

FAIRMOUNT SANTROL HOLDINGS INC.  
Form 10-K/A  
April 23, 2018

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

**FORM 10-K/A**  
**(Amendment No. 2)**

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

**For the fiscal year ended December 31, 2017**

**or**

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

**Commission File Number 001-36670**

**FAIRMOUNT SANTROL HOLDINGS INC.**  
**(Exact name of registrant as specified in its charter)**

**Delaware** **34-1831554**  
**(State or Other Jurisdiction of** **(I.R.S. Employer**  
**Incorporation or Organization)** **Identification No.)**  
**8834 Mayfield Road**  
**Chesterland, Ohio 44026**  
**(Address of Principal Executive Offices) (Zip Code)**  
**(800) 255-7263**  
**(Registrant's Telephone Number, Including Area Code)**

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

<b>Title of each class:</b>	<b>Name of each exchange on which registered:</b>
<b>Common Stock, par value \$0.01 per share</b>	<b>New York Stock Exchange</b>
<b>Securities registered pursuant to Section 12(g) of the Securities Act: None</b>	

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

The aggregate market value of common stock held by non-affiliates of the registrant computed by reference to the last sales price, \$3.90 as reported on the New York Stock Exchange, of such common stock as of the closing of trading on June 30, 2017: \$580,770,641

Number of shares of Common Stock outstanding, par value \$0.01 per share, as of April 2, 2018: 224,954,671

## EXPLANATORY NOTE

This Amendment No. 2 to Form 10-K (this Second Amendment ) amends the Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (the 2017 Form 10-K ) originally filed on March 13, 2018 (the Original Filing ) and subsequently amended on April 16, 2018 (the First Amendment ) by Fairmount Santrol Holdings Inc., a Delaware corporation (the Company ). The Company is filing this Second Amendment to provide additional information concerning how we assess the economic viability of our mineral reserves, as set forth herein under Item 2 Properties.

Except as described above, no other changes have been made to the Original Filing or the First Amendment.

The Original Filing continues to speak as of the date of the Original Filing, and the Company has not updated the disclosures contained therein to reflect any events which occurred at a date subsequent to the date of the Original Filing.

## ITEM 2. PROPERTIES

### *Our Reserves*

We control one of the largest bases of silica sand reserves in the United States. From our reserves, we are able to produce a large selection of high-purity silica sand, lake sand, coated sand, silica gravel, and other specialty sands. According to the SEC Industry Guide 7, reserves are defined as that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Reserves are categorized into proven (measured) reserves and probable (indicated) reserves. In accordance with SEC Industry Guide 7, our reserves are categorized as proven or probable.

We estimate that the company has approximately 893.4 million tons of proven recoverable mineral reserves as of December 31, 2017. Additional probable but not proven reserves are considered immaterial. Mineral reserve estimated quantities and characteristics at our properties are overseen by our internal geologists and engineers and validated by third party consulting company, GZA GeoEnvironmental, Inc.

The Company assesses the economic viability of our minerals reserves for each operation primarily by evaluating the following key criteria for mining feasibility: estimate of saleable quality reserves; percent recovery following processing; overburden stripping and other operational costs and annual production volumes. These factors are considered in preparation of a mine plan that ultimately estimates the tons of product to be sold per year and the estimated life of the mine. Historical mineral prices are considered in the context of market supply and demand dynamics to further assess the long term economic viability of the mineral reserve assets. The underlying FOB mining facilities considered a range of average sales price assumptions for the last three years to estimate proven and probable reserves in accordance with the Commission's definitions, which were \$21/ton to \$36/ton for our Proppant Solutions Segment and \$32/ton to \$33/ton for our I&R Segment. The reserve estimates are updated annually based on sales, changes to reserve boundaries, new physical or chemical information on the reserve deposit or overburden, changes in the mine plan, changes in customer demand, current pricing forecasts and other business strategies.

