Summary of Gas Limits and Fugitive Emissions Management Requirements

The table below summarizes the vent gas limits and fugitive emissions management requirements in *Directive 060*, section 8, and is provided for information only. Companies must adhere to the requirements as set out in *Directive 060*.

Under the overall vent gas limit, which includes all routine and nonroutine vent gas, are source-specific vent gas limits that must be followed while remaining in compliance with the overall vent gas limit. Defined vent gas is vent gas emitted from routine venting, excluding vent gas from pneumatic devices, compressor seals, and glycol dehydrators.

Note:

- "Existing" means *before* January 1, 2022; "new" means *on or after* January 1, 2022.
- In May 2020, the current edition of *Directive 060* was released and its requirements were compared to those in the previous edition. "Previous" means the December 2018 edition of *Directive 060*; "current" means the May 2020 edition. Changes are indicated in red. Where requirements stayed the same, no such note is present.

Source	Category [effective date]	Requirement
All venting sources	**Overall vent gas limit** [January 1, 2020, with specified exemptions until 2023]	15.0 10^3 m^3/month/site or 9.0 10^3 kg of methane/month/site
Venting	**Defined vent gas limit for new sites** [January 1, 2022]	<3.0 10^3 m^3/month/site or <1.8 10^3 kg of methane/month/site
	Defined vent gas limit for existing sites	Subject to overall vent gas limit
	Vent gas limits for new and existing crude bitumen batteries [January 1, 2022]	*Current*: Either • defined vent gas limit for each site, or • crude bitumen fleet average in each month of 1.5 10^3 m^3/facility ID *Previous*: Either • defined vent gas limit for each site, or • crude bitumen fleet average in each month of 3.0 10^3 m^3/facility ID
Pneumatic devices	**Vent gas limits for new pneumatic devices** [January 1, 2022]	*Current*: Prevent or control vent gas from pneumatic instruments Prevent or control vent gas from pneumatic pumps operating more than 750 hours/year *Previous*: Prevent or control vent gas from at least 90 per cent of the instruments installed in a calendar year Venting instruments: • Level controllers: Use a relay that has been designed to reduce or minimize transient or dynamic venting, or adjust the actuation frequency to ensure that the time between actuations is greater than 15 minutes • Pneumatic instruments other than level controllers: Manufacturer-specified steady-state vent gas rate of less than 0.17 m^3/hr Prevent or control vent gas from pneumatic pumps operating more than 750 hours/year
	Vent gas limits for existing pneumatic devices [January 1, 2023]	Level controllers: Prevent or control vent gas, use a relay that has been designed to reduce or minimize transient or dynamic venting, or adjust the actuation frequency to ensure that the time between actuations is greater than 15 minutes Pneumatic instruments other than level controllers: Prevent or control vent gas or ensure instruments have a manufacturer-specified steady-state vent gas rate of less than 0.17 m^3/hr

Source	Category [effective date]	Requirement
Compressors seals	**Vent gas limits for new reciprocating compressors** [*Current:* January 1, 2022; for all units] [*Previous*: January 1, 2023, for units with <4 throws]	Units with ≥4 throws: Control vent gas Units with <4 throws: *Current*: Fleet vent rate of <0.35 m^3/hr/throw, with no compressor venting gas over 5.00 m^3/hr/throw *Previous*: Fleet vent rate of <0.83 m^3/hr/throw, with no compressor venting gas over 5.00 m^3/hr/throw
	Vent gas limits for existing reciprocating compressors [*Current*: January 1, 2022] [*Previous*: January 1, 2023]	*Current*: Reciprocating-compressor-seal fleet: <0.35 m^3/hr/throw, with no compressor venting gas over 5.00 m^3/hr/throw *Previous*: Reciprocating-compressor-seal fleet rate <0.83 m^3/hr/throw, with no compressor venting gas over 5.00 m^3/hr/throw
	Vent gas limits for new centrifugal compressors [January 1, 2022]	<3.40 m^3/hr/compressor
	Vent gas limits for existing centrifugal compressors [*Current*: January 1, 2022] [*Previous*: January 1, 2023]	<10.20 m^3/hr/compressor
Glycol dehydrators	**Vent gas limits for new glycol dehydrators** [January 1, 2022]	<68 kg of methane/day/glycol dehydrator
	Vent gas limits for existing glycol dehydrators [*Current*: January 1, 2022] [*Previous*: January 1, 2023]	*Current*: <109 kg of methane/day/glycol dehydrator *Previous*: Glycol dehydrator fleet <136 kg of methane/day

Source	Category [effective date]	Requirement
Fugitive emissions	**Facility or equipment type:**	
	Gas plants (<0.01 mol/kmol H_2S) Compressor stations (<0.01 mol/kmol H_2S) Controlled liquid hydrocarbon storage tanks Controlled produced water storage tanks [January 1, 2020]	Triannual fugitive emissions surveys
	Gas plants (≥0.01 mol/kmol H_2S) Compressor stations (≥0.01 mol/kmol H_2S) Batteries Custom treating facilities Terminals Injection/disposal facilities [January 1, 2020]	Annual fugitive emissions surveys
	Well sites [January 1, 2020]	Annual screenings