

June 17, 2022

Mr. Will Seuffert Executive Secretary Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

RE: In the Matter of the Information Book for Owners and Tenants of Property along the Unit 48 Liquified Anhydrous Ammonia Pipeline Route in Dakota County, Minnesota Docket No. IP-2/PPL-21-747

Dear Mr. Seuffert:

Attached are the comments and recommendations of the Department of Commerce, Energy Environmental Review and Analysis (EERA) staff in the above referenced matter.

Flint Hills Resources Pine Bend, LLC has filed an "Information Book" for Commission approval pursuant to the requirements of Minnesota Statutes Chapter 216G for distribution to property owners and tenants, so they have a clear understanding of the proposed Unit 48 Liquified Anhydrous Ammonia Pipeline Route (Project)t in the city of Rosemount in Dakota County, Minnesota.

The Information Book was efiled on May 24, 2022 by:

Holli VanOverbeke Flint Hills Resources P.O. Box 64596 Saint Paul, Minnesota

Tel: 651-438-5669

Email: Holli.VanOverbeke@fhr.com

EERA staff recommends Commission approval of the information book in the above matter. Staff is available to answer any questions the Commission may have.

Sincerely,

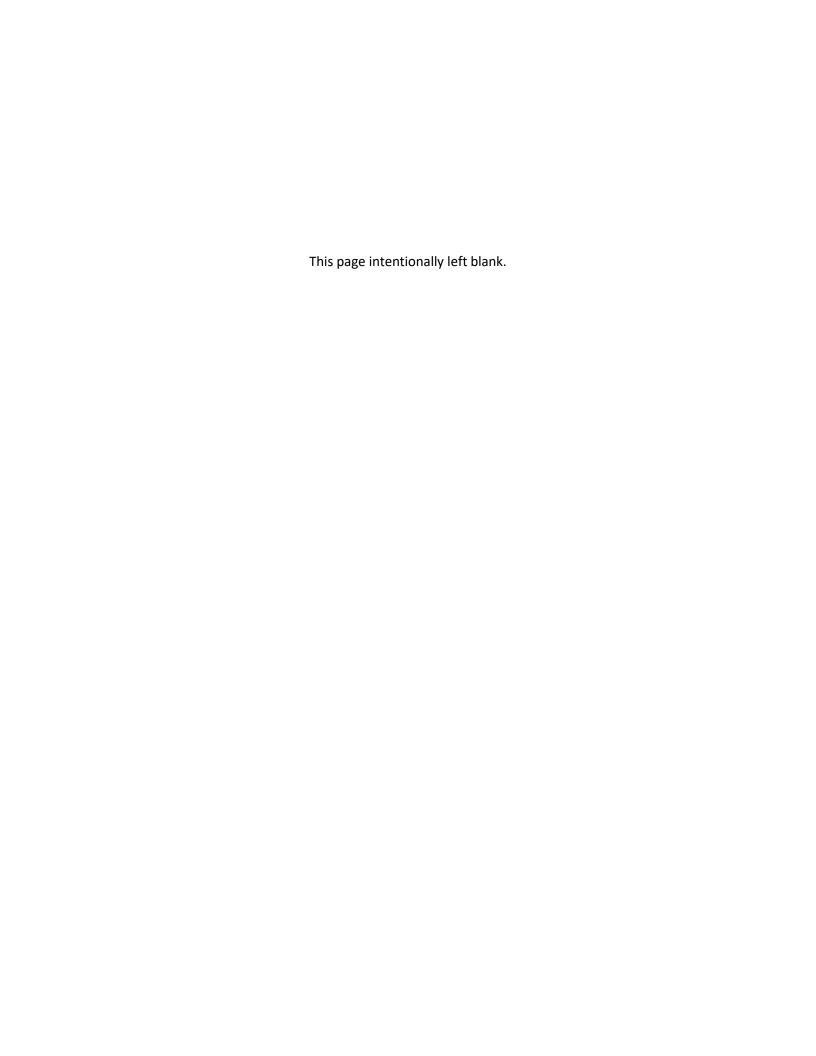
/s/ Larry B. Hartman

DOC EERA staff Tel: 651-539-1839

Email: larry.hartman@state.mn.us

c: Louise Miltich, EERA

Bret Eknes, Commission EFP Supervisor
Charlie Bruce, Commission staff





#### BEFORE THE PUBLIC UTILITIES COMMISSION

# ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS Comments and Recommendations

Unit 48 Liquified Anhydrous Ammonia Pipeline Project **Docket No. IP-2/PPL-21-747** 

Date: June 17, 2022 Staff: Larry Hartman (651) 539-1839 | larry.hartman@state.mn.us

In the Matter of the Information Book for Owners and Tenants of Property along the Unit 48 Liquified Anhydrous Ammonia Pipeline Route in Dakota County, Minnesota

**Issues Addressed**: These comments and recommendations address the following questions:

- Does the Information Book contain the information required under Minnesota Statutes,
   Chapter 216G?
- Should the Commission approve of the Information Book that authorizes Flint Hills
  Resources Pine Bend, LLC to proceed with the requirements of Minn. Stat. 216G for an
  Information Book?
- Are there other issues or concerns related to this matter?