**Summary of Reserves**

The following table provides information on each of our sand mining facilities. Included is the location and area of the facility; the type, amount, and ownership status of its reserves and whether or not they meet API standards, and the primary end markets that it serves:

Active Mines	Acres		API	Proven Reserves	Estimated	Primary End Markets
	Owned/Leased			In-Situ (Thousand Tons)	Recovery Percentages	
<b>API White</b>						
Wedron, IL	2,230 0	O L	API White	223,296	80%	proppant, glass, foundry, specialty products
Maiden Rock, WI	987 576 377	O OM L	API White	24,061	70%	proppant, glass, foundry
Menomonie, WI	2 366	O L	API White	23,102	75%	proppant, glass, foundry, specialty products
Shakopee, MN	93 115	O L	API White	14,133	80%	proppant, glass, foundry, specialty products
Brewer, MO	353 0	O L	API White	31,460	80%	proppant, glass, foundry
<b>API Brown</b>						
Voca, TX	1,962 0	O L	API Brown	187,013	50%	proppant, glass, foundry
<b>Non-API</b>						
Chardon, OH	591 0	O L	Non-API	17,337	80%	glass, turf, landscaping, construction, filler/extender, foundry, industrial, proppant, filtration
Beaver, OH	91 216	O L	Non-API	12,473	75%	turf, landscaping, industrial
<b>Development Stage</b>						
Katemcy, TX	848 0	O L	API Brown	113,278	50%	potential to serve proppant, glass, foundry
Diamond Bluff, WI	10 2,674	O L	API White	44,539	70%	potential to serve proppant, glass, foundry
Kermit, TX	0 3,250	O	API Brown	165,772	90%	potential to serve proppant, glass, foundry

L						
<b>Inactive</b>						
Bay City, WI	40	O	API White	19,251	70%	proppant, glass, foundry
	322	OM				
	1,131	L				
Harrietta, MI	255	O	Non-API	11,087	75%	foundry, construction
	86					
		L				
Grand Haven, MI	143	O	Non-API	6,555	85%	N/A
	0	L				
<b>Total</b>				<b>893,357</b>		

***Descriptions of Sand Facilities***

As of December 31, 2017, we had seven active sand mining and processing operations facilities located in Illinois, Wisconsin, Minnesota, Missouri, Texas, and Ohio. We also have a processing facility located in Ontario, Canada that does not have any sand reserves but has an annual processing capacity of approximately 336,000 tons per year. We have inactive mines in Michigan, Minnesota, and Wisconsin and undeveloped mines in Texas and Wisconsin.

The mineral rights and access to mineral reserves for the majority of our facilities are secured through land that is owned. There are no underlying agreements and/or royalties associated with these properties. Where there are agreements and/or royalties associated related to our properties, we have provided more information in the facility descriptions below. We are required to pay production royalties on a per ton basis pursuant to our mineral reserve leases.

#### API White

*Wedron, Illinois.* Our Wedron, Illinois facility is located in Wedron, LaSalle County, Illinois and consists of owned real property. The facility, which is approximately 6 miles northeast of Ottawa, Illinois, is accessible via County Highway 21 off of State Highway 71 and State Highway 23. The site utilizes natural gas and electricity to process sand. Mining methods include mechanical removal of glacial overburden followed by drilling, blasting, and hydraulic mining. Hydraulically mined sand is pumped to the wash plant to be hydraulically sized and sent to the dry plant where it is dried and screened.

Our Wedron facility and its predecessors have operated since 1890. The washing and drying operations at our Wedron facility were upgraded in 2012, 2013, 2014, 2015 and 2016 in conjunction with significant capacity and reserve base increases. Significant railyard expansions in 2014 and 2015 facilitated greater flexibility and provided for unit train capabilities. Processed sand is shipped from the facility via truck or rail on the Burlington Northern Santa Fe ( BNSF ) and CSX Railroads via the Illinois Railnet. Our Wedron facility utilizes approximately 50,000 linear feet of rail. A portion of the sand is transferred by conveyor or trucked from our Wedron facility and is coated at our Technisand Wedron and/or Troy Grove, Illinois resin-coating facilities. The total net book value of the Wedron facility's real property and fixed assets as of December 31, 2017 was \$250.5 million.

