PROVINCE OF BRITISH COLUMBIA

REGULATION OF THE BOARD OF THE OIL AND GAS COMMISSION

Oil and Gas Activities Act

The Board of the Oil and Gas Commission orders that, effective January 1, 2020, the Drilling and Production Regulation, B.C. Reg. 282/2010, is amended as set out in the attached Schedule.

DEPOSITED

December 17, 2018

B.C. REG. 286/2018

Dec 17/ 2018

Date

Chair, BOARD OF DIRECTORS

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: *Oil and Gas Activities Act*, S.B.C. 2008, c. 36, ss. 106, 111 and 112

Other:

R10240117

SCHEDULE

1 *Section 1 (1) of the Drilling and Production Regulation, B.C. Reg. 282/2010, is amended by adding the following definition:*

"turnaround", in relation to a facility, means a planned shutdown to allow for maintenance, cleaning, inspection, repairs or an overhaul; .

2 *Section 4 (1) is amended by adding the following paragraph:*

(m.1) section 41.1 (2), (3), (5) and (6); .

3 *Section 41 (5) is repealed.*

4 *The following section is added:*

Leak detection and repair

41.1 (1) In this section:

"comprehensive survey" means a survey to detect leaks using one or both of the following methods:

(a) an organic vapour analyzer that is

(i) capable of detecting natural gas concentrations of 500 parts per million, and

(ii) operated in accordance with United States Environmental Protection Agency Method 21 – Determination of Volatile Organic Compound Leaks;

(b) a gas imaging camera that is

(i) capable under laboratory conditions of detecting, at a distance of 3 metres, pure methane emitted at a rate of 1 gram per hour, and

(ii) operated by individuals who are competent in the operation of the camera;

"screening survey" means a survey to detect leaks using one or both of the following methods:

(a) a soap solution bubble test;

(b) the senses of hearing, sight and smell.

(2) A facility permit holder who operates a facility must, in accordance with subsection (4), carry out at least the following surveys of the facility, including, without limitation, any pneumatic devices at the facility:

(a) three comprehensive surveys per year, if the facility is

(i) a gas processing plant,

(ii) a compressor station,

(iii) a multi-well battery, or

(iv) a single-well battery that includes a controlled storage tank;

(b) one comprehensive survey per year, if the facility is

(i) a custom treating facility,

(ii) an injection and disposal facility,

(iii) a single-well battery not described in paragraph (a) (iv), or

(iv) a facility that includes a storage tank, other than a facility described in paragraph (a);

(c) in any other case, one screening survey per year.

(3) A well permit holder who operates a well must, in accordance with subsection (4), carry out at least the following surveys of the well:

(a) one comprehensive survey per year, if the well

(i) has a storage tank, or

(ii) is producing from an unconventional zone listed in Schedule 2;

(b) in any other case, one screening survey per year.

(4) A survey required under this section must be carried out at least the following interval after the previous required survey:

(a) in the case of a facility described in subsection (2) (a), 60 days;

(b) in the case of a facility described in subsection (2) (b) or (c) or a well described in subsection (3) (a) or (b), 9 months.

(5) If a leak is detected at a facility during a survey required under this section, the facility permit holder who operates the facility must repair the leak

(a) within 30 days of detection, or

(b) if the repair requires the facility to be shut down, at the next turnaround for the facility.

(6) If a leak is detected at a well during a survey required under this section, the well permit holder who operates the well must repair the leak within 30 days of detection.

(7) A permit holder who operates a facility or well must maintain a record of the surveys of the facility or well that are carried out to meet a requirement under this section that includes the following information for each survey:

(a) the date of the survey and the method used;

(b) any leaks that are detected and, for each leak detected,

(i) the rate of the leak, and

(ii) if the leak is repaired, the date of the repair.

5 *Part 7 is amended*

(a) by adding the following heading before section 39:

Division 1 – General , *and*

(b) by adding the following Division after section 52:

Division 2 – Natural Gas Emissions

Definition

52.01 In this Division, **"natural gas"** does not include propane.

Hydrocarbon gas conservation equipment

52.02 (1) A facility permit holder who operates a facility that uses hydrocarbon gas conservation equipment must ensure that

(a) the equipment is operated continuously, except during a turnaround for the facility or while being maintained, cleaned, inspected or repaired,

(b) the equipment recovers at least 95% of the natural gas routed through the equipment, and

(c) the natural gas recovered by the equipment is used for a purpose other than to dispose of that gas as waste.

