaining an investment grade credit profile and ensuring balance sheet flexibility. Since the completion of its initial public offering in 1998, PAA has completed and integrated over 100 acquisitions with an aggregate purchase price of approximately \$14.0 billion, implemented investment capital projects totaling approximately \$17.3 billion, returned \$17.2 billion to its equity holders, primarily in the form of distributions, and enhanced its credit rating to investment grade from non-investment grade.

Targeted Credit Profile

As part of PAA's financial strategy, it intends to maintain a credit profile that it believes is consistent with investment grade credit ratings. PAA targets a credit profile with the following attributes:

- a leverage multiple averaging between 3.75x to 4.25x, which is calculated as total debt plus 50% of preferred units, divided by Adjusted EBITDA attributable to PAA (this is roughly equivalent to a long-term debt-to-Adjusted EBITDA attributable to PAA multiple of between 3.0x and 3.5x);
- an average long-term debt-to-total capitalization ratio of approximately 50% or less;
- an average total debt-to-total capitalization ratio of approximately 60% or less; and
- an average Adjusted EBITDA-to-interest coverage multiple of approximately 3.3x or better.

See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Non-GAAP Financial Measures" for our definition of Adjusted EBITDA and a reconciliation to Adjusted EBITDA attributable to PAA.

At December 31, 2022, PAA's publicly-traded senior notes comprised approximately 99% of its long-term debt. Additionally, PAA also routinely incurs short-term debt primarily in connection with its merchant activities that involve the simultaneous purchase and forward sale of crude oil and NGL. The crude oil and NGL purchased in these transactions are volumetrically hedged. These borrowings are self-liquidating as they are repaid with sales proceeds. PAA also incurs short-term debt to fund New York Mercantile Exchange ("NYMEX") and Intercontinental Exchange ("ICE") margin requirements. In certain market conditions, these routine short-term debt levels may increase above baseline levels. Similar to PAA's working capital borrowings, these borrowings are self-liquidating. PAA does not consider the working capital borrowings or margin requirements associated with these activities to be part of its long-term capital structure.

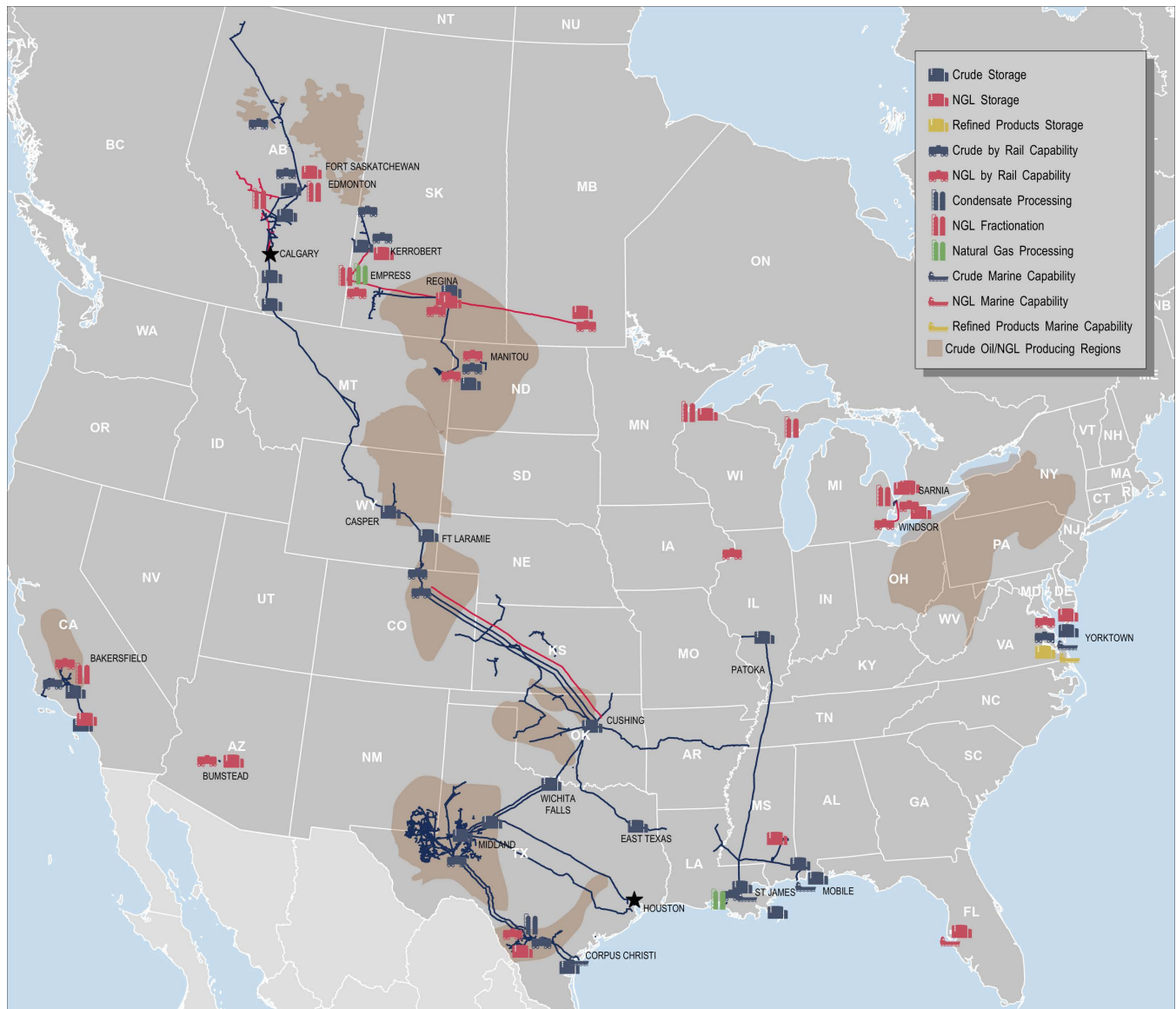
Values and Sustainability

Our Core Values include Safety and Environmental Stewardship; Ownership and Accountability; Respect, Fairness, and Inclusion; Ethics and Integrity; Teamwork; and Entrepreneurship and Innovation. Our Code of Business Conduct sets forth the ways in which these Core Values govern how we conduct ourselves and engage in business relationships. Our approach to sustainability involves integrating prudent environmental, social and governance ("ESG") practices throughout the organization with a focus on transparency and building trust among stakeholders, managing operating and business risks and minimizing environmental impacts, and utilizing our people, assets and systems to maximize long-term value for our stakeholders. The tenets of sustainability align with our values, underpin our business strategy and offer a framework to measure and report our progress. Annual environmental, safety and operational performance targets help us measure progress toward meeting our sustainability objectives. Performance against such targets is also a factor in determining annual bonus compensation for our employees, which further incentivizes desired behaviors and outcomes. In addition, our Health, Safety, Environmental and Sustainability ("HSES") Board Committee provides additional oversight and perspectives with respect to HSES matters. Additional information regarding our Core Values and our commitment to environmental and social responsibility, including our annual Sustainability report, is available in the Sustainability section of our website. See "—Available Information" below.

Description of Segments and Associated Assets

Under GAAP, we consolidate GP LLC, AAP and PAA and its subsidiaries. We currently have no separate operating activities apart from those conducted by PAA. As such, our segment analysis, presentation and discussion is the same as that of PAA, which conducts its operations through two segments — Crude Oil and Natural Gas Liquids (“NGL”). Accordingly, any references to “we,” “us,” “our,” and similar terms describing assets, business characteristics or other related matters are references to assets, business characteristics or other matters involving PAA’s assets and operations.

We have an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada.



Following is a description of the activities and assets for each of our segments.

Crude Oil Segment

Crude Oil Market and Business Overview

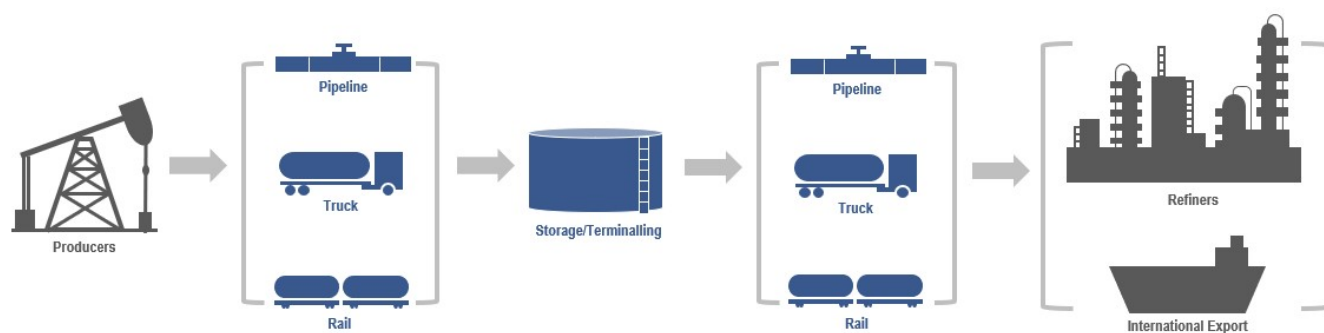
Crude oil is a global commodity that serves as feedstock for many of the world's essential refined products such as transportation fuels (gasoline, diesel, jet fuel) and heating oil, among others. While commodities are typically considered unspecialized, mass-produced and fungible, crude oil is neither unspecialized nor fungible. The crude slate available to North American and world-wide refineries consists of a substantial number of different grades and varieties. Each crude oil grade has distinguishing physical properties. For example, specific gravity (generally referred to as light or heavy), sulfur content (generally referred to as sweet or sour) and metals content, along with other characteristics, collectively result in varying economic attributes of a particular grade or type of crude oil. In many cases, these factors result in the need for such grades to be batched or segregated in the transportation and storage processes, blended to precise specifications or adjusted in value.

The lack of fungibility of the various grades of crude oil creates logistical transportation, terminalling and storage challenges and inefficiencies associated with regional volumetric supply and demand imbalances. These logistical inefficiencies are created as certain qualities of crude oil are indigenous to particular regions or countries. Also, each refinery has a distinct configuration of process units designed to handle particular grades of crude oil. The relative yields and the cost to obtain, transport and process the crude oil, combined with the value of finished goods created, drive a refinery's choice of feedstock.

Our business model integrates large-scale supply aggregation capabilities with the ownership and operation of critical infrastructure systems that connect major producing regions (supply) to key demand centers (refineries) and export terminals. Our assets and our business strategy are designed to serve our producer and refiner customers by addressing regional crude oil supply and demand imbalances that exist in the United States and Canada. The nature and extent of supply and demand imbalances change from time to time as a result of a variety of factors, including global demand for exports; regional production declines and/or increases; refinery expansions, modifications and shut-downs; available transportation and storage capacity; and government mandates and related regulatory factors.

Our Crude Oil segment operations generally consist of gathering and transporting crude oil using pipelines, gathering systems, trucks and at times on barges or railcars, in addition to providing terminalling, storage and other facilities-related services utilizing our integrated assets across the United States and Canada. Our assets serve third parties and are also supported by our merchant activities. Our merchant activities include the purchase of crude oil supply and the movement of this supply on our assets or third-party assets to sales locations, including our terminals, third-party connecting carriers, regional hubs or to refineries.

The figure below provides an illustrative and simplified overview of the assets and activities associated with our Crude Oil segment:



With respect to the transportation assets in this segment, we primarily generate revenue through a combination of tariffs, pipeline capacity agreements and other transportation fees. With respect to our crude oil terminal and condensate processing assets in this segment, we primarily generate revenue through a combination of month-to-month and multi-year agreements and arrangements which include (i) storage, throughput and loading/unloading fees at our crude oil terminals, and (ii) fees from condensate processing services. We also generate significant revenue through a variety of commercial and merchant activities that often result in increased utilization of our transportation and storage assets.

Crude Oil Segment Assets Overview

As of December 31, 2022, the assets utilized in our Crude Oil segment included the following:

- 18,075 miles of active crude oil transportation pipelines and gathering systems;
- 72 million barrels of commercial crude oil storage capacity at our terminalling and storage locations;
- 39 million barrels of active, above-ground tank capacity used to facilitate pipeline throughput or support our rail assets and help maintain product quality segregation;
- four marine facilities in the United States;
- a condensate processing facility located in the Eagle Ford area of South Texas with an aggregate processing capacity of 120,000 barrels per day;
- seven crude oil rail terminals with aggregate loading and unloading capacity of 264,000 and 350,000 barrels per day, respectively;
- 2,100 crude oil railcars; and
- 720 trucks and 1,440 trailers.

Additionally, our assets include the linefill associated with our commercial activities, including approximately:

- 15 million barrels of crude oil linefill in pipelines and tanks owned by us; and
- 3 million barrels of crude oil utilized as linefill in pipelines owned by third parties or otherwise required as long-term inventory.

The following table presents additional information about our pipelines and terminals by geographic location, including active pipeline miles and commercial storage capacity as of December 31, 2022 and average daily volumes transported on our crude oil pipelines for the year ended December 31, 2022:

| Region | Ownership Percentage | Approximate System Miles ⁽¹⁾ | 2022 Average Barrels per Day ⁽²⁾ (in thousands) | Commercial Storage Capacity ⁽³⁾ (in millions) |
|--|----------------------|---|---|---|
| Permian Basin: | | | | |
| Gathering pipelines ⁽⁴⁾ | 65% | 4,915 | 2,346 | |
| Intra-basin pipelines ^{(4) (5)} | 65% - 100% | 785 | 2,084 | |
| Long-haul pipelines ⁽⁵⁾ | 16% - 100% | 1,620 | 1,208 | |
| Permian Basin | | 7,320 | 5,638 | 8 |
| South Texas/Eagle Ford | 50% - 100% | 800 | 357 | 1 |
| Mid-Continent | 50% - 100% | 2,440 | 512 | 36 |
| Gulf Coast | 54% - 100% | 1,155 | 219 | 24 |
| Rocky Mountain | 21% - 100% | 3,365 | 332 | 3 |
| Canada | 100% | 2,570 | 328 | — |
| Western | 100% | 425 | 179 | — |
| Total | | 18,075 | 7,565 | 72 |

⁽¹⁾ Includes total mileage of pipelines in which we own less than 100%.

- (2) Represents average daily volumes for the entire year attributable to our interest for pipelines owned by consolidated entities, unconsolidated entities or through undivided joint interests. Average daily volumes are calculated as the total volumes (attributable to our interest) for the year divided by the number of days in the year. Volumes reflect tariff movements and thus may be included multiple times as volumes move through our integrated system. Volumes associated with assets acquired during the year represent total volumes for the number of days we actually owned the assets divided by the number of days in the period.
- (3) Commercial storage capacity in millions of barrels. Does not include operational storage capacity used to facilitate pipeline throughput and maintain product quality segregation.
- (4) All of our gathering pipelines and a majority of our intra-basin pipelines in the Permian Basin are owned by the Permian JV, a consolidated entity in which we own a 65% interest. The Permian JV has a 57% interest in an unconsolidated entity that owns one of the gathering pipelines and a 63% undivided joint interest in one of the intra-basin pipelines in the Permian Basin.
- (5) Includes pipelines operated by a third party.

Crude Oil Infrastructure

A significant portion of our crude oil assets are interconnected and are operated as a contiguous system. The following descriptions are organized by geographic location and asset type and represent our most significant assets. Pipeline capacities throughout these descriptions are based on our reasonable estimate of volumes that can be delivered from origin to final destination on our pipeline systems. We report pipeline volumes based on the tariffs charged for individual movements, some of which may only utilize a certain segment of a pipeline system (i.e. two short-haul movements on a pipeline from point A to point B and another from point B to point C would double the pipeline tariff volumes on a particular system versus a single point A to point C movement). As a result, at times, our reported tariff barrel movements may exceed our total capacity.

Our crude oil pipelines are comprised of:

- *gathering pipelines* that move crude oil from wellhead or central battery connections to regional market hubs;
- *intra-basin pipelines* that are used as a hub system allowing for a significant amount of flexibility by creating connections between regional hub locations; and
- *long-haul pipelines* that move crude oil from (i) regional market hubs to major market hubs such as Cushing, Oklahoma or to export facilities, including our Corpus Christi terminal, or (ii) a refinery or other major market hubs, such as the Houston market.

Our crude oil terminals have significant flexibility and operational capabilities, including large-scale multi-grade handling and segregation capabilities and multiple marine transportation loading and unloading capabilities. Our largest crude oil terminals are located in key market hubs, including Cushing, Oklahoma; St. James, Louisiana; Midland, Texas; and Patoka, Illinois, and have connectivity to major inbound and outbound pipelines and other terminals at these hubs.

Our most significant assets are described further below by region.

Permian Basin

Gathering Pipelines. We operate approximately 4,900 miles of gathering pipelines in both the Midland Basin and the Delaware Basin that in aggregate represent approximately 3.7 million barrels per day of pipeline capacity. This gathering capacity includes pipeline capacity that delivers volumes to regional market hubs. Approximately 80% of the capacity of our gathering systems is in the Delaware Basin. Our gathering pipelines are supported by long-term acreage dedications. All of our gathering pipelines in the Permian Basin are owned by the Permian JV, a consolidated entity in which we own a 65% interest.

Intra-Basin Pipelines. Our intra-basin pipeline system in the Permian Basin has a capacity of approximately 3.1 million barrels per day and connects gathering pipelines and truck injection volumes to our owned and operated as well as third-party mainline pipelines that transport crude oil to major market hubs. This interconnected pipeline system is designed to provide shippers with flow assurance, flexibility and access to multiple markets and support downstream movements on certain Permian Basin long-haul pipelines. A majority of the intra-basin pipeline system is owned by the Permian JV, a consolidated entity in which we own a 65% interest.

Long-Haul Pipelines. We own interests in multiple long-haul pipeline systems that, on a combined basis, represent approximately 2.1 million barrels per day of currently operational takeaway capacity out of the Permian Basin to major market hubs in Corpus Christi and Houston, Texas and Cushing, Oklahoma. Our long-haul pipelines are supported by long-term commitments. Below is a description of some of our most significant long-haul pipeline systems originating from the Permian Basin region.

Permian to Cushing/Mid-Continent

- *Basin Pipeline (Permian to Cushing).* We own an 87% undivided joint interest (“UJI”) in and are the operator of Basin Pipeline. Basin Pipeline has three primary origination locations: Jal, New Mexico; Wink, Texas; and Midland, Texas and, in addition to making intra-basin movements, serves as the primary route for transporting crude oil from the Permian Basin to Cushing, Oklahoma. Basin Pipeline also receives crude oil from a facility in southern Oklahoma which aggregates South Central Oklahoma Oil Province (SCOOP) production.
- *Sunrise II Pipeline.* We operate the Sunrise II Pipeline and, through a UJI arrangement, own 80% of the capacity of the pipeline, which equates to 400,000 barrels of capacity. Our Sunrise II Pipeline transports crude oil from Midland and Colorado City to connecting carriers at Wichita Falls.

Permian to Gulf Coast

- *BridgeTex Pipeline (Permian to Houston).* We own a 20% interest in the entity that owns the BridgeTex Pipeline. The pipeline, operated by a subsidiary of Magellan Midstream Partners, L.P. (“Magellan”), originates at Colorado City, Texas and extends to Houston, Texas. The BridgeTex pipeline has a capacity of 440,000 barrels per day and is capable of receiving supply from both our Basin and Midland South pipelines.
- *Cactus Pipeline (Permian to Corpus Christi).* We own and operate the Cactus Pipeline, which has a capacity of 390,000 barrels per day, originates at McCamey, Texas and extends to Gardendale, Texas. The Cactus Pipeline connects to our Eagle Ford joint venture pipeline system at Gardendale for access to the Corpus Christi, Texas market. Movements to Corpus Christi are made on a joint tariff with the Eagle Ford joint venture pipeline.
- *Cactus II Pipeline (Permian to Corpus Christi).* In November 2022, we and Enbridge Inc. (“Enbridge”) purchased Western Midstream Partners, LP (“WES”)’s 15% interest in the entity that owns the Cactus II Pipeline. Enbridge acquired 10% and we acquired 5% of Cactus II. We and Enbridge are now the sole owners of Cactus II, with 70% and 30% respective ownership interests. We continue to operate the Cactus II Pipeline, which is a Permian mainline system that extends directly to the Corpus Christi market, and has a capacity of 670,000 barrels per day.
- *Wink to Webster Pipeline.* We own a 16% interest in the entity that owns the Wink to Webster Pipeline (“W2W Pipeline”), which in turn owns 100% of certain segments of the W2W Pipeline and a 71% UJI in the segment from Midland, Texas to Webster, Texas. The W2W Pipeline originates in the Permian Basin in West Texas and transports crude oil to multiple destinations in the Houston and Galveston market areas. The pipeline system provides approximately 1.5 million barrels per day of crude oil capacity (1.1 million barrels per day, net to the UJI interest). Phases one and two of the pipeline system project are currently in service. Phase three of the project, which includes the segments from Wink, Texas to Midland, Texas and from Webster, Texas to Baytown, Texas, is under construction and is expected to be completed by the fourth quarter of 2023.

Terminals. Our Midland terminal has access to all of the Permian JV gathering pipelines, either through direct connections, or through the Permian JV intra-basin pipelines. Likewise, the terminal is also either directly connected, or connected through the Permian JV intra-basin pipelines, to all of our Permian Basin long-haul pipelines. Our Midland terminal also has connectivity to third-party inbound and outbound pipelines and terminals at the Midland, Texas hub.

South Texas/Eagle Ford

Gathering Pipelines. We own and operate various gathering systems in the Eagle Ford producing region that connect into our Eagle Ford joint venture pipeline system or to third-party pipelines.

Long-Haul Pipelines. We own a 50% interest in the entity that owns the Eagle Ford Pipeline through a joint venture with a subsidiary of Enterprise Products Partners, L.P. (“Enterprise”). We serve as the operator of the Eagle Ford Pipeline, which has a total capacity of approximately 660,000 barrels per day and connects Permian, through a connection with our Cactus Pipeline, and Eagle Ford area production to Corpus Christi, Texas refiners and terminals. Additionally, the Eagle Ford Pipeline has connectivity to Houston, Texas via a connection with Enterprise’s pipeline at Lyssy, Texas. The Eagle Ford Pipeline is supported by long-term shipper commitments.

Terminals. We own a 50% interest in the entity that owns the Corpus Christi terminal through a joint venture with a subsidiary of Enterprise. The Corpus Christi terminal has a dock and the capacity to export crude oil and approximately one million barrels of commercial storage capacity.

Condensate Processing. We own a condensate processing facility located in La Salle County, Texas that stabilizes condensate that is primarily sourced from our Eagle Ford area gathering systems. The stabilized condensate is delivered to a third-party pipeline that delivers into Mont Belvieu, Texas.

Mid-Continent

Gathering Pipelines. We own and operate gathering pipelines that source crude oil from Western and Central Oklahoma and Southwest Kansas for transportation and delivery into our terminal facilities at Cushing, Oklahoma.

Long-haul Pipelines. We own and operate various pipeline systems that extend from our Cushing terminal in Oklahoma to various refineries and/or crude oil hubs. Below is a description of some of our most significant pipeline systems in the Mid-Continent region.

- *Diamond Pipeline (Cushing to Memphis).* We own a 50% interest in the entity that owns the Diamond Pipeline through a joint venture with Valero Energy Corporation (“Valero”). We operate the Diamond Pipeline, which extends from our Cushing Terminal to Valero’s refinery in Memphis, Tennessee. The Diamond Pipeline has a total capacity of 200,000 barrels per day.
- *Red River Pipeline (Cushing to Longview).* We own 67% of the entity that owns the Red River Pipeline through a joint venture with Delek Logistics Partners, LP (“Delek”). The Red River Pipeline is an approximately 235,000 barrel per day capacity pipeline that extends from our Cushing Terminal in Oklahoma to Longview, Texas, where it connects with various pipelines. We serve as operator of the Red River Pipeline. The Red River joint venture owns an approximate 69% UJI in the pipeline segment from Cushing to Hewitt, Oklahoma and owns 100% of the segment of the pipeline extending from Hewitt to Longview, Texas.

In addition, we own 50% interests in both the Cushing Connect and Midway pipelines that originate at our Cushing terminal and terminate at refineries in Tulsa, Oklahoma and Coffeyville, Kansas, respectively. Our partners in each pipeline are the refiner customers at the terminus of the pipelines.

Terminals. We are a large provider of crude oil terminalling services in Cushing, Oklahoma, which is one of the largest physical trading hubs in the United States and is the delivery point for the NYMEX light sweet crude oil futures contracts (the benchmark for U.S. crude oil). Our Cushing terminal has been designated by the NYMEX as an approved delivery location.

Our Cushing terminal, which has 27 million barrels of commercial storage capacity, is connected to our long-haul pipelines from the Permian Basin and Rocky Mountain regions, as well as to our Mid-Continent region gathering pipelines. Additionally, the terminal supplies crude oil to all of our joint venture, Mid-Continent region long-haul pipelines.

Our crude oil terminal in Patoka, Illinois, which has 7 million barrels of commercial storage capacity, has connectivity to major inbound and outbound pipelines at this hub, including the Capline Pipeline (discussed further below).

Gulf Coast

Long-haul Pipelines. We own an approximate 54% interest in the entity that owns the Capline Pipeline, which extends from Patoka, Illinois to various terminals in St. James, Louisiana. The Capline Pipeline is supported by long-term shipper commitments, and a subsidiary of Marathon Petroleum Corporation serves as the operator.