The sand reserve mined from the open-pit mine at the Wedron facility is the St. Peter Sandstone formation. The Wedron facility produces high purity, round grain silica sand that meets the API requirements for proppant application. The Wedron facility production capacity, including the expansion project completed in April 2016, is approximately 9.0 million tons per year. The average utilization rate over the past three years was 82%. The surface deposit at the Wedron facility is a high purity, round grain sand with a minimum silica content of 99%, which meets API requirements for proppant application. The controlling attributes are iron and grain size. Iron is concentrated near the surface, where orange iron staining is evident and also increases where the bottom contact becomes concentrated in iron pyrite. Maximum average full face iron content is 0.020%. The deposit tends to exhibit a coarser grain size distribution in the top half of the deposit.

*Maiden Rock, Wisconsin.* Our Maiden Rock, Wisconsin facility is located in Maiden Rock, Pierce County, Wisconsin and consists of owned and leased real property. The mineral reserves at the Maiden Rock facility are secured under mineral leases that, with the exercise of renewal options, expire between 2021 and 2046. The facility is within the Village and Town of Maiden Rock along State Highway 35. The Maiden Rock facility utilizes natural gas and electricity to process sand. This is an underground mine and mining methods include drilling and blasting. The reserves are located at a depth of 230 feet. The sand is removed from the face of the tunnels with a front end loader and deposited into a container where it is combined with water to form a slurry. The slurry is pumped to the surface wash plant to be hydraulically sized and sent to the dry plant where it is dried and screened.

The Maiden Rock facility and its predecessors have operated since the 1920s. We acquired a 50% equity interest in the facility from Wisconsin Industrial Sand in 1997, and acquired the remaining equity interest in 1999. The washing and drying operations at the Maiden Rock facility were upgraded in 2012 in conjunction with a significant capacity increase. Processed sand is shipped from the Maiden Rock facility via truck or rail on the BNSF Railroad.

The Maiden Rock facility utilizes a new rail loadout facility and approximately 5,000 linear feet of rail constructed in 2012. This plant is unit train capable, utilizing the new unit train railyard at the Bay City facility. The total net book

value of the Maiden Rock facility's real property and fixed assets as of December 31, 2017 was \$45.1 million.

The sand reserve mined from the underground mine at the Maiden Rock facility is the Jordan Sandstone formation. The Maiden Rock facility produces high purity, round grain silica that meets API requirements for proppant application. The mining capacity is approximately 1.3 million tons per year, and the average utilization rate over the past three years was 51%.

The underground deposit at this facility is a high purity, round grain sand with a minimum silica content of 99%, which meets API requirements for proppant application. The controlling attributes are turbidity, acid solubility, and grain size. The deposit tends to exhibit a coarser grain size distribution near the top of the deposit. Grain size distribution is maintained through control of mine horizon. Turbidity and acid solubility are controlled through the use of hydrosizers during wet processing.



*Menomonie, Wisconsin.* Our Menomonie, Wisconsin facility is located in Menomonie, Dunn County, Wisconsin and consists of owned and leased real property. The mineral reserves at our Menomonie facility are secured under mineral subleases that expire in 2044. We constructed the Menomonie facility in 2007 approximately two miles east of Menomonie and it is accessible via US Highway 12 / State Highway 16. The Menomonie facility utilizes natural gas and electricity to process sand. Mining methods include the mechanical removal of glacial overburden followed by drilling, blasting and mechanical mining. Mined sand is processed and shipped by truck or rail. A remote transload facility adjacent to the Union Pacific (UP) Railroad is located approximately one mile north of the site. The total net book value of the Menomonie facility's real property and fixed assets as of December 31, 2017 was \$8.8 million.

The sand reserve mined from the open-pit at the Menomonie facility is the Wonewoc Sandstone formation. The Menomonie facility produces high purity, round grain silica sand that meets the API requirements for proppant application. The mining capacity is approximately 750,000 tons per year, and the average utilization rate over the past three years was 47%. The surface deposit at the Menomonie facility is a high purity, round grain sand with a minimum silica content of 99% which meets API requirements for proppant application. The controlling attributes are turbidity, iron, and grain size. Maximum average full face iron content is 0.080%. The deposit tends to exhibit a coarser grain size distribution in top half of deposit. Turbidity is controlled through the use of attrition scrubbers during wet processing. Iron is controlled during processing through the use of magnetic separators.

