

**Brief Summary of Requirements Contained in the Eight Federal Rules Included in the
Federal Implementation Plan for True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas
Processing Segments of the Oil and Natural Gas Sector**

(5/9/16)

Caveat: The requirements in this table are NOT the official or complete set of requirements, but rather a condensation of some of the key emission standards and related requirements. Please consult the Code of Federal Regulations for a complete set of the requirements (<http://www.ecfr.gov>).

40 CFR Part and Subpart	Title of Subpart	Potentially Affected Sources in the Production Segment	Types of Emission Standards	Types of Compliance Provisions (Monitoring, Recordkeeping and Reporting)
40 CFR part 63, subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Process heaters	<p><u>Emission Limits:</u> HCl, Hg, PM, and PM as a function of fuel type (solid fuel, liquid fuel, and gas 2) (Table 1 to Subpart DDDDD)</p> <p><u>Work Practice Standards:</u> Process heater tune-ups (frequency is a function of unit size) (Table 3 to Subpart DDDDD)</p> <p><u>Operating Limits:</u> Opacity, O2 content, effluent pH, pressure drop, liquid flow rate, and other parameters intended to provide for compliance with emission limits (Table 4 to Subpart DDDDD)</p>	<p><u>Emission Limits:</u> Stack testing, fuel analysis, continuous monitoring systems (40 CFR 63.7540)</p> <p><u>Work Practice Standards:</u> Signed statement that tune-up has been completed (40 CFR 63.7540)</p> <p><u>Reporting and Recordkeeping:</u> Various notifications, fuel records, performance test results (40 CFR 63.7545 – 63.7560)</p>
40 CFR part 60, subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Fuel Storage Tanks (≥ 75 m ³)	<p><u>Fixed Roof with External Floating Roof:</u> Must meet certain specifications, including closure devices, proper vents and covers/lids (40 CFR 60.112b)</p> <p><u>Internal Floating Roof:</u> Must meet certain specifications, including closure devices, gasketed covers/seals/lids (40 CFR 60.112b)</p> <p><u>Closed Vent System:</u> Must be designed to collect all VOC vapors and gases (40 CFR 60.112b)</p>	<p><u>Testing Procedures:</u> Visual inspection, measurement of gap areas around seals, documentation of control device efficiency, monitor parameters of control equipment (40 CFR 60.113b)</p> <p><u>Monitoring:</u> Records retention period, records on dimension and capacity of storage vessel, record of volatile organic liquid stored (40 CFR 60.116b)</p> <p><u>Reporting and Recordkeeping:</u> Certification that control equipment meets specifications, inspection records, reports providing gap measurement data (40 CFR 60.115b)</p>

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40 CFR part 60, subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Compression Ignition Internal Combustion Engines	<p><u>Engines:</u> Depending on size, for pre-2007 model year engine owners/operators must meet standards in either Table 1 to subpart IIII or 40 CFR 94.8(a)(1)</p> <p>For 2007 model year and later engines, owners/operators must meet standards specified in §60.4204 and §60.4205</p> <p>Depending on date of installation, engines of certain sizes must meet certain, different requirements, including limits on NO_x and PM emissions (40 CFR 60.4204 - 4206)</p> <p><u>Fuel:</u> Engines of a certain size must use low sulfur fuel (40 CFR 60.4207)</p> <p><u>Emergency Engines:</u> Limits on hours of operation and for what purpose (40 CFR 60.4211)</p>	<p><u>Monitoring:</u> Non-emergency engines that do not meet standards must install non-resettable hour meter, any diesel particulate filters must have backpressure monitors (40 CFR 60.4209)</p> <p><u>Compliance:</u> Follow manufacturer's emission-related instructions, initial performance test to demonstrate compliance, continuous monitoring of operating parameters (40 CFR 60.4211)</p> <p><u>Recordkeeping and Reporting:</u> Initial notification with key information (non-emergency engines); records of performance test results, control device compliance data, maintenance, certification documentation; records of corrective action for control devices; annual report with key information (emergency engines) (40 CFR 60.4214)</p>
40 CFR part 60, subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Spark Ignition Internal Combustion Engines	<p><u>Engines:</u> Depending on size, engine owners/operators must meet standards for NO_x, CO and NMHC emissions in 40 CFR part 90, 40 CFR part 1054 and 40 CFR part 1048 and Table 1 to subpart JJJJ (40 CFR 60.4233 - 4234)</p> <p><u>Fuel:</u> Engines must use low sulfur fuel (40 CFR 60.4235)</p> <p><u>Emergency Engines:</u> Limits on hours of operation and for what purpose (40 CFR 60.4243)</p>	<p><u>Monitoring:</u> Engines of a certain size that do not meet standards must install non-resettable hour meter (40 CFR 60.4237)</p> <p><u>Compliance:</u> Follow manufacturer's emission-related instructions, maintenance plan, performance tests (40 CFR 60.4243)</p> <p><u>Recordkeeping and Reporting:</u> Records of maintenance, performance test results, notifications, certifications, documentation for engines not meeting standards; annual report with key information (emergency engines) (40 CFR 60.4245)</p> <p><u>Testing:</u> Performance testing (40 CFR 60.4244)</p>