Terminals. Our terminal at St. James, Louisiana, which has 15 million barrels of commercial storage capacity, is a destination facility connected to the Capline Pipeline and other third-party pipelines, and also has a rail unload facility that can move crude oil from rail cars to pipelines that service local refiners, or to our dock which can receive or export crude oil. Our terminal at Mobile, Alabama, which has 4 million barrels of commercial storage capacity, also has a dock and the capacity to receive or export crude oil.

Rocky Mountain

Gathering Pipelines. We own and operate pipelines that provide gathering services in the Bakken and the Powder River Basin.

Long-haul Pipelines. Our pipeline systems in the Rocky Mountain region provide access to our terminal in Cushing, Oklahoma as well as other major market hubs. We have two cross-border pipelines, each of which has the flexibility to move up to 30,000 barrels per day of crude oil, depending on the quality. We own and operate the Bakken North cross-border pipeline system that accommodates bidirectional flow and can move crude oil between the Bakken at Trenton, North Dakota and the Enbridge Mainline system at Regina, Saskatchewan. We own a UJI in the Western Corridor pipeline system that extends from the Canadian border to our terminal in Guernsey, Wyoming and receives crude oil from our cross-border Rangeland South pipeline. In addition to these assets, our largest Rocky Mountain region systems include the following joint venture pipelines, both of which connect to our terminal in Cushing, Oklahoma.

- *Saddlehorn Pipeline.* We own a 30% interest in the entity that owns the Saddlehorn Pipeline which, through a UJI arrangement, owns 290,000 barrels per day of capacity in the Saddlehorn Pipeline. The pipeline extends from the Niobrara and Denver-Julesburg (“DJ”) Basin to Cushing and is operated by Magellan. The Saddlehorn Pipeline is supported by minimum volume commitments.
- *White Cliffs Pipeline.* We own an approximate 36% interest in the entity that owns the White Cliffs Pipeline system through a joint venture with three other partners. The White Cliffs Pipeline system consists of one crude oil pipeline with approximately 100,000 barrels per day of capacity that extends from the DJ Basin to Cushing, Oklahoma and one NGL pipeline with approximately 90,000 barrels per day of capacity that extends from the DJ Basin to a tie-in location with the Southern Hills Pipeline in Oklahoma. The NGL pipeline is supported by a long-term capacity lease and long-term throughput agreements. A subsidiary of Energy Transfer LP serves as the operator of the pipelines.

Canada

Gathering Pipelines. We own and operate gathering systems that source crude oil from truck terminals and pipeline-connected facilities to deliver to the Enbridge Mainline system at our Kerrobert and Regina terminals in Saskatchewan, Canada.

Intra-basin Pipelines. We own and operate intra-basin pipelines with capacity of approximately 300,000 barrels per day that deliver crude oil from northern and southern Alberta to the Edmonton, Alberta market hub. These pipelines provide shippers with flexibility to access the Enbridge and TransMountain long-haul pipelines along with the Imperial Oil Refinery.

Western

Gathering Pipelines. We own and operate a pipeline in the San Joaquin Valley that gathers locally produced crude oil, which is then delivered via our Line 63 pipeline system and/or Line 2000 pipeline for transportation to Los Angeles area refiners.

Long-haul Pipelines. We own and operate Line 63 and Line 2000 pipelines in California. Line 2000 is a mainline system that has the capacity to transport approximately 110,000 barrels per day from the San Joaquin Valley to refineries and terminal facilities in the Los Angeles area. Line 63 is used as a gathering and distribution system. The pipeline gathers crude oil in the San Joaquin Valley for delivery to Line 2000 and local refiners. In the Los Angeles area, the Line 63 distribution lines are used to move crude oil from Line 2000 to local refiners. During the third quarter of 2022, we temporarily ceased service on Line 2000 as a precautionary measure following a routine inspection and initiated a program of additional tests and inspections. Line 2000 was returned to service in the first quarter of 2023.

In 2022, we recorded an impairment related to certain of our California crude oil assets. See Note 6 to our Consolidated Financial Statements for additional information.

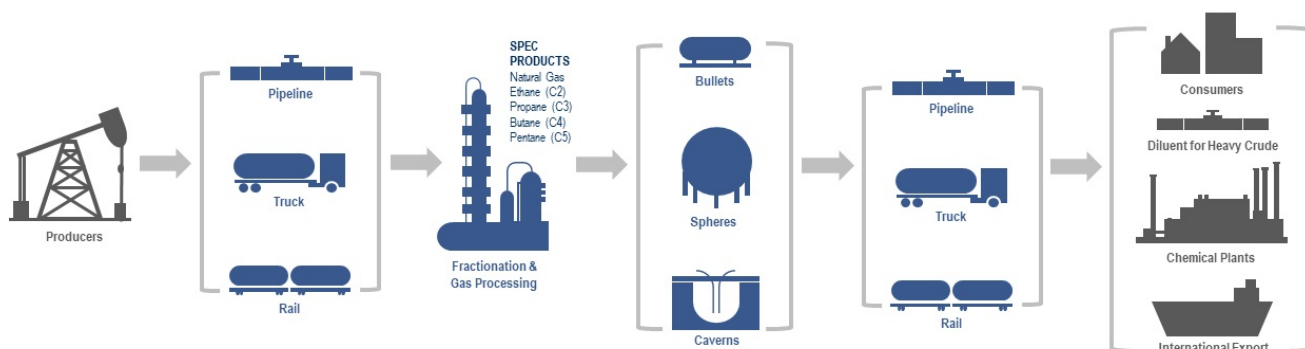
Natural Gas Liquids (“NGL”) Segment

NGL Market and Business Overview

NGL primarily includes ethane, propane, normal butane, iso-butane and natural gasoline, and is derived from natural gas production and processing activities, as well as crude oil refining processes. The individual NGL components are used for various purposes including heating, engine and industrial fuels, a component of motor gasoline and as the primary feedstock for petrochemical facilities that produce many everyday consumer products, including a wide range of plastics and synthetic rubber.

Our NGL segment operations involve natural gas processing and NGL fractionation, storage, transportation and terminalling. Our NGL revenues are primarily derived from a combination of (i) providing gathering, fractionation, storage, and/or terminalling services to third-party customers for a fee, and (ii) our merchant activities that support the assets. Our merchant activities include the acquisition of extraction rights from producers and/or shippers of the gas streams that pass through our Empress facility. The extraction rights allow us to process that gas at our Empress facility and extract the higher valued NGL from the gas stream. We then purchase natural gas to replace the thermal content attributable to the NGL that was extracted. We use our assets to transport, store and fractionate NGL mix extracted from our Empress straddle plants, or NGL mix acquired from third parties, into finished products to sell to customers. We may also acquire finished NGL products to be seasonally stored in our storage caverns, which is then resold to third-party customers. Often times we will use derivative instruments to hedge the margins related to these merchant activities.

The figure below provides an illustrative and simplified overview of the assets and activities associated with our NGL segment:



NGL Segment Assets Overview

We operate a highly integrated network of assets, strategically positioned across Canada and the United States, with a particular focus on serving production from the liquids-rich Western Canadian Sedimentary Basin. As of December 31, 2022, the assets utilized in our NGL segment included the following:

- four natural gas processing plants;
- eight fractionation plants located throughout Canada and the United States with an aggregate useable capacity of approximately 185,600 barrels per day;
- NGL storage facilities with approximately 28 million barrels of capacity;
- approximately 1,620 miles of active NGL transportation pipelines;
- 16 NGL rail terminals and approximately 4,100 NGL rail cars; and
- approximately 220 trailers.

Additionally, our assets include the linefill associated with our commercial activities, including approximately:

- 2 million barrels of NGL linefill in pipelines and storage owned by us; and
- 1 million barrels of NGL utilized as linefill in pipelines owned by third parties or otherwise required as long-term inventory.

The tables below present volumes and capacities for our NGL assets and activities as of December 31, 2022 and our natural gas processing and NGL infrastructure and activities are described further below.

| Natural Gas Processing Facilities | Ownership Interest | Gas Processing Capacity (Bcf/d) ⁽¹⁾ | Average Inlet Volume ⁽²⁾ (Bcf/d) |
|--|---------------------------|---|--|
| <i>Empress</i> | 100 % | 6.2 | 3.3 |

| NGL Fractionation Facilities | Ownership Interest | Fractionation Capacity (Bbls/d) ⁽¹⁾ | Average Volume ⁽²⁾ (Bbls/d) |
|---|---------------------------|---|---|
| <i>Empress</i> | 100 % | 23,300 | 20,700 |
| <i>Fort Saskatchewan</i> ⁽³⁾ | 21-100% | 61,700 | 49,900 |
| <i>Sarnia</i> | 62-84% | 75,000 | 58,400 |
| <i>Other</i> | 82-100% | 25,600 | 7,800 |
| | | <u>185,600</u> | <u>136,800</u> |

| NGL Storage Facilities | Storage Capacity ⁽¹⁾ (MMBbls) |
|---|---|
| <i>Fort Saskatchewan</i> ⁽³⁾ | 11 |
| <i>Sarnia</i> | 7 |
| <i>Empress</i> | 4 |
| <i>Other</i> | 6 |
| | <u>28</u> |

| | Ownership Interest | Approximate System Miles ⁽⁴⁾ | Average Volumes ⁽²⁾ (MBbls/d) |
|----------------------|---------------------------|--|---|
| <i>NGL Pipelines</i> | 21-100% | 1,620 | 192 |

| | Ownership Interest | Number of Rack Spots | Number of Storage Spots |
|----------------------------|---------------------------|-----------------------------|--------------------------------|
| <i>NGL Rail Facilities</i> | 75-100% | 277 | 1,527 |

(1) Represents total average annual capacity of the facilities, net to our ownership interest.

(2) Average daily volumes are calculated as the total volumes for the year, net to our share, divided by the number of days in the year.

(3) Includes our approximately 21% non-operated/undivided joint ownership interest in the Keyera Fort Saskatchewan facility and associated fractionation capacity of 17,300 barrels per day and storage capacity of approximately four million barrels. In December 2022, we entered into a definitive agreement to sell our interest in this facility. The transaction closed in February 2023.

(4) Includes total mileage of pipelines in which we own a less than 100% interest.

Natural Gas Processing and NGL Infrastructure

Our network of liquids infrastructure includes NGL fractionation facilities, underground NGL storage caverns, above ground storage tanks, NGL pipelines, and rail and truck terminals. With these assets, we process, fractionate, store and transport NGL such as ethane, propane, butane and condensate. The unique integrated and geographically diverse nature of our Canadian infrastructure provides the opportunity to maximize margins across the NGL value chain for both us and our customers. The most significant of these assets include the following:

Empress Facility

We own and operate four gas processing facilities near Empress, Alberta. These facilities, referred to as straddle plants because they “straddle” gas transportation pipelines, process natural gas to extract ethane and NGL mix entrained in the gas stream before returning the gas to the transportation pipelines. We acquire the rights to extract the NGL from producers and/or shippers of the gas streams that pass through our Empress facility and then purchase natural gas to replace the thermal content attributable to the NGL that was extracted. The NGL mix can be fractionated at our Empress facility or transported along the Enbridge pipeline system for fractionation at our Sarnia facility.

Our Empress plants are capable of processing up to 6.2 Bcf of natural gas per day; however, supply available to these plants is typically in the 3.0 to 4.0 Bcf per day range. These plants produce approximately 50,000 to 85,000 barrels per day of ethane, and 30,000 to 50,000 barrels per day of NGL mix. Our Empress fractionation facility is capable of processing and producing up to 23,300 barrels per day of NGL products and is connected to rail loading infrastructure at Empress and our PPTC pipeline system, which enables NGL to be transported to storage and loading terminals in Saskatchewan and Manitoba.

Co-Ed Pipeline

Our primary NGL transportation supply system, the Co-Ed NGL pipeline system, has transportation capacity of approximately 70,000 barrels per day and gathers NGL from Southwest and Central Alberta (Cardium, Deep Basin, and Alberta Montney) for delivery to our Fort Saskatchewan, Alberta NGL fractionation facilities.

Fort Saskatchewan Complex

Our Fort Saskatchewan facility is located near Edmonton, Alberta in one of the key North American NGL hubs. The facility is a receipt, storage, fractionation and delivery facility for NGL and is connected to other major NGL plants and pipeline systems in the area. The facility’s primary assets include a fractionation plant, 12 storage caverns, and truck and rail loading capability. Our Fort Saskatchewan fractionation facility has an inlet design capacity of 88,400 barrels per day and is able to produce up to approximately 44,400 barrels per day of propane, butane and condensate. The remaining throughput capacity is used to produce a propane and butane mix, which is transported via the Enbridge pipeline system to our Sarnia facility for further fractionation.

Within the Fort Saskatchewan area, as of December 31, 2022, we also held an approximately 21% ownership in the Keyera Fort Saskatchewan facility, which included fractionation capacity of approximately 17,300 barrels per day, net to our interest, and 17 storage caverns. In December of 2022, we signed a purchase and sale agreement for the divestiture of our interest in this facility. The transaction closed in February 2023.

Sarnia Area

Our Sarnia Area assets in Southwestern Ontario consist of (i) our Sarnia facility, (ii) our Windsor storage terminal and (iii) our St. Clair, Michigan terminal. The Sarnia facility is a large NGL fractionation and storage facility with rail and truck loading capabilities. The Sarnia Area facilities are served by a network of multiple pipelines connected to various refineries, chemical plants, and other pipeline and railroad systems in the area. This pipeline network also delivers product between our Sarnia facility and our Windsor and St. Clair storage facilities. The Sarnia fractionator receives NGL feedstock primarily from the Enbridge pipeline system and, to a lesser extent, from our rail unloading facility. The fractionation unit is able to process an average of approximately 100,000 barrels per day of NGL products. Our ownership in the various processing units at the Sarnia fractionator ranges from 62% to 84%.

Impact of Commodity Price Volatility and Dynamic Market Conditions on Our Business Model

Crude oil, NGL and natural gas commodity prices have historically been very volatile. For example, in 2022, the prompt month NYMEX light, sweet futures contract (commonly referred to as “WTI”) price ranged from a low of approximately \$71 per barrel to a high of approximately \$124 per barrel. Similarly, there has also been volatility within the propane and butane markets as seen through the North American benchmark price located at Mont Belvieu, Texas, as well as with the basis differentials between Mont Belvieu prices and prices realized at various market hubs in North America.

While our objective is to position the Partnership such that our overall annual cash flow is not materially adversely affected by the absolute level of energy prices, market volatility associated with shifts between demand-driven markets and supply-driven markets or other similar dynamics may create market conditions that are more challenging to our business model. In extended periods of lower crude oil and/or NGL prices, or periods where the supply and demand fundamentals compress regional location differentials, our financial results may be adversely impacted. Under such market conditions, product flows on our pipelines or through our facilities may be adversely impacted. Alternatively, in periods where supply exceeds regional demand and/or pipeline egress, product flows on our pipelines or through our facilities may be favorably impacted. In executing our business model, we employ a variety of financial risk management tools and techniques to manage our financial risk, predominantly related to our merchant activities. These are discussed in greater detail in the “—Risk Management” section below.

In addition, relative contribution levels will vary from quarter-to-quarter due to seasonality, particularly with respect to our NGL merchant activities.

Risk Management

In order to hedge margins involving our physical assets and manage risks associated with our various commodity purchase and sale obligations and, in certain circumstances, to realize incremental margin during volatile market conditions, we use derivative instruments. We also use various derivative instruments to manage our exposure to interest rate risk and currency exchange rate risk. In analyzing our risk management activities, we draw a distinction between enterprise-level risks and trading-related risks. Enterprise-level risks are those that underlie our core businesses and may be managed based on management’s assessment of the cost or benefit of doing so. Conversely, trading-related risks (the risks involved in trading in the hopes of generating an increased return) are not inherent in our core business; rather, those risks arise as a result of engaging in trading activities. Our policy is to manage the enterprise-level risks inherent in our core businesses by using financial derivatives to protect our ability to generate cash flow and optimize asset profitability, rather than trying to profit from trading activities. Our commodity risk management policies and procedures are designed to monitor NYMEX, ICE and over-the-counter positions, as well as physical volumes, grades, locations, delivery schedules and storage capacity, to help ensure that our hedging activities address our risks. Our interest rate and currency exchange rate risk management policies and procedures are designed to monitor our derivative positions and ensure that those positions are consistent with our objectives and approved strategies. We have a risk management function that has direct responsibility and authority for our risk policies, related controls around commercial activities and procedures and certain other aspects of corporate risk management. Our risk management function also approves all new risk management strategies through a formal process. Our approved strategies are intended to mitigate and manage enterprise-level risks that are inherent in our core businesses.

Our policy is generally to structure our purchase and sales contracts so that price fluctuations do not materially affect our operating income, and not to acquire and hold physical inventory or derivatives for the purpose of speculating on outright commodity price changes. Although we seek to maintain a position that is substantially balanced within our merchant activities, we purchase crude oil, NGL and natural gas from thousands of locations and may experience net unbalanced positions for short periods of time as a result of production, transportation and delivery variances as well as logistical issues associated with inclement weather conditions and other uncontrollable events that may occur. When unscheduled physical inventory builds or draws do occur, they are monitored and managed to a balanced position over a reasonable period of time. This activity is monitored independently by our risk management function and must take place within predefined limits and authorizations.

Credit

Our merchant activities in our Crude Oil and NGL segments require significant extensions of credit by our suppliers. In order to assure our ability to perform our obligations under purchase agreements, various credit arrangements are negotiated with our suppliers. These arrangements include open lines of credit and, to a lesser extent, standby letters of credit issued under our hedged inventory facility or our senior unsecured revolving credit facility. In addition, storing crude oil, NGL or spec products in a contango market, or otherwise, requires us to have credit facilities to finance both the purchase of these products in the prompt month as well as margin requirements that may be required for the derivative instruments used to hedge our price exposure.

When we sell crude oil and NGL, we must determine the amount, if any, of credit to be extended to any given customer. Because our typical sales transactions can involve large volumes of crude oil or NGL, the risk of nonpayment and nonperformance by customers is a major consideration in our business. We believe our sales are made to creditworthy entities or entities with adequate credit support. See Note 3 to our Consolidated Financial Statements for further discussion of our credit review process and risk management procedures.

Customers

ExxonMobil Corporation and its subsidiaries accounted for 20%, 15% and 12% of our revenues for the years ended December 31, 2022, 2021 and 2020, respectively. Marathon Petroleum Corporation and its subsidiaries accounted for 12% and 13% of our revenues for the years ended December 31, 2021 and 2020, respectively. BP p.l.c. and its subsidiaries accounted for 10% of our revenues for the year ended December 31, 2021. No other customers accounted for 10% or more of our revenues during any of the three years ended December 31, 2022. The majority of revenues from these customers pertain to our Crude Oil segment merchant activities, and sales to these customers occur at multiple locations. If we were to lose one or more of these customers, there is risk that we would not be able to identify and access a replacement market at a comparable margin. For a discussion of credit and industry concentration risk, see Note 16 to our Consolidated Financial Statements.

Competition

Competition among pipelines is based primarily on transportation charges, access to producing areas and supply regions and demand for crude oil and NGL by end users. Although new pipeline projects represent a source of competition for our business, existing third-party owned pipelines with excess capacity in the vicinity of our operations also expose us to significant competition based on the relatively low operating cost associated with moving an incremental barrel of crude oil or NGL through such unutilized capacity. In areas where additional infrastructure is being built or has been built to accommodate new or increased production or changing product flows, we face competition in providing the required infrastructure solutions as well as the risk that capacity in the area will be overbuilt until production grows sufficiently or pipelines are retired or converted to alternate service. As a result of multiple pipeline expansions in the Permian Basin and other areas, together with meaningful changes and delays in expected production growth due to COVID-19 impacts, we are currently experiencing heightened competition for uncommitted barrels and contract renewals, which puts downward pressure on tariffs and margins. Further slowing of production growth or production declines could exacerbate these risks, but we believe that the current duration of our contracts and structure of our integrated business model, combined with expected crude oil production growth in the Permian Basin and other areas, should partially mitigate these risks.

In addition, depending upon the specific movement, pipelines, which generally offer the lowest cost of transportation, may also face competition from other forms of transportation, such as truck, rail and barge. Although these alternative forms of transportation are typically higher cost, they can provide access to alternative markets at which a higher price may be realized for the commodity being transported, thereby overcoming the increased transportation cost.

We also face competition with respect to our merchant activities and facilities services. Our competitors include other crude oil and NGL pipeline and terminalling companies, other NGL processing and fractionation companies, the major integrated oil companies and their marketing affiliates, independent gatherers, private equity backed entities, banks that have established a trading platform, and brokers and marketers of widely varying sizes, financial resources and experience. Some of these competitors have capital resources greater than ours. In addition, recently constructed pipelines supported by minimum volume commitments and/or acreage dedications could also amplify the level of competition for purchasing wellhead barrels, especially in the Permian Basin, and thus impact our margins.

Ongoing Activities Related to Strategic Transactions

We are continuously engaged in the evaluation of potential transactions that support our current business strategy. In the past, such transactions have included the sale of non-core assets, the sale of partial interests in assets to strategic joint venture partners, acquisitions and large investment capital projects. With respect to a potential divestiture or acquisition, we may conduct an auction process or participate in an auction process conducted by a third party or we may negotiate a transaction with one or a limited number of potential buyers (in the case of a divestiture) or sellers (in the case of an acquisition). Such transactions could have a material effect on our financial condition and results of operations.

We typically do not announce a transaction until after we have executed a definitive agreement. In certain cases, in order to protect our business interests or for other reasons, we may defer public announcement of a transaction until closing or a later date. Past experience has demonstrated that discussions and negotiations regarding a potential transaction can advance or terminate in a short period of time. Moreover, the closing of any transaction for which we have entered into a definitive agreement may be subject to customary and other closing conditions, which may not ultimately be satisfied or waived. Accordingly, we can give no assurance that our current or future efforts with respect to any such transactions will be successful, and we can provide no assurance that our financial expectations with respect to such transactions will ultimately be realized. See Item 1A. “Risk Factors—Risks Related to PAA’s Business—*Acquisitions and divestitures involve risks that may adversely affect PAA’s business.*”

Joint Venture and Joint Ownership Arrangements

We are party to more than 25 joint venture (“JV”) and undivided joint interest (“UJI”) arrangements with long-term partners throughout the industry value chain spanning across multiple North American basins. We believe that these capital-efficient arrangements provide strategic alignment with long-term industry partners while adding volume commitments to our systems and improving returns.

The following table summarizes our significant JVs as of December 31, 2022:

| Entity | Type of Operation | JV Ownership Percentage |
|--|---|-------------------------|
| BridgeTex Pipeline Company, LLC | Crude Oil Pipeline | 20% |
| Cactus II Pipeline LLC ⁽²⁾ | Crude Oil Pipeline ⁽¹⁾ | 70% |
| Capline Pipeline Company LLC | Crude Oil Pipeline | 54% |
| Diamond Pipeline LLC | Crude Oil Pipeline ⁽¹⁾ | 50% |
| Eagle Ford Pipeline LLC | Crude Oil Pipeline ⁽¹⁾ | 50% |
| Eagle Ford Terminals Corpus Christi LLC | Crude Oil Terminal and Dock ⁽¹⁾ | 50% |
| Plains Oryx Permian Basin LLC ⁽²⁾⁽³⁾ | Crude Oil Pipelines and Related Assets ⁽¹⁾ | 65% |
| Red River Pipeline Company LLC ⁽²⁾⁽⁴⁾ | Crude Oil Pipeline ⁽¹⁾ | 67% |
| Saddlehorn Pipeline Company, LLC ⁽⁴⁾ | Crude Oil Pipeline | 30% |
| White Cliffs Pipeline, LLC | Crude Oil Pipeline | 36% |
| Wink to Webster Pipeline LLC ⁽⁴⁾ | Crude Oil Pipeline | 16% |

⁽¹⁾ Assets are operated by Plains.

⁽²⁾ We consolidate the entity based on control, with our partner’s interest accounted for as a noncontrolling interest.

⁽³⁾ Entity owns a 57% interest in OMOG JV LLC (“OMOG”), an unconsolidated entity that owns a crude oil pipeline.

⁽⁴⁾ Entity owns a UJI in the crude oil pipeline.

The following table summarizes our significant UJIs as of December 31, 2022, excluding UJIs that are indirectly owned by us through JVs (e.g., Wink to Webster, Saddlehorn and Red River JVs):

| Asset | Type of Operation | UJI Ownership Percentage |
|--|---------------------------|--------------------------|
| Basin Pipeline ⁽¹⁾ | Crude Oil Pipeline | 87% |
| Fort Saskatchewan NGL Storage and Fractionation ⁽²⁾ | NGL Facility | 21% to 48% |
| Kerrobert Storage and Pipeline Assets ⁽¹⁾ | NGL Pipeline and Facility | 50% |
| Sarnia NGL Storage and Fractionation ⁽²⁾ | NGL Facility | 62% to 84% |
| Sunrise II Pipeline ⁽¹⁾ | Crude Oil Pipeline | 80% |

⁽¹⁾ Asset is operated by Plains.

⁽²⁾ Certain of these assets are operated by Plains.