*Bay City, Wisconsin.* Our Bay City, Wisconsin facility is located in Isabelle and Hartland Township, Pierce County, Wisconsin and consists of owned and leased real property. The mineral reserves at the Bay City facility are secured under mineral leases that, with the exercise of renewal terms, expire between 2045 and 2106. The Bay City facility was opened in 1919 and operated continuously until 1989. We acquired the mine through the acquisition of Wisconsin Specialty Sand and constructed the associated Hager City processing (drying) plant in 2007. This underground mine is approximately 1.5 miles northeast of Bay City on State Highway 35. The reserves are located at a depth of 230 feet. The mine utilizes electricity to process sand. Mining methods include drilling and blasting. As a result of the challenging conditions in the global oil and gas markets, these operations were idled in 2015. Although the processing facility was idled, the railyard remains active and provides unit train capabilities for the Maiden Rock facility.

Mined sand is shipped approximately five miles to the Hager City plant for further processing and eventual shipment via truck or rail on the BNSF Railroad. The Hager City plant, constructed by Wisconsin Industrial Sand Company, LLC in 2007, was expanded in 2013 and 2014 with the addition of a new rail yard containing approximately 19,000 linear feet of rail for assembling unit trains. The total net book value of the Bay City facility's real property and fixed assets as of December 31, 2017 was \$41.4 million.

The sand reserve mined from the underground mine at the Bay City facility is the Jordan Sandstone formation. The Bay City facility produces high purity, round grain silica that meets API requirements for proppant application. The mining capacity is approximately 780,000 tons per year, and the average utilization rate over the past three years was 13%. The underground deposit at the Bay City facility is a high purity, round grain sand with a minimum silica content of 99% which meets API requirements for proppant application. The controlling attributes are turbidity, acid solubility, and grain size. The deposit tends to exhibit a coarser grain size distribution near the top of the deposit. Grain size distributions are maintained through control of mine horizon. Turbidity and acid solubility are controlled through the use of hydrosizers during wet processing.

*Shakopee, Minnesota.* Our Shakopee, Minnesota facility is located in Shakopee, Scott County, Minnesota and consists of owned and leased real property. The mineral reserves at our mine are secured by fee ownership and a lease agreement that, with the exercise of renewal options, expires in 2030. The facility is approximately four miles south of Shakopee, Minnesota and is accessible via US Highway 169. The Shakopee facility utilizes natural gas and electricity to process sand. Mining methods include the mechanical removal of glacial overburden followed by drilling, blasting and mechanical mining. As a result of the challenging conditions in the global oil and gas markets, these operations were idled in 2015 and re-opened in 2017.

Mining occurred at the Shakopee facility for a short time in the 1980s by others until the property was reclaimed. The mine was permitted by Great Plains Sand in 2012 and acquired by us in 2013, at which time we changed the name to Shakopee Sand LLC. We upgraded the washing and drying operations at the facility following the acquisition. Processed sand is shipped from the Shakopee facility via truck or by rail on the UP. The total net book value of the Shakopee facility's real property and fixed assets as of December 31, 2017 was \$12.0 million.

The sand reserve mined from the open-pit mine at the Shakopee facility is the Jordan Sandstone formation. The deposit produces high purity, round grain silica sand which meets API requirements for proppant application. The mining capacity is approximately 718,000 tons per year, and the average utilization rate over the past three years was 21%. This surface deposit at the Shakopee facility is a high purity, round grain sand with a minimum silica content of 99% which meets API requirements for proppant application. The controlling attributes are turbidity and grain size. The deposit tends to exhibit a coarser grain size distribution in the top half of deposit. Turbidity is controlled through the use of hydrosizers and attrition scrubbers during wet processing. Fine and coarse areas are blended to meet the grain size average.

*Brewer, Missouri.* Our Brewer, Missouri mine is located in Brewer, Perry County, Missouri and consists of owned real property. The facility, approximately one-half mile northwest of Brewer, Missouri, is accessible via State Highway M. We acquired the inactive mine in 2013. The operation was reactivated and began production in December 2014 but was idled in 2015 due to the challenging conditions in the global oil and gas markets. In January 2017, the decision was made to return Brewer to full production due to an increase in demand for proppants. The mine resumed production in the first quarter of 2017. Mining methods include the mechanical removal of overburden followed by drilling, blasting and mechanical mining. The total net book value of the facility's real property and fixed assets as of December 31, 2017 was \$22.2 million.

