

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) GUIDELINE 1.2

Equipment Category:	Oil and Gas Fugitive Hydrocarbon Components
Revision:	1.3
Date:	November 20, 2017

Pollutant	BACT Requirement	BACT Technology	Performance Standard	AIP/TF
ROC	1	Valve (leakless or seal less designs) - bellows, diaphragm seals	(a) Leak Detection and Repair Rate (LDAR) of 100 ppmv or less (as methane); or (b) No LDAR reading above background	AIP
	2	Valves (low emissions designs) ¹ - spring-loaded packing, expandable packing, graphite packing, PTFE coated packing; precision machine stem; sealant injection	LDAR of 100 ppmv or less (as methane)	AIP
	3	Flange connections - welded or new gasket rated to 150% of process pressure at process temperature	LDAR of 100 ppmv or less (as methane)	AIP
	4	Pump seals - vented to vapor recovery or closed vent; dual/tandem mechanical seals, O-ring seals, dry-running secondary containment seals, leakless designs (e.g. magnetic drive)	LDAR of 100 ppmv or less (as methane)	AIP
	5	Compressor seals (reciprocating drives) - vented to vapor recovery system (VRS), elastomer bellows, O-ring seals, dry-running secondary containment seals	LDAR of 100 ppmv or less (as methane)	AIP
	6	Compressor seals (rotary drives) - vented to VRS or closed vent, dual/tandem mechanical seals, leakless designs (e.g. magnetic drive).	LDAR of 100 ppmv or less (as methane)	AIP



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ROC	7	Pressure relief valves/devices (PRDs) - vented to VRS, equipped with rupture disk, soft-seat designs	(a) PRDs that are vented to VRS or closed vent system are not subject to LDAR (b) LDAR of 100 ppmv or less (as methane)	AIP
	8	Other - welded, new gasket rated to 150% of process pressure at process temperature	LDAR of 100 ppmv or less (as methane)	AIP
	9	Fugitive Inspection and Maintenance Plan	District Rule 331 and applicable State/Federal regulations (as applicable)	AIP

Notes:

1. BACT technologies and performance standards for valves (low emissions designs) must be validated by the API 624 certification test using the same packing used during the certification test. "Same" is defined as the specific make and model of packing. Alternatively, the combination of API 622 certified graphite packing and manufacturer's emissions guarantee will be accepted to validate the BACT technologies and performance standards.
2. AIP means Achieved in Practice. TF means Technologically Feasible. PTFE means polytetrafluoroethylene.
3. BACT is the most stringent control technique for the emissions unit and equipment category that is either achieved in practice or technologically feasible/cost effective.
4. BACT determinations are subject to periodic updates without advanced notice.
5. Alternative Oil and Gas Fugitive Component BACT may be proposed through the procedures found at <https://www.ourair.org/wp-content/uploads/331bact.pdf>