Acquisitions and Divestitures

Since PAA's initial public offering in 1998, the acquisition of midstream assets and businesses has been an important component of our business strategy. While the pace of our acquisition activity has slowed down in recent years, we continue to selectively analyze and pursue the acquisition of assets and businesses that are strategic and complementary to our existing operations. We also routinely review our asset portfolio to evaluate potential sales of non-core assets and/or sales of partial interests in assets to strategic joint venture partners to optimize our asset portfolio and strengthen our balance sheet and leverage metrics. For example, from 2016 through December 31, 2022, we have completed several acquisitions for an aggregate of approximately \$2.0 billion (which figure excludes the value of our Permian JV formed in October 2021), and we have completed asset sales and sales of partial interests in assets to strategic joint venture partners totaling more than approximately \$4.6 billion. See Note 7 to our Consolidated Financial Statements for additional information.

Capital Projects

Our extensive asset base and our relationships with long-term industry partners across the value chain provide us with opportunities for organic growth through the construction of additional assets that are complementary to, and expand or extend, our existing asset base. Our 2023 capital plan consists of capital-efficient, highly contracted projects that help address industry needs.

Total investment capital for the year ending December 31, 2023 is currently projected to be approximately \$420 million (\$325 million net to our interest), of which approximately half is expected to be associated with the Permian JV. Additionally, maintenance capital for 2023 is currently projected to be \$205 million (\$195 million net to our interest). Note that potential variation to current capital costs estimates may result from (i) changes to project design, (ii) final cost of materials and labor and (iii) timing of incurrence of costs due to uncontrollable factors such as receipt of permits or regulatory approvals and weather.

Regulation

Our assets, operations and business activities are subject to extensive legal requirements and regulations under the jurisdiction of numerous federal, state, provincial and local agencies. Many of these agencies are authorized by statute to issue, and have issued, requirements binding on the energy industry, related businesses and individual participants. The failure to comply with such legal requirements and regulations can result in substantial fines and penalties, expose us to civil and criminal claims, and cause us to incur significant costs and expenses. See Item 1A. "Risk Factors—Risks Related to Laws and Regulations Impacting PAA's Business—PAA's operations are subject to laws and regulations relating to protection of the environment (people, property and natural resources), operational safety, climate change and related matters that may expose it to significant costs and liabilities. The current laws and regulations affecting PAA's business are subject to change and in the future PAA may be subject to additional laws, executive orders and regulations, which could adversely impact PAA's business." At any given time, there may be proposals, provisional rulings or proceedings in legislation or under governmental agency or court review that could affect our business. The regulatory burden on our assets, operations and activities increases our cost of doing business and, consequently, affects our profitability. We can provide no assurance that the increased costs associated with any new or proposed laws, rules or regulations will not be material. We may at any time also be required to apply significant resources in responding to governmental requests for information and/or enforcement actions.

The following is a summary of certain, but not all, of the laws and regulations affecting our operations. Unless the context requires otherwise, references herein to our "facilities" includes all of the pipelines, terminals, storage and other assets owned by us.

Health, Safety and Environmental Regulation

General

Our operations involving the storage, treatment, processing and transportation of liquid and gaseous hydrocarbons, including crude oil and NGL, are subject to stringent federal, state, provincial and local laws and regulations governing the discharge of materials into the environment or otherwise relating to protection of the environment and natural resources, operational safety and related matters. As with the industry generally, compliance with these laws and regulations increases our overall cost of doing business, including our capital costs to construct, maintain and upgrade equipment and facilities as regulations are updated or new regulations are invoked. Failure to comply with these laws and regulations could result in the assessment of administrative, civil and criminal penalties, the imposition of investigatory or remedial obligations or the incurrence of capital expenditures, imposition of restrictions, delays or cancellations in the permitting or performance of projects, and the issuance of injunctions or other orders that may subject us to additional operational constraints. Failure to comply with these laws and regulations could also result in negative public perception of our operations or the industry in general, which may adversely impact our ability to conduct our business. Environmental and safety laws and regulations are subject to changes that may result in more stringent requirements, and we cannot provide any assurance that compliance with current and future laws and regulations will not have a material effect on our results of operations or earnings. A discharge of hazardous liquids or other materials into the environment could, to the extent such event is not insured, subject us to substantial expense, including the cost to respond, repair and remediate any impact from releases, the cost to comply with applicable laws and regulations and liabilities or costs arising out of any claims made by third parties. The following is a summary of some of the environmental, health and safety laws and regulations to which our operations are subject.

Pipeline Safety/Integrity Management

A substantial portion of our petroleum pipelines and our storage tank facilities in the United States are subject to regulation by the Department of Transportation's ("DOT") Pipeline and Hazardous Materials Safety Administration ("PHMSA") pursuant to the Hazardous Liquids Pipeline Safety Act of 1979, as amended (the "HLPISA") with respect to crude oil and NGL. The HLPISA imposes safety requirements on the design, installation, testing, construction, operation, replacement and management of pipeline and tank facilities. Federal regulations implementing the HLPISA require pipeline operators to adopt measures designed to reduce the environmental impact of oil discharges from onshore oil pipelines, including the maintenance of comprehensive spill response plans and the performance of extensive spill response training for pipeline personnel. These regulations also require pipeline operators to develop and maintain a written qualification program for individuals performing covered tasks on pipeline facilities. Comparable regulation exists in some states in which we conduct intrastate common carrier or private pipeline operations. Our operations in Canada are also subject to comparable regulations promulgated by the Canada Energy Regulator ("CER") and provincial regulators and agencies.

United States

Pursuant to the authority under the HLPISA, as amended from time to time, PHMSA has promulgated regulations that require transportation pipeline operators to implement integrity management programs, including frequent inspections, correction of certain identified anomalies and other measures, to ensure pipeline safety in locations where a pipeline leak or rupture could affect high risk areas known as high consequence areas ("HCAs"). The HCAs for crude oil and NGL pipelines are based on high population areas, areas unusually sensitive to environmental damage, and commercially navigable waterways. In the United States, our costs associated with the inspection, testing and correction of identified anomalies were approximately \$20 million in 2022. Based on currently available information, our preliminary estimate for 2023 is that we will incur approximately \$30 million in expenditures associated with our required pipeline integrity management program. However, significant additional expenses could be incurred if new or more stringently interpreted pipeline safety requirements are implemented. In addition to required activities, our integrity management program includes several voluntary, multi-year initiatives designed to prevent incidents. Costs incurred in connection with these voluntary initiatives were approximately \$14 million in 2022, and our preliminary estimate for 2023 is that we will incur approximately \$10 million of such costs.

Federal legislation has resulted in more stringent mandates for pipeline safety and has charged PHMSA with developing and adopting regulations that impose increased pipeline safety requirements on pipeline operators. In particular, Congress has amended the HLPISA several times over the past decade and to the extent those regulations impose practices that exceed our operating standards, they increase our cost to operate.

The DOT has issued guidelines with respect to securing regulated facilities against terrorist attack. We have instituted security measures and procedures in accordance with such guidelines to enhance the protection of certain of our facilities; however, we cannot provide any assurance that these security measures would fully protect our facilities from an attack.

The DOT has also generally adopted American Petroleum Institute Standard (“API”) 653 as the standard for the inspection, repair, alteration and reconstruction of above ground petroleum storage tanks subject to DOT jurisdiction. API 653 requires regularly scheduled inspection and repair of tanks remaining in service. In the United States, our costs associated with this program were \$28 million in 2022. For 2023, we have budgeted approximately \$35 million in connection with continued compliance activities with respect to API 653 and similar new EPA regulations for tanks not regulated by the DOT. Certain storage tanks may be taken out of service if we believe the cost of compliance will exceed the value of the storage tanks and replacement tankage may be constructed.

Furthermore, our operations may also be subject to state pipeline safety and integrity regulations. For example, to protect state waters and wildlife, California has adopted legislation that requires operators of hazardous liquid pipelines located near environmentally and ecologically sensitive areas to use best available technologies to minimize the amount of oil released in an oil spill. These technologies include, but are not limited to, installation of leak detection technologies, automatic shutoff systems, or remote controlled sectionalized block valves. Our pipeline operations in California must implement certain of these technologies, unless specifically exempted, by April 1, 2023.

Canada

In Canada, the CER and provincial regulators regulate the safety and integrity management of pipelines and facilities used for hydrocarbon transmission and storage. We have incurred and will continue to incur costs related to such regulatory requirements. For example, we continue to implement Pipeline, Facility and Cavern Integrity Management Programs in Canada to comply with applicable regulatory requirements and assist in our efforts to mitigate risk. Costs incurred for such integrity management activities were approximately \$85 million in 2022. Our preliminary estimate for 2023 is approximately \$80 million of costs on such projects.

We cannot predict the potential costs associated with additional, future regulations in Canada or the United States. Significant additional expenses could be incurred, and additional operational requirements and constraints could be imposed, if new or more stringently interpreted pipeline safety requirements are implemented.

Occupational Safety and Health

United States

In the United States, we are subject to the requirements of the Occupational Safety and Health Act, as amended, and comparable state statutes that regulate the protection of the health and safety of workers. In addition, the U.S. Occupational Safety and Health Administration (“OSHA”) hazard communication standard requires that certain information be maintained about hazardous materials used or produced in operations and that this information be provided to employees, state and local government authorities and citizens. Certain of our facilities are also subject to OSHA Process Safety Management (“PSM”) regulations, which are designed to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals. These regulations apply to any process which involves a chemical at or above specified thresholds or any process that involves 10,000 pounds or more of a flammable liquid or gas in one location.

Canada

Similar regulatory requirements exist in Canada under the federal and provincial Occupational Health and Safety Acts, Regulations and Codes. The agencies with jurisdiction under these regulations are empowered to enforce them through inspection, audit, incident investigation or investigation of a public or employee complaint. In some jurisdictions, the agencies have been empowered to administer penalties for violations without the company first being prosecuted. Additionally, under the Criminal Code of Canada, organizations, corporations and individuals may be prosecuted criminally for violating the duty to protect employees and the public.

Solid Waste

We generate wastes, including hazardous wastes, which are subject to the requirements of the federal Resource Conservation and Recovery Act, as amended (“RCRA”), and analogous state and provincial laws. Many of the wastes that we generate are not subject to the most stringent requirements of RCRA because our operations generate primarily oil and gas wastes, which currently are excluded from consideration as RCRA hazardous wastes. It is possible, however, that in the future, the exclusion for oil and gas waste under RCRA may be revisited and our wastes may become subject to more rigorous and costly disposal requirements, resulting in additional capital expenditures or operating expenses.

Hazardous Substances

The federal Comprehensive Environmental Response, Compensation and Liability Act, as amended (“CERCLA”), also known as “Superfund,” and comparable state laws impose liability, without regard to fault or the legality of the original act, on certain classes of persons that contribute to the release of a “hazardous substance” into the environment. These persons include the owner or operator of the site or sites where the release occurred and companies that disposed of, or arranged for the disposal of, the hazardous substances found at the site. Such persons may be subject to strict, joint and several liability for the costs of cleaning up the hazardous substances that have been released into the environment, for damages to natural resources, and for the costs of certain health studies. It is not uncommon for neighboring landowners and other third parties to file claims for personal injury and property damage allegedly caused by hazardous substances or other pollutants released into the environment. In the course of our ordinary operations, we may generate waste that falls within CERCLA’s definition of a “hazardous substance.”

We are subject to the Environmental Protection Agency’s (“EPA”) Risk Management Plan regulations at certain facilities. These regulations are intended to work with OSHA’s PSM regulations to minimize the offsite consequences of catastrophic releases. The regulations require us to develop and implement a risk management program that includes a five-year accident history, an offsite consequence analysis process, a prevention program and an emergency response program.

Environmental Remediation

We currently own or lease, and in the past have owned or leased, properties where potentially hazardous liquids, including hydrocarbons, are or have been handled. These properties may be subject to CERCLA, RCRA and state and Canadian federal and provincial laws and regulations. Under such laws and regulations, we could be required to remove or remediate potentially hazardous liquids or associated wastes (including wastes disposed of or released by prior owners or operators) and to clean up contaminated property (including contaminated groundwater).

Air Emissions

Our United States operations are subject to the United States Clean Air Act (“Clean Air Act” or “CAA”), comparable state laws and associated federal, state and local regulations. Our Canadian operations are also subject to federal and provincial air emission regulations, which are discussed in subsequent sections.

As a result of the changing air emission requirements in both Canada and the United States, we may be required to incur certain capital and operating expenditures in the next several years to install air pollution control equipment and otherwise comply with more stringent federal, state, provincial and regional air emissions control requirements when we attempt to obtain or maintain permits and approvals for sources of air emissions. We can provide no assurance that future air compliance obligations will not have a material adverse effect on our financial condition or results of operations.

Climate Change Initiatives

United States

The threat of climate change continues to attract considerable attention in the United States and around the world. Numerous proposals have been made and could continue to be made at the international, national, regional and state levels of government to monitor and limit emissions of carbon dioxide, methane and other greenhouse gases (“GHG”). These efforts have included consideration of cap-and-trade programs, carbon taxes, climate-related disclosure obligations, and regulations that directly limit GHG emissions from certain sources. These proposals and related legislation could increase operating costs within the oil and gas industry and accelerate the transition away from fossil fuels, which could in turn reduce demand for our products and services and adversely affect our business and results of operations.

In addition, following the U.S. Supreme Court finding that GHG emissions constitute a pollutant under the CAA, the EPA has adopted rules and regulations that, among other things, establish construction and operating permit reviews for GHG emissions from certain large stationary sources, require the monitoring and annual reporting of GHG emissions from certain petroleum and gas system sources, and impose new standards reducing methane emissions from oil and gas operations through limitations on venting and flaring and the implementation of enhanced emission leak detection and repair requirements. Two of our facilities are presently subject to the federal GHG reporting requirements. These include facilities with combustion GHG emissions and potential fugitive emissions above the reporting thresholds. We import sufficient quantities of finished fuel products into the United States to be required to report that activity as well. In recent years, there has been considerable uncertainty surrounding regulation of methane emissions. For example, President Biden issued an executive order calling on the EPA to revisit federal regulations promulgated during the Trump Administration regarding methane and establish new or more stringent standards for existing or new sources in the oil and gas sector, including the transmission and storage segments, and he signed into law a revocation of certain parts of the Trump-era rules. Separately, the Bureau of Land Management (“BLM”) has also proposed rules to limit venting, flaring, and methane leaks for oil and gas operations on federal lands.

At the state level, California has implemented a GHG cap-and-trade program. California finished fuels providers (refiners and importers), including Plains Marketing and Plains Midstream Canada, are required to purchase GHG emission credits for finished fuel sold in or imported into California.

Certain other states where we operate, such as Colorado, have also adopted, or are considering adopting, regulations related to GHG emissions. While it is not possible at this time to predict how federal or state governments may choose to regulate GHG emissions, any new regulatory restrictions on GHG emissions could result in material increased compliance costs, additional operating restrictions, an increase in the cost of feedstock and products produced by our refinery customers, and a reduced demand for petroleum-based fuels.

Canada

Large emitters of GHG have been required to report their emissions under the Canadian Greenhouse Gas Emissions Reporting Program since 2004. Effective January 1, 2018, the Federal Department of Environment and Climate Change lowered the reporting threshold for all facilities from 50 thousand tonnes per year (“kt/y”) to 10 kt/y GHG emissions. Four of our facilities are currently required to prepare annual emissions reports. The associated cost with this reporting requirement is not considered to be material. Several Canadian Provinces, including some in which we operate, have implemented additional climate-related initiatives and regulations.

Water

The U.S. Federal Water Pollution Control Act, as amended, also known as the Clean Water Act (“CWA”), and analogous state and Canadian federal and provincial laws impose restrictions and strict controls regarding the discharge of pollutants into navigable waters of the United States and Canada, as well as state and provincial waters. Federal, state and provincial regulatory agencies can impose administrative, civil and/or criminal penalties for non-compliance with discharge permits or other requirements of the CWA, and can also pursue injunctive relief to enforce compliance with the CWA and analogous laws.

The U.S. Oil Pollution Act of 1990 (“OPA”) amended certain provisions of the CWA as they relate to the release of petroleum products into navigable waters. OPA subjects owners of facilities to strict, joint and potentially unlimited liability for containment and removal costs, natural resource damages and certain other consequences of an oil spill. State and Canadian federal and provincial laws also impose requirements relating to the prevention of oil releases and the remediation of impacted areas.

The construction or expansion of pipelines often requires authorizations under the CWA, which authorizations may be subject to challenge. For over 35 years, the U.S. Army Corps of Engineers (the “Corps”) has authorized construction, maintenance and repair of pipelines under a streamlined nationwide permit program known as Nationwide Permit 12 (“NWP 12”). From time to time, environmental groups have challenged the use of NWP 12 for oil and gas pipeline projects. In April 2020, the federal district court for the District of Montana vacated the Corps’ NWP 12 after determining that it failed to comply with consultation requirements under the Endangered Species Act, though the district court’s order was subsequently limited on appeal. In January 2021, the Corps published a reissuance of NWP 12, but this permit is being challenged in federal court on the same grounds that were litigated in the April 2020 case. More recently, the Corps announced it was beginning a formal review of NWP 12 in May 2022. While the full extent and impact of these recent developments is unclear at this time, any disruption in our ability to obtain coverage under NWP 12 or other general permits may result in increased costs and project delays if we are forced to seek individual permits from the Corps.

Also, there continues to be uncertainty on the federal government’s applicable jurisdictional reach under the Clean Water Act over waters of the United States (“WOTUS”), including wetlands. The EPA and the Corps under the Obama, Trump and Biden Administrations have pursued multiple rulemakings since 2015 in an attempt to determine the scope of such reach, and in several instances, federal courts have vacated these rulemakings. Two federal district court decisions vacated the Trump Administration’s 2020 rule, which resulted in a return to protections that were in place prior to the 2015 rulemaking revisions under the Obama Administration. The EPA and the Corps recently published a final rule, which will take effect on March 20, 2023, defining WOTUS according to the broader pre-2015 standards with additional updates to incorporate existing Supreme Court decisions and agency guidance. However, the new rule has already been challenged, with the State of Texas and industry groups filing separate suits in federal court in Texas on January 18, 2023. Moreover, the EPA and the Corps have announced an intent to develop a subsequent rule further revising the definition of WOTUS. Additionally, the Supreme Court is also expected to rule in mid-2023 on the legal tests used to determine whether wetlands are WOTUS, which ruling could impact the regulatory definition and its implementation more broadly. Therefore, the ongoing boundaries and substance of the WOTUS definition and its impacts on the scope of the CWA remain uncertain at this time. In addition, in an April 2020 decision, the U.S. Supreme Court held that, in certain cases, discharges from a point source to groundwater could fall within the scope of the CWA and require a permit. The Court rejected the EPA’s and Corps’ assertion that groundwater should be totally excluded from the CWA. To the extent any new rule or judicial decision expands the scope of the CWA’s jurisdiction in areas where we or our customers conduct operations, such developments could delay, restrict or halt permitting or development of projects, result in longer permitting timelines, or increased compliance expenditures or mitigation costs for our and our customers’ operations, which may reduce the rate of production from operators.

Endangered Species

The federal Endangered Species Act (the “ESA”) and comparable state laws may restrict exploration, development and production activities that may affect endangered and threatened species or their habitats. The ESA provides broad protection for species of fish, wildlife and plants that are listed as threatened or endangered in the United States and prohibits the taking of protected species. Similar protections are offered to migratory birds under the Migratory Bird Treaty Act, Canada’s Species at Risk Act, and other analogous state and provincial laws and regulations. Under the ESA, federal agencies are required to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed or endangered species or modify their critical habitats. New projects may require approvals and environmental analysis under these and other laws, including the National Environmental Policy Act. The resulting costs and liabilities associated with lengthy regulatory review and approval requirements could materially and negatively affect the viability of such projects.

Other Regulations

Transportation Regulation

Our transportation activities are subject to regulation by multiple governmental agencies. Our historical operating costs reflect the recurring costs resulting from compliance with these regulations. The following is a summary of the types of transportation regulation that may impact our operations.

Interstate Liquids Regulation in the United States. Our common carrier pipeline operations with interstate movements of liquids are subject to rate regulation by the U.S. Federal Energy Regulatory Commission (“FERC”) under the Interstate Commerce Act (“ICA”). Unless covered by a waiver, the ICA requires that we maintain tariffs on file with FERC for interstate movements of liquids on our pipelines. Those tariffs set forth the rates we charge for providing transportation services as well as the rules and regulations governing these services. The ICA requires that tariff rates for liquids pipelines, which include both crude oil pipelines and petroleum products pipelines, be just and reasonable and not unduly discriminatory. Failure to comply with the requirements of the ICA could result in the imposition of civil or criminal penalties, as described below.

Under the Energy Policy Act of 1992 (“EPAct”), liquids pipeline rates in effect for the 365-day period ending on the date of enactment of EPAct are deemed to be just and reasonable under the ICA if such rates had not been subject to complaint, protest or investigation during such 365-day period. Generally, complaints against such “grandfathered” rates may only be pursued if the complainant can show that a substantial change has occurred since the enactment of EPAct in either the economic circumstances of the liquids pipeline or in the nature of the services provided that were a basis for the rate. EPAct places no such limit on challenges to a provision of a liquids pipeline tariff rate or rules as unduly discriminatory or preferential. Many FERC-regulated liquids pipelines also use the FERC indexing methodology to change their rates. For those pipelines that use the FERC indexing methodology, FERC reviews the index formula every five years to determine whether a change in the methodology is required or, if not, to determine the appropriate index for the subsequent five-year period. On January 20, 2022, FERC issued an order on rehearing of its December 17, 2020 Order Establishing Index Level in which the Commission reduced the oil pricing index factor for oil pipelines to use for the current five-year period. As a result, the ceiling levels computed for July 1, 2021 to June 30, 2022, as well as the ceiling levels for July 1, 2022 to June 30, 2023, and the resulting rates currently in effect for certain of our liquids pipelines, were computed to account for the appropriate index factor. Some parties sought rehearing of the January 20, 2022 order with FERC, which was denied by FERC on May 6, 2022. Certain parties have appealed the January 20, 2022 and May 6, 2022 FERC orders, and the appeals remain pending before the DC Circuit. FERC has also retained cost-of-service ratemaking, market-based rates and settlement rates as alternatives to the indexing approach that may be used in certain specified circumstances.

Because the indexing methodology for the next five-year indexing period is tied in part to an inflation index and is not based on our specific costs, the indexing methodology could hamper our ability to recover cost increases. The majority of our pipeline profits in the United States are based on rates that are either grandfathered in part or set by agreement with one or more shippers. These rates remain regulated by FERC and are subject to challenge or review and modification by FERC under the ICA. Changes in FERC’s methodologies for approving rates could adversely affect us. In addition, challenges to our regulated rates could be filed with FERC and future decisions by FERC regarding our regulated rates could adversely affect our cash flows.

The Energy Policy Act of 2005 (“EPAct 2005”) authorized FERC to impose civil penalties for violations of the ICA and FERC regulations thereunder, up to a maximum amount that is adjusted annually for inflation, which for 2023 equals \$15,662 per day, per violation. Should we fail to comply with applicable statutes, rules, regulations and orders administered by FERC, we could be subject to substantial penalties and fines.

Intrastate Regulation in the United States. Our intrastate liquids pipeline transportation activities are subject to various state laws and regulations, as well as orders of state regulatory bodies, including the Railroad Commission of Texas (“TRRC”) and the California Public Utility Commission (“CPUC”). The CPUC prohibits certain of our subsidiaries from acting as guarantors of our senior notes and credit facilities.

Canadian Regulation. Our Canadian pipeline assets are subject to regulation by the CER and by provincial regulators. With respect to pipelines over which it has jurisdiction, the relevant regulatory authority has the power, upon application by a third party, to determine reasonability of the rates we are allowed to charge for transportation on, and set other terms of access to, such pipelines. In such circumstances, if the relevant regulatory authority determines that the applicable terms and conditions of service are not just and reasonable, the regulatory authority can impose conditions it considers appropriate.

Trucking Regulation

United States

We operate a fleet of trucks to transport crude oil and oilfield materials as a private, contract and common carrier. We are licensed to perform both intrastate and interstate motor carrier services. As a motor carrier, we are subject to certain safety regulations issued by the Federal Motor Carrier Safety Association of the DOT. The trucking regulations cover, among other things: (i) driver operations, (ii) log book maintenance, (iii) truck manifest preparations, (iv) safety placard placement on the trucks and trailer vehicles, (v) drug and alcohol testing and (vi) operation and equipment safety. We are also subject to OSHA with respect to our U.S. trucking operations.

Canada

Our trucking assets in Canada are subject to regulation by both federal and provincial transportation agencies in the provinces in which they are operated. These regulatory agencies do not set freight rates, but do establish and administer rules and regulations relating to other matters including equipment, facility inspection, reporting and safety. We are licensed to operate both intra- and inter-provincially under the direction of the National Safety Code (“NSC”) that is administered by Transport Canada. Our for-hire service is primarily the transportation of crude oil, condensates and NGL. We are required under the NSC to, among other things, monitor: (i) driver operations, (ii) log book maintenance, (iii) truck manifest preparations, (iv) safety placard placement on the trucks and trailers, (v) operation and equipment safety and (vi) many other aspects of trucking operations. We are also subject to Occupational Health and Safety regulations with respect to our Canadian trucking operations.