Additional documents and information, including the Information Book is available on eDockets by searching "21" for year and "747" for number: https://www.edockets.state.mn.us/EFiling/search.jsp.

This document can be made available in alternative formats, that is, large print or audio, by calling (651) 539-1530 (voice).

# **Introduction and Background**

On November 15, 2021, Flint Hills Resources provided notice to the Minnesota Public Utilities Commission (Commission) and Dakota County Board of Commissioners of its proposed Unit 48 Pipeline Project pursuant to Minn. Stat. 216G.03 Subd 2, which requires preparation of an Information Book.<sup>1</sup>

Flint Hills Resources' proposed pipeline is a hazardous liquid pipeline with a nominal diameter of less than six inches. Therefore, it meets the definition of a "pipeline" pursuant to Minn. Stat.

<sup>&</sup>lt;sup>1</sup> Notice provided by Flint Hills Resources', See eDockets at: <u>20223-183958-01</u>. This notice was provided, as required by statute, but not posted until an eDocket was created for the project. Notice posted on March 18, 2022.

216G.01 and therefore requires Commission approval of an "Information Book" for distribution to owners and tenants of property along the Unit 48 Liquified Anhydrous Ammonia Pipeline Route in the city of Rosemount in Dakota County, Minnesota.

Flint Hills Resources Pine Bend, LLC (FH) is requesting Commission approval of an Information Book pursuant to the requirements of Minnesota Statutes 216G.03-216G.04 to construct the proposed Unit 48 Anhydrous Ammonia Pipeline Project in Dakota County, an approximately 1.6-mile-long 4.5-inch outside diameter, welded steel, fusion bond epoxy coated pipe with a wall thickness of 0.237 inches and a maximum allowable operating pressure (MAOP) of 740 pounds per square inch gauge (psig) with typical operating pressures ranging between 250 to 355 psig.<sup>2</sup>

FH representatives and EERA staff have worked together in development of and revisions to the "Information Book" prior to Flint Hills' filing on May 24, 2022.<sup>3</sup>

EERA staff has also held discussions with a representative of Dakota County on April 21, 2022 to explain the Information Book requirements and procedures of Minn. Stat. 216G. EERA staff will continue to advise Dakota County and other units of government if there are any additional questions regarding their role in complying with the requirements of Minn. Stat. 216G.