(2) A facility permit holder who operates a facility that uses hydrocarbon gas conservation equipment must maintain a record of the following for each piece of hydrocarbon gas conservation equipment:

(a) the periods of time when the equipment is in operation;

(b) the periods of time when the equipment is not in operation;

(c) the following information for each calendar month:

(i) the volume of natural gas routed though the equipment;

(ii) the volume of natural gas recovered by the equipment.

Tanks

52.03 (1) A facility permit holder who operates a facility that began operations on or after January 1, 2022 must ensure that the emissions of natural gas from tanks at the facility are less than 1 250 m^3 per month in total.

(2) Beginning on January 1, 2023, a facility permit holder who operates a facility that began operations before January 1, 2022 must ensure that the emissions of natural gas from tanks at the facility are less 9 000 m^3 per month in total.

(3) Subject to subsection (4), a facility permit holder who operates a facility that includes an uncontrolled storage tank must maintain a record of the volume of natural gas emitted from the tank in each calendar month.

(4) Subsection (3) does not apply until January 1, 2023 in relation to a facility that began operations before January 1, 2022.

Compressors

52.04 (1) In this section:

"high-output" means

(a) rated at 75 kW or more, or

(b) operated for 450 hours or more per year;

"provincial fleet", in relation to a facility permit holder, means all of the type B compressors used at facilities operated by the permit holder, whether or not under the same permit;

"type A compressor" means

(a) a reciprocating compressor that has 4 or more throws, and

(b) a high-output compressor, other than a type B compressor;

"type B compressor" means a high-output reciprocating compressor that

(a) was installed before January 1, 2021, or

(b) has fewer than 4 throws.

(2) Subject to subsections (3) to (5), a facility permit holder who operates a facility that uses a type A compressor must ensure that the emissions of natural gas from the compressor are

(a) routed to hydrocarbon gas conservation equipment, or

(b) flared in accordance with sections 42 to 44.

(3) Subsection (2) does not apply until January 1, 2022 in relation to a centrifugal compressor that was installed before January 1, 2021.

(4) Subsection (2) does not apply in relation to a centrifugal compressor that was installed before January 1, 2021 if the emissions of natural gas from the compressor

(a) are routed to a vent, and

(b) do not exceed 0.17 m^3 per minute.

(5) Subsection (2) does not apply in relation to a centrifugal compressor that was installed on or after January 1, 2021 if the emissions of natural gas from the compressor

(a) are routed to a vent, and

(b) do not exceed 0.057 m^3 per minute.

(6) A facility permit holder who operates a facility that uses a type B compressor must ensure

(a) that the emissions of natural gas from the compressor do not exceed 5 m^3 per hour per throw on that compressor, and

(b) beginning on January 1, 2022, that the emissions of natural gas from the permit holder's provincial fleet do not exceed 0.83 m^3 per hour per throw on the compressors in the fleet that are in operation.

(7) Beginning on January 1, 2022, a facility permit holder who operates a facility that uses a type A compressor or a type B compressor must maintain a record of the following:

(a) whether the compressor is centrifugal or reciprocating;

(b) if applicable, the number of throws the compressor has;

(c) for each calendar year, the volume of natural gas emitted from the compressor during a period of 15 minutes that is representative of the normal operating conditions of the compressor.

Pneumatic devices

52.05 (1) In this section:

"large compressor station" means a compressor station at which the total power of all compressors is 3 MW or greater;

"pneumatic device" does not include a pneumatic pump or a pneumatic compressor starter.

(2) A facility permit holder who operates a facility that began operations on or after January 1, 2021 must not use at the facility a pneumatic device that emits natural gas.

(3) Beginning on January 1, 2022, a facility permit holder who operates a gas processing plant, or a large compressor station, that began operations before January 1, 2021 must not use at the facility a pneumatic device that emits natural gas.