Railcar Regulation

We own and operate a number of railcar loading and unloading facilities in the United States and Canada. In connection with these rail terminals, we own and lease a significant number of railcars. Our railcar operations are subject to the regulatory jurisdiction of the Federal Railroad Administration (“FRA”) of the DOT, OSHA, as well as other federal and state regulatory agencies and Canadian regulatory agencies for operations in Canada. From time to time, these regulatory bodies may enact new regulations or revise and update existing regulations related to the transportation of oil and NGL by railcar.

Railcar accidents involving trains carrying crude oil from North Dakota’s Bakken shale formation have led to increased regulatory scrutiny. PHMSA issued a safety advisory warning that Bakken crude may be more flammable than other grades of crude oil and reinforcing the requirement to properly test, characterize, classify, and, where appropriate, sufficiently degasify hazardous materials prior to and during transportation. PHMSA also initiated “Operation Classification,” a compliance initiative involving unannounced inspections and testing of crude oil samples to verify that offerors of the materials have properly classified, described and labeled the hazardous materials before transportation. In late 2015, Congress passed the Fixing America’s Surface Transportation (“FAST”) Act which was subsequently signed by the President. This legislation clarified the parameters around the timeline and requirements for railcars hauling crude oil in the United States. We believe our railcar fleet is in compliance in all material respects with current standards for crude oil moved by rail.

Indigenous Protections

Part of our operations cross land that has historically been apportioned to various Native American/First Nations tribes (“Indigenous Peoples”), who may exercise significant jurisdiction and sovereignty over their lands. Indigenous Peoples may also have certain treaty rights and rights to consultation on projects that may affect such lands. Our operations may be impacted to the extent these tribal governments are found to have and choose to act upon such jurisdiction over lands where we operate.

Transportation Security Administration Security Directives

In 2021, in response to the Colonial Pipeline cybersecurity incident, The United States Department of Homeland Security’s Transportation Security Administration (“TSA”) issued two comprehensive security directives that included various cyber security and reporting requirements for critical infrastructure pipeline owners and/or operators. Compliance with these security directives may have a significant impact on our operations and results of operations.

Cross Border Regulation

As a result of our cross border activities, including transportation and importation of crude oil and NGL between the United States and Canada, we are subject to a variety of legal requirements pertaining to such activities including presidential permit requirements, export/import license requirements, tariffs, Canadian and U.S. customs and taxes, and requirements relating to toxic substances. U.S. legal requirements relating to these activities include regulations adopted pursuant to the Short Supply Controls of the Export Administration Act (“EAA”), the United States-Mexico-Canada Agreement (“USMCA”) and the Toxic Substances Control Act (“TSCA”), as well as presidential permit requirements of the U.S. Department of State. In addition, the importation and exportation of natural gas from and to the United States and Canada is subject to regulation by U.S. Customs and Border Protection, U.S. Department of Energy and the CER. Violations of these licensing, tariff and tax reporting requirements or failure to provide certifications relating to toxic substances could result in the imposition of significant administrative, civil and criminal penalties. Furthermore, the failure to comply with U.S. federal, state and local tax requirements, as well as Canadian federal and provincial tax requirements, could lead to the imposition of additional taxes, interest and penalties.

Market Anti-Manipulation Regulation

In November 2009, the Federal Trade Commission (“FTC”) issued regulations pursuant to the Energy Independence and Security Act of 2007, intended to prohibit market manipulation in the petroleum industry. Violators of the regulations face civil penalties of up to approximately \$1.4 million per violation per day, subject to the FTC’s annual inflation adjustment. In July 2010, Congress passed the Dodd-Frank Act, which incorporated an expansion of the authority of the Commodity Futures Trading Commission (“CFTC”) to prohibit market manipulation in the markets regulated by the CFTC. This authority, with respect to crude oil swaps and futures contracts, is similar to the anti-manipulation authority granted to the FTC with respect to crude oil purchases and sales. In July 2011, the CFTC issued final rules to implement their new anti-manipulation authority. The rules subject violators to a civil penalty of up to the greater of approximately \$1.23 million, subject to the CFTC’s annual inflation adjustment, or triple the monetary gain to the person for each violation.

Operational Hazards and Insurance

Pipelines, terminals, trucks or other facilities or equipment may experience damage as a result of an accident, natural disaster, terrorist attack, cyber event or other event. These hazards can cause personal injury and loss of life, severe damage to and destruction of property and equipment, pollution or environmental damage and suspension of operations. Consistent with insurance coverage generally available in the industry, in certain circumstances our insurance policies provide limited coverage for losses or liabilities relating to gradual pollution, with broader coverage for sudden and accidental occurrences. We maintain various types and varying levels of insurance coverage to cover our operations and properties, and we self-insure certain risks, including gradual pollution, cybersecurity and named windstorms. To the extent we do maintain insurance coverage, such insurance does not cover every potential risk that might occur, associated with operating pipelines, terminals and other facilities and equipment, including the potential loss of significant revenues and cash flows.

The occurrence of a significant event not fully insured, indemnified or reserved against, or the failure of a party to meet its insurance or indemnification obligations, could materially and adversely affect our operations and financial condition. While we strive to maintain adequate insurance coverage, our actual costs may exceed our coverage levels and insurance will not cover many types of interruptions that might occur, will not cover amounts up to applicable deductibles and will not cover all risks associated with certain of our assets and operations. With respect to our insurance coverage, our policies are subject to deductibles and retention levels that we consider reasonable and not excessive. Additionally, no assurance can be given that we will be able to maintain adequate insurance in the future at rates we consider reasonable. As a result, we may elect to self-insure or utilize higher deductibles in certain other insurance programs. In addition, although we believe that we have established adequate reserves and liquidity to the extent such risks are not insured, costs incurred in excess of these reserves may be higher or we may not receive insurance proceeds in a timely manner, which may potentially have a material adverse effect on our financial conditions, results of operations or cash flows.

Title to Properties and Rights-of-Way

Our real property holdings generally consist of: (i) parcels of land that we own in fee, (ii) surface leases and underground storage leases and (iii) easements, rights-of-way, permits, crossing agreements or licenses from landowners or governmental authorities permitting the use of certain lands for our operations. In all material respects, we believe we have satisfactory title or the right to use the sites upon which our significant facilities are located, subject to (a) customary liens, restrictions or encumbrances and (b) challenges that we do not regard as material relative to our overall operations. Some of our real property rights may be subject to termination under agreements that provide for one or more of: periodic payments, term periods, renewal rights, abandonment of use, continuous operation requirements, revocation by the licensor or grantor and possible relocation obligations.

Human Capital

General

Our primary human capital management objective is to attract, retain and develop a high quality workforce that will enable us to maintain and enhance a culture that is consistent with our Core Values. To support this objective, we seek to attract, reward and support employees through competitive pay, benefits and other programs; develop employees and encourage internal talent mobility to prepare employees for critical roles and leadership positions for the future; facilitate the development of a workplace culture that is diverse, engaging and inclusive; and promote efficiency and a high performance culture by investing in technology and systems and providing tools and resources that enable employees at work.

Neither we nor our general partner have officers or employees. All of our officers and other personnel necessary for our business to function are employed by GP LLC or PMCULC. As of December 31, 2022, GP LLC and PMCULC employed approximately 4,100 people in North America, of which approximately 2,900 were employed in the U.S. and approximately 1,200 were employed in Canada. Approximately 69% of our workforce (approximately 2,800 employees) are field employees, which includes approximately 800 employees in our trucking division. Our employees are located in 25 states in the U.S. and in four provinces in Canada. Approximately 185 employees are covered by six separate collective bargaining agreements, which are open for renegotiation in 2023, 2024 and 2025.

Health and Safety

Our people are our most valuable asset. We prioritize the health and safety of our employees and we are committed to protecting our employees and conducting our operations in a safe, reliable and responsible manner. We support our commitment to health and safety through extensive education and training and investment in necessary equipment, systems, processes and other resources, and we have a number of safety programs and campaigns that are shared across our operations, such as “Hazard ID / Near Miss Program” communications, periodic and situation specific safety stand-downs, lessons learned sharing and stop work authorization for all employees. We also have a number of programs that are focused on employee wellness, including an employee assistance program that provides free mental and behavioral support for employees. In addition, in order to incentivize performance in the areas of safety and environmental responsibility, our performance-based annual bonus program includes a safety component that is based on reductions in our recordable injury rate, and an environmental responsibility component that is tied to reductions in the number of federally reportable releases we experience. For 2022, our targets for these two areas were based on reductions from our 2020 results and we achieved or exceeded our targets, with reductions of approximately 18% and 35%, respectively, and since 2018, for each of these metrics, we have achieved cumulative reductions of more than 50%. In addition, in 2021 we established a new HSES Board Committee to provide additional oversight and perspectives with respect to HSES and ESG matters.

Diversity and Inclusion

We are committed to providing a professional work environment where all employees are treated with respect and dignity and provided with equal opportunities. To that end, we strive to develop a culture of inclusion and diversity in our workforce and aspire to employ a workforce that reflects the diversity of the communities where we operate. As of December 31, 2022, approximately 21% of our overall workforce was female (46% exclusive of field employees), and under-represented groups comprised approximately 34% of our U.S. workforce (39% exclusive of field employees).

We have focused our recruiting efforts on expanding the pool of potential new hire candidates in order to attract a more diverse employee workforce. We are recruiting at schools that traditionally have a more diverse student population and are also using recruiting tools that allow us to post open positions to expand our reach to a larger and more diverse potential employee candidate population.

In addition, to further support diversity and inclusion efforts at Plains and across the broader industry, we created and sponsor an employee resource group called Cultivating Connections. This group is dedicated to encouraging diversity, inclusion and advancement of women in the industry through networking, mentoring, sharing experiences and ideas, training, and furthering the development of leadership skills. Through Cultivating Connections, an employee mentorship program was also established to encourage professional growth through the development of core competencies.

Training and Leadership Development

We are committed to the continued development of our people. We provide a multitude of training programs covering subjects such as field operations, health and safety, regulatory compliance, technical training, management and leadership skills, and professional development. We also operate a number of internal programs at all levels of the workforce that are designed to identify and develop future leaders of the organization. The Board receives reports from senior management on a regular basis regarding the status of succession plans with respect to executive leadership of the company.

Benefits

Our compensation and benefits programs are designed to attract, retain and motivate our employees and to reward them for their services and success. In addition to providing competitive salaries and other compensation opportunities, we offer comprehensive and competitive benefits to our eligible employees including, depending on location, health (medical, dental and vision) insurance, prescription drug benefits, flexible spending accounts, parental leave, disability coverage, mental and behavioral health resources, paid time off, retirement savings plan, education reimbursement program, a disaster relief fund, life insurance and accidental death and dismemberment insurance.

Summary of Tax Considerations

The following is a brief summary of certain material U.S. federal income tax consequences and tax considerations related to the purchase, ownership and disposition of our Class A shares by a taxpayer that holds our Class A shares as a “capital asset” (generally property held for investment). This summary is based on the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), U.S. Treasury regulations, administrative rulings and judicial decisions, all as in effect on the date hereof, and all of which are subject to change or differing interpretations, possibly with retroactive effect. We have not sought any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary does not address all aspects of U.S. federal income taxation or the tax considerations arising under the laws of any non-U.S., state, or local jurisdiction, or under U.S. federal estate and gift tax laws. In addition, this summary does not address tax considerations applicable to investors that may be subject to special treatment under the U.S. federal income tax laws. The tax consequences of ownership of Class A shares depends in part on the owner’s individual tax circumstances. It is the responsibility of each shareholder, either individually or through a tax advisor, to investigate the legal and tax consequences of the shareholder’s investment in us under applicable U.S. federal, state and local law, as well as Canada and the Canadian provinces, of the shareholder’s investment in us. Further, it is the responsibility of each shareholder to file all U.S. federal, Canadian, state, provincial and local tax returns that may be required of the shareholder. Also see Item 1A. “Risk Factors—Tax Risks.”

Corporate Status

Although we are a Delaware limited partnership, we have elected to be treated as a corporation for U.S. federal income tax purposes. As a result, we are subject to tax as a corporation and distributions on our Class A shares will be treated as distributions on corporate stock for U.S. federal income tax purposes. No Schedule K-1 will be issued with respect to our Class A shares. Instead, holders of Class A shares will receive a Form 1099 from us or a broker with respect to distributions received on our Class A shares.

Consequences to U.S. Holders

The discussion in this section is addressed to holders of our Class A shares who are U.S. holders for U.S. federal income tax purposes. For the purposes of this discussion, a “U.S. holder” is a beneficial owner of our Class A shares that, for U.S. federal income tax purposes, is:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust (i) the administration of which is subject to the primary supervision of a U.S. court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (ii) which has made a valid election under applicable U.S. Treasury regulations to be treated as a United States person.

Distributions

Distributions with respect to our Class A shares will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent that the amount of a distribution with respect to our Class A shares exceeds our current and accumulated earnings and profits, such distribution will be treated first as a tax-free return of capital to the extent of the U.S. holder's adjusted tax basis in such Class A shares, which reduces such basis dollar-for-dollar, and thereafter as capital gain from the sale or exchange of such Class A shares. See "—Gain on Disposition of Class A Shares." Non-corporate holders that receive distributions on our Class A shares that are treated as dividends for U.S. federal income tax purposes generally will be subject to U.S. federal income tax at a reduced rate (currently at a maximum rate of 20%) provided certain holding period requirements are met.

Both AAP and PAA have made elections permitted by Section 754 of the Code. As a result, our acquisition of AAP units in connection with our initial public offering ("IPO") and in connection with exchanges since the IPO by the holders of our Class B shares and the AAP units not held by us ("Legacy Owners") and their permitted transferees of their AAP units and Class B shares for Class A shares have resulted in basis adjustments with respect to our interest in the assets of AAP (and indirectly in PAA). Such adjustments have resulted in depreciation and amortization deductions that we anticipate will offset a substantial portion of our taxable income for an extended period of time. In addition, future exchanges of AAP units and Class B shares for our Class A shares will result in additional basis adjustments with respect to our interest in the assets of AAP (and indirectly in PAA). We expect to benefit from additional tax deductions resulting from those adjustments, the amount of which will vary depending on the value of the Class A shares at the time of the exchange.

As a result of the basis adjustments described above, we may not have sufficient earnings and profits for distributions on our Class A shares to qualify as dividends for U.S. federal income tax purposes. If a distribution on our Class A shares fails to qualify as a dividend for U.S. federal income tax purposes, such distribution will be treated first as a tax-free return of capital to the extent of the U.S. holder's adjusted tax basis in our Class A shares and thereafter as capital gain from the sale or exchange of our Class A shares. As a result, U.S. corporate holders will be unable to utilize the corporate dividends-received deduction with respect to such distribution.

Investors in our Class A shares are encouraged to consult their tax advisors as to the tax consequences of receiving distributions on our Class A shares that do not qualify as dividends for U.S. federal income tax purposes, including, in the case of corporate investors, the inability to claim the corporate dividends received deduction with respect to such distributions.

Gain on Disposition of Class A Shares

A U.S. holder generally will recognize capital gain or loss on a sale, exchange, certain redemptions, or other taxable disposition of our Class A shares equal to the difference, if any, between the amount realized upon the disposition of such Class A shares and the U.S. holder's adjusted tax basis in those shares. A U.S. holder's tax basis in our shares generally will be equal to the amount paid for such shares reduced (but not below zero) by distributions received on such shares that are not treated as dividends for U.S. federal income tax purposes. Such capital gain or loss generally will be long-term capital gain or loss if the U.S. holder's holding period for the shares sold or disposed of is more than one year. Long-term capital gains of individuals generally are subject to U.S. federal income tax at a reduced rate (currently at a maximum rate of 20%). The deductibility of net capital losses is subject to limitations.

Backup Withholding and Information Reporting

Information returns generally will be filed with the IRS with respect to distributions on our Class A shares and the proceeds from a disposition of our Class A shares. U.S. holders may be subject to backup withholding on distributions with respect to our Class A shares and on the proceeds of a disposition of our Class A shares unless such U.S. holders furnish the applicable withholding agent with a taxpayer identification number, certified under penalties of perjury, and certain other information, or otherwise establish, in the manner prescribed by law, an exemption from backup withholding. Penalties apply for failure to furnish correct information and for failure to include reportable payments in income.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be creditable against a U.S. holder's U.S. federal income tax liability, and the U.S. holder may be entitled to a refund, provided the U.S. holder timely furnishes the required information to the IRS. U.S. holders are urged to consult their own tax advisors regarding the application of the backup withholding rules to their particular circumstances and the availability of, and procedure for, obtaining an exemption from backup withholding.

Consequences to Non-U.S. Holders

The discussion in this section is addressed to holders of our Class A shares who are non-U.S. holders for U.S. federal income tax purposes. For purposes of this discussion, a “non-U.S. holder” is a beneficial owner of our Class A shares that is an individual, corporation, estate or trust that is not a U.S. holder as defined above.

Distributions

Distributions with respect to our Class A shares will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, the distributions will be treated as a non-taxable return of capital to the extent of the non-U.S. holder’s tax basis in our common stock and thereafter as capital gain from the sale or exchange of such common stock. See “—Gain on Disposition of Class A Shares.” Subject to the withholding requirements under FATCA (as defined below) and with respect to effectively connected dividends, each of which is discussed below, any distribution made to a non-U.S. holder on our Class A shares generally will be subject to U.S. withholding tax at a rate of 30% of the gross amount of the distribution unless an applicable income tax treaty provides for a lower rate. To the extent a distribution exceeds our current and accumulated earnings and profits, such distribution will reduce the non-U.S. holder’s adjusted tax basis in its Class A shares (but not below zero). The amount of any such distribution in excess of the non-U.S. holder’s adjusted tax basis in its Class A shares will be treated as gain from the sale of such shares and will have the tax consequences described below under “Gain on Disposition of Class A Shares.” The rules applicable to distributions by a United States real property holding corporation (a “USRPHC”) to non-U.S. persons that exceed current and accumulated earnings and profits are not clear. As a result, it is possible that U.S. federal income tax at a rate not less than 15% (or such lower rate as specified by an applicable income tax treaty for distributions from a USRPHC) may be withheld from distributions received by non-U.S. holders that exceed our current and accumulated earnings and profits. To receive the benefit of a reduced treaty rate, a non-U.S. holder must provide the applicable withholding agent with an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) certifying qualification for the reduced rate.

Non-U.S. holders are encouraged to consult their tax advisors regarding the withholding rules applicable to distributions on our Class A shares, the requirement for claiming treaty benefits, and any procedures required to obtain a refund of any overwithheld amounts.

Distributions treated as dividends that are paid to a non-U.S. holder and that are effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, are treated as attributable to a permanent establishment maintained by the non-U.S. holder in the United States) generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code). Such effectively connected dividends will not be subject to U.S. withholding tax if the non-U.S. holder satisfies certain certification requirements by providing the applicable withholding agent with a properly executed IRS Form W-8ECI certifying eligibility for exemption. If the non-U.S. holder is a corporation for U.S. federal income tax purposes, it may also be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include effectively connected dividends.

Gain on Disposition of Class A Shares

Subject to the discussion below under “—Backup Withholding and Information Reporting,” a non-U.S. holder generally will not be subject to U.S. federal income or withholding tax on any gain realized upon the sale or other disposition of our Class A shares unless:

- the non-U.S. holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met;
- the gain is effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States); or
- our Class A shares constitute a United States real property interest by reason of our status as a USRPHC for U.S. federal income tax purposes and as a result such gain is treated as effectively connected with a trade or business conducted by the non-U.S. holder in the United States.

A non-U.S. holder described in the first bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate as specified by an applicable income tax treaty) on the amount of such gain, which generally may be offset by U.S. source capital losses provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

A non-U.S. holder whose gain is described in the second bullet point above or, subject to the exceptions described in the next paragraph, the third bullet point above, generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code) unless an applicable income tax treaty provides otherwise. If the non-U.S. holder is a corporation for U.S. federal income tax purposes whose gain is described in the second bullet point above, then such gain would also be included in its effectively connected earnings and profits (as adjusted for certain items), which may be subject to a branch profits tax (at a 30% rate or such lower rate as specified by an applicable income tax treaty).

Generally, a corporation is a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. We believe that we currently are, and expect to remain for the foreseeable future, a USRPHC for U.S. federal income tax purposes. However, as long as our Class A shares continue to be “regularly traded on an established securities market” (within the meaning of the U.S. Treasury regulations), only a non-U.S. holder that actually or constructively owns, or owned at any time during the shorter of the five-year period ending on the date of the disposition or the non-U.S. holder’s holding period for the Class A shares, more than 5% of our Class A shares will be treated as disposing of a United States real property interest and will be taxable on gain realized on the disposition of our Class A shares as a result of our status as a USRPHC. If our Class A shares were not considered to be regularly traded on an established securities market, such non-U.S. holder (regardless of the percentage of our Class A shares owned) would be treated as disposing of a United States real property interest and would be subject to U.S. federal income tax on a taxable disposition of our Class A shares (as described in the preceding paragraph), and a 15% withholding tax would apply to the gross proceeds from such disposition.

Non-U.S. holders should consult their tax advisors with respect to the application of the foregoing rules to their ownership and disposition of our Class A shares, including regarding potentially applicable income tax treaties that may provide for different rules.

Backup Withholding and Information Reporting

Any distributions paid to a non-U.S. holder must be reported annually to the IRS and to each non-U.S. holder. Copies of these information returns may be made available to the tax authorities in the country in which the non-U.S. holder resides or is established. Payments of distributions to a non-U.S. holder generally will not be subject to backup withholding if the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, or IRS Form W-8BEN-E (or other applicable or successor form).

Payments of the proceeds from a sale or other disposition by a non-U.S. holder of our Class A shares effected by or through a U.S. office of a broker generally will be subject to information reporting and backup withholding (at the applicable rate) unless the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) and certain other conditions are met. Information reporting and backup withholding generally will not apply to any payment of the proceeds from a sale or other disposition of our Class A shares effected outside the United States by a non-U.S. office of a broker. However, unless such broker has documentary evidence in its records that the non-U.S. holder is not a United States person and certain other conditions are met, or the non-U.S. holder otherwise establishes an exemption, information reporting will apply to a payment of the proceeds of the disposition of our Class A shares effected outside the United States by such a broker if it has certain relationships within the United States.

Backup withholding is not an additional tax. Rather, the U.S. federal income tax liability (if any) of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is timely furnished to the IRS.

Additional Withholding Requirements under FATCA

Sections 1471 through 1474 of the Code, and the U.S. Treasury regulations and administrative guidance issued thereunder (“FATCA”), impose a 30% withholding tax on any dividends paid on our Class A shares and, subject to the proposed U.S. Treasury regulations discussed below, on proceeds from sales or other dispositions of our Class A shares if paid to a “foreign financial institution” or a “non-financial foreign entity” (each as defined in the Code) (including, in some cases, when such foreign financial institution or non-financial foreign entity is acting as an intermediary), unless (i) in the case of a foreign financial institution, such institution enters into an agreement with the U.S. government to withhold on certain payments, and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners), (ii) in the case of a non-financial foreign entity, such entity certifies that it does not have any “substantial United States owners” (as defined in the Code) or provides the applicable withholding agent with a certification identifying the direct and indirect substantial United States owners of the entity (in either case, generally on an IRS Form W-8BEN-E), or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules and provides appropriate documentation (such as an IRS Form W-8BEN-E). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes. While gross proceeds from a sale or other disposition of our Class A shares paid after January 1, 2019 would have originally been subject to withholding under FATCA, proposed U.S. Treasury regulations provide that such payments of gross proceeds do not constitute withholdable payments. Taxpayers may generally rely on these proposed U.S. Treasury regulations until they are revoked or final U.S. Treasury regulations are issued. Non-U.S. holders are encouraged to consult their own tax advisors regarding the effects of FATCA on an investment in our Class A shares.

Available Information

We make available, free of charge on our Internet website at www.plains.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file the material with, or furnish it to, the Securities and Exchange Commission (“SEC”). The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. Our website includes a significant amount of information about us, including financial and other information that could be deemed material to investors. Investors and others are encouraged to review the information posted on our website. The information posted on our website is not incorporated by reference into this Annual Report on Form 10-K or any of our other filings with the SEC.

Item 1A. Risk Factors

Summary of Risk Factors

Risks Inherent in an Investment in Us

Our partnership structure carries inherent risks, including but not limited to:

- our cash flow will be entirely dependent upon the ability of PAA to make cash distributions to AAP, and the ability of AAP to make cash distributions to us;
- the distributions AAP is entitled to receive may fluctuate, which may reduce cash distributions to our Class A shareholders;
- if distributions on our Class A shares are not paid with respect to any fiscal quarter, our Class A shareholders will not be entitled to receive that quarter's payments in the future;
- the amount of cash that we and PAA distribute each quarter may limit our ability to grow;
- the Class B shareholders own a significant number of shares, which may make the removal of our general partner difficult; and
- Our general partner may cause us to issue additional Class A shares or other equity securities, including equity securities that are senior to our Class A shares, or cause AAP to issue additional securities, in each case without shareholder approval, which may adversely affect our shareholders.

Risks Related to Conflicts of Interest

Our existing organizational structure and the current and future relationships among us, PAA, our respective general partners, the Legacy Owners and affiliated entities present the potential for conflicts of interest.