# **Project Purpose**

In July 2020, FH constructed a permanent anhydrous ammonia system to eliminate a temporary system. This system included the installation of a 45,000-gallon tank, currently supplied by ~12 truck deliveries per week (3 trucks per day, approximately four days a week). Anhydrous ammonia is a necessary component to producing ammonium thiosulfate (ATS). FH has indicated that Flint Hills Resources Pine Bend's distribution terminal, coupled with new technology allows the refinery to convert a traditional source of air pollution from motor fuels (sulfur) into a valuable fertilizer product that benefits farmers and the environment. FH has indicated that this is currently, one of the largest applications of ATS technology in the world, and that this system also helps the refinery produce ultra-low sulfur gasoline, which lowers vehicle emissions and is better for the environment.<sup>4</sup>

Delivering and storing anhydrous ammonia on-site introduces the risk of an ammonia gas release that presents a hazard to employees and society. In line with industry practice and MN Dept. of Agriculture requirements, Flint Hills installed excess flow valves and emergency isolation valves to reduce the likelihood and mitigate the consequence of a release. Other risk mitigations include ammonia detectors, tank vapor suppression deluge and remote level monitoring.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup>Liquefied Petroleum Gas (LPG) - a liquid mixture of light gaseous hydrocarbons (ethane, propane, butane, etc.) used as fuel in heating appliances, cooking equipment, and vehicles.

<sup>&</sup>lt;sup>3</sup> Information Book, see eDockets at: 20225-186029-01.

<sup>&</sup>lt;sup>4</sup> Ibid. p. 4

<sup>&</sup>lt;sup>5</sup> Ibid. p. 4.

This project will provide Flint Hills' Pine Bend refinery with a continuous supply of anhydrous ammonia while reducing truck traffic and reducing the potential of safety events driven by accidental releases of ammonia. This reduces the probability of an anhydrous ammonia gas release by ~50% and operator involvement/oversight of unloading operation, currently at ~14 manhours/wk.<sup>6</sup>

### **Project Location**

The pipeline will start at the CF Industries Anhydrous Ammonia Terminal located at 13040 Pine Bend Trail, Rosemount, MN and terminate at the Flint Hills' Pine Bend refinery.<sup>7</sup>

Flint Hills proposes to install an anhydrous ammonia pipeline approximately 1.6-miles in length in Rosemount, Minnesota. The pipeline originates at the CF Industries anhydrous ammonia Terminal. The pipeline crosses through Sections 17, 18, and 19 in Township (T) 115 North (N), Range (R) 18 West (W) and Section 13 in Township (T) 115 North (N), Range (R) 19 West (W) in the city of Rosemount, Dakota County, Minnesota. The pipeline terminates at Flint Hills' Pine Bend refinery. Project maps are provided in Appendix A.8

## **Project Description**

This project includes installation of a four and a half-inch (4 ½ inches) outside diameter, welded steel, fusion bond epoxy coated pipe with a wall thickness of 0.237 inches. The pipeline will have a maximum operating pressure<sup>9</sup> of 720 psig, with typical operating pressures ranging between 250 to 355 psig. The pipeline will flow in one direction, with an anticipated flowrate range of 15 to 245 bph when transporting anhydrous ammonia from the CF Industries Anhydrous Ammonia Terminal to Flint Hills Resources' Pine Bend refinery. <sup>10</sup>

FHR is proposing to acquire a permanent 40-foot easement (right-of-way) that will be maintained for the pipeline, 20-feet on each side of the pipeline centerline. A temporary 60-foot-wide temporary workspace will be required during construction, 30-feet on each side on the outside edge of permanent 40-foot permanent pipeline right-of-way. The permanent 40-foot easement will be limited to installation, operation, and maintenance of a single pipeline within the easement. Additional temporary workspace may be required to facilitate the boring or horizontal directional drilling (HDD) activities at roadway and rail bed crossings.

<sup>&</sup>lt;sup>6</sup> Ibid. p. 4

<sup>&</sup>lt;sup>7</sup> Ibid. p. 4

<sup>&</sup>lt;sup>8</sup> Ibid. p. 4

<sup>&</sup>lt;sup>9</sup> Maximum Operating Pressure (MOP) – as defined within 49 CFR 195.2, the maximum pressure at which a pipeline or segment of a pipeline may be normally operated.