The sand reserve mined from the open-pit mine at the Brewer facility is the St. Peter Sandstone formation. The deposit produces high purity, round grain silica that meets API requirements for proppant application. The mining capacity is approximately 1.3 million tons per year, and the average utilization rate over the past three years was 31%. The surface deposit at the Brewer facility is a high purity, round grain sand with a minimum silica content of 99% which meets API requirements for proppant application. The controlling attributes are turbidity and grain size. The deposit tends to exhibit a coarser grain size distribution in top half of deposit. Turbidity is controlled through the use of hydrosizers and attrition scrubbers during wet processing.

### API Brown

*Voca, Texas.* Our Voca, Texas facility is located in Voca, Mason and McCulloch Counties, Texas and consists of owned real property. The facility, which is approximately 1.5 miles southeast of Voca, is accessible via County Highway 1851, south of State Highway 71. Sand mining and processing operations were developed at the facility during 2008, with the construction of existing plants completed in 2012. We acquired the operations in 2013. The Voca facility utilizes propane and electricity to process sand. Mining methods include the mechanical removal of thin overburden followed by drilling, blasting, and mechanical mining. The total net book value of the Voca facility's real property and fixed assets as of December 31, 2017 was \$92.4 million.

The sand reserve mined at our Voca property is the Hickory Sandstone Member of the Riley formation. The Voca facility produces high purity, round grain silica which meets API requirements for proppant application. The mining capacity is approximately 1.2 million tons per year, and the average utilization rate over the past three years was 59%. The surface deposit at the Voca facility is a high purity, round grain sand with a minimum silica content of 98% which meets API requirements for proppant application. The controlling attributes are turbidity and grain size. Turbidity is controlled through the use of hydrosizers and attrition scrubbers during wet processing. Grain size is controlled through the use of hydrosizers and wet screening.

### Non-API

*Chardon, Ohio.* Our Chardon, Ohio facility is located in Geauga County, Ohio and consists of owned real property. The facility, which is approximately two miles south of Chardon, is accessible via State Route 44. The site utilizes natural gas and electricity to process sand. Mining methods include the mechanical removal of glacial overburden followed by drilling, blasting and mechanical mining.

The mine was opened in 1938 and acquired by Best Sand in 1978. We acquired the mine as a result of the merger of Wedron Silica and Best Sand in 1986. Upgrades were made to the wash plant in 2009, the fluid bed dryer in 2012 and the rotary dryer circuit in 2012. The reserve base was increased by 950,000 tons in 2014 and 1.2 million tons in 2015. The total net book value of the Chardon facility's real property and fixed assets as of December 31, 2017 was \$10.5 million.

The sand reserve mined from the open-pit mine at the Chardon facility is the Sharon Conglomerate formation. This plant produces high purity, sub-angular grain silica sand and gravel used for industrial and recreational markets. The mining capacity is approximately 1.1 million tons per year, and the average utilization rate over the past three years was 61%. The surface deposit at the Chardon facility is a high purity, sub-round grain silica sand/gravel. The deposit has a minimum silica content of 99% ideal for glass and foundry applications. The contributing attributes are iron and grain size distribution. The mine's iron averages 0.084%.

*Beaver, Ohio.* Our Beaver, Ohio facility, acquired in 1994 from Schrader Sand and Gravel, is located in Jackson Township, Pike County, Ohio and consists of owned and leased real property. The mineral reserves at this facility are secured under mineral leases that, with the exercise of renewal options, expire in 2024. The facility, which is approximately six miles northeast of Beaver, Ohio, is accessible via County Road 521. The facility utilizes electricity to process sand. Mining methods include the mechanical removal of glacial overburden followed by drilling, blasting and mechanical mining. The total net book value of the Beaver facility's real property and fixed assets as of December 31, 2017 was \$1.3 million.

The sand reserve mined from the open-pit mine at the Beaver facility is the Sharon Conglomerate formation. The Beaver facility produces high purity, sub-angular grain silica sand and gravel. The mining capacity is approximately 426,000 tons per year, and the average utilization rate over the past three years was 10%. The surface deposit at the Beaver facility is a high purity, sub-angular grain silica sand/gravel. The deposit has a minimum silica content of 99%

and is ideal for turf/landscaping and industrial applications. The controlling attribute is cleanliness. Cleanliness is controlled through wet processing.