Risks Related to PAA's Business

PAA's business, results of operations, financial condition, cash flows and unit price can be adversely affected by many factors including but not limited to:

- the volume of crude oil, natural gas and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of PAA's facilities, which can be negatively impacted by a variety of factors outside of its control;
- competition in PAA's industry, including recontracting and other risks associated with the general capacity overbuild of midstream energy infrastructure in some of the areas where PAA operates;
- changes in supply and demand for the products PAA handles and the services it provides, which can be caused by a variety of factors outside of its control;
- natural disasters, catastrophes, terrorist attacks (including eco-terrorist attacks), process safety failures, equipment failures or other events, including pipeline or facility accidents and cyber or other attacks on PAA's electronic and computer systems, could interrupt its operations, hinder PAA's ability to fulfil its contractual obligations and/or result in severe personal injury, property damage and environmental damage;
- cybersecurity attacks, data breaches and other disruptions affecting PAA or its service providers could materially and adversely affect its business, operations, reputation and financial results;
- pandemics, epidemics or other public health events;
- societal and political pressures from various groups, including opposition to the development or operation of PAA's pipelines and facilities;
- increased concern by financial stakeholders with respect to PAA's governance structure and the perceived social and environmental cost of PAA's industry;
- the overall forward market for crude oil and NGL, and certain market structures, the absence of pricing volatility and other market factors;
- an inability to fully implement or realize expected returns or other anticipated benefits associated with joint venture and joint ownership arrangements, acquisitions, divestitures and other projects;
- entering into new businesses in connection with PAA's strategy to participate in emerging energy opportunities;
- loss of PAA's investment grade credit rating or a significant reduction in the ability of PAA to receive open credit;

- the credit risk of PAA's customers and other counterparties it transacts with in the ordinary course of business activities;
- tightened capital markets or other factors that increase PAA's cost of capital or otherwise limit its access to capital;
- the insufficiency of, or non-compliance with, PAA's risk policies;
- PAA's insurance coverage may not fully cover its losses and it may in the future encounter increased costs related to, and lack of availability of, insurance;
- PAA's current or future debt levels, or inability to borrow additional funds or capitalize on business opportunities;
- changes in currency exchange rates;
- difficulties recruiting and retaining PAA's workforce;
- an impairment of long-term assets;
- significant under-utilization of certain assets due to fixed costs incurred to obtain the right to use such assets;
- the cost to repair and maintain PAA's assets;
- PAA does not own all of the land on which its pipelines and facilities are located, which could result in disruptions to its operations; and
- failure to obtain materials or commodities in the quantity and the quality PAA needs, and at commercially acceptable prices, whether due to supply disruptions, inflation, tariffs, quotas or other factors.

Risks Related to Laws and Regulations Impacting PAA's Business

PAA's business may be adversely impacted by existing or new laws, executive orders and regulations relating to protection of the environment and wildlife, operational safety, pandemics, cross-border import/export and tax matters, financial and hedging activities, climate change and related matters.

Risks Inherent in an Investment in PAA

PAA's partnership structure carries inherent risks, including but not limited to:

- cost reimbursements due to PAA's general partner may be substantial and will reduce PAA's cash available for distribution to its unitholders;
- cash distributions are not guaranteed and may fluctuate with PAA's performance and the establishment of financial reserves; and
- PAA's preferred units have rights, preferences and privileges that are not held by, and are preferential to the rights of, holders of PAA's common units.

Tax Risks

Our shares are subject to tax risks, which may adversely impact the value of or market for our shares and may reduce our cash available for distribution or debt service, including but not limited to:

- the tax treatment of PAA depends on its status as a partnership for U.S. federal income tax purposes and not being subject to a material amount of entity-level taxation. The cash available for distribution to us from PAA may be substantially reduced if PAA were to become subject to entity-level taxation as a result of the Internal Revenue Service ("IRS") treating PAA as a corporation or legislative, judicial or administrative changes, and may also be reduced by any audit adjustments if imposed directly on PAA. Additionally, the treatment of PAA as a corporation would increase the portion of our distributions treated as taxable dividends; and
- our current tax treatment may change, which could affect the value of our Class A shares or reduce our cash available for distribution, and any decrease in our Class A share price could adversely affect our amount of cash available for distribution.

Risks Inherent in an Investment in Us

Our cash flow will be entirely dependent upon the ability of PAA to make cash distributions to AAP, and the ability of AAP to make cash distributions to us.

The source of our earnings and cash flow currently consists exclusively of cash distributions from AAP, which currently consist exclusively of cash distributions from PAA. The amount of cash that PAA will be able to distribute to its partners, including AAP, each quarter principally depends upon the amount of cash it generates from its business. For a description of certain factors that can cause fluctuations in the amount of cash that PAA generates from its business, please read “—Risks Related to PAA’s Business”, “—Risks Related to Laws and Regulations Impacting PAA’s Business”, “—Risks Inherent in an Investment in PAA” and Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” PAA may not have sufficient available cash each quarter to continue paying distributions at its current level or at all. If PAA reduces its per unit distribution, either because of reduced operating cash flow, higher expenses, capital requirements or otherwise, we will have less cash available for distribution and would likely be required to reduce our per share distribution. The amount of cash PAA has available for distribution depends primarily upon PAA’s cash flow, including cash flow from the release of financial reserves as well as borrowings, and is not solely a function of profitability, which will be affected by non-cash items. As a result, PAA may make cash distributions during periods when it records losses and may not make cash distributions during periods when it records profits.

Furthermore, AAP’s ability to distribute cash to us and our ability to distribute cash received from AAP to our Class A shareholders is limited by a number of factors, including:

- our payment of any income taxes;
- restrictions on distributions contained in PAA’s credit facilities and any future debt agreements entered into by AAP, PAA or us; and
- reserves our general partner establishes for, among other things, the proper conduct of our business or to comply with applicable law or any agreement binding on us or our subsidiaries (exclusive of PAA and its subsidiaries).

A material increase in amounts paid or reserved with respect to any of these factors could restrict our ability to pay quarterly distributions to our Class A shareholders. See Item 5. “Market for Registrant’s Shares, Related Shareholder Matters and Issuer Purchases of Equity Securities—Cash Distribution Policy.”

The distributions AAP is entitled to receive may fluctuate, which may reduce cash distributions to our Class A shareholders.

At December 31, 2022, we owned an approximate 81% limited partner interest in AAP, which owned approximately 241.0 million PAA common units. All of the cash flow we receive from AAP is derived from its ownership of these PAA common units. Because distributions on PAA common units are dependent on the amount of cash PAA generates, distributions may fluctuate based on PAA’s performance. The actual amount of cash that is available to be distributed each quarter will depend on numerous factors, some of which are beyond our control and the control of PAA. Cash distributions are dependent primarily on cash flow, including cash flow from financial reserves and working capital borrowings, and not solely on profitability, which is affected by non-cash items. Therefore, PAA’s cash distributions might be made during periods when PAA records losses and might not be made during periods when PAA record profits.

If distributions on our Class A shares are not paid with respect to any fiscal quarter, our Class A shareholders will not be entitled to receive that quarter’s payments in the future.

Our distributions to our Class A shareholders are not cumulative. Consequently, if distributions on our Class A shares are not paid with respect to any fiscal quarter, our Class A shareholders will not be entitled to receive that quarter’s payments in the future.

The amount of cash that we and PAA distribute each quarter may limit our ability to grow.

Because we distribute all of our available cash, our growth may not be as fast as the growth of businesses that reinvest their available cash to expand ongoing operations. In fact, because currently our cash flow is generated solely from distributions we receive from AAP, which are derived from AAP's partnership interests in PAA, our growth will be completely dependent upon PAA. The amount of distributions received by AAP is based on PAA's per unit distribution paid on each PAA common unit and the number of PAA common units that AAP owns. If we issue additional Class A shares or we were to incur debt or are required to pay taxes, the payment of distributions on those additional Class A shares, or interest on such debt or payment of such taxes, could increase the risk that we will be unable to maintain or increase our cash distribution levels.

Restrictions in PAA's credit facilities could limit AAP's ability to make distributions to us, thereby limiting our ability to make distributions to our Class A shareholders.

PAA's credit facilities contain various operating and financial restrictions and covenants. PAA's ability to comply with these restrictions and covenants may be affected by events beyond its control, including prevailing economic, financial and industry conditions. If PAA is unable to comply with these restrictions and covenants, any indebtedness under these credit facilities may become immediately due and payable and PAA's lenders' commitment to make further loans under these credit facilities may terminate. PAA might not have, or be able to obtain, sufficient funds to make these accelerated payments.

For more information regarding PAA's credit facilities, please read "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources." For information regarding risks related to PAA's credit facilities, please see "—Risks Related to PAA's Business—The terms of PAA's indebtedness may limit its ability to borrow additional funds or capitalize on business opportunities. In addition, PAA's future debt level may limit its future financial and operating flexibility."

The Class B shareholders own a significant number of shares, which may make the removal of our general partner difficult.

Our shareholders have only limited voting rights on matters affecting our business and, therefore, limited ability to influence management's decisions regarding our business. If our Class A shareholders are dissatisfied with the performance of our general partner, it may be difficult for them to remove our general partner. Our general partner may only be removed by vote of the holders of at least 66 2/3% of our outstanding shares (including both Class A and Class B shares). At December 31, 2022, the Legacy Owners owned approximately 19% of our outstanding Class A and Class B shares. Without the support of our Legacy Owners, such ownership level may make it more difficult for our Class A shareholders to obtain the requisite vote level required to remove our general partner.

As a result of these provisions, the price at which our shares trade may be lower because of the absence or reduction of a control or takeover premium in the trading price.

Our general partner may cause us to issue additional Class A shares or other equity securities, including equity securities that are senior to our Class A shares, or cause AAP to issue additional securities, in each case without shareholder approval, which may adversely affect our shareholders.

Our general partner may cause us to issue an unlimited number of additional Class A shares or other equity securities of equal rank with the Class A shares, or cause AAP to issue additional securities, in each case without shareholder approval. In addition, we may issue an unlimited number of shares that are senior to our Class A shares in right of distribution, liquidation and voting. Except for Class A shares issued in connection with the exercise of an Exchange Right, which will result in the cancellation of an equivalent number of Class B shares and therefore have no effect on the total number of outstanding shares, the issuance of additional Class A shares or our other equity securities of equal or senior rank, or the issuance by AAP of additional securities, will have the following effects:

- each shareholder's proportionate ownership interest in us may decrease;
- the amount of cash available for distribution on each Class A share may decrease;
- the relative voting strength of each previously outstanding Class A share may be diminished;
- the ratio of taxable income to distributions may increase; and
- the market price of the Class A shares may decline.

If PAA's unitholders remove PAA GP as PAA's general partner, AAP may be required to sell or exchange its indirect general partner interest and we may lose our ability to manage and control PAA.

We currently manage our investment in PAA through our indirect ownership of PAA GP, which serves as PAA's general partner. PAA's partnership agreement gives unitholders of PAA the right to remove PAA GP as general partner upon the affirmative vote of holders of 66 2/3% of PAA's outstanding units. If PAA GP withdraws as general partner or is removed without cause (as defined in PAA's partnership agreement) and a successor general partner is elected, AAP will receive cash in exchange for its indirect general partner interest. If PAA GP withdraws under circumstances other than those described in the preceding sentence and a successor general partner is elected, the successor general partner will purchase the general partner interest for its fair market value. If PAA GP's interests are not purchased, they will be converted into common units. In either case, we could lose our ability to manage and control PAA.

In addition, if PAA GP is removed or withdraws as general partner of PAA, we could face an increased risk of being deemed an investment company. Please read "—If in the future we cease to manage and control PAA, we may be deemed to be an investment company under the Investment Company Act of 1940."

Shareholders may not have limited liability if a court finds that shareholder action constitutes control of our business.

Under Delaware law, our shareholders could be held liable for our obligations to the same extent as a general partner if a court determined that the right or the exercise of the right by our shareholders as a group to remove or replace our general partner, to approve some amendments to the partnership agreement or to take other action under our partnership agreement constituted participation in the "control" of our business. Additionally, the limitations on the liability of holders of limited partner interests for the liabilities of a limited partnership have not been clearly established in many jurisdictions.

Furthermore, Section 17-607 of the Delaware Revised Uniform Limited Partnership Act provides that, under some circumstances, a shareholder may be liable to us for the amount of a distribution for a period of three years from the date of the distribution.

If in the future we cease to manage and control PAA, we may be deemed to be an investment company under the Investment Company Act of 1940.

If we cease to indirectly manage and control PAA and are deemed to be an investment company under the Investment Company Act of 1940, we would either have to register as an investment company under the Investment Company Act of 1940, obtain exemptive relief from the SEC or modify our organizational structure or our contractual rights to fall outside the definition of an investment company. Registering as an investment company could, among other things, materially limit our ability to engage in transactions with affiliates, including the purchase and sale of certain securities or other property to or from our affiliates, restrict the ability of PAA and us to borrow funds or engage in other transactions involving leverage, require us to add additional directors who are independent of us and our affiliates, and adversely affect the price of our Class A shares.

Our partnership agreement restricts the rights of shareholders owning 20% or more of our shares.

Our shareholders' voting rights are restricted by the provision in our partnership agreement generally providing that any shares held by a person or group that owns 20% or more of any class of shares then outstanding, other than our general partner, the Legacy Owners (or certain transferees in private, non-exchange transactions), their respective affiliates and persons who acquired such shares with the prior approval of our general partner's board of directors, cannot be voted on any matter, except that such shares constituting up to 19.9% of the total shares outstanding may be voted in the election of directors. In addition, our partnership agreement contains provisions limiting the ability of our shareholders to call meetings or to acquire information about our operations, as well as other provisions limiting our shareholders' ability to influence the manner or direction of our management. As a result, the price at which our Class A shares will trade may be lower because of the absence or reduction of a takeover premium in the trading price.

If PAA's general partner, which is owned by AAP, is not fully reimbursed or indemnified for obligations and liabilities it incurs in managing the business and affairs of PAA, its value, and, therefore, the value of our Class A shares, could decline.

AAP, GP LLC and their affiliates may make expenditures on behalf of PAA for which PAA GP will seek reimbursement from PAA. Under Delaware partnership law, PAA GP has unlimited liability for the obligations of PAA, such as its debts and environmental liabilities, except for those contractual obligations of PAA that are expressly made without recourse to the general partner. To the extent PAA GP incurs obligations on behalf of PAA, it is entitled to be reimbursed or indemnified by PAA. If PAA is unable or unwilling to reimburse or indemnify PAA GP, PAA GP may be required to satisfy those liabilities or obligations, which would reduce AAP's cash flows to us.

The price of our Class A shares may be volatile, and holders of our Class A shares could lose a significant portion of their investments.

The market price of our Class A shares could be volatile, and our shareholders may not be able to resell their Class A shares at or above the price at which they purchased such Class A shares due to fluctuations in the market price of the Class A shares, including changes in price caused by factors unrelated to our operating performance or prospects or the operating performance or prospects of PAA. The following factors, among others, could affect our Class A share price:

- PAA's operating and financial performance and prospects and the trading price of its common units;
- the level of PAA's quarterly distributions and our quarterly distributions;
- quarterly variations in the rate of growth of our financial indicators, such as distributable cash flow per Class A share, net income and revenues;
- changes in revenue or earnings and distribution estimates or publication of research reports by analysts;
- speculation by the press or investment community;
- sales of our Class A shares by our shareholders;
- the exercise by the Legacy Owners of their exchange rights with respect to any retained AAP units;
- announcements by PAA or its competitors of significant contracts, acquisitions, strategic partnerships, joint ventures, securities offerings or capital commitments;
- general market conditions, including conditions in financial markets;
- changes in accounting standards, policies, guidance, interpretations or principles;
- adverse changes in tax laws or regulations;
- domestic and international economic, legal and regulatory factors related to PAA's performance; and
- other factors described in these "Risk Factors."

An increase in interest rates may cause the market price of our shares to decline.

Like all equity investments, an investment in our Class A shares is subject to certain risks. In exchange for accepting these risks, investors may expect to receive a higher rate of return than would otherwise be obtainable from lower-risk investments. Accordingly, as interest rates rise, the ability of investors to obtain higher risk-adjusted rates of return by purchasing government-backed debt securities may cause a corresponding decline in demand for riskier investments generally, including yield-based equity investments such as publicly traded limited partnership interests. Reduced demand for our Class A shares resulting from investors seeking other more favorable investment opportunities may cause the trading price of our Class A shares to decline.

Future sales of our Class A shares in the public market could reduce our Class A share price, and any additional capital raised by us through the sale of equity or convertible securities may have a dilutive effect on our shareholders.

Subject to certain limitations and exceptions, holders of AAP units may exchange their AAP units (together with a corresponding number of Class B shares) for Class A shares (on a one-for-one basis, subject to customary conversion rate adjustments for equity splits and reclassification and other similar transactions) and then sell those Class A shares. We may also issue additional Class A shares or convertible securities in subsequent public or private offerings.

We cannot predict the size of future issuances of our Class A shares or securities convertible into Class A shares or the effect, if any, that future issuances and sales of our Class A shares will have on the market price of our Class A shares. Sales of substantial amounts of our Class A shares (including shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices of our Class A shares.

The Legacy Owners hold a meaningful portion of the combined voting power of our Class A and Class B shares.

At December 31, 2022, through their ownership of Class B shares, the Legacy Owners held approximately 19% of the combined voting power of our Class A and Class B shares. The Legacy Owners are entitled to act separately in their own respective interests with respect to their partnership interests in us, and collectively they currently have the ability to influence (although not the ability to block outright) (i) the outcome of any matters requiring shareholder approval, including certain mergers and other material transactions and (ii) a change in the composition of our board of directors or a change in control of our company that could deprive our shareholders of an opportunity to receive a premium for their Class A shares as part of a sale of our company. So long as the Legacy Owners continue to own a meaningful amount of our outstanding shares, even if such amount is less than 50%, they will continue to be able to influence any matters requiring shareholder approval, regardless of whether or not other shareholders believe that such matters are in their own best interests.

A valuation allowance on our deferred tax asset could reduce our earnings.

As of December 31, 2022, we had a gross deferred tax asset of approximately \$1.4 billion. Generally accepted accounting principles in the United States (“GAAP”) requires that a valuation allowance must be established for deferred tax assets when it is more likely than not that they will not be realized. We believe that the deferred tax asset we recorded through 2022 will be realized and that a valuation allowance is not required. However, if we were to determine that a valuation allowance was appropriate for our deferred tax asset, we would be required to take an immediate charge to earnings with a corresponding reduction of partners’ capital and increase in balance sheet leverage as measured by debt-to-total capitalization. In light of the Tax Cuts and Jobs Act of 2017, a valuation allowance will not be required for any U.S. federal deferred tax asset created after 2017.

We may incur liability as a result of our ownership of our and PAA’s general partner.

Under Delaware law, a general partner of a limited partnership is generally liable for the debts and liabilities of the partnership for which it serves as general partner, subject to the terms of any indemnification agreements contained in the partnership agreement and except to the extent the partnership’s contracts are non-recourse to the general partner. As a result of our structure, we indirectly own and control the general partner of PAA and own a portion of our general partner’s membership interests. Our percentage ownership of our general partner is expected to increase over time as the Legacy Owners exercise their exchange rights. To the extent the indemnification provisions in the applicable partnership agreement or non-recourse provisions in our contracts are not sufficient to protect us from such liability, we may in the future incur liabilities as a result of our ownership of these general partner entities.

Risks Related to Conflicts of Interest

Our existing organizational structure and the current and future relationships among us, PAA, our respective general partners, the Legacy Owners and affiliated entities present the potential for conflicts of interest.

Conflicts of interest may arise as a result of our organizational structure and the current and future relationships among us, PAA, our respective general partners, the Legacy Owners and affiliated entities.

Our partnership agreement defines the duties of our general partner (and, by extension, its officers and directors). Our general partner’s board of directors or its conflicts committee will have authority on our behalf to resolve any conflict involving us and they have broad latitude to consider the interests of all parties to the conflict.

Conflicts of interest may arise between us and our shareholders, on the one hand, and our general partner and its owners and affiliated entities, on the other hand, or between us and our shareholders, on the one hand, and PAA and its unitholders, on the other hand. The resolution of these conflicts may not always be in our best interest or that of our shareholders.

Our partnership agreement defines our general partner's duties to us and contains provisions that reduce the remedies available to our shareholders for actions that might otherwise be challenged as breaches of fiduciary or other duties under state law.

Our partnership agreement contains provisions that substantially reduce the standards to which our general partner would otherwise be held by state fiduciary duty law. For example, our partnership agreement:

- permits our general partner to make a number of decisions in its individual capacity, as opposed to in its capacity as our general partner. This entitles our general partner to consider only the interests and factors that it desires, and it has no duty or obligation to give any consideration to any interest of, or factors affecting, us, the Legacy Owners, our affiliates or any limited partner. Examples include its right to vote membership interests in our general partner held by us, the exercise of its limited call right, its rights to transfer or vote any shares it may own, and its determination whether or not to consent to any merger or consolidation of our partnership or amendment to our partnership agreement;
- generally provides that our general partner will not have any liability to us or our shareholders for decisions made in its capacity as a general partner so long as it acted in good faith which, pursuant to our partnership agreement, requires a subjective belief that the determination, or other action or anticipated result thereof is in, or not opposed to, our best interests;
- generally provides that any resolution or course of action adopted by our general partner and its affiliates in respect of a conflict of interest will be permitted and deemed approved by all of our partners, and will not constitute a breach of our partnership agreement or any duty stated or implied by law or equity if the resolution or course of action in respect of such conflict of interest is:
 - approved by a majority of the members of our general partner's conflicts committee after due inquiry, based on a subjective belief that the course of action or determination that is the subject of such approval is fair and reasonable to us;
 - approved by majority vote of our Class A shares and Class B shares (excluding Class C shares and excluding shares owned by our general partner and its affiliates, but including shares owned by the Legacy Owners) voting together as a single class;
 - determined by our general partner (after due inquiry) to be on terms no less favorable to us than those generally being provided to or available from unrelated third parties; or
 - determined by our general partner (after due inquiry) to be fair and reasonable to us, which determination may be made taking into account the circumstances and the relationships among the parties involved (including our short-term or long-term interests and other arrangements or relationships that could be considered favorable or advantageous to us).
- provides that, to the fullest extent permitted by law, in connection with any action or inaction of, or determination made by, our general partner or the conflicts committee of our general partner's board of directors with respect to any matter relating to us, it shall be presumed that our general partner or the conflicts committee of our general partner's board of directors acted in a manner that satisfied the contractual standards set forth in our partnership agreement, and in any proceeding brought by any limited partner or by or on behalf of such limited partner or any other limited partner or our partnership challenging any such action or inaction of, or determination made by, our general partner, the person bringing or prosecuting such proceeding shall have the burden of overcoming such presumption; and
- provides that our general partner and its officers and directors will not be liable for monetary damages to us, our limited partners or assignees for any acts or omissions unless there has been a final and non-appealable judgment entered by a court of competent jurisdiction determining that our general partner or those other persons acted in bad faith or engaged in fraud or willful misconduct or, in the case of a criminal matter, acted with knowledge that such person's conduct was criminal.

The Legacy Owners may have interests that conflict with holders of our Class A shares.

At December 31, 2022, the Legacy Owners owned approximately 19% of our outstanding Class A and Class B shares and approximately 19% of the AAP units. As a result, the Legacy Owners may have conflicting interests with holders of Class A shares. For example, the Legacy Owners may have different tax positions from us which could influence their decisions regarding whether and when to cause us to dispose of assets.

Furthermore, conflicts of interest could arise in the future between us, on the one hand, and the Legacy Owners, on the other hand, concerning among other things, potential competitive business activities or business opportunities. These conflicts of interest may not be resolved in our favor.

If we are presented with business opportunities, PAA has the first right to pursue such opportunities.

Pursuant to the administrative agreement, we have agreed to certain business opportunity arrangements to address potential conflicts with respect to business opportunities that may arise among us, our general partner, PAA, PAA GP, AAP and GP LLC. If a business opportunity is presented to us, our general partner, PAA, PAA GP, AAP or GP LLC, then PAA will have the first right to pursue such business opportunity. We have the right to pursue and/or participate in such business opportunity if invited to do so by PAA, or if PAA abandons the business opportunity and GP LLC so notifies our general partner. Accordingly, the terms of the administrative agreement limit our ability to pursue business opportunities.

Our general partner's affiliates and the Legacy Owners may compete with us.

Our partnership agreement provides that our general partner will be restricted from engaging in any business activities other than acting as our general partner and those activities incidental to its ownership of interests in us. The restrictions contained in our general partner's limited liability company agreement are subject to a number of exceptions. Affiliates of our general partner and the Legacy Owners will not be prohibited from engaging in other businesses or activities that might be in direct competition with us except to the extent they compete using our confidential information.

Our general partner has a call right that may require our shareholders to sell their Class A shares at an undesirable time or price.