<sup>&</sup>lt;sup>10</sup> Information Book, see eDockets at: 20225-186029-01, p. 4-5.

<sup>&</sup>lt;sup>11</sup> Ibid. p. 5

These additional temporary workspace areas will be approximately 50 feet wide by 200 feet long (see Appendix D for illustration of that process. 12

Pipeline markers will be installed as required by federal regulations (49 Code of Federal Regulation Part 195.41) along the entire route of the pipeline.

The pipeline will be installed with a typical depth of cover of 4-1/2 feet (or 54-inches) including where the pipeline will cross a county, town, or municipal street or highway; where the pipeline will cross cultivated agricultural land; or where the pipeline will cross a drainage ditch. A landowner may waive depth of cover requirements (See Minn. Stat. 216G.07).<sup>13</sup>

A new liquid anhydrous ammonia transfer pump will be installed at the CF Industries Anhydrous Ammonia Terminal. The pipeline will begin at a point of demarcation at the CF Industries Anhydrous Ammonia Terminal at their property line. The pipeline will have traps at both ends of the pipeline, one at the east end downstream of the demarcation line at the CF Industries Anhydrous Ammonia Terminal and one at the west end inside the property line at the Flint Hills Resources Pine Bend refinery. Automated shut off valves will be located at each trap.<sup>14</sup>

In addition to the pipeline, associated facilities, will include installation of valves and a cathodic protection system. The valves will be located in accordance with applicable federal and state pipeline regulations. Cathodic protection systems needs are being evaluated and will be installed as necessary to provide anti-corrosion protection. Any other component placements will be determined upon final configuration of the pipeline and operation needs.

#### **Route Features Traversed**

#### **Land Use**

As illustrated in Table 1, the Project will traverse lands consisting primarily of industrial lands owned by Flint Hills' Pine Bend refinery and CF Industries Anhydrous Ammonia Terminal. The pipeline will cross three roads: US Highway 52/Clayton Ave E, MN State Highway 55/Courthouse Boulevard, and Clark Road, as identified in Table 2. The pipeline will run parallel to and cross a bike path on Flint Hills' property within Dakota County's existing right-of-way. No agricultural lands will be crossed.<sup>15</sup>

Table 1				
Land Use, Features Traversed and Ownership				
Right of Way	Length (miles)	% Ownership		
CF Industries	0.01	1%		
Flint Hills	1.31	82%		

<sup>&</sup>lt;sup>12</sup> Ibid. p. 26.

<sup>&</sup>lt;sup>13</sup> Ibid. p. 5.

<sup>&</sup>lt;sup>14</sup> Ibid. p. 5.

<sup>&</sup>lt;sup>15</sup> Ibid. p. 5.

Minnesota Department of Transportation	0.26	16%
	1.59	

Table 2 Crossing Locations					
Crossing	Description	GPS Location			
#1	Chicago & Norther Western Transportation Company (railroad)	44.76492, -93.03177			
#2	MN State Highway 55/Courthouse Blvd	44. 76435°, -93. 03204°			
#3	US Highway 52/Clayton Ave E	44.76407°, -93.03396°			
#4	Clark Road	44. 76407°, -93. 03472°			

Lands disturbed\_by construction activities will be restored.

#### **Archaeological and Historic Resources**

For the Project, FH retained Commonwealth Heritage Group (Commonwealth) to perform an archeological review of the Project area. For this study, Commonwealth reviewed site files maintained by the Minnesota Office of the State Archaeologist and Minnesota state Historic Preservation Office to locate any previously identified archeological sites. A field survey and shovel test survey were also performed along the route. Commonwealth's report summarized the findings as follows:

