

40 CFR 60 Subpart 0000b
Published 3/8/2024

- **Applicability:** Affected sources (equipment) constructed, modified, or reconstructed **after 12/6/2022**
 - **Construction** means fabrication, erection, or installation of an affected facility. (40 CFR 60.2)
 - **Modification** means any physical change in, or change in the method of operation of, an existing facility that increases the amount of any air pollutant emitted into the atmosphere by that facility or which results in the emission of any air pollutant into the atmosphere not previously emitted. (40 CFR 60.2, 60.14)
 - **Reconstruction** means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility, and it is technologically and economically feasible to meet the applicable standards set forth in this part (40 CFR 60.15):
- **Compliance Deadline:** 5/7/2024 unless otherwise specified
- **Business Impact:** Increases in emission controls, monitoring, recordkeeping, and reporting.
- **Recordkeeping:** Maintain for 5 years unless otherwise specified
- **Reporting:** Annual reporting of records, including all deviations unless otherwise specified (publicly available)

Affected Source	Emission Reduction Method
Fugitive Emissions (except at natural gas plants)	<ul style="list-style-type: none"> • Audio, visual, and olfactory (AVO) inspections (monthly, bi-monthly, or quarterly). • Optical gas imaging (OGI) or Method 21 inspections (semiannual or quarterly). • First attempt of repair in 30 days and final repair and resurvey within 30 days of first attempt. • Modifications occur when: <ul style="list-style-type: none"> ▪ A well is drilled or hydraulically fractured at an existing well site ▪ A well is drilled or hydraulically fractured at or sent to an existing central production facility. ▪ A compressor is installed or replaced with greater horsepower at a compressor station. • Plugging & Abandoning (P&A) well closure plan and monitoring after P&A to prove proper closure. • If on a cover or closed vent system to a control device required by the rule, must meet the cover and closed vent system requirements.
Natural Gas Plant Fugitives (process unit equipment)	<ul style="list-style-type: none"> • Monitoring with either optical gas imaging (OGI) following 40 CFR 60 Appendix K or Method 21 • Initial inspection and reoccurring frequency dependent on method and type of component • If on a cover or closed vent system to a control device required by the rule, must meet the cover and closed vent system requirements. • Tag leaking equipment with a weatherproof tag, marked with the equipment identification number, and remove it once repaired • First attempt at repair in 5 days and final repair in 15 days of detection • Monitoring plan containing difficult-to-monitor and unsafe-to-monitor components and their monitoring frequency.
Super Emitters (Leaks ≥ 100 kg/hr methane)	<ul style="list-style-type: none"> • Applies to any leak >100 kg/hr (regardless of source and the date of construction, modification, or reconstruction) • Approved 3rd party detection company submits findings to EPA • EPA gives notice to the operator • Operator is required to: <ul style="list-style-type: none"> ▪ Initiate investigation within 5 days of EPA Notification ▪ Conduct facility screening using OGI, Method 21, or alternate tech ▪ Submit results of investigation to EPA within 15 days of notification ▪ Submit the plan to end the super-emitter event and notice it has been ended
Cover and Closed Vent Systems (of any affected facilities)	<ul style="list-style-type: none"> • No identifiable emissions • Covers openings secured in a closed, sealed position • Audio, visual, and olfactory (AVO) inspections (monthly, bi-monthly, or quarterly). • Optical gas imaging (OGI) or Method 21 inspections (semiannually or quarterly) • Visual inspections annually • First attempt at repair within 5 days and completed and resurveyed within 30 days of detection • PE or inhouse engineer certification of closed vent systems design
Flares and Combustion Device (of any affected facilities required to meet requirements)	<ul style="list-style-type: none"> • Specific requirements per control device type • Continuous monitoring of the <ul style="list-style-type: none"> ▪ Pilot with thermocouple ▪ Net heating value (Btu/SCF) ▪ Inlet Flow • Monitoring plan • Performance test initially and every 5 years • Monthly Method 22 inspections for smoking flares and combustion devices • PE or inhouse engineer certification of control device design