If at any time more than 80% of our outstanding Class A shares and Class B shares on a combined basis (including Class A shares issuable upon the exchange of Class B shares) are owned by our general partner, the Legacy Owners (or certain transferees in private, non-exchange transactions) or their respective affiliates, our general partner will have the right (which it may assign to any of its affiliates, the Legacy Owners or us), but not the obligation, to acquire all, but not less than all, of the remaining Class A shares held by public shareholders at a price equal to the greater of (x) the current market price of such shares as of the date three days before notice of exercise of the call right is first mailed and (y) the highest price paid by our general partner, the Legacy Owners (or certain transferees in private, non-exchange transactions) or their respective affiliates for such shares during the 90 day period preceding the date such notice is first mailed. As a result, holders of our Class A shares may be required to sell such Class A shares at an undesirable time or price and may not receive any return of or on their investment. Class A shareholders may also incur a tax liability upon a sale of their Class A shares. At December 31, 2022, the Legacy Owners owned approximately 19% of the Class A shares and Class B shares on a combined basis.

Risks Related to PAA's Business

PAA's profitability depends on the volume of crude oil, natural gas and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of its facilities, which can be negatively impacted by a variety of factors outside of its control.

Drilling activity, crude oil production and benchmark crude oil prices can fluctuate significantly over time for a wide variety of reasons, including prevailing economic conditions, reduced demand by consumers for end products made with hydrocarbons, increased competition, adverse weather conditions, public health emergencies, and government laws and regulations affecting prices and production levels. Crude oil prices may also decline due to actions of domestic or foreign oil producers—they may take actions that create an over-supply of crude oil, and decrease benchmark crude oil prices. If producers reduce drilling activity in response to future declines in such prices, reduced capital market access, increased capital raising costs or adverse governmental or regulatory action, including, for example, federal, state or local laws or regulations that restrict drilling activities for environmental, seismic or other reasons, it could adversely impact current or future production levels. In turn, such developments could lead to reduced throughput on PAA's pipelines and at its other facilities, which, depending on the level of production declines, could have a material adverse effect on PAA's business.

Also, except with respect to some of PAA's recently constructed long haul pipeline assets, third-party shippers generally do not have long-term contractual commitments to ship crude oil on PAA's pipelines. A decision by a shipper to substantially reduce or cease to ship volumes of crude oil on PAA's pipelines could cause a significant decline in its revenues.

To maintain the volumes of crude oil PAA purchases in connection with its operations, PAA must continue to contract for new supplies of crude oil to offset volumes lost because of reduced drilling activity by producers, natural declines in crude oil production from depleting wells or volumes lost to competitors. If production declines, competitors with under-utilized assets could adversely impact PAA's ability to secure additional supplies of crude oil.

PAA's profitability can be negatively affected by a variety of factors stemming from competition in its industry, including recontracting and other risks associated with the general capacity overbuild of midstream energy infrastructure in some of the areas where it operates.

PAA faces competition in all aspects of its business and can give no assurances that it will be able to compete effectively against its competitors. In general, competition comes from a wide variety of participants in a wide variety of contexts, including new entrants and existing participants and in connection with day-to-day business, investment capital projects, acquisitions and joint venture activities. Some of PAA's competitors have capital resources many times greater than PAA's or control greater supplies of crude oil, natural gas or NGL. In addition, other competitors with significant excess capacity and high financial leverage may be motivated to reduce transportation rates to levels approaching variable operating costs, without regard to whether they are generating an acceptable return on their investment. These competitive risks make it more difficult for PAA to attract new customers and expose PAA to increased contract renewal and customer retention risk with respect to its existing customers and make recontracting at favorable rates and volumes more challenging, including, for example, with respect to certain of PAA's long-haul Permian pipelines.

A significant driver of competition in some of the markets where PAA operates (including, for example, the Eagle Ford, Permian Basin, and Rockies/Bakken areas) stems from the rapid development of new midstream energy infrastructure capacity that was driven by the combination of (i) significant increases in oil and gas production and development in the applicable production areas, both actual and anticipated, (ii) relatively low barriers to entry and (iii) generally widespread access to relatively low cost capital. While this environment presented opportunities for PAA, many of the areas where PAA operates have become overbuilt, resulting in an excess of midstream energy infrastructure capacity. In addition, as an established participant in some markets, PAA also faces competition from aggressive new entrants to the market who are willing to provide services at a lower rate of return in order to establish relationships and gain a foothold in the market. In addition, PAA's crude oil and NGL merchant activities utilize many of its pipelines and facilities. Competition that impacts PAA's merchant activities could result in a reduction in the use of its transportation and facilities assets. All of these competitive effects put downward pressure on PAA's throughput and margins and, together with other adverse competitive effects, could have a significant adverse impact on PAA's financial position, cash flows and ability to pay or increase distributions to its unitholders.

With respect to PAA's crude oil activities, its competitors include other crude oil pipelines, the major integrated oil companies, their marketing affiliates, refiners, private equity-backed entities, and independent gatherers, brokers and marketers of widely varying sizes, financial resources and experience. PAA competes against these companies on the basis of many factors, including geographic proximity to production areas, market access, rates, terms of service, connection costs and other factors.

With regard to PAA's NGL operations, it competes with large oil, natural gas and natural gas liquids companies that may, relative to PAA, have greater financial resources and access to supplies of natural gas and NGL. The principal elements of competition are rates, processing fees, geographic proximity to the natural gas or NGL mix, available processing and fractionation capacity, transportation alternatives and their associated costs, and access to end-user markets.

Changes in supply and demand for the products PAA handles, which can be caused by a variety of factors outside of its control, can negatively affect its operating results.

Supply and demand for crude oil and other hydrocarbon products PAA handles is dependent upon a variety of factors, including price, current and future economic conditions, fuel conservation measures, alternative fuel adoption, governmental regulation, including climate change regulations, and technological advances in fuel economy and energy generation and storage technologies. For example, legislative, regulatory or executive actions intended to reduce emissions of greenhouse gases could increase the cost of consuming crude oil and other hydrocarbon products or accelerate the adoption of alternative energy technologies, thereby causing a reduction in the demand for such products. Given that crude oil and petroleum products are global commodities, demand can also be significantly influenced by global market conditions, particularly in key consumption markets such as the United States and China, domestic and foreign political conditions and governmental or regulatory actions (including restrictions on the import or export of crude oil or petroleum products). Demand also depends on the ability and willingness of shippers having access to PAA's transportation assets to satisfy their demand by deliveries through those assets. Decreases in demand for the products PAA handles, whether at a global level or in areas its assets serve, can negatively affect its operating results.

The supply of crude oil depends on a variety of global political and economic factors, including the reliance of foreign governments on petroleum revenues. Excess global supply of crude oil may negatively impact PAA's operating results by decreasing the price of crude oil and making production and transportation less profitable in areas PAA services.

Fluctuations in demand for crude oil, such as those caused by refinery downtime or shutdowns, can have a negative effect on PAA's operating results. Specifically, reduced demand in an area serviced by PAA's transportation systems will negatively affect the throughput on such systems. Although the negative impact may be mitigated or overcome by PAA's ability to capture differentials created by demand fluctuations, this ability is dependent on the availability of certain grades of crude oil at specific locations, and thus is largely unpredictable.

Fluctuations in demand for NGL products, whether because of general or industry specific economic conditions, new government regulations, global competition, reduced demand by consumers for products made with NGL products, increased competition from petroleum-based feedstocks due to pricing differences, mild winter weather for some NGL products, particularly propane, or other reasons, could result in a decline in the volume of NGL products PAA handles or a reduction of the fees it charges for its services or margins it earns. Also, increased supply of NGL products could reduce the value of NGL PAA handles and reduce the margins realized by it.

NGL and products produced from NGL also compete with products from global markets. Any reduced demand or increased supply for ethane, propane, normal butane, iso-butane or natural gasoline in the markets PAA accesses for any of the reasons stated above could adversely affect demand for the services PAA provides as well as NGL prices, which could negatively impact its operating results.

Natural disasters, catastrophes, terrorist attacks (including eco-terrorist attacks), process safety failures, equipment failures or other events, including pipeline or facility accidents and cyber or other attacks on PAA's electronic and computer systems, could interrupt its operations, hinder its ability to fulfil its contractual obligations and/or result in severe personal injury, property damage and environmental damage, which could have a material adverse effect on its financial position, results of operations and cash flows.

Some of PAA's operations involve risks of personal injury, property damage and environmental damage that could curtail its operations and otherwise materially adversely affect its cash flow. Virtually all of PAA's operations are exposed to potential natural disasters or other natural events, including hurricanes, tornadoes, storms, floods, earthquakes, shifting soil and/or landslides. The location of some of PAA's assets and its customers' assets in the U.S. Gulf Coast region makes them particularly vulnerable to hurricane or tropical storm risk. PAA's facilities and operations are also vulnerable to accidents caused by process safety failures, equipment failures, or human error. In addition, the U.S. government has previously issued warnings that energy assets, specifically the nation's pipeline infrastructure, may be targets of terrorist organizations. Terrorists may target PAA's physical facilities and hackers may attack its electronic and computer systems.

If one or more of PAA's pipelines or other facilities, including electronic and computer systems, or any facilities or businesses that deliver products, supplies or services to PAA or that it relies on in order to operate its business, are damaged by severe weather or any other disaster, accident, catastrophe, terrorist attack or event, its operations could be significantly interrupted. In addition, PAA's merchant activities include purchasing crude oil and NGL that is carried on railcars, tankers or barges. Such cargos are at risk of being damaged or lost because of events such as derailment, marine disaster, inclement weather, mechanical failures, grounding or collision, fire, explosion, environmental accidents, piracy, terrorism and political instability. These incidents or interruptions could involve significant damage or injury to people, property or the environment, and repairs could take anywhere from a few days to several months or more depending on the severity and impact of the event. Any such event that interrupts the revenues generated by its operations, hinders its ability to fulfil its contractual obligations or which causes PAA to make significant expenditures not covered by insurance, could reduce its profitability, cash flows and cash available for paying distributions to its partners and, accordingly, adversely affect its financial condition and the market price of its securities.

PAA may also suffer damage (including reputational damage) as a result of a disaster, accident, catastrophe, terrorist attack or other such event. The occurrence of such an event, or a series of such events, especially if one or more of them occurs in a highly populated or sensitive area, could negatively impact public perception of PAA's operations and/or make it more difficult for PAA to obtain the approvals, permits, licenses or real property interests PAA needs in order to operate its assets or complete planned growth projects or other transactions.

Cybersecurity attacks, data breaches and other disruptions affecting PAA, or its service providers, could materially and adversely affect PAA's business, operations, reputation and financial results.

PAA is reliant on the continuous and uninterrupted operation of its various technology systems. User access to PAA's sites and information technology systems are critical elements of its operations, as is cloud security and protection against cyber security incidents. In the ordinary course of its business, PAA collects and stores sensitive data in its data centers and on its networks, including intellectual property, proprietary business information, critical operating information and data, information regarding its customers, suppliers, royalty owners and business partners, and personally identifiable information of its employees. PAA also engages third parties, such as service providers and vendors, who provide a broad array of software, technologies, tools and other products, services and functions that enables it to conduct, monitor and/or protect its business, operations systems and data assets. The secure processing, maintenance and transmission of this information is critical to PAA's operations and business strategy. Despite PAA's security measures, the information technology and infrastructure it relies on may be vulnerable to attacks by third parties, such as hackers, or breached due to human error, malfeasance or other disruptions. Any such breach could compromise PAA's networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties for divulging shipper information, disruption of PAA's operations, damage to its reputation, and loss of confidence in its services, which could adversely affect its business.

PAA and certain of its service providers have, from time to time, been subject to cyberattacks. The frequency and magnitude of cyberattacks is expected to increase and attackers are becoming more sophisticated. PAA may be unable to anticipate, detect or prevent future attacks, particularly as the methodologies used by attackers change frequently or are not recognized until launched, and PAA may be unable to investigate or remediate incidents because attackers are increasingly using techniques and tools designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence.

The information technology infrastructure PAA uses is critical to the efficient operation of its business and essential to its ability to perform day-to-day operations. Risks to PAA's information technology systems include: unauthorized or inadvertent extraction of business sensitive, confidential or personal information; denial of access extortion; corruption of information; or disruption of business processes. Breaches of PAA's information technology infrastructure or physical facilities, or other disruptions, could result in damage to its assets, safety incidents, damage to the environment, remediation costs, liability, regulatory enforcement, violation of privacy or securities laws and regulations, the loss of contracts or the inability to fulfil its contractual obligations, any of which could have a material adverse effect on its operations, financial position and results of operations. In addition, PAA may be required to invest significant additional resources to enhance its information security and controls or to comply with evolving cybersecurity laws or regulations.

PAA self-insures and thus does not carry insurance specifically for cybersecurity events; however, certain of PAA's insurance policies may allow for coverage of associated damages resulting from such events. If PAA were to incur a significant liability for which it was not fully insured, or if PAA incurred costs in excess of reserves established for uninsured or self-insured risks, it could have a material adverse effect on PAA's financial position, results of operations and cash flows.

PAA's business, results of operations, financial condition, cash flows and unit price can be adversely affected by pandemics, epidemics or other public health events.

PAA's business, results of operations, financial condition, cash flows and unit price can be adversely affected by pandemics, epidemics or other public health events. Such events may cause widespread economic disruption and result in material reductions in demand for crude oil, NGL and other petroleum products, which in turn may result in significant declines in the volume of crude oil and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of many of PAA's assets. The effects of a public health event depend on a wide variety of factors that are outside of PAA's control, including the clinical severity and transmissibility of the virus or pathogen; the development, deployment, adoption and effectiveness of treatments and vaccines; the capacity of healthcare systems and public health infrastructure; and the response of public health authorities, governments and individuals in areas impacted by such event.

PAA may face opposition from various groups to the development or operation of its pipelines and facilities and PAA's business may be subject to societal and political pressures.

PAA may face opposition to the development or operation of its pipelines and facilities from environmental groups, landowners, indigenous groups, local groups and other advocates. Such opposition could take many forms, including organized protests, attempts to block or sabotage PAA's operations, intervention in regulatory or administrative proceedings involving its assets, or lawsuits or other actions designed to prevent, disrupt or delay the development or operation of PAA's assets and business. For example, repairing PAA's pipelines often involves securing consent from individual landowners to access their property; one or more landowners may resist PAA's efforts to make needed repairs, which could lead to an interruption in the operation of the affected pipeline or other facility for a period of time that is significantly longer than would have otherwise been the case. In addition, acts of sabotage or eco-terrorism could cause significant damage or injury to people, property or the environment or lead to extended interruptions of PAA's operations. Any such event that interrupts the revenues generated by PAA's operations, or which causes PAA to make significant expenditures not covered by insurance, could reduce PAA's cash available for paying distributions to its partners and, accordingly, adversely affect PAA's financial condition and the market price of its securities.

PAA's business plans are based upon the assumption that societal sentiment and applicable laws and regulations will continue to allow and enable the future development, transportation and use of hydrocarbon-based fuels. Policy decisions relating to the production, refining, transportation and marketing of hydrocarbon-based fuels are subject to political pressures, the negative portrayal of the industry in which PAA operates by the media and others, and the influence and protests of environmental and other special interest groups. Such negative sentiment regarding the hydrocarbon energy industry could influence consumer preferences and government or regulatory actions, which could, in turn, have an adverse impact on PAA's business.

Activists concerned about the potential effects of climate change have directed their attention towards sources of funding for hydrocarbon energy companies, which has resulted in certain financial institutions, funds and other sources of capital restricting or eliminating their investment in energy-related activities. Ultimately, this could make it more difficult to secure funding for exploration and production activities or energy infrastructure related projects and ongoing operations, and consequently could both indirectly affect demand for PAA's services and directly affect PAA's ability to fund construction or other capital projects and its ongoing operations.

PAA is subject to increased concern by institutional investors with respect to the perceived social and environmental cost of its industry and its governance structure, which may adversely impact its ability to raise capital from such investors.

In recent years, certain financial stakeholders, including institutional investors such as public pension funds, have placed increased importance on the implications and social cost of ESG matters. ESG factors are playing an increasingly important role in the investment decisions made by investors, and companies involved in certain industries or with certain governance structures, such as master limited partnerships, are receiving increased scrutiny.

Investors' increased focus and activism related to ESG and similar matters could constrain PAA's ability to raise capital. Any material limitations on its ability to access capital as a result of such scrutiny could limit its ability to obtain future financing on favorable terms, or at all, or could result in increased financing costs in the future. Similarly, such activism could negatively impact PAA's unit price, limiting its ability to raise capital through equity issuances or debt financing, or could negatively affect its ability to engage in, expand or pursue its business activities, and could also prevent it from engaging in certain transactions that might otherwise be considered beneficial to PAA.

Businesses across all industries are facing increasing attention from stakeholders related to their ESG practices. Businesses that do not adapt to or comply with investor or stakeholder expectations and standards, which are continuing to evolve, or businesses that are perceived to have not responded appropriately to the growing concern for ESG issues, regardless of whether there is a legal requirement to do so, may suffer from reputational damage and the business, financial condition, and/or equity value of such business entity could be materially and adversely affected. Increasing attention to climate change, societal expectations on companies to address climate change, investor expectations regarding voluntary ESG related disclosures, increasing mandatory ESG disclosures, and consumer demand for alternative forms of energy may result in increased costs, reduced demand for PAA's services or the products it handles, reduced profits, increased legislative and judicial scrutiny, investigations and litigation, reputational damage, and negative impacts on PAA's access to capital markets. PAA could also be subject to additional governmental investigations, private litigation, or activist campaigns as unitholders may attempt to effect changes to PAA's business or governance practices.

In March 2022, the SEC issued a proposed rule that would mandate extensive disclosure of climate-related risks, including financial impacts, physical and transition risks, climate-related governance and strategy, and GHG emissions, for all U.S.-listed public companies. The SEC missed its self-imposed October 2022 deadline for issuing a final rule and most commentators now expect a final rule to be issued in 2023. Although the final form and substance of this rule and its requirements are not yet known and its ultimate impact on PAA's business is uncertain, compliance with the proposed rule, if finalized, will result in additional legal, accounting and financial compliance costs. In addition, enhanced climate-related disclosure requirements could accelerate the trend of certain stakeholders and lenders restricting or seeking more stringent conditions with respect to their investments in certain carbon-intensive sectors.

PAA's crude oil and NGL merchant activities are influenced by the overall forward market for crude oil and NGL, and certain market structures, the absence of pricing volatility and other market factors may adversely impact its results.

The profitability of PAA's crude oil and NGL merchant activities are dependent on a variety of factors affecting the markets for crude oil and NGL, including regional and international supply and demand imbalances, takeaway availability and constraints, transportation costs and the overall forward market for crude oil and NGL products. Periods when differentials are wide or when there is volatility in the forward market structure are generally more favorable for PAA's merchant activities. During periods where midstream infrastructure is over-built and/or there is a lack of volatility in the pricing structure, PAA's results may be negatively impacted. Depending on the overall duration of these transition periods, how PAA has allocated its assets to particular strategies and the tenor of its crude oil purchase and sale contracts and storage agreements, these periods may have either an adverse or beneficial effect on the profitability of PAA's merchant activities. In the past, the results of such activities have varied significantly based on market conditions and these activities may continue to experience highly variable results as a result of future changes to the markets for crude oil and NGL.

Joint ventures, joint ownership arrangements and other projects pose unique challenges and PAA may not be able to fully implement or realize synergies, expected returns or other anticipated benefits associated with such projects.

PAA is involved in many strategic joint ventures and other joint ownership arrangements. PAA may not always be in complete alignment with its joint venture or joint owner counterparties; PAA may have differing strategic or commercial objectives and may be outvoted by its joint venture partners or PAA may disagree on governance matters with respect to the joint venture entity or the jointly owned assets. When PAA enters into joint ventures or joint ownership arrangements it may be subject to the risk that its counterparties do not fund their obligations. In some joint ventures and joint ownership arrangements PAA may not be responsible for construction or operation of such projects and will rely on its joint venture or joint owner counterparties for such services. Joint ventures and joint ownership arrangements may also require PAA to expend additional internal resources that could otherwise be directed to other projects. If PAA is unable to successfully execute and manage its existing and proposed joint venture and joint owner projects, it could adversely impact PAA's financial and operating results.

PAA is undertaking, or is participating with various counterparties in, a number of projects that involve the expansion, modification, divestiture or combination of existing assets or the construction of new midstream energy infrastructure assets. Many of these projects involve numerous regulatory, environmental, commercial, economic, weather-related, political and legal uncertainties that are beyond its control, including the following:

- PAA may be unable to realize its forecasted commercial, operational or administrative synergies in connection with its joint ventures and joint ownership arrangements, including the Plains Oryx Permian Basin LLC joint venture;
- Joint ventures and other joint ownership arrangements may demand substantial internal resources and may divert resources and attention from other areas of PAA's business;

- PAA may construct pipelines, facilities or other assets in anticipation of market demand that dissipates or market growth that never materializes;
- Despite the fact that PAA will expend significant amounts of capital during the construction phase of growth or expansion projects, revenues associated with these organic growth projects will not materialize until the projects have been completed and placed into commercial service, and the amount of revenue generated from these projects could be significantly lower than anticipated for a variety of reasons;
- As these projects are undertaken, required approvals, permits and licenses may not be obtained, may be delayed, may be obtained with conditions that materially alter the expected return associated with the underlying projects or may be granted and then subsequently withdrawn;
- PAA may face opposition to its planned projects from environmental groups, landowners, local groups and other advocates, including lawsuits or other actions designed to disrupt or delay PAA's planned projects;
- PAA may not be able to obtain, or PAA may be significantly delayed in obtaining, all of the rights of way or other real property interests it needs to complete such projects, or the costs PAA incurs in order to obtain such rights of way or other interests may be greater than PAA anticipated;
- Due to unavailability or costs of materials, supplies, power, labor or equipment, including increased costs associated with any import duties or requirements to source certain supplies or materials from U.S. suppliers or manufacturers, the cost of completing these projects could turn out to be significantly higher than PAA budgeted and the time it takes to complete construction of these projects and place them into commercial service could be significantly longer than planned; and
- The completion or success of PAA's projects may depend on the completion or success of third-party facilities over which PAA has no control.

As a result of these uncertainties, the anticipated benefits associated with PAA's joint ventures and joint ownership arrangements may not be achieved or could be delayed. In turn, this could negatively impact PAA's cash flow and its ability to make or increase cash distributions to its partners.

PAA may enter into new businesses in connection with its strategy to participate in emerging energy opportunities. If PAA is unable to execute on this strategy or operate these new lines of business effectively, PAA's future growth could be limited. These new lines of business may never develop or may present risks that PAA cannot effectively manage.

As part of PAA's strategy, it intends to evaluate the potential to repurpose certain under-utilized assets for an alternative use in emerging energy opportunities. This may involve entering into new lines of businesses, which present different challenges and risks. PAA may be unable to execute on its business plans, demand for these new services may not develop on a large or economic scale, or PAA may fail to operate these businesses effectively. In addition, PAA may not be able to compete with companies who also plan to enter into these new lines of business, and who may be larger than PAA and may have greater financial resources to devote to these businesses. These new businesses may also present novel issues in law, taxation, safety or environmental policy, and other areas that PAA may not be able to manage effectively. Management's assessment of the risks in these new lines of business may be inexact and not identify or resolve all the problems that PAA would face. If PAA is not able to enter into these new lines of business effectively or at all, it could limit PAA's future growth if such emerging energy businesses grow and become a more important part of the energy industry.

Loss of PAA's investment grade credit rating or the ability to receive open credit could negatively affect its borrowing costs, ability to purchase crude oil, NGL and natural gas supplies or to capitalize on market opportunities.

PAA's business is dependent on its ability to maintain an attractive credit rating and continue to receive open credit from its suppliers and trade counterparties. PAA's senior unsecured debt is currently rated as "investment grade" by Standard & Poor's, Moody's Investors Service and Fitch Ratings Inc. A downgrade by such agencies to a level below investment grade could increase its borrowing costs, reduce its borrowing capacity and cause its counterparties to reduce the amount of open credit it receives from them. This could negatively impact PAA's ability to capitalize on market opportunities. For example, PAA's ability to utilize its crude oil storage capacity for merchant activities to capture contango market opportunities is dependent upon having adequate credit facilities, both in terms of the total amount of credit facilities and the cost of such credit facilities, which enables PAA to finance the storage of the crude oil from the time it completes the purchase of the crude oil until the time it completes the sale of the crude oil. Accordingly, loss of PAA's investment grade credit ratings could adversely impact its cash flows, its ability to make distributions and the value of its outstanding equity and debt securities.

PAA is exposed to the credit risk of its customers and other counterparties it transacts with in the ordinary course of its business activities.

Risks of nonpayment and nonperformance by customers or other counterparties are a significant consideration in PAA's business. Although PAA has credit risk management policies and procedures that are designed to mitigate and limit its exposure in this area, there can be no assurance that PAA has adequately assessed and managed the creditworthiness of its existing or future counterparties or that there will not be an unanticipated deterioration in their creditworthiness or unexpected instances of nonpayment or nonperformance, all of which could have an adverse impact on PAA's cash flow and its ability to pay or increase its cash distributions to its partners.

PAA has a number of minimum volume commitment contracts that support its pipelines. In addition, certain of the pipelines in which PAA owns a joint venture interest have minimum volume commitment contracts. Pursuant to such contracts, shippers are obligated to pay for a minimum volume of transportation service regardless of whether such volume is actually shipped (typically referred to as a deficiency payment), subject to the receipt of credits that typically expire if not used by a certain date. While such contracts provide greater revenue certainty, if the applicable shipper fails to transport the minimum required volume and is required to make a deficiency payment, under applicable accounting rules, the revenue associated with such deficiency payment may not be recognized until the applicable transportation credit has expired or has been used. Deferred revenue associated with non-performance by shippers under minimum volume contracts could be significant and could adversely affect PAA's profitability and earnings.