"The work effort resulted in the identification of no new archaeological sites and the revisit of one previously identified archaeological alpha site (21DKak) intersecting the construction limits during the survey. As is standard practice in Minnesota, the boundary of this site is shown to be the entire section it is in but the site itself, when formally documented, would likely be much smaller than what is currently represented. The alpha site has no site form but is instead described in a Pioneer Press newspaper article. The article describes the site as being located down along the shoreline adjacent to the river. Commonwealth preformed an intensive survey for the alpha site within the construction limits of the Project and found no evidence of the prehistoric site. Commonwealth is left to conclude that if 21DKak does exist in this section, it is likely located down along the river shoreline and does not intersect this Project area. Commonwealth believes that the survey is adequate and complete, and recommends the Project proceed as designed and proposed. Commonwealth suggests this investigation results in a determination of "No Historic Properties Affected" and receive no further archaeological survey work."

Based on Flint Hills' review of site files maintained by the Minnesota State Historic Preservation Office and files maintained by the National Register of Historic Places, no previously recorded archaeological features or historic properties are located within the proposed pipeline route and temporary workspace.<sup>16</sup>

### **High Consequences Areas**

Pipeline safety regulations use the concept of "High Consequence Areas" (HCAs), to identify specific locales and areas where a release could have the most significant adverse consequences. Once identified, operators are required to devote additional focus, efforts, and analysis in HCAs to ensure the integrity of pipelines.

Releases from pipelines can adversely affect human health and safety, cause environmental degradation, and damage personal or commercial property. Consequences of inadvertent releases from pipelines can vary greatly, depending on where the release occurs, and the commodity involved in the release.

Identification of HCAs for hazardous liquid pipelines focuses on pipelines that pass close to populated areas, drinking water sources and unusually sensitive ecological resources. Drinking water sources include those supplied by surface water or wells and where a secondary source of water supply is not available. The land area in which spilled hazardous liquid could affect the water supply is also treated as an HCA.

The pipeline route crosses through an Other Populated Area,<sup>17</sup> defined as a high consequence area (HCA) in 49 CFR 195.450. Additional HCAs the pipeline will be in proximity to include: an Unusually Sensitive Area (Drinking Water)<sup>18</sup> and a Commercially Navigable Waterway<sup>19</sup>. 49 CFR 195 requires a pipeline integrity management program. This pipeline will be a part of the established Flint Hills Resources Integrity Management Program. Project maps depicting the pipeline route and showing the HCAs is provided in Appendix B.<sup>20</sup>

<sup>&</sup>lt;sup>16</sup> Ibid. p. 5-6.

<sup>&</sup>lt;sup>17</sup> Other Populated Area – as defined within 49 CFR 195.450; a place, as defined and delineated by the Census Bureau, that contains a concentrated population, such as an incorporated or unincorporated city, town, village, or other designated residential or commercial area.

<sup>&</sup>lt;sup>18</sup> Unusually Sensitive Area – as defined within 49 CFR 195.6; a drinking water or ecological resource area that is unusually sensitive to environmental damage from a hazardous liquid pipeline release.

<sup>&</sup>lt;sup>19</sup> Commercially Navigable Waterway – as defined within 49 CFR 195.450; a waterway where a substantial likelihood of commercial navigation exists

<sup>&</sup>lt;sup>20</sup> Ibid. p. 5.

# **Regulatory Process and Procedures**

Minnesota Statutes 216G.01 through 216G.12 [Pipelines] provides for Commission review and regulation of pipelines as defined in this chapter. Commission review of a proposed pipeline project is determined by several factors. These factors include pipeline diameter, pressure threshold, liquid or natural gas, interstate or intrastate, franchise utility or not, public land or private land. In this instance the proposed project is subject to the Information Book requirements of Minn. Stat., Chapter 216G.

## **Information Book Requirements**

The Information Book requirements of Minn. Stat 216G date back to 1979 and are in statute only, not rules. The statutory requirement for a pipeline route permit (see 216G.02) did not exist until 1987. The information book and route permit requirements do not have any procedural overlap; therefore, Commission review of pipelines is tiered, but dependent on the factors described above. However, other requirements for pipelines, such as depth of burial, the county inspector and other requirements are common to all pipelines, irrespective of the applicable Commission review process.

