



North Dakota Industrial Commission
Hearing – Case No. 23084
September 23, 2014

Good morning, my name is Brent Lohnes and I am the Director for Field & Plant Operations for Hess Corporation. I want to thank the State, and the North Dakota Industrial Commission, for giving Hess the opportunity to participate in this important hearing today.

Safety has always been a core value of both Hess and the oil and natural gas industry, and we are committed to working with regulators and all stakeholders to ensure public safety in the handling, packaging and transportation of crude oil. Any new proposals for operator requirements must be data-driven and produce measurable improvements to safety without creating new risks or inadvertently shifting the risks to other businesses or operations.

Today I am testifying on behalf of Hess Corporation as well as the American Petroleum Institute, the national trade association representing America's oil and natural gas industry. API has more than 600 members, including integrated companies, as well as exploration and production, refining, marketing, pipeline, marine businesses, and service and supply firms.

Hess has a long history of operating in North Dakota – we have been here since 1951 when our company drilled the first production oil well in the state. We are proud to say that generations of Hess employees have called, and will continue to call, North Dakota home. Today, Hess is one of the largest producers in the entire region, with a 17 rig program and over 800 wells of which Hess is the primary operator. In the Bakken, we are expecting to produce approximately 80,000 barrels of oil equivalent per day on a net basis, with plans to reach 125,000 barrels of oil equivalent per day by 2016.

With the substantial increase in production of Bakken crude from North Dakota, the industry is experiencing constraints on pipeline capacity for transporting the product, which has resulted in a larger amount of Bakken crude to be shipped out of the state via rail. Several high profile rail incidents involving transport of Bakken crude have caused greater speculation and scrutiny around the chemical characteristics of the product, causing federal regulators and others to question whether or not transportation of crude by rail is safe. As the debate continues on the potential changes to rail regulations at the federal level, we are here today to discuss the practices of oil conditioning processes in the field – which we believe are sufficient in preparing Bakken crude for transport by rail, pipeline, or truck.

The North Dakota Petroleum Council, in conjunction with Turner, Mason & Co., has conducted Bakken quality assurance tests that studied the range and variability of Bakken crude oil qualities. The Turner Mason study was based on original data collected from both well sites and rail sites, and was representative of the entire Bakken field by using samples from older wells, newer wells, areas of different geography, and from different operators. The results of this study have shown that Bakken crude oil is very similar to other light crude oils. All samples were typical of light crude oil and classified as flammable liquids according to federal regulations. The study found no meaningful change in transit,



little geographical variation, and no evidence of corrosiveness – showing that Bakken crude is extremely consistent across the entire basin, and from load to delivery point.

The results of the study support our position that there is no practical difference in the characteristics of Bakken crude and other light crudes, and that it is suitable for shipment in current rail tank cars. Hess currently operates CPC-1232 tank cars, which exceed today's required specifications for safe transport of flammable liquids as prescribed by the Department of Transportation. Hess also incorporates strict safety protocols into our day-to-day management of crude shipments, and will continue to do so. As such, the transportation safety of crude oil should be considered holistically by evaluating the product, the package, and the operations. Turner Mason's study and API's work on a standard for classification address the characteristics of the product and the proper classification and loading of crude oil in rail tank cars.

In fact, the NDPC testified recently before Congress that three independent studies have now shown that Bakken crude is similar to other North American light, sweet crude oils in gravity, vapor pressure, flash point and initial boiling point – the key parameters in proper classification. According to these studies, Bakken crude oil chemical properties attest to its proper classification as a Class 3 flammable liquid.

An across-the-board requirement to stabilize crude oil beyond the current practices taking place would still likely result in a product that remains a flammable liquid, as defined by the Department of Transportation. To date, no evidence has been presented to suggest that measureable safety improvements would result from processes beyond current oil conditioning. Furthermore, additional oil conditioning would create two separate product streams of flammable liquids for transport. Because of the lack of existing infrastructure in North Dakota, this would be even more flammable liquids that would still have to be transported by rail. We believe Bakken crude oil is sufficiently prepared for transport in the field using conventional separation equipment already in place at well sites – for example, separators and heater-treaters, as Hess employs in our operations. Furthermore, oil conditioning at the well site is conducted to prepare the oil for market by separating the oil, water, and gas components. While practices will differ between operators – due to equipment or infrastructure constraints – we are confident that current oil conditioning practices by industry, including Hess, already meet transportation requirements.

It is important to note that all operating conditions must be carefully optimized to stay within equipment design limits, as well as product quality and general operability constraints. For example, increasing heater-treater temperature to the upper end of the design limits can have the undesirable and unacceptable consequence of increasing internal tube failures and driving excessive amounts of crude oil range material (C_4^+) into the gas stream.



North Dakota Industrial Commission

Hearing – Case No. 23084

September 23, 2014

Hess feels there is merit in assuring a standard level of conditioning being employed at all well sites. However, as stated before, we believe that any new safety solutions – at any level of government – must be data-driven and produce measurable improvements to safety without creating new risks or inadvertently shifting the risks to other businesses or operations. Doing anything else could cause unintended consequences to the safety and production of Bakken crude, while potentially putting economic constraints on business decisions in the state.

API and the oil and gas industry remain committed to the safe production and transportation of crude oil. When evaluating potential standards or provisions, API encourages this committee to consider actions that will make a measurable improvement to safety.

Thank you, again, for allowing us to participate today.