

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 23084
ORDER NO. 31092

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO AMEND
NDIC ORDER NO. 29398 PARAGRAPH 2(C) IN
CASE NO. 23084 AND SUBSEQUENT
POLICY/GUIDANCE DOCUMENT REGARDING
OIL CONDITIONING STANDARDS FOR THE
BAKKEN, BAKKEN/THREE FORKS, THREE
FORKS, AND SANISH POOL FIELD RULES.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) Order No. 25417, issued in Case No. 23084, signed by the Commission on December 9, 2014, adopted new conditioning standards for the transportation of Bakken Petroleum System oil to improve the transportation safety and marketability of crude oil. Order No. 25417 sets forth operating standards guiding the use of conditioning equipment to separate production fluids into gas and liquid components. The new standard required operators to condition Bakken crude oil to a vapor pressure of no more than 13.7 psi. The order also required operators to separate light hydrocarbons from all Bakken crude oil to be transported and prohibited the blending of light hydrocarbons back into oil supplies prior to shipment. The Commission, in setting the vapor pressure limit at 13.7 psi, noted that standards-setting organizations set crude oil stability at a vapor pressure of 14.7 psi.

(2) Order No. 29398, issued in Case No. 27125, signed by the Commission on January 18, 2019, amended the previous oil conditioning Order No. 25417. Order No. 29398 updated the language to ensure the most current ASTM or API sampling and testing standards are used, and by creating the Oil Conditioning Order No. 29398 Policy/Guidance Version 011819 which provided for further compliance information.

(3) Oil Conditioning Order No. 29398 Policy/Guidance Version 011819 required operators utilizing gas liquid separators and/or emulsion heater treaters operating at pressures and temperatures other than those outlined in the document, to have a valid vapor pressure test on file that demonstrates such system is producing a crude oil Vapor Pressure of Crude Oil (VPCR₄) no greater than 13.7 psi or 1 psi less than the vapor pressure of stabilized crude oil as defined in the latest version of ANSI/API RP3000, whichever is lower.

(4) On May 9, 2019 Governor Inslee of Washington state signed into law Engrossed Senate Bill 5579 that restricted the unloading of crude oil with a vapor pressure greater than 9 psi.

(5) On May 11, 2020, the Pipeline and Hazardous Materials Safety Administration (PHMSA) found that the federal Hazardous Material Transportation Association (HMTA) preempts Washington state's vapor pressure limit for crude oil loaded or unloaded from rail tank cars, for three reasons. First, Washington state's proposed vapor pressure requirement constitutes a scheme for classifying a hazardous material that is not substantively the same as the Hazardous Materials Regulations (HMR). Second, the vapor pressure requirement imposes requirements on the handling of a hazardous material that are not substantively the same as the requirements of the HMR. Third, PHMSA has determined that the vapor pressure requirement is an obstacle to accomplishing and carrying out the HMTA Laws.

In addition, PHMSA finds that the administrative record regarding Washington state's Advance Notice of Transfer requirement is insufficient to make a determination whether the requirement is preempted under the HMTA.

(6) There is not a federal vapor pressure standard for the classification process for unrefined petroleum-based products such as crude oil.

(7) North Dakota Administrative Code Section 43-02-03-48. Measurement Of Oil states that "Oil production may not be transported from a well premises, central production facility, treating plant, or saltwater handling facility until its volume has been determined through the use of properly calibrated meter measurements or tank measurements. All meter and tank measurements, and volume determinations must conform to American petroleum institute standards and be corrected to a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter]."

The American National Standards Institute (ANSI), along with the American Petroleum Institute (API) published Recommended Practice 3000: Classifying and Loading of Crude Oil Into Rail Tank Cars in September 2014 which sets a Reid Vapor Pressure threshold of 14.696 psi as the definition of a "stabilized" or "dead" crude oil.