(4) Beginning on January 1, 2022, a facility permit holder who operates a facility that began operations before January 1, 2021, other than a gas processing plant or a large compressor station, must not use at the facility a pneumatic device that emits natural gas unless

(a) the emissions of natural gas from the device do not exceed 0.17 m^3 per hour, or

(b) all of the following requirements are met:

(i) the facility permit holder has a signed statement, from a professional engineer licensed or registered under the *Engineers and Geoscientists Act*, that

(A) the device cannot be operated so as to meet the requirement in paragraph (a) without compromising the safe operation of the facility, and

(B) it is not practical to replace the device with a device that can be operated so as to meet those requirements;

(ii) the emissions of natural gas from the device are minimized to the extent consistent with efficient operation of the device and safe operation of the facility, and

(iii) the device is marked with a weatherproof and readily visible tag.

(5) Subject to subsection (6), a facility permit holder who operates a facility that uses a pneumatic device that emits natural gas must maintain a record of the following:

(a) a description of the device;

(b) the purposes and operational settings of the device;

(c) whether the device is being used under subsection (4) (b);

(d) the volume of natural gas emitted from the device in each calendar month.

(6) Subsection (5) does not apply until January 1, 2022 in relation to a facility that began operations before January 1, 2021.

Pneumatic pumps

52.06 (1) A facility permit holder who operates a facility must not use at the facility a pneumatic pump that emits natural gas unless the pump

(a) was installed before January 1, 2021, or

(b) is operated 750 hours or less per year.

(2) Beginning on January 1, 2021, a facility permit holder who operates a facility that uses a pneumatic pump that emits natural gas must maintain a record that contains

(a) a description of the pump and the type of fluid pumped, and

(b) the following information for each calendar month:

(i) the number of hours the pump is operated;

(ii) the volume of natural gas emitted from the pump.

Pneumatic compressor starters

52.07 (1) Beginning on January 1, 2022, a facility permit holder who operates a facility that uses a pneumatic compressor starter must ensure that the emissions of natural gas from the compressor starter are

(a) routed to hydrocarbon gas conservation equipment, if the facility includes hydrocarbon gas conservation equipment to which the emissions can be routed, or

(b) flared in accordance with sections 42 to 44, if the facility includes a flaring system to which the compressor starter can be connected.

(2) Beginning on January 1, 2022, a permit holder who operates a facility that uses a pneumatic compressor starter that cannot be routed or flared as set out in subsection (1) must maintain a record that contains

(a) a description of the compressor starter, and

(b) the following information for each calendar month:

(i) the volume of natural gas used in start attempts;

(ii) the number of hours the compressor starter is operated;

(iii) the volume of natural gas emitted from the compressor.

Glycol dehydrators

52.08 (1) Subject to subsection (2), a facility permit holder who operates a facility that uses a glycol dehydrator that was installed on or after January 1, 2022 must ensure that the emissions of natural gas from the dehydrator are less than 25 tonnes per year.

(2) Beginning on January 1, 2023, a facility permit holder who operates a facility that uses a glycol dehydrator that was installed before January 1, 2022 must ensure that the emissions of natural gas from the dehydrator are less than 50 tonnes per year.

(3) A facility permit holder who operates a facility that uses a glycol dehydrator must

(a) maintain a record of the volume of natural gas emitted from the dehydrator in each calendar year, and

(b) submit the record to the commission by July 1 of the calendar year after the calendar year to which the record relates.

Pipes and hatches

52.09 A facility permit holder who operates a facility must ensure that pipes and hatches at the facility are closed whenever an operation does not require them to be open.

Sampling and pressure relief systems

52.10 A facility permit holder who operates a facility must ensure that sampling and pressure relief systems at the facility are installed and operated so that emissions of natural gas are minimized.

Well surface casings

52.11 Beginning on July 1, 2021, a well permit holder who operates a well must ensure that the emissions of natural gas from the surface casing vent flow do not exceed 100 m^3 per day.

Measurement equipment

52.12 A permit holder who operates a facility or well must ensure that the equipment and methods used to measure emissions at the facility or well are sufficient to measure

(a) the actual volumes and rates of emissions referred to in this Division, other than in section 52.04 (7) (c), and

(b) the volume of emissions referred to in section 52.04 (7) (c) to within 10% of the actual volume.