For an information book approved by the Commission, EERA staff provides an overview of the statutory requirements for: a) notice, procedure, fees, and restrictions; b) preparation, content, and distribution; and c) public meeting(s).

Minn. Stat. 216G.03, Subd. 2. [Notice, Procedure, Fees, Route Modifications and Right-of-Way Acquisition Restrictions]

Requires that any person proposing to construct or operate a pipeline for which a pipeline routing permit is not required to notify the Public Utilities Commission and the county board of each county through which the pipeline will be constructed.

The notice is to include: "a description of the route on which the pipeline is proposed to be located, the size and type of pipeline to be constructed, the types of commodities to be carried and the construction and operational characteristics of the pipeline. The proposed route shall be described in sufficient detail so that the owners or lessees of property on which the route is located can be identified."

The notice provided by FH meets the requirements of Min. Stat. 216G.03, Subd. 2.

As noted above, this subdivision also addresses two other provisions: one is fees and the other a route modification, and the requirements are as follows:

Notice to the Public Utilities Commission shall be accompanied by a fee of \$25,000 for preparation of an information book as provided

in section <u>216G.04</u> and for expenses incurred by state agencies to participate in public meetings as provided in section <u>216G.05</u>. All fees received are appropriated to the Public Utilities Commission for its own use and for distribution to state agencies for these purposes. The Public Utilities Commission shall refund any amount that exceeds the actual cost to the commission of preparing the information book, including necessary revisions, and to state agencies for participating in the public meetings.

If the pipeline route described in the notice is changed to the extent that, in any county, 20 percent or more of the owners or lessees of property on which the new route is located were not owners or lessees of property on which the other route was located, the person proposing to construct and operate the pipeline shall notify the Public Utilities Commission and the county board of that county of the change in the proposed route. No additional fee shall be required for a notice of change of a proposed route.

When an information book is required, the requirements of Minn. Stat. 216G.03 Subd. 3., limit a pipeline proposer from acquiring or negotiating for rights-of-way until:

- (a) .... a person may not negotiate or acquire an easement or right-of-way agreement for the purpose of constructing and operating a pipeline until 30 days after:
  - a public meeting has been held as provided in section 216G.05 in the county in which the right-of-way in question is located; and
  - (2) that person has provided to the owner or lessee from whom the easement or agreement is acquired a copy of the information book prepared pursuant to section 216G.04.
- (b) If the original information book is revised pursuant to section 216G.04, each owner or lessee of property which the original route did not affect shall be provided with a copy of the revised book.

FH has provided the required application fee for the Information Book.

# Information Book [Minn. Stat. 216G.04]

The preparation of and the content requirements of an Information Book are covered in Minn. Stat. 216G.04 [Information Book] and are as follows:

- (a) Within 45 days after receiving notification, the Commission shall prepare and make available to the person proposing to construct the pipeline sufficient copies of an information book for owners and lessees of property along the pipeline. The other provision of this requirement may be satisfied the person proposing the pipeline to prepare the book at that person's expense subject to approval of the book by the Commission.
- (b) The information book shall contain at least the following information:
  - A description of the pipeline proposed for construction, including the proposed route, types of commodities to be carried, size of the line and construction and operation characteristics;
  - (2) explanation of the steps which must be taken to acquire right-of-way for the pipeline and of the rights and alternatives of the owner;
  - (3) explanation of the legal requirements that must be met in constructing the pipeline
  - (4) explanation of the county inspection procedures and instructions for contacting the inspector in the event of noncompliance with legal requirements.
- (c) Within 45 days after receiving notification of a change in a proposed route, the commission shall prepare and make available or shall approve a revision of the original information book so that a description of the new route and any other required information relevant to the new route is incorporated in the book.