(8) To avoid conflict with federal standards the Commission proposes changing oil conditioning VPCR₄ requirements in the state of North Dakota for Bakken crude oil from 13.7 psi to 14.7 psi.

(9) Many transmission pipelines and rail terminals have adopted vapor pressure tariffs as stringent or more stringent than the recommendations of ANSI/API, making it unnecessary for the Commission to have limits on vapor pressure.

IT IS THEREFORE ORDERED:

(1) No well shall be hereafter produced in a Bakken, Bakken/Three Forks, Three Forks, and/or Sanish Pool (the Bakken Petroleum System), except in conformity with the regulations below without special order of the Commission after due notice and hearing.

(2) All wells completed in the Bakken Petroleum System must be produced through equipment utilizing the following standards to improve the marketability and measurement of the crude oil:

- (a) A gas-liquid separator and/or emulsion heater-treater of ample capacity and in good working order that effectively separates the production into gaseous and liquid hydrocarbons, must be operated within manufacturer's recommended operating limits pursuant to the Commission's approved oil conditioning policy/guidance;
 - (b) Production facilities utilizing gas-liquid separator(s) and/or emulsion heater-treater(s) operating at pressures and temperatures other than those provided in the Commission's approved oil conditioning policy/guidance shall be allowed only upon the operator demonstrating that the operating pressures and temperatures of the separator(s) and/or emulsion heater-treater(s) are producing crude oil with a Vapor Pressure of Crude Oil (VPCR₄) pursuant to the Commission's approved oil measurement policy/guidance. Such test must be performed by a person sufficiently trained to perform the test. All VPCR₄ tests shall be performed in accordance with the most current ASTM testing standard and shall be conducted pursuant to the Commission's approved oil conditioning policy/guidance. Samples for testing must be collected at the point of custody transfer pursuant to the Commission's approved oil conditioning policy/guidance. A Sundry Notice (Form 4) shall be submitted to the Director within 15 days of the test date which includes required information pursuant to the Commission's approved oil conditioning policy/guidance; or
 - (c) Production facilities utilizing an alternative oil conditioning method other than a gas-liquid separator(s) and/or an emulsion heater-treater(s) will only be approved by the Commission after due notice and hearing, and must: (a) be capable of delivering crude oil with a VPCR₄ no greater than 14.7 psi at custody transfer; or (b) provide marketable crude oil to a crude oil plant producing crude oil with a VPCR₄ pursuant to the Commission's approved oil conditioning policy/guidance.
 - (d) Commission personnel will periodically inspect production facilities and records to confirm operator compliance with the standards and requirements contained herein. Noncompliance could result in the Commission issuing civil and criminal penalties pursuant to North Dakota Century Code Section 38-08-16.
- (3) The following practices are hereby prohibited:
- (a) Blending crude oil produced from the Bakken Petroleum System with liquids recovered from gas pipelines prior to custody transfer; and
 - (b) Blending crude oil produced from the Bakken Petroleum System with natural gas liquids (i.e. condensate, pentanes, butanes, or propane) prior to custody transfer.
- (4) The operator of any transload rail facility shall notify the Director after discovering that any crude oil received from the Bakken Petroleum System violates federal crude oil safety standards. The notice shall indicate: (a) the federal standard violated and the date; (b) the probable source of such crude oil, if known; and (c) an outline on the final disposition of such

crude oil and the process subsequently utilized to provide the safe transportation of such crude oil.

(5) The Commission shall have continuing jurisdiction in this matter and specifically reserves the authority, upon its own motion or the motion of any interested party, to: (a) review such requirements outlined herein; (b) determine whether additional requirements are warranted; (c) issue crude oil conditioning policy/guidance as necessary; and (d) make such further amendments or modifications as the Commission deems appropriate.

(6) This order shall cover all wells completed in the Bakken Petroleum System, and shall continue in full force and effect until further order of the Commission.

Dated this 20th day of August, 2020.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Doug Goehring, Agriculture Commissioner