

## 40 CFR Part 60, Subpart KKKK - Requirements Reference Tables

### Subpart KKKK Standards

- [§60.4310\(a\)](#) NO<sub>x</sub> exemption for emergency combustion turbines.
- [§60.4310\(b\)](#) NO<sub>x</sub> exemption for stationary combustion turbines engaged by manufacturers in research and development of equipment for both combustion turbine emission control techniques and combustion turbine efficiency improvements.
- [§60.4320\(a\)-Table 1|1](#) NO<sub>x</sub> emission limit (42 ppm at 15 percent O<sub>2</sub>) for new turbine firing natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|2](#) NO<sub>x</sub> emission limit (290 ng/J of useful output) for new turbine firing natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|3](#) NO<sub>x</sub> emission limit (100 ppm at 15 percent O<sub>2</sub>) for new mechanical drive turbine firing natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|4](#) NO<sub>x</sub> emission limit (690 ng/J of useful output) for new mechanical drive turbine firing natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|5](#) NO<sub>x</sub> emission limit (25 ppm at 15 percent O<sub>2</