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40 CFR part 60, subpart OOOOa	Standards for New and Modified Sources in the Oil and Natural Gas Sector	Storage Vessels, Pneumatic Controllers, Compressors (Reciprocating and Centrifugal), Hydraulically Fractured Oil and Gas Well Completions, Pneumatic Pumps and Fugitive Emissions from Well Sites and Compressor Stations	<p><u>Storage Vessels</u>: Reduce emissions by 95% (40 CFR 60.5395)</p> <p><u>Pneumatic Controllers</u>: Natural gas bleed rate no more than 6 scfh (Continuous bleed natural gas-driven pneumatic controllers greater than 6 scfh between wellhead and natural gas processing plant or oil pipeline) (40 CFR 60.5390)</p> <p><u>Compressors</u>: Reduce emissions by 95% (Centrifugal compressors with wet seals) and Change rod packing after 26,000 operating hours or after 36 months, or route emissions to a process under negative pressure (Reciprocating compressors) (40 CFR 60.5380, 60.5385)</p> <p><u>Hydraulically Fractured Gas Well Completions</u>: Depending on well type, route flowback to completion combustion device, or use REC (“reduced emissions completions”) combined with completion combustion device (40 CFR 60.5375)</p> <p><u>Hydraulically Fractured Oil and Gas Well Completions, Pneumatic Pumps and Fugitive Emissions from Well Sites and Compressor Stations</u>: Consult the current proposed rule at: http://www.epa.gov/airquality/oilandgas/actions.html</p>	<p><u>Storage Vessels, Pneumatic Controllers, Compressors (Reciprocating and Centrifugal), Hydraulically Fractured Gas Well Completions</u>:</p> <p><u>Compliance</u>: Achieve initial compliance with notification, initial annual report, record log, performance test, inspections, continuous parameter monitoring (40 CFR 60.5395)</p> <p><u>Recordkeeping and Reporting</u>: Notification; annual report that includes well completion records, deviations, operation data, equipment; performance test results; keep records of well completions, deviations, equipment changes, inspections (40 CFR 60.5420)</p> <p><u>Hydraulically Fractured Oil and Gas Well Completions, Pneumatic Pumps and Fugitive Emissions from Well Sites and Compressor Stations</u>: Consult the current proposed rule at: http://www.epa.gov/airquality/oilandgas/actions.html</p>

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40 CFR part 63, subpart HH	National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	Glycol Dehydrators	<p><u>Units Located at a Major HAP Source:</u> Large dehydrators (gas throughput at least 3 million scf per day) must capture and reduce HAP emissions by 95% or more, or reduce benzene emissions below 1 tpy; small dehydrators (gas throughput less than 3 million scf per day or benzene emissions less than 1 ton per year) must meet an emission limitation for BTEX based on inlet concentration (40 CFR 63.765)</p> <p><u>Units at an Area Source of HAP in Urban Areas:</u> Reduce HAP emissions by 95% (40 CFR 63.764)</p> <p><u>Units Located at an Area Source of HAP Outside of an Urban Area:</u> Minimize HAP emissions through work practice to maximize glycol circulation rate efficiency (40 CFR 63.764)</p>	<p><u>Testing Procedures:</u> Performance testing of control devices, inspect closed vent systems (40 CFR 63.772)</p> <p><u>Monitoring:</u> Parametric monitoring of control device performance (40 CFR 63.773)</p> <p><u>Reporting and Recordkeeping:</u> Annual reporting, records retention, Certification that control equipment meets specifications, inspection records (40 CFR 63.774, 63.775)</p>
40 CFR part 63, subpart ZZZZ	Subpart ZZZZ— National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Reciprocating Internal Combustion Engines	<p><u>Emission and Operating Limitations:</u> Depending on size, engine owners/operators must meet standards for CO, formaldehyde and/or work practices (40 CFR 63.6600 – 63.6603)</p> <p><u>Fuel:</u> Engines must use low sulfur fuel (40 CFR 63.6604)</p>	<p><u>General Compliance Requirements:</u> General requirements for complying (40 CFR 63.6605)</p> <p><u>Testing and Initial Compliance Requirements:</u> Dates for initial and subsequent performance tests; performance tests and procedures to follow; monitoring, installation, collection, operation and maintenance requirements; how to demonstrate initial compliance (40 CFR 63.6610 – 63.6630)</p> <p><u>Continuous Compliance Requirements:</u> How to monitor and collect compliance data and demonstrate continuous compliance (40 CFR 63.6635, 63.6640)</p> <p><u>Notifications, Reports and Records:</u> What notifications, reports, and records are required and records form and retention requirements (40 CFR 63.6645 – 63.6660)</p>

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40 CFR part 60, subpart KKKK	Standards of Performance for New Stationary Combustion Turbines	Combustion Turbines	<u>Emission Limits</u> : Specifies what pollutants are regulated and <u>NO_x and SO₂ emission</u> limits (40 CFR 60.4315 – 60.4330)	<p><u>General Compliance Requirements</u>: General requirements for complying (40 CFR 60.4333)</p> <p><u>Monitoring Requirements</u>: Specifies requirements for: (1) continuous emission monitoring system equipment; (2) how do to use data from continuous emission monitoring equipment to identify excess emissions; (3) how to establish and document a proper parameter monitoring plan; (4) how to determine the total sulfur content of the turbine's combustion fuel; (5) how to be exempted from monitoring the total sulfur content of the fuel; and (6) how often to determine the sulfur content of fuel (40 CFR 60.4335 – 60.4370)</p> <p><u>Reports</u>: Specifies: (1) what reports must be submitted; (2) how excess emissions and monitor downtime are defined for NO_x; (3) how excess emissions and monitoring downtime are defined for SO₂; (4) what reporting requirements are if an emergency combustion turbine or a research and development turbine is operated; and (5) when reports must be submitted (40 CFR 60.4375 - 60.4395)</p> <p><u>Performance Tests</u>: Specifies: (1) how to conduct performance tests for NO_x and if the source has installed a NO_x-diluent CEMS; (2) how to establish a valid parameter range if under continuously monitored parameters; and (3) how to conduct initial and subsequent performance tests for sulfur (40 CFR 60.4400 – 60.4415)</p>