In addition, in those cases in which PAA provides division order services for crude oil purchased at the wellhead, it may be responsible for distribution of proceeds to all parties. In other cases, PAA pays all of or a portion of the production proceeds to an operator who distributes these proceeds to the various interest owners. These arrangements expose PAA to operator credit risk, and there can be no assurance that PAA will not experience losses in dealings with such operators and other parties.

Further, to the extent one or more of PAA's major customers experiences financial distress or commences bankruptcy proceedings, contracts with such customers (including contracts that are supported by acreage dedications) may be subject to renegotiation or rejection under applicable provisions of the United States Bankruptcy Code. Any such renegotiation or rejection could have an adverse effect on PAA's revenue and cash flows and its ability to make cash distributions to its unitholders.

PAA has also undertaken numerous projects that require cooperation with and performance by joint venture co-owners. In addition, in connection with various acquisition, divestiture, joint venture and other transactions, PAA often receives indemnifications from various parties for certain risks or liabilities. Nonperformance by any of these parties could result in increased costs or other adverse consequences that could decrease PAA's earnings and returns.

PAA also relies to a significant degree on the banks that lend to it under its revolving credit facility for financial liquidity, and any failure of those banks to perform their obligations to PAA could significantly impair its liquidity. Furthermore, nonpayment by the counterparties to PAA's interest rate and/or commodity derivatives could expose it to additional interest rate and/or commodity price risk.

Acquisitions and divestitures involve risks that may adversely affect PAA's business.

PAA's ability to execute its financial strategy is in part dependent on its ability to complete strategic transactions, including acquisitions, divestitures or sales of interests to strategic partners. If PAA is unable to successfully complete, integrate or realize the anticipated benefits of future acquisitions or planned divestitures (due to reduced investment in the energy sector, governmental action, litigation, counterparty non-performance or other factors), it may be more difficult for PAA to implement its business strategies, achieve its desired leverage levels, increase returns to equity holders or otherwise accomplish its financial goals. In addition, in connection with its divestitures, PAA may agree to retain responsibility for certain liabilities that relate to PAA's period of ownership, which could adversely impact its future financial performance.

Acquisitions also involve potential risks, including:

- performance from the acquired businesses or assets that is below the forecasts PAA used in evaluating the acquisition;
- a significant increase in PAA's indebtedness and working capital requirements;
- the inability to timely and effectively integrate the operations of recently acquired businesses or assets;

- the incurrence of substantial unforeseen environmental and other liabilities arising out of the acquired businesses or assets for which PAA is either not fully insured or indemnified, including liabilities arising from the operation of the acquired businesses or assets prior to PAA's acquisition;
- risks associated with operating in lines of business that are distinct and separate from PAA's historical operations;
- customer or key employee loss from the acquired businesses; and
- the diversion of management's attention from other business concerns.

Any of these factors could adversely affect PAA's ability to achieve anticipated levels of cash flows or other benefits from its acquisitions, pay distributions to its partners or meet its debt service requirements.

Tightened capital markets or other factors that increase PAA's cost of capital or otherwise limit its access to capital could impair its ability to achieve its strategic objectives.

Any limitations on PAA's access to capital or increase in the cost of that capital could significantly impair the implementation of its strategy. PAA's inability to maintain its targeted credit profile, including maintaining its credit ratings, could adversely affect PAA's cost of capital as well as its ability to execute its strategy. In addition, a variety of factors beyond its control could impact the availability or cost of capital, including domestic or international economic conditions, increases in key benchmark interest rates and/or credit spreads, the adoption of new or amended banking or capital market laws or regulations, the re-pricing of market risks and volatility in capital and financial markets.

Due to these factors, PAA cannot be certain that funding for its capital needs will be available from bank credit arrangements, capital markets or other sources on acceptable terms. If funding is not available when needed, or is available only on unfavorable terms, PAA may be unable to implement its development plans, enhance its existing business, complete strategic projects and transactions, take advantage of business opportunities or respond to competitive pressures, any of which could have a material adverse effect on its cash flows and results of operations.

PAA's risk policies cannot eliminate all risks and the insufficiency of, or non-compliance with its risk policies could result in significant financial losses.

Generally, it is PAA's policy to establish a margin for crude oil or other products it purchases by selling such products for physical delivery to third-party users, or by entering into a future delivery obligation under derivative contracts. Through these transactions, PAA seeks to maintain a position that is substantially balanced between purchases on the one hand, and sales or future delivery obligations on the other hand. PAA's policy is not to acquire and hold physical inventory or derivative products for the purpose of speculating on commodity price changes. These policies and practices cannot, however, eliminate all risks. For example, any event that disrupts PAA's anticipated physical supply of crude oil or other products could expose it to risk of loss resulting from price changes. PAA is also exposed to basis risk when crude oil or other products are purchased against one pricing index or benchmark and sold against a different index or benchmark. PAA may also face disruptions to futures markets for crude oil, NGL and other petroleum products, which may impair its ability to execute its commercial or hedging strategies. Margin requirements due to spikes or crashes in commodity prices may require PAA to exit hedge strategies at inopportune times. PAA is also exposed to some risks that are not hedged, including risks on certain of its inventory, such as linefill, which must be maintained in order to transport crude oil on its pipelines. In an effort to maintain a balanced position, specifically authorized personnel can purchase or sell crude oil, refined products and NGL, up to predefined limits and authorizations. Although this activity is monitored independently by PAA's risk management function, it exposes PAA to commodity price risks within these limits.

In addition, PAA's operations involve the risk of non-compliance with its risk policies. PAA has taken steps within its organization to implement processes and procedures designed to detect unauthorized trading; however, PAA can provide no assurance that these steps will detect and prevent all violations of its risk policies and procedures, particularly if deception, collusion or other intentional misconduct is involved.

PAA's insurance coverage may not fully cover its losses and it may in the future encounter increased costs related to, and lack of availability of, insurance.

While PAA maintains insurance coverage at levels that it believes to be reasonable and prudent, PAA can provide no assurance that its current levels of insurance will be sufficient to cover any losses that it has incurred or may incur in the future, whether due to deductibles, coverage challenges or other limitations. In addition, over the last several years, as the scale and scope of PAA's business activities has expanded, the breadth and depth of available insurance markets has contracted. As a result of these factors and other market conditions, as well as the fact that PAA has experienced several incidents in the past, premiums and deductibles for certain insurance policies have increased substantially. Accordingly, PAA can give no assurance that it will be able to maintain adequate insurance in the future at rates or on other terms PAA considers commercially reasonable. In addition, although PAA believes that it currently maintains adequate insurance coverage, insurance will not cover many types of interruptions or events that might occur and will not cover all risks associated with its operations. In addition, the proceeds of any such insurance may not be paid in a timely manner and may be insufficient if such an event were to occur. The occurrence of a significant event, the consequences of which are either not covered by insurance or not fully insured, or a significant delay in, or denial of, the payment of a major insurance claim, could materially and adversely affect PAA's financial position, results of operations and cash flows. For a discussion of our Line 901 Incident insurance receivable, please read Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Line 901 Incident Insurance Receivable" and Note 19 to our Consolidated Financial Statements.

The terms of PAA's indebtedness may limit its ability to borrow additional funds or capitalize on business opportunities. In addition, PAA's current or future debt levels, or inability to borrow additional funds or capitalize on business opportunities, may limit its future financial and operating flexibility.

As of December 31, 2022, the face value of PAA's consolidated debt outstanding was approximately \$8.5 billion (excluding unamortized discounts and debt issuance costs of approximately \$46 million), consisting of approximately \$7.3 billion face value of long-term debt (including senior notes and finance lease obligations) and approximately \$1.2 billion of short-term borrowings. As of December 31, 2022, PAA had approximately \$3 billion of liquidity available, including cash and cash equivalents and available borrowing capacity under its senior unsecured revolving credit facility and its senior secured hedged inventory facility, subject to continued covenant compliance. Lower Adjusted EBITDA could increase PAA's leverage ratios and effectively reduce its ability to incur additional indebtedness.

The amount of PAA's current or future indebtedness could have significant effects on its operations, including, among other things:

- a significant portion of PAA's cash flow will be dedicated to the payment of principal and interest on its indebtedness and may not be available for other purposes, including the payment of distributions on its units and capital expenditures;
- credit rating agencies may view PAA's debt level negatively;
- covenants contained in PAA's existing debt arrangements will require it to continue to meet financial tests that may adversely affect its flexibility to plan for and react to changes in its business;
- PAA's ability to obtain additional financing for working capital, capital expenditures, acquisitions and general partnership purposes may be limited;
- PAA may be at a competitive disadvantage relative to similar companies that have less debt; and
- PAA may be more vulnerable to adverse economic and industry conditions as a result of its significant debt level.

PAA's credit agreements prohibit distributions on, or purchases or redemptions of, units if any default or event of default is continuing. In addition, the agreements contain various covenants limiting PAA's ability to, among other things, incur indebtedness if certain financial ratios are not maintained, grant liens, engage in transactions with affiliates, enter into sale-leaseback transactions, and sell substantially all of its assets or enter into a merger or consolidation. PAA's credit facilities treat a change of control as an event of default and also requires PAA to maintain a certain debt coverage ratio. PAA's senior notes do not restrict distributions to unitholders, but a default under its credit agreements will be treated as a default under the senior notes. Please read Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Credit Agreements, Commercial Paper Program and Indentures."

PAA's ability to access capital markets to raise capital on favorable terms will be affected by its debt level, its operating and financial performance, the amount of its current maturities and debt maturing in the next several years, and by prevailing market conditions. In addition, if the rating agencies were to downgrade PAA's credit ratings, then it could experience an increase in its borrowing costs, face difficulty accessing capital markets or incurring additional indebtedness, be unable to receive open credit from its suppliers and trade counterparties, be unable to benefit from swings in market prices and shifts in market structure during periods of volatility in the crude oil market or suffer a reduction in the market price of its common units. If PAA is unable to access the capital markets on favorable terms at the time a debt obligation becomes due in the future, it might be forced to refinance some of its debt obligations through more expensive and restrictive bank credit, as opposed to long-term public debt securities or equity securities, or the sale of assets. The price and terms upon which PAA might receive such extensions or additional bank credit, if at all, could be more onerous than those contained in existing debt agreements. Any such arrangements could, in turn, increase the risk that PAA's leverage may adversely affect its future financial and operating flexibility and thereby impact its ability to execute its capital allocation strategies and priorities.

Increases in interest rates could adversely affect PAA's business and the trading price of its units.

As of December 31, 2022, the face value of PAA's consolidated debt was approximately \$8.5 billion (excluding unamortized discounts and debt issuance costs of approximately \$46 million), substantially all of which was at fixed interest rates. PAA is exposed to market risk due to the short-term nature of its commercial paper borrowings and the floating interest rates on its credit facilities. PAA's results of operations, cash flows and financial position could be adversely affected by significant increases in interest rates above current levels. Additionally, increases in interest rates could adversely affect PAA's merchant activities by increasing interest costs associated with the storage of hedged crude oil and NGL inventory. In addition, distributions on PAA's Series B preferred units accumulate for each distribution period at a percentage of the liquidation preference equal to the applicable three-month LIBOR (or, if discontinued, a substitute or successor rate determined by the calculation agent), plus a spread of 4.11%. Further, the trading price of PAA's common units may be sensitive to changes in interest rates and any rise in interest rates could adversely impact such trading price.

Changes in currency exchange rates could adversely affect PAA's operating results.

Because PAA is a U.S. dollar reporting company and also conducts operations in Canada, it is exposed to currency fluctuations and exchange rate risks that may adversely affect the U.S. dollar value of its earnings, cash flow and partners' capital under applicable accounting rules. For example, if the U.S. dollar appreciates against the Canadian dollar, the U.S. dollar value of PAA's Canadian dollar denominated earnings is reduced for U.S. reporting purposes.

PAA's business requires the retention and recruitment of a skilled workforce, and difficulties retaining and recruiting its workforce could result in a failure to implement PAA's business plans.

PAA's operations and management require the retention and recruitment of a skilled workforce, including engineers, technical personnel and other professionals. PAA and its affiliates compete with other companies both within and outside the energy industry for this skilled workforce, and other employers may be able to offer potential employees higher salaries, more attractive benefits or work arrangements or opportunities to work in industries with greater perceived status or growth potential. If PAA is unable to (i) retain current employees; and/or (ii) recruit new employees of comparable knowledge and experience, PAA's business could be negatively impacted. In addition, PAA could experience increased costs to retain current employees and recruit new employees.

An impairment of long-term assets could reduce PAA's earnings.

At December 31, 2022, PAA had approximately \$15.3 billion of net property and equipment, \$961 million of linefill, \$3.1 billion of investments accounted for under the equity method of accounting and approximately \$2.1 billion of net intangible assets capitalized on its balance sheet. GAAP requires an assessment for impairment in certain circumstances, including when there is an indication that the carrying value of property and equipment may not be recoverable. If PAA was to determine that any of its property and equipment, linefill, intangibles or equity method investments was impaired, it could be required to take an immediate charge to earnings, which could adversely impact its operating results, with a corresponding reduction of partners' capital and increase in balance sheet leverage as measured by debt-to-total capitalization. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" for additional discussion of our accounting policies and use of estimates associated with impairments. During the year ended December 31, 2022, PAA recognized non-cash impairment charges of approximately \$330 million related to the write-down of certain long-lived crude oil assets in California. See Note 6 to our Consolidated Financial Statements for additional information regarding these impairments.

PAA is dependent on the use or availability of third-party assets for certain of its operations.

Certain of PAA's business activities require the use or availability of third-party assets over which it may have little or no control. If at any time the availability of these assets is limited or denied, and if access to alternative assets cannot be arranged, it could have an adverse effect on PAA's business, results of operations and cash flow.

Significant under-utilization of certain assets could significantly reduce PAA's profitability due to fixed costs incurred to obtain the right to use such assets.

From time to time in connection with its business, PAA may lease or otherwise secure the right to use certain assets (such as railcars, trucks, barges, ships, pipeline capacity, storage capacity and other similar assets) with the expectation that the revenues it generates through the use of such assets will be greater than the fixed costs it incurs pursuant to the applicable leases or other arrangements. However, when such assets are not utilized or are under-utilized, PAA's profitability could be negatively impacted because the revenues it earns are either non-existent or reduced, but it remains obligated to continue paying any applicable fixed charges, in addition to the potential of incurring other costs attributable to the non-utilization of such assets (such as maintenance, storage or other costs). Significant under-utilization of assets PAA leases or otherwise secures the right to use in connection with its business could have a significant negative impact on PAA's profitability and cash flows.

Many of PAA's assets have been in service for many years and require significant expenditures to maintain them. As a result, its maintenance or repair costs may increase in the future.

PAA's pipelines, terminals, storage and processing and fractionation assets are generally long-lived assets, and many of them have been in service for many years. The age and condition of its assets could result in increased maintenance or repair expenditures in the future. Any significant increase in these expenditures could adversely affect PAA's results of operations, financial position or cash flows, as well as its ability to make cash distributions to its unitholders.

PAA does not own all of the land on which its pipelines and facilities are located, which could result in disruptions to its operations.

PAA does not own all of the land on which its pipelines and facilities have been constructed, and therefore is potentially subject to more onerous terms and/or increased costs to retain necessary land use if PAA does not have valid rights-of-way or if such rights-of-way lapse or terminate. In some instances, PAA obtains the rights to construct and operate its pipelines on land owned by third parties and governmental agencies for a specific period of time. Following a decision issued in May 2017 by the Tenth Circuit Court of Appeals tribal ownership of even a very small fractional interest in tribal land owned or at one time owned by an individual Indian landowner, bars condemnation of any interest in the allotment. Consequently, the inability to condemn such allotted lands under circumstances where existing pipeline rights-of-way may soon lapse or terminate serves as an additional potential impediment for pipeline operations. Additionally, parts of PAA's operations cross land that has historically been apportioned to various Native American/First Nations tribes, who may exercise significant jurisdiction and sovereignty over their lands. For more information, see our regulatory disclosure entitled "Indigenous Protections." PAA cannot guarantee that it will always be able to renew existing rights-of-way or obtain new rights-of-way on favorable terms without experiencing significant delays and costs. Any loss of rights with respect to real property, through PAA's inability to renew right-of-way contracts or otherwise, could have a material adverse effect on its business, results of operations, and financial position.

If PAA fails to obtain materials or commodities in the quantity and the quality it needs, and at commercially acceptable prices, whether due to supply disruptions, inflation, tariffs, quotas or other factors, PAA's results of operations, financial condition and cash flows could be materially and adversely affected.

PAA's business requires access to steel and other materials to construct and maintain new and existing pipelines and facilities. If PAA experiences a shortage in the supply of these materials or is unable to source sufficient quantities of high quality materials at acceptable prices and in a timely manner, it could materially and adversely affect PAA's ability to construct new infrastructure and maintain its existing assets.

PAA's business also depends on having access to significant amounts of electricity and other commodities. If PAA is unable to obtain commodities sufficient to operate and maintain its assets, or only able to do so at commercially unreasonable prices, it could materially and adversely affect its business.

Supply chain disruptions and inflation of prices for commodities, materials, products and shipping may make it more challenging to obtain sufficient quantities of high quality materials at acceptable prices and in a timely manner. If PAA is unable to source such materials, it could materially and adversely affect its ability to construct new infrastructure and operate and maintain its existing assets.

In addition, some of the materials used in PAA's business are imported. Existing and future import duties and quotas could materially increase PAA's costs of procuring imported or domestic steel and/or create shortages or difficulties in procuring sufficient quantities of steel meeting PAA's required technical specifications. A material increase in PAA's costs of construction and maintenance or any significant delays in its ability to complete its infrastructure projects could have a material adverse effect on PAA's financial position, results of operations and cash flows.

Risks Related to Laws and Regulations Impacting PAA's Business

PAA's operations are subject to laws and regulations relating to protection of the environment (people, property and natural resources), operational safety, climate change and related matters that may expose it to significant costs and liabilities. The current laws and regulations affecting PAA's business are subject to change and in the future PAA may be subject to additional laws, executive orders and regulations, which could adversely impact PAA's business.

PAA's operations involving the storage, treatment, processing, and transportation of liquid hydrocarbons, including crude oil, NGL and refined products, are subject to stringent federal, state, and local laws and regulations governing the discharge of materials into the environment. PAA's operations are also subject to laws and regulations relating to protection of the environment, natural resources, operational safety, climate change and related matters. Compliance with these laws and regulations may increase its overall cost of doing business, including its capital costs to construct, maintain and upgrade equipment and facilities. Also, new or additional laws and regulations, new interpretations of existing requirements or changes in PAA's operations could trigger new permitting requirements applicable to its operations, which could result in increased costs or delays of, or denial of rights to conduct, PAA's development programs. The failure to comply with any such laws and regulations could result in the assessment of administrative, civil, and criminal penalties, the imposition of investigatory or remedial obligations or the incurrence of capital expenditures. Any such failure could also result in the imposition of restrictions, delays or cancellations in the permitting or performance of projects, or the issuance of injunctions that may subject PAA to additional operational requirements and constraints, or claims of damages to property or persons. The laws and regulations applicable to PAA's operations are subject to change and interpretation by the relevant governmental agency, including the possibility that exemptions it currently qualifies for may be modified or changed in ways that require PAA to incur significant additional compliance costs. PAA's business and operations may also become subject to new or additional laws or regulations. For example, President Biden has made the combat of climate change arising from GHG emissions a priority under his Administration and has issued, and may continue to issue, executive orders or other regulatory initiatives in pursuit of his regulatory agenda that could curtail oil and natural gas production and transportation. Potential examples include laws, rules, executive orders or regulations that limit fracturing of oil and natural gas wells, restrictions on flaring and venting during natural gas production on federal properties, limitations or bans on oil and gas leases on federal lands and offshore waters, increased requirements for construction and permitting of pipeline infrastructure and LNG export facilities, and further restrictions on GHG emissions from oil and gas facilities. Any new laws, executive orders or regulations, or changes to or interpretations of existing laws or regulations, adverse to PAA could have a material adverse effect on its operations, revenues, expenses and profitability.

PAA has a history of making incremental additions to the miles of pipelines it owns, both through acquisitions and investment capital projects. PAA has also increased its terminal and storage capacity and operates several facilities on or near navigable waters and domestic water supplies. Although PAA has implemented programs intended to maintain the integrity of its assets (discussed below), as it increases the capacity of its existing assets or acquires additional assets it is at risk for an increase in the number and/or volume of releases of liquid hydrocarbons into the environment. These releases expose PAA to potentially substantial expense, including clean-up and remediation costs, fines and penalties, and third-party claims for personal injury or property damage related to past or future releases. Some of these expenses could increase by amounts disproportionately higher than the relative increase in pipeline mileage and the increase in revenues associated therewith. PAA's refined products terminal assets are also subject to significant compliance costs and liabilities. In addition, because of the increased volatility of refined products and their tendency to migrate farther and faster than crude oil when released, releases of refined products into the environment can have a more significant impact than crude oil and require significantly higher expenditures to respond and remediate. The incurrence of such expenses not covered by insurance, indemnity or reserves could materially adversely affect PAA's results of operations.

PAA currently devotes substantial resources to comply with DOT-mandated pipeline integrity rules. The DOT regulations include requirements for the establishment of pipeline integrity management programs and for protection of HCAs where a pipeline leak or rupture could produce significant adverse consequences. Pipeline safety regulations are revised frequently. For more information, please see our regulatory disclosure entitled “Pipeline Safety/Integrity Management.” The adoption of new regulations requiring more comprehensive or stringent safety standards could require PAA to install new or modified safety controls, pursue new capital projects, or conduct maintenance programs on an accelerated basis, all of which could require PAA to incur increased operational costs that could be significant.

Although PAA continues to focus on pipeline and facility integrity management as a primary operational emphasis, doing so requires substantial time and resources and cannot eliminate all risk of releases. PAA has an internal review process pursuant to which it examines various aspects of its pipeline and gathering systems that are not currently subject to the DOT pipeline integrity management mandate. The purpose of this process is to review the surrounding environment, condition and operating history of these pipeline and gathering assets to determine if such assets warrant additional investment or replacement. Accordingly, in addition to potential cost increases related to unanticipated regulatory changes or injunctive remedies resulting from regulatory agency enforcement actions, PAA may elect (as a result of its own internal initiatives) to spend substantial sums to enhance the integrity of and upgrade its pipeline systems to maintain environmental compliance and, in some cases, PAA may take pipelines out of service if it believes the cost of upgrades will exceed the value of the pipelines. PAA cannot provide any assurance as to the ultimate amount or timing of future pipeline integrity expenditures but any such expenditures could be significant. See “Environmental — General” in Note 19 to our Consolidated Financial Statements. In addition, despite PAA’s pipeline and facility integrity management efforts, it can provide no assurance that its pipelines and facilities will not experience leaks or releases or that PAA will be able to fully comply with all of the federal, state and local laws and regulations applicable to the operation of PAA’s pipelines or facilities; any such leaks or releases could be material and could have a significant adverse impact on PAA’s reputation, financial position, cash flows and ability to pay or increase distributions to its unitholders.

PAA’s assets are subject to federal, state and provincial regulation. Rate regulation or a successful challenge to the rates PAA charges on its U.S. and Canadian pipeline systems may reduce the amount of cash it generates.

PAA’s U.S. interstate common carrier liquids pipelines are subject to regulation by various federal regulatory agencies, including the FERC under the ICA. The ICA requires that tariff rates and terms and conditions of service for liquids pipelines be just and reasonable and not unduly discriminatory. PAA is also subject to the Pipeline Safety Regulations of the DOT. PAA’s intrastate pipeline transportation activities are subject to various state laws and regulations as well as orders of state regulatory bodies.

For PAA’s U.S. interstate common carrier liquids pipelines subject to FERC regulation under the ICA, shippers may protest its pipeline tariff filings or file complaints against its existing rates or complaints alleging that it is engaging in discriminatory behavior. The FERC can also investigate on its own initiative. Under certain circumstances, the FERC could limit PAA’s ability to set rates based on its costs, or could order PAA to reduce its rates and could require the payment of reparations to complaining shippers for up to two years prior to the complaint.

In addition, PAA routinely monitors the public filings and proceedings of other parties with the FERC and other regulatory agencies in an effort to identify issues that could potentially impact its business. Under certain circumstances PAA may choose to intervene in such third-party proceedings in order to express its support for, or its opposition to, various issues raised by the parties to such proceedings. For example, if PAA believes that a petition filed with, or order issued by, the FERC is improper, overbroad or otherwise flawed, PAA may attempt to intervene in such proceedings for the purpose of protesting such petition or order and requesting appropriate action such as a clarification, rehearing or other remedy. Despite such efforts, PAA can provide no assurance that the FERC and other agencies that regulate its business will not issue future orders or declarations that increase its costs or otherwise adversely affect its operations.