*Harrietta, Michigan.* Our Harrietta, Michigan facility is located in Slagle Township, Wexford County, Michigan and consists of owned and leased real property. The facility, which is approximately three miles northeast of Harrietta, Michigan, is accessible via West 28th Road and State Highway 37. The facility utilizes recycled oil and electricity to process sand. Mining methods include mechanical removal of overburden and excavation of sand.

We acquired Wexford Sand from Sargent Sand in 1998. A new screen plant was installed in 2008. The processed sand is shipped from the Harrietta facility by bulk via truck or rail on the Great Lakes Central Railroad. The total net book value of the Harrietta facility's real property and fixed assets as of December 31, 2017 was \$1.2 million.

The sand reserve mined from the open-pit mine at the Harrietta facility is a glacial outwash sand deposit for proppant applications. Glacial outwash is glacial sediments deposited by melting glacial ice at the terminus of a glacier. The mining capacity is approximately 625,000 tons per year, and the average utilization rate over the past three years was 7%. This surface deposit at the Harrietta is sub-round grain sand with minimum silica content of 96% ideal for foundry applications. The controlling attributes are Acid Demand Value (ADV) and grain size distribution.

As a result of challenging conditions in end markets, this facility was closed in 2015. However, it is in the process of being re-opened and producing sand, and is scheduled for the second quarter of 2018.

*Grand Haven, Michigan.* Our Grand Haven, Michigan facility is located in Grand Haven, Ottawa County, Michigan. The mine and facility consists of owned real property that is subject to a reverter to the prior property owner in 2021. The mine and facility have been closed since 2014. The facility, which is approximately two miles south of Grand Haven, Michigan, is accessible via Lakeshore drive and US Highway 31.

The sand reserve historically mined from the open-pit mine at the facility is a dune sand deposit. This surface dune deposit is a high purity, sub-round grain sand with minimum silica (SiO<sub>2</sub>) content of 96% ideal for foundry metal casting applications. The controlling attributes are grain size and chemistry, (ADV). The mine's ADV ranges from 30-50. ADV is controlled through floatation during wet processing. The grain size distribution averages greater than 50% plus 50 mesh. There is no net book value assigned to the Grand Haven mine or facility.

#### Development

*Katemcy, Texas.* Our Katemcy, Texas reserves are located in Katemcy, Mason County, Texas and consist of owned real property. The mine property was purchased in September 2013 and is accessed via County Road 1222 and State Highway 87. The mine has not yet been developed and the property is currently used as agricultural land. This deposit is capable of producing high purity, round grain silica sand that meets API requirements for proppant application. Plans to develop the mine property are under review. The sand reserve at this proposed open-pit mine is the Hickory Sandstone Member of the Riley formation. The total net book value of Katemcy as of December 31, 2017 is included in the net book value of the Voca facility.

The surface reserve is a high purity, round grain sand with a minimum silica content of 98% which meets API requirements for proppant application. The controlling attributes will be turbidity and grain size.

*Diamond Bluff, Wisconsin.* Our Diamond Bluff, Wisconsin reserves are located in Diamond Bluff and Oak Grove Townships, Pierce County, Wisconsin and consist of owned and leased real property. The mineral reserves are secured under mineral leases that expire between 2063 and 2064. The mine access property was purchased in 2014 and is undeveloped. The mine was permitted by the Diamond Bluff Township in 2012 and by the Oak Grove Township in 2014. The facility, which is located approximately one mile northwest of the unincorporated community of Diamond Bluff, is accessible off of 1005th Street via State Highway 35. The proposed underground mine site will be at a depth of 230 feet and will utilize electricity to process sand through drilling, blasting, mechanical, and hydraulic mining methods. Mined sand will be shipped approximately eight miles to the Hager City plant for further processing and eventual shipment via truck or rail on the BNSF Railroad. The total net book value of the facility's real property and fixed assets as of December 31, 2017 is included in the net book value of the Bay City facility.

The sand reserve at this proposed underground mine is the Jordan Sandstone formation. This deposit is capable of producing high purity, round grain silica sand which meets API requirements for proppant application. This

underground reserve is a high purity, round grain sand with a minimum silica content of 99% which meets API requirements for proppant application. The controlling attributes are turbidity, acid solubility, and grain size. The deposit tends to exhibit a coarser grain size distribution near the top of the deposit.

*Kermit, Texas.* Our Kermit, Texas reserves are located eight miles east of Kermit, Winkler County, Texas and consists of approximately 3,250 acres of leased property. The location is accessible via Highway 115 with access to the Delaware and Midland basins. The facility (currently under construction) will mine sand through the excavation method and will use natural gas and electricity to process sand. The sand will be transported by slurry to the processing plant where it will be washed, screened, and dried. The finished product will be shipped via truck. At December 31, 2017, this property is a greenfield site with construction expected to be completed and the facility expected to be in operation in the second quarter of 2018. The net book value of the location's real property and fixed assets is \$79.2 million as of December 31, 2017. The mining capacity will be approximately 3.0 million tons.

The sand reserves are an active dune deposit that is capable of producing high purity and round grain silica sand that meets API requirements for proppant application.

### **Coating, Resin Manufacturing, Specialty Blending, and Research and Development Facilities**

We have six strategically located coating facilities in North America near our mining operations. These facilities are on a combination of leased as well as owned land and buildings. As of March 2018, two of the domestic facilities were inactive or closed. We also have three international coating facilities located in Mexico, Denmark, and China.

We have four specialty blending facilities, located in Ohio, Illinois, and Texas. These operations make custom blends of aggregates for use in industrial and commercial flooring, polymer cements, grouts and performance mortars. An additional specialty facility, Mineral Visions, located in Illinois, produces specialty colored quartz. We have a manufacturing facility in Michigan, Alpha Resins, which produces resins primarily for our own use. These properties are all on owned land and buildings. We have research and development facilities also located in Texas and Illinois. These facilities are leased.



The following map reflects the location of our mining and processing, resin manufacturing, coating, specialty blending and R&D facilities and our administrative offices:

The following table reflects the segment(s) served by significant locations:

Location	Segment	
	Proppant Solution	R&R Corporate
Chesterland, OH		X
Ottawa, IL		X
Sugar Land, TX		X
Benton Harbor, MI		X
Wedron, IL	X	X
Menomonie, WI	X	X
Voca, TX	X	
Brewer, MO	X	
Shakopee, MN	X	
Maiden Rock, WI	X	
Hager City, WI	X	
Harrietta, MI	X	X
Chardon, OH		X
Beaver, OH		X
Troy Grove, IL	X	X
Roff, OK	X	
Cutler, IL	X	
Fresno, TX		X
Detroit, MI	X	X
Ontario, Canada	X	X
Mexico	X	
Denmark	X	
China	X	

## **Product Delivery**

We have established an oil and gas logistics network that we believe is highly responsive to our customers' needs. Our terminal network includes 44 active oil and gas terminals and 12 industrial and recreational terminals. These terminals are a combination of facilities that we own or lease, as well as properties that are owned and operated by third parties. They generally consist of rail and transload operations, plus in some cases additional storage and handling facilities.

## **Item 15. Exhibits, Financial Statement Schedules**

(a) The following documents are filed as part of this report:

### *3. Exhibits:*

The exhibits listed in the exhibit index of the Original Form 10-K and the exhibits listed in the exhibit index of this Amendment are filed with, or incorporated by reference in, this report.

**FAIRMOUNT SANTROL HOLDINGS INC.**

**EXHIBIT INDEX**

The following Exhibits are filed with this Amendment.

**Exhibit**

<b>No.</b>	<b>Description</b>
31.5(x)	<u>Certification pursuant to Rule 13a-14(a) or 15d-14(a) of the Principal Executive Officer.</u>
31.6(x)	<u>Certification pursuant to Rule 13a-14(a) or 15d-14(a) of the Principal Financial Officer.</u>

(x) Filed herewith.

**SIGNATURES**

Pursuant to the requirements of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**FAIRMOUNT SANTROL HOLDINGS INC.**

**(Registrant)**

Date: April 23, 2018

/s/ Michael F. Biehl  
Michael F. Biehl  
Executive Vice President and Chief Financial Officer