

A special hearing was heard (Case 23084) on September 23, 2014 on a motion of the Commission to consider amending the Bakken, Bakken/Three Forks, Three Forks, and/or Sanish Pool field rules to establish oil conditioning standards and/or impose such provisions as deemed appropriate to improve the transportation safety and marketability of crude oil. Testimony was received from 33 parties.

A working draft order was presented to the Commission on November 13, 2014. The working draft order sets operating standards for conditioning equipment to properly separate production fluids into gas and liquid. It also includes parameters for temperatures and pressures under which the equipment must operate to ensure that light hydrocarbons are removed before oil is shipped to market. The working draft order further requires operators to condition crude oil to a Reid Vapor Pressure of no more than 13.7 pounds per square inch and prohibits the blending of light hydrocarbons back into oil supplies prior to shipment.

Please find attached the working draft order for Case 23084. The Commission agreed to reopen the record for public comment until 5 p.m., Wednesday November 19, 2014, to specifically address technical corrections within the draft order.

Comments will be received until 5:00 p.m. Wednesday, November 19, 2014. Please submit comments to: brkadrmas@nd.gov

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 23084
ORDER NO. 25417

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER AMENDING THE BAKKEN, BAKKEN/THREE FORKS, THREE FORKS, AND/OR SANISH POOL FIELD RULES TO ESTABLISH OIL CONDITIONING STANDARDS AND/OR IMPOSE SUCH PROVISIONS AS DEEMED APPROPRIATE TO IMPROVE THE TRANSPORTATION SAFETY AND MARKETABILITY OF CRUDE OIL.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 23rd day of September, 2014.
- (2) This special hearing was called on a motion of the Commission to consider amending the Bakken, Bakken/Three Forks, Three Forks, and/or Sanish Pool field rules to establish oil conditioning standards and/or impose such provisions as deemed appropriate to improve the transportation safety and marketability of crude oil.
- (3) Prior to the hearing, the Commission indicated it was seeking testimony of technical nature for input on the following:
 - (a) Typical operating temperature, pressure, and retention time of gas/liquid separators;
 - (b) Optimum operating gas/liquid separator temperature, pressure, and retention time to effectively remove light hydrocarbons;
 - (c) Typical operating temperature, pressure, and retention time of treaters;
 - (d) Optimum operating treater temperature, pressure, and retention time to effectively remove light hydrocarbons;
 - (e) Optimum oil stock tank pressure to effectively operate vapor collection equipment;
 - (f) Optimum oil tank settling time prior to shipment;

- (g) Capital costs of typical gas/liquid separator and treating equipment;
- (h) Operating costs of typical gas/liquid separator and treating equipment;
- (i) Other field operation methods to effectively reduce the light hydrocarbons in crude oil; and
- (j) Crude oil quality and safety studies including but not limited to those conducted by American Fuel & Petrochemical Manufacturers, PHMSA & FRA Operation Classification, Transportation Safety Board of Canada, and Turner Mason & Company.

Written comments were allowed no later than 5:00 p.m., Monday, September 22, 2014.

(4) The Commission received written comments from Joel Noyes of Hess Corporation, Phillip Steck with the New York Legislature, Don Morrison of Dakota Resource Council, John Zellitti of Triangle USA Petroleum Corporation including video, Ron Day of Tesoro, Kari Cutting of the North Dakota Petroleum Council (NDPC) including slides, and Tony Lucero of Enerplus Resources USA Corporation.

The record in this case was left open to allow American Fuel & Petrochemical Manufacturers to submit written comments. Comments were received October 1, 2014 and the record was closed.

The following concerned land/royalty owners also submitted written comments: R.J. Larsen, Edward Decker, Paul Hanson, Nancy Casler, and Timothy Lane.

The Commission also received written comments from Ron Schalow.

(5) The Commission received oral comments at the hearing from Jon Ramer of Terrenus Resources, Hal Cooper of CP&Y Engineering, Kari Cutting of NDPC, Jeff Hume on behalf of the NDPC, Brent Lohnes of Hess Corporation, Roger Kelley of Continental Resources, Inc., Keith Lilie of Statoil Oil & Gas LP, Eric Bayes of Oasis Petroleum North America LLC, Jeff Hume of Continental Resources, Inc., Phil Archer of Whiting Oil and Gas Corporation, Wayne King of Grit Industries, Inc., Tony Lucero of Enerplus Resources USA Corporation, Colin Nikiforuk of CRNG Energy Inc., Theodora Bird Bear, Scott Skokos, Marie Hoff, and Lynn Wolff of the Dakota Resource Council, Connie Triplett, a North Dakota State Legislator, John Fanto of True Oil LLC, and Darrell Graf with the Fire Academy of North Dakota.

(6) Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following conclusions. Much of the testimony was relevant, but did not address the requested topics on which the Commission sought testimony.

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 conditioning standards to improve the marketability and safe transportation 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;
- (b) Production facilities utilizing a gas-liquid separator and/or an emulsion heater-treater operating at a pressure of no more than 50 psi must heat the produced fluids to a temperature of no less than 115 degrees Fahrenheit. Such temperature may be applied in the emulsion heater-treater or prior to the fluids entering the separator if no emulsion heater-treater is utilized;
- (c) Production facilities utilizing a gas-liquid separator and/or an emulsion heater-treater operating at a pressure greater than 50 psi but no more than 75 psi must heat the produced fluids to a temperature of no less than 120 degrees Fahrenheit. Such temperature may be applied in the emulsion heater-treater or prior to the fluids entering the separator if no emulsion heater-treater is utilized;
- (d) Production facilities utilizing a gas-liquid separator and/or an emulsion heater-treater operating at a pressure greater than 75 psi must heat the produced fluids to a temperature no less than 120 degrees Fahrenheit and shall also be required to install a vapor recovery unit on the crude oil storage tanks;
- (e) Production facilities utilizing a gas-liquid separator and/or an emulsion heater-treater operating at pressures and temperatures other than those provided in (b) through (d) above shall be allowed only upon the operator confirming the resulting Reid Vapor Pressure is no greater than 13.7 psi. Such test must be performed by a third party sufficiently trained to perform the test. All Reid Vapor Pressure tests shall be performed in accordance with the latest version of ASTM D6377 and shall be conducted quarterly. A Sundry Notice (Form 4) shall be submitted to the Director within 15 days of the test date which includes a screen shot printout of the Reid Vapor Pressure test conducted and details the operating capacities, pressures, and temperatures of all well site conditioning equipment at the time of the test; and
- (f) Production facilities not utilizing a gas-liquid separator and/or an emulsion heater-treater will only be approved by the Commission after due notice and hearing, and must: (a) be capable of delivering crude oil with a Reid Vapor Pressure no greater than 13.7 psi at custody transfer; or (b) provide safe transportation of marketable crude oil to a crude oil conditioning or stabilization plant.

- (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 oil sales; and
 - (b) Blending crude oil produced from the Bakken Petroleum System with liquids (i.e. condensate, pentanes, butanes, or propane) prior to oil sales.

(4) The operator of any transload rail facility shall submit a Sundry Notice (Form 4) to the Director within 15 days of discovering the Reid Vapor Pressure exceeds 13.7 psi for any crude oil received from the Bakken Petroleum System. The notice shall indicate: (a) the Reid Vapor Pressure reading and the test 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; and (c) make such further amendments or modifications as the Commission deems appropriate.

(6) This order is hereby effective February 1, 2015, shall cover all wells completed in the Bakken Petroleum System, and shall continue in full force and effect until further order of the Commission.