PAA’s Canadian pipelines are subject to regulation by the CER and by provincial authorities. Under the Canadian Energy Regulator Act, the CER could investigate the tariff rates or the terms and conditions of service relating to a jurisdictional pipeline on its own initiative upon the filing of a toll or tariff application, or upon the filing of a written complaint. If the CER found the rates or terms of service relating to such pipeline to be unjust or unreasonable or unjustly discriminatory, the CER could require PAA to change its rates, provide access to other shippers, or change its terms of service. A provincial authority could, on the application of a shipper or other interested party, investigate the tariff rates or PAA’s terms and conditions of service relating to its provincially-regulated proprietary pipelines. If it found PAA’s rates or terms of service to be contrary to statutory requirements, it could impose conditions it considers appropriate. A provincial authority could declare a pipeline to be a common carrier pipeline, and require PAA to change its rates, provide access to other shippers, or otherwise alter its terms of service. Any reduction in PAA’s tariff rates would result in lower revenue and cash flows.

Some of PAA's operations cross the U.S./Canada border and are subject to cross-border regulation.

PAA's cross border activities subject it to regulatory matters, including import and export licenses, tariffs, Canadian and U.S. customs and tax issues and toxic substance certifications. Such regulations include the Short Supply Controls of the EAA, the USMCA and the TSCA. Violations of these licensing, tariff and tax reporting requirements could result in the imposition of significant administrative, civil and criminal penalties. Furthermore, Presidential Permits that allow cross-border movements of crude oil may be revoked or terminated at any time.

PAA's purchases and sales of crude oil, natural gas and NGL, and hedging activities, expose it to potential regulatory risks.

The FTC, the FERC and the CFTC hold statutory authority to monitor certain segments of the physical and futures energy commodities markets. These agencies have imposed broad regulations prohibiting fraud and manipulation of such markets. With regard to PAA's physical purchases and sales of crude oil, natural gas or NGL and any related hedging activities that it undertakes, PAA is required to observe the market-related regulations enforced by these agencies, which hold substantial enforcement authority. PAA's purchases and sales may also be subject to certain reporting and other requirements. Additionally, to the extent that PAA enters into transportation contracts with pipelines that are subject to FERC regulation, it is subject to FERC requirements related to the use of such capacity. Any failure on PAA's part to comply with the regulations and policies of the FERC, the FTC or the CFTC could result in the imposition of civil and criminal penalties. Failure to comply with such regulations, as interpreted and enforced, could have a material adverse effect on PAA's business, results of operations, financial condition and its ability to make cash distributions to its unitholders.

The enactment and implementation of derivatives legislation could have an adverse impact on PAA's ability to use derivative instruments to reduce the effect of commodity price, interest rate and other risks associated with its business and increase the amount of working capital required to conduct these hedging activities.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), enacted on July 21, 2010, established federal oversight and regulation of derivative markets and entities, such as PAA, that participate in those markets. The Dodd-Frank Act requires the CFTC and the SEC to promulgate rules and regulations implementing the Dodd-Frank Act. Although the CFTC has finalized certain regulations, others remain to be finalized or implemented and it is not possible at this time to predict when this will be accomplished.

The CFTC has designated certain interest rate swaps and credit default swaps for mandatory clearing, and the associated rules require PAA, in connection with covered derivative activities, to comply with clearing and trade-execution requirements or take steps to qualify for an exemption from such requirements. PAA does not utilize credit default swaps and PAA qualifies for, and expects to continue to qualify for, the end-user exception from the mandatory clearing requirements for swaps entered into to hedge its interest rate risks. Should the CFTC designate commodity derivatives for mandatory clearing, PAA would expect to qualify for an end-user exception from the mandatory clearing requirements for swaps entered into to hedge its commodity price risk. However, the majority of PAA's financial derivative transactions used for hedging commodity price risks are currently executed and cleared over exchanges that require the posting of margin or letters of credit based on initial and variation margin requirements. Pursuant to the Dodd Frank Act, however, the CFTC or federal banking regulators may require the posting of collateral with respect to uncleared interest rate and commodity derivative transactions.

Certain banking regulators and the CFTC have adopted final rules establishing minimum margin requirements for uncleared swaps. Although PAA qualifies for the end-user exception from margin requirements for swaps entered into to hedge commercial risks, if any of PAA's swaps do not qualify for the commercial end-user exception, or if PAA is otherwise required to post additional cash margin or collateral it could reduce PAA's ability to execute hedges necessary to reduce commodity price exposures and protect cash flows. Posting of additional cash margin or collateral could affect PAA's liquidity (defined as unrestricted cash on hand plus available capacity under its credit facilities) and reduce PAA's ability to use cash for capital expenditures or other partnership purposes.

Even if PAA itself is not required to post additional cash margin or collateral for its derivative contracts, the banks and other derivatives dealers who are PAA's contractual counterparties will be required to comply with other new requirements under the Dodd-Frank Act and related rules. The costs of such compliance may be passed on to customers such as PAA, thus decreasing the benefits to PAA of hedging transactions or reducing its profitability. In addition, implementation of the Dodd-Frank Act and related rules and regulations could reduce the overall liquidity and depth of the markets for financial and other derivatives PAA utilizes in connection with its business, which could expose PAA to additional risks or limit the opportunities PAA is able to capture by limiting the extent to which PAA is able to execute its hedging strategies.

Finally, the Dodd-Frank Act was intended, in part, to reduce the volatility of oil and gas prices, which some legislators attributed to speculative trading in derivatives and commodity instruments related to oil and gas. PAA's financial results could be adversely affected if a consequence of the Dodd-Frank Act and implementing regulations is lower commodity prices.

The full impact of the Dodd-Frank Act and related regulatory requirements upon PAA's business will not be known until the regulations are implemented and the market for derivatives contracts has adjusted. The Dodd-Frank Act and any new regulations could significantly increase the cost of derivative contracts, materially alter the terms of derivative contracts, reduce the availability of derivatives to protect against risks PAA encounters, reduce PAA's ability to monetize or restructure its existing derivative contracts. If PAA reduces its use of derivatives as a result of the Dodd-Frank Act and regulations implementing the Dodd-Frank Act, PAA's results of operations may become more volatile and its cash flows may be less predictable. Any of these consequences could have a material adverse effect on PAA, its financial condition and its results of operations.

Legislation, executive orders and regulatory initiatives relating to hydraulic fracturing or other hydrocarbon development activities could reduce domestic production of crude oil and natural gas.

Hydraulic fracturing is an important and common practice that is used to stimulate production of hydrocarbons from unconventional geological formations. The process involves the injection of water, sand and chemicals under pressure into the formation to fracture the surrounding rock and stimulate production, and it is typically regulated by state and provincial oil and gas commissions. Hydraulic fracturing continues to be a controversial practice, resulting in increased scrutiny and regulation of the hydraulic fracturing process, including by federal and state agencies and local municipalities. PAA does not perform hydraulic fracturing, but much of the production that flows on its assets was produced with the benefit of hydraulic fracturing. There have been a variety of legislative and regulatory proposals to prohibit, restrict, or more closely regulate various forms of hydraulic fracturing; for example, the Governor of California issued an order in April 2021 directing the Department of Conservation's Geologic Energy Management Division to initiate regulatory action to end the issuance of new permits for hydraulic fracturing by January 2024. Moreover, the Biden Administration has pursued policy initiatives that have resulted in temporary suspensions of new oil and gas leasing, more stringent emissions and operating regulations, and increased royalty rates for oil and gas operations on federal lands and waters. These actions, as well as any other legislation, executive orders or regulatory initiatives that curtail hydraulic fracturing or otherwise limit producers' ability to drill or complete wells could reduce the production of crude oil and natural gas in the United States or Canada, and could thereby result in reduced demand for PAA's transportation, terminalling and storage services as well as its merchant activities.

PAA's and its customers' operations are subject to various risks arising out of the threat of climate change, energy conservation measures, or initiatives that stimulate demand for alternative forms of energy that could result in increased costs, limits on the areas in which oil and natural gas production may occur and reduced demand for PAA's services.

PAA's and its customers' operations are subject to a number of risks arising out of the threat of climate change, energy conservation measures, or initiatives that stimulate demand for alternative forms of energy that could result in increased operating costs, limits on the areas in which oil and natural gas production may occur, and reduced demand for the crude oil and natural gas. Risks arising out of the threat of climate change, fuel conservation measures, governmental requirements for renewable energy resources, increasing consumer demand for alternative forms of energy, and technological advances in fuel economy and energy generation devices may create new competitive conditions that result in reduced demand for the crude oil and natural gas PAA's customers produce and, in turn, the services it provides. The adoption and implementation of any international, federal, regional or state legislation, executive actions, regulations or other regulatory and policy initiatives that impose more stringent standards for GHG emissions from the oil and natural gas industry, restrict the areas in which this industry may produce crude oil and natural gas or generate GHG emissions, increase scrutiny of environmental permitting or delay such permitting reviews, or require enhanced disclosure of such GHG emission and other climate-related information, could result in increased compliance costs, which if passed on to the customer could also result in increased fossil fuel consumption costs, and thereby reduce demand for crude oil and natural gas, and thus PAA's services. The potential impact of changing demand for crude oil and natural gas services and products may have a material adverse effect on PAA's business, financial condition, results of operations and cash flows. Additionally, political, financial and litigation risks may result in PAA restricting, delaying or canceling development activities and new projects, incurring liability for infrastructure damages as a result of climatic changes, or impairing the ability to continue to operate in an economic manner.

Litigation risks are also increasing as a number of cities, local governments and other plaintiffs have filed lawsuits against various oil and natural gas companies in state or federal court, alleging, among other things, that such companies created public nuisances by producing fuels that contributed to climate change and its effects, such as rising sea levels, and therefore are responsible for roadway and infrastructure damages as a result, or alleging that the companies have been aware of the adverse effects of climate change for some time but defrauded their investors by failing to adequately disclose those impacts. Should Plains be targeted by any such litigation, it may incur liability, which, to the extent that societal pressures or political or other factors are involved, could be imposed without regard to causation or contribution to the asserted damage, or to other mitigating factors. Involvement in such a case could have adverse reputational impacts and an unfavorable ruling in any such case could adversely impact PAA's operations and financial condition.

Climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts, floods and other climatic events, as well as shifts in temperature and precipitation patterns have the potential to cause physical damage to PAA's assets or disrupt its supply chains and thus could have an adverse effect on its operations. Additionally, changing meteorological conditions, particularly temperature, may result in changes to the amount, timing, or location of demand for energy or PAA's customer's production, which could reduce the need for its services. While PAA's consideration of changing climatic conditions and inclusion of safety factors in its design is intended to reduce the uncertainties that climate change and other events may potentially introduce, PAA's ability to mitigate the adverse impacts of these events depends in part on the effectiveness of its facilities, particularly those located in coastal or flood prone areas, and its disaster preparedness and response and business continuity planning, which may not have considered or be prepared for every eventuality.

Although it is not possible at this time to predict how legislation or new regulations that may be adopted to address GHG emissions and climate change would impact PAA's business, any such future laws and regulations could result in increased compliance costs or additional operating restrictions, and could have a material adverse effect on PAA's business, demand for its services, financial condition, results of operations and cash flows.

Laws and regulations pertaining to the protection of threatened and endangered species or to critical habitat, wetlands and natural resources could delay, restrict or prohibit PAA's and its customers' operations and cause PAA or its customers to incur substantial costs that may have a material adverse effect on its results of operations.

In the United States, the Endangered Species Act ("ESA") and comparable state laws were established to protect endangered and threatened species. Under the ESA, if a species is listed as threatened or endangered, restrictions may be imposed on activities that have the potential to adversely affect that species' habitat. Similar protections are given to migratory birds under the Migratory Bird Treaty Act, Canada's Species at Risk Act, and analogous provincial laws and regulations. Some of PAA's operations are conducted in areas where protected species or their habitats are known to exist, and from time to time PAA's development plans have been impacted in these areas. PAA may be obligated to develop and implement plans to avoid potential adverse effects to protected species and their habitats, and PAA may be delayed, restricted or prohibited from conducting operations in certain locations or during certain seasons, such as breeding and nesting seasons, when its operations could have an adverse effect on the species. Additionally, the designation of previously unprotected species or the re-designation of under-protected species as threatened or endangered in areas where PAA or its customers conduct operations could cause PAA to incur increased costs arising from species protection measures or could result in delays, restrictions or prohibitions on PAA's customers' development and production activities that could have a material adverse effect on its results of operations.

Risks Inherent in an Investment in PAA

Cost reimbursements due to PAA's general partner may be substantial and will reduce PAA's cash available for distribution to its unitholders.

Prior to making any distribution on its common units, PAA will reimburse its general partner and its affiliates, including officers and directors of its general partner, for all expenses incurred on PAA's behalf. In addition, PAA is required to pay all direct and indirect expenses of the Plains Entities, other than income taxes of any of the PAGP Entities. The reimbursement of expenses and the payment of fees and expenses could adversely affect PAA's ability to make distributions. PAA's general partner has sole discretion to determine the amount of these expenses. In addition, PAA's general partner and its affiliates may provide PAA with services for which PAA will be charged reasonable fees as determined by its general partner.

Cash distributions are not guaranteed and may fluctuate with PAA's performance and the establishment of financial reserves.

Because distributions on PAA's common units are dependent on the amount of cash it generates, distributions may fluctuate based on PAA's performance, which will result in fluctuations in the amount of distributions ultimately received by AAP. The actual amount of cash that is available to be distributed each quarter will depend on numerous factors, some of which are beyond PAA's control and the control of PAA's general partner. Cash distributions are dependent primarily on cash flow, levels of financial reserves and working capital borrowings, and not solely on profitability, which is affected by non-cash items. PAA's levels of financial reserves are established by its general partner and include reserves for the proper conduct of PAA's business (including future capital expenditures and anticipated credit needs), compliance with legal or contractual obligations and funding of future distributions to its Series A and Series B preferred unitholders. Therefore, cash distributions might be made during periods when PAA records losses and might not be made during periods when it records profits.

PAA's preferred units have rights, preferences and privileges that are not the same as, and are preferential to, the rights of holders of PAA's common units.

PAA's Series A preferred units and PAA's Series B preferred units (together, "PAA's preferred units") rank senior to all of PAA's other classes or series of equity securities with respect to distribution rights and rights upon liquidation. These preferences could adversely affect the market price for PAA's common units, or could make it more difficult for PAA to sell its common units in the future.

In addition, distributions on PAA's preferred units accrue and are cumulative, at a fixed rate with respect to PAA's Series A preferred units and at a floating rate with respect to PAA's Series B preferred units. PAA's Series A preferred units are convertible into PAA common units by the holders of such units or by PAA in certain circumstances. PAA's Series B preferred units are not convertible into PAA common units, but are redeemable by PAA in certain circumstances. PAA's obligation to pay distributions on PAA's preferred units, or on the PAA common units issued following the conversion of PAA's Series A preferred units, could impact its liquidity and reduce the amount of cash flow available for working capital, capital expenditures, growth opportunities, acquisitions, and other general partnership purposes. PAA's obligations to the holders of PAA's preferred units could also limit its ability to obtain additional financing or increase its borrowing costs, which could have an adverse effect on PAA's financial condition.

Tax Risks

As our only cash-generating assets consist of our partnership interest in AAP and its related direct and indirect interests in PAA, our tax risks are primarily derivative of the tax risks associated with an investment in PAA.

The tax treatment of PAA depends on its status as a partnership for U.S. federal income tax purposes, as well as it not being subject to a material amount of additional entity-level taxation by individual states. If the IRS were to treat PAA as a corporation for U.S. federal income tax purposes or if PAA becomes subject to additional amounts of entity-level taxation for state or foreign tax purposes, it would reduce the amount of cash available for distribution to us and increase the portion of our distributions treated as taxable dividends.

At December 31, 2022, we owned an approximate 81% limited partner interest in AAP, which directly owned a limited partner interest in PAA through its ownership of approximately 241.0 million PAA common units (approximately 31% of PAA's Series A preferred units and common units combined). Accordingly, the value of our indirect investment in PAA, as well as the anticipated after-tax economic benefit of an investment in our Class A shares, depends largely on PAA being treated as a partnership for U.S. federal income tax purposes, which requires that 90% or more of PAA's gross income for every taxable year consist of qualifying income, as defined in Section 7704 of the Internal Revenue Code of 1986, as amended (the "Code"). Based on PAA's current operations, and current Treasury regulations, PAA believes that it is treated as a partnership rather than a corporation for such purposes; however, a change in PAA's business could cause it to be treated as a corporation for U.S. federal income tax purposes.

Current law may change, causing PAA to be treated as a corporation for U.S. federal income tax purposes or otherwise subjecting PAA to additional entity-level taxation. In addition, several states have been evaluating ways to subject partnerships to entity-level taxation through the imposition of state income, franchise and other forms of taxation. Imposition of any new or increased federal or state taxes on PAA may result in a decrease in the amount of distributions AAP receives from PAA and our resulting cash flows could be reduced substantially, which would adversely affect our ability to pay distributions to our shareholders.

If PAA were treated as a corporation for U.S. federal income tax purposes, it would pay U.S. federal income tax on its taxable income at the corporate tax rate and would likely pay state income taxes at varying rates. Distributions to PAA's partners, including AAP, would generally be taxed again as corporate distributions, and no income, gains, losses or deductions would flow through to PAA's partners. Because a tax would be imposed upon PAA as a corporation, its cash available for distribution would be substantially reduced. Therefore, treatment of PAA as a corporation would result in a material reduction in the anticipated cash flow and after-tax return to us, likely causing a substantial reduction in the value of our Class A shares.

Moreover, if PAA were treated as a corporation we would not be entitled to the deductions associated with our initial acquisition of interests in AAP or subsequent exchanges of retained AAP interests and Class B shares for our Class A shares. As a result, if PAA were treated as a corporation, (i) our liability for taxes would likely be higher, further reducing our cash available for distribution, and (ii) a greater portion of the cash we are able to distribute will be treated as a taxable dividend.

The tax treatment of publicly traded partnerships or an investment in PAA common units could be subject to potential legislative, judicial or administrative changes or differing interpretations, possibly applied on a retroactive basis.

The present U.S. federal income tax treatment of publicly traded partnerships, including PAA, or an investment in PAA common units may be modified by administrative, legislative or judicial changes or differing interpretations at any time. Members of Congress have proposed and considered substantive changes to the existing U.S. federal income tax laws that would affect publicly traded partnerships, including proposals that would eliminate PAA's ability to qualify for partnership tax treatment.

In addition, the Treasury Department has issued, and in the future may issue, regulations interpreting those laws that affect publicly traded partnerships. There can be no assurance that there will not be further changes to U.S. federal income tax laws or the Treasury Department's interpretation of the qualifying income rules in a manner that could impact PAA's ability to qualify as a partnership in the future.

Any modification to the U.S. federal income tax laws and interpretations thereof may or may not be retroactively applied and could make it more difficult or impossible for PAA to meet the exception for certain publicly traded partnerships to be treated as partnerships for U.S. federal income tax purposes. We are unable to predict whether any changes or other proposals will ultimately be enacted. Any future legislative changes could negatively impact the value of our indirect investment in PAA.

If the IRS makes audit adjustments to PAA's income tax returns for tax years beginning after December 31, 2017, it (and some states) may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from PAA, in which case PAA's cash distribution to AAP and our cash available for distribution to our shareholders might be substantially reduced.

Pursuant to the Bipartisan Budget Act of 2015, for tax years beginning after December 31, 2017, if the IRS makes audit adjustments to PAA's income tax returns, it (and some states) may assess and collect any taxes (including any applicable penalties and interest) resulting from such audit adjustments directly from PAA. To the extent possible under these rules, PAA's general partner may elect to either pay the taxes (including any applicable penalties and interest) directly to the IRS or, if PAA is eligible, issue a revised information statement to each unitholder and former unitholder with respect to an audited and adjusted return. Although PAA's general partner may elect to have PAA's unitholders and former unitholders take such audit adjustment into account and pay any resulting taxes (including applicable penalties or interest) in accordance with their interests in PAA during the tax year under audit, there can be no assurance that such election will be practical, permissible or effective in all circumstances. As a result, PAA's current unitholders, including us through AAP, may bear some or all of the tax liability resulting from such audit adjustment, even if such unitholders did not own units in PAA during the tax year under audit. If, as a result of any such audit adjustment, PAA or AAP is required to make payments of taxes, penalties and interest, then the amount of distributions we receive from AAP could be substantially reduced, which would adversely affect our ability to pay distributions to our shareholders. These rules are not applicable for tax years beginning on or prior to December 31, 2017.

Taxable gain or loss on the sale of our Class A shares could be more or less than expected.

If a holder sells our Class A shares, the holder will recognize gain or loss equal to the difference between the amount realized and the holder's tax basis in those Class A shares. To the extent that the amount of our distributions exceeds our current and accumulated earnings and profits, the distributions will be treated as a tax free return of capital and will reduce a holder's tax basis in the Class A shares. We did not have any earnings and profits in 2022 and we do not expect to have any earnings and profits for an extended period of time. Because our distributions in excess of our earnings and profits decrease a holder's tax basis in Class A shares, such excess distributions will result in a corresponding increase in the amount of gain, or a corresponding decrease in the amount of loss, recognized by the holder upon the sale of the Class A shares.

Our current tax treatment may change, which could affect the value of our Class A shares or reduce our cash available for distribution.

Our expectation that tax deductions associated with our initial and subsequent acquisitions of interests in AAP (as a result of the exercise by Legacy Owners of their exchange rights) will offset all of our current taxable income for an extended period of time, and thus result in our distributions not constituting taxable dividends for an extended period of time, is based on current law with respect to the amortization of basis adjustments associated with our acquisition of interests in AAP. Changes in U.S. federal income tax law relating to such tax treatment could result in (i) our being subject to additional taxation at the entity level with the result that we would have less cash available for distribution, and (ii) a greater portion of our distributions being treated as taxable dividends. Moreover, we are subject to tax in numerous jurisdictions. Changes in current law in these jurisdictions, particularly relating to the treatment of deductions attributable to acquisitions of interests in AAP, could result in our being subject to additional taxation at the entity level with the result that we would have less cash available for distribution.

Any decrease in our Class A share price could adversely affect our amount of cash available for distribution.

Changes in certain market conditions may cause our Class A share price to decrease. If our Legacy Owners exchange their retained interests in AAP and Class B shares in us for our Class A shares at a point in time when our Class A share price is below the price at which Class A shares were sold in our initial public offering or in any subsequent exchange, the ratio of our income tax deductions to gross income would decline. This decline could result in our being subject to tax sooner than expected, our tax liability being greater than expected, or a greater portion of our distributions being treated as taxable dividends.

The IRS Forms 1099-DIV that our shareholders receive from their brokers may over-report dividend income with respect to our shares for U.S. federal income tax purposes, which may result in a shareholder's overpayment of tax. In addition, failure to report dividend income in a manner consistent with the IRS Forms 1099-DIV may cause the IRS to assert audit adjustments to a shareholder's U.S. federal income tax return. For non-U.S. holders of our shares, brokers or other withholding agents may overwithhold taxes from dividends paid, in which case a shareholder generally would have to timely file a U.S. tax return or an appropriate claim for refund in order to claim a refund of the overwithheld taxes.

Distributions we pay with respect to our shares will constitute "dividends" for U.S. federal income tax purposes only to the extent of our current and accumulated earnings and profits. Distributions we pay in excess of our earnings and profits will not be treated as "dividends" for U.S. federal income tax purposes; instead, they will be treated first as a tax-free return of capital to the extent of a shareholder's tax basis in their shares and then as capital gain realized on the sale or exchange of such shares. We may be unable to timely determine the portion of our distributions that is a "dividend" for U.S. federal income tax purposes, which may result in a shareholder's overpayment of tax with respect to distribution amounts that should have been classified as a tax-free return of capital. In such a case, a shareholder generally would have to timely file an amended U.S. tax return or an appropriate claim for refund in order to obtain a refund of the overpaid tax.

For a U.S. holder of our shares, the IRS Forms 1099-DIV may not be consistent with our determination of the amount that constitutes a "dividend" for U.S. federal income tax purposes or a shareholder may receive a corrected IRS Form 1099-DIV (and may therefore need to file an amended federal, state or local income tax return). We will attempt to timely notify our shareholders of available information to assist with income tax reporting (such as posting the correct information on our website). However, the information that we provide to our shareholders may be inconsistent with the amounts reported by a broker on IRS Form 1099-DIV, and the IRS may disagree with any such information and may make audit adjustments to a shareholder's tax return.

For a non-U.S. holder of our shares, “dividends” for U.S. federal income tax purposes will be subject to withholding of U.S. federal income tax at a 30% rate (or such lower rate as specified by an applicable income tax treaty) unless the dividends are effectively connected with conduct of a U.S. trade or business. In the event that we are unable to timely determine the portion of our distributions that is a “dividend” for U.S. federal income tax purposes, or a shareholder’s broker or withholding agent chooses to withhold taxes from distributions in a manner inconsistent with our determination of the amount that constitutes a “dividend” for such purposes, a shareholder’s broker or other withholding agent may overwithhold taxes from distributions paid. In such a case, a shareholder generally would have to timely file a U.S. tax return or an appropriate claim for refund in order to obtain a refund of the overwithheld tax.

Item 1B. *Unresolved Staff Comments*

None.

Item 3. *Legal Proceedings*

The information required by this item is included in Note 19 to our Consolidated Financial Statements, and is incorporated herein by reference thereto.

Item 4. *Mine Safety Disclosures*

Not applicable.