Affected Source	Emission Reduction Method
Storage Vessels	<ul style="list-style-type: none"> Storage tank or manifold tank battery >6 TPY VOC or >20 TPY Methane 95% reduction of VOC and methane Comply with the cover, closed vent system, and control device requirements
Associated Gas from Oil Wells	<ul style="list-style-type: none"> No routine associated gas flaring (gas released from the first stage of separation) Route associated gas to a sale or use. Few exceptions allowing flaring to a closed vent system and control device meeting the rule requirements if: <ul style="list-style-type: none"> Malfunction or incident that endangers the safety of operator personnel or the public - 24 hours or less per incident. Repair, maintenance including blow downs, a production test, or commissioning - 24 hours or less per incident. Temporary interruption in service from the gathering or pipeline system - not to exceed 30 days per incident. Periods when the composition does not meet pipeline specifications or quality requirements - 72 hours per incident
Process Controllers (collection of natural gas-driven process controllers)	<ul style="list-style-type: none"> Zero emissions process controllers – <ul style="list-style-type: none"> Routing to a control device is not allowed. If you route emissions to a process, emissions must be routed through a closed vent system meeting the rule requirements If you use self-contained natural gas-driven process controllers, they must have no identifiable emissions Modification when natural gas-driven process controllers at a site are increased by one or more. Emergency shutdown devices are exempt
Natural gas-driven pumps	<ul style="list-style-type: none"> Sites with power - zero-emissions pumps (electric, solar, instrument air, nitrogen) Sites without power and 3 more diaphragm pumps - zero emissions pumps (electric, solar, instrument air, nitrogen) Sites without power and less than 2 diaphragm pumps - route to VRU, if not VRU, to a control device with a 95% reduction of VOC and Methane that meets the rule requirements Modification when the number of pumps is increased by one or more pumps
Reciprocating compressor (except for those located at well sites)	<ul style="list-style-type: none"> Must either: <ul style="list-style-type: none"> Replace the reciprocating compressor rod packing every 8760 hours or Measure the rod packing every 8760 hours and replace it if it exceeds 2 SCFM or Route emissions through a closed vent system to a process or control device meeting 95% control meeting the rule requirements.
Gas Well Liquids Unloading	<ul style="list-style-type: none"> If liquids unloading technology or technique results: <ul style="list-style-type: none"> No venting of methane –Comply only with recordkeeping and reporting requirements. Venting of methane - comply with: <ul style="list-style-type: none"> Best Management Practices to minimize venting or Reduce emissions by 95% by routing emissions through a closed vent system to a control device meeting the rule requirements. Best management practices must include: <ul style="list-style-type: none"> Steps to create a differential pressure to minimize the need to vent Steps to reduce wellbore pressure before opening the well to the atmosphere Unload liquids through a separator where feasible Close all wellhead vents to the atmosphere and return to production as soon as practicable
Well Completions (flow back following hydraulic fracturing, same as 0000 and 0000a)	<ul style="list-style-type: none"> Route all salable gas from the separator to a flow line or collection system, re-inject the gas into the well or another well, use the gas as an onsite fuel source, or use it for another useful purpose that a purchased fuel would serve. If technically infeasible to route recovered gas as specified above, recovered gas must be combusted. All liquids must be routed to a storage vessel or well completion vessel, collection system, or be re-injected into the well or another well.
Sweetening Units	<ul style="list-style-type: none"> SO2 emission reduction efficiency is based on the sulfur feed rate and sulfur content of the acid gas Control Requirements: <ul style="list-style-type: none"> <2 LT/day sulfur feed rate - no reduction requirement <5 LT/day sulfur feed rate - 79% reduction requirement >5 LT/day sulfur feed rate - up to 99.9% reduction requirement (depending on inlet H₂S concentration) Initial performance testing within 60 days after achieving the maximum production rate at which the facility will be operated but no later than 180 days after the initial startup and subsequent tests as requested Conduct monitoring of emissions and operations of the sweetening unit according to §60.5407b(a) Conduct monitoring of the oxidation control system or a reduction control system in accordance with 60.5407b(b)
Centrifugal Compressors (except at well sites)	<ul style="list-style-type: none"> With wet seals, capture and route emissions from the wet seal fluid degassing system through a closed vent system to a control device meeting the rule requirements that meet a 95% reduction of methane and VOC. With mechanical wet seals, monitor and repair to maintain a volumetric flow rate at or below 3 SCFM per seal. With dry seals, monitor and repair to maintain a volumetric flow rate at or below 10 SCFM per seal.

Please get in touch with Dana Wood, VP of Environmental Compliance and Consulting, with any questions. E: dwood@energyoverwatch.com