

# AER Vent Gas Limits & Fugitive Emission Survey Requirements

Emission Sources	Final AER Dir 060 Effective Date	Final AER Dir 060 Section 8 Requirements
<b>All Venting Sources</b>	<b>Overall vent gas limit (Effective release date of finalized directive, with exemptions until 2023)</b>	<ul style="list-style-type: none"> <li>15 e3m3/month or 9 e3 kg of methane/month</li> <li>Vent gas from pneumatic devices, compressor seals, and glycol dehydrators are excluded from the OVG limit until January 1, 2023.</li> </ul>
<b>Venting</b>	<b>Defined vent gas limit for existing sites</b>	<ul style="list-style-type: none"> <li>Subject to overall vent limit</li> </ul>
	<b>Vent gas limits for new and existing crude bitumen batteries (Effective January 1, 2022)</b>	<ul style="list-style-type: none"> <li>Crude bitumen fleet average of 3 e3m3 month</li> </ul>
<b>Pneumatics</b>	<b>Vent gas limits for existing pneumatic devices (Effective January 1, 2023)</b>	<ul style="list-style-type: none"> <li>Replace, retrofit or modify with low-vent alternative</li> </ul>
	<b>Vent gas limits for new pneumatic devices (Effective January 1, 2022)</b>	<ul style="list-style-type: none"> <li>90%: Control vent gas</li> <li>10%: May vent up to 0.17 m3/hr</li> <li>Must document</li> </ul>
	<b>Level Controllers</b>	<ul style="list-style-type: none"> <li>Must measure actuation frequency. 0-15 mins = High Frequency; &gt;15 Min = Low Frequency</li> <li>High Frequency: must use relay designed to limit dynamic response</li> </ul>
<b>Compressor Seals</b>	<b>Vent gas limits for existing centrifugal compressors (Effective January 1, 2023)</b>	<ul style="list-style-type: none"> <li>&lt; 10.2 m3 / hour /compressor</li> </ul>
	<b>Vent gas limits for new centrifugal compressors (Effective January 1, 2022)</b>	<ul style="list-style-type: none"> <li>&lt; 3.4 m3 / hour / compressor</li> </ul>
	<b>Vent gas limits for existing reciprocating compressors (Effective January 1, 2023)</b>	<ul style="list-style-type: none"> <li>Fleet average vent rate of &lt;0.83 m<sup>3</sup>/hr/throw, with no compressor venting gas over 5 m<sup>3</sup>/hr/throw</li> </ul>
	<b>Vent gas limits for new reciprocating compressor seals (Effective January 1, 2022)</b>	<ul style="list-style-type: none"> <li>Units with ≥4 throws, control vent gas</li> <li>Units with &lt;4 throws, fleet average vent rate of &lt;0.83 m<sup>3</sup>/hr/throw, with no compressor venting gas over 5 m<sup>3</sup>/hr/throw</li> </ul>
<b>Glycol Dehydrators</b>	<b>Vent gas limits for existing glycol dehydrators (Effective January 1, 2023)</b>	<ul style="list-style-type: none"> <li>Fleet average methane emissions rate of &lt;136 kg of methane/day/operating dehydrator</li> </ul>
	<b>Vent gas limits for new glycol dehydrators (Effective January 1, 2022)</b>	<ul style="list-style-type: none"> <li>&lt; 68 kg of methane/day</li> </ul>
<b>Fugitive Emissions</b>	<b>Facility or equipment type:</b> <ul style="list-style-type: none"> <li>Gas plants (&lt;0.01 mol/kmol H<sub>2</sub>S)</li> <li>Compressor stations (&lt;0.01 mol/kmol H<sub>2</sub>S)</li> <li>Controlled liquid hydrocarbon tanks &amp; Controlled produced water storage tanks</li> </ul> <b>(Effective January 1, 2020)</b>	Triannual fugitive emission <b>surveys</b>
	<b>Facility or equipment type:</b> <ul style="list-style-type: none"> <li>Gas plants (≥0.01 mol/kmol H<sub>2</sub>S)</li> <li>Straddle and fractionation plants</li> <li>Compressor stations (≥0.01 mol/kmol H<sub>2</sub>S)</li> <li>Batteries and associated satellite facilities</li> <li>Custom treating facilities</li> <li>Terminals</li> <li>Injection/disposal facilities</li> </ul> <b>(Effective January 1, 2020)</b>	Annual fugitive emission <b>surveys</b>
	<b>Facility or equipment type:</b> <ul style="list-style-type: none"> <li>Well sites</li> </ul> <b>(Effective January 1, 2020)</b>	Annual fugitive emission <b>screening</b>