#### Public Meetings Required [Minn. Stat. 216G.05]

(a) Within 60 days of receiving notification as provided in section 216G.03, the county board of each county in which the pipeline route is proposed to be located shall hold a public meeting as provided in this section. If a county board receives a required notification of a chage in the proposed pipeline route in that county, the board shall hold an additional public meeting as provided in this section within 30 days after receiving notification. The purpose of a public meeting held pursuant to this section shall be to provide information to the public concerning:

- (1) the pipeline proposed for construction, including the proposed route, the size of the pipeline, types of commodities to be carried and construction and operating characteristics; and
- (2) the legal requirements which must be met in acquiring easements and in construction and operating the pipeline.
- (b) Notice and agenda of the public meeting shall be given by the county board at least ten days, but no earlier than 45 days before the meeting. Notice shall be by publication in a legal newspaper of the county and a newspaper of general circulation in the area in which the public meeting is to be held and written notice to the clerk of each town and incorporated municipality in the county.
- (c) State agencies authorized to issue permits required for construction or operation of the pipeline shall participate in the public meetings in each county. The agencies shall explain the procedures for issuing the permits and the way the public may participate in those procedures.

#### Other Applicable Provisions of Minn. Stat. 216G

Besides the procedural statutory requirements reviewed above, the proposed Unit 48 Anhydrous Ammonia Pipeline Project is subject to the requirements of Minn. Stat. 216G.07, Subd 1. Depth of Cover, Subd. 2 Waiver of depth requirements, Subd. 3 Waiver of rules of political subdivisions, Subd. 5 Agricultural protection standards, Subd. 6 Inspection Fee, Subd. 7 County Inspector, Subd. 8 Equitable relief, Subd. 9 Criminal Penalty and Subd. 10 Civil Penalty.

# **EERA Staff Analysis and Comments**

FH has complied with the requirements of Minn. Stat. 216G.03 by providing notice to the Minnesota Public Utilities Commission and Dakota County Board of Commissioners. <sup>21</sup> The notice provided the information required by Minn. Stat 216G.03 Subd 2. <sup>22</sup> Flint Hill Resources' also provided payment as required by Minn. Stat. 216G.03 Subd. 2.

DOC EERA staff has reviewed the information book for compliance with the requirements of Minnesota Statute 216G.04 (b) that include:

- (1) a description of the pipeline proposed for construction, including the proposed route, types of commodities to be carried, size of the line and construction and operation characteristics (See Information Book (IB), pages 3-7);
- (2) explanation of the steps which must be taken to acquire right-of-way for the pipeline and of the rights and alternatives of the owners (See IB, p. 7-8);
- (3) explanation of the legal requirements that must be met in constructing the pipeline (See IB, p. 8); and
- (4) explanation of the county inspections procedure and instructions for contacting the inspector in the event of noncompliance with legal requirements (See IB, p. 8).

DOC EERA staff finds that the revised Information Book submitted by Flint Hills Resources Pine Bend, LLC on May 24, 2022, for the Unit 48 Liquified Anhydrous Ammonia Pipeline Project meets the requirements of Minnesota Statute 216G.04 for Commission approval.

Dakota County is prepared to implement the requirements of Minn. Stat. 216G.05 [Public Meetings Required] upon Commission approval of the Information Book filed by Flint Hills Resources. EERA staff has confirmed this with a representative of Dakota County.

ERRA staff is not aware of any other issues or concerns related to this matter.

## **EERA Staff Recommendations**

Approve the Flint Hills Resources Pine Bend, LLC "Information Book for Owners and Tenants of Property along the Unit 48 Liquified Anhydrous Ammonia Pipeline Project in Dakota County, Minnesota" prepared in compliance with Minnesota Statute 216GF.04 [Information Book] and authorize Flint Hills Pine Bend, LLC to proceed with the requirements of Minn. Stat. 216G for an Information Book.

<sup>&</sup>lt;sup>21</sup> See eDockets at: <u>20223-183958-01</u>. The Information Book was not filed until May 24, 2022, until project design and location modifications were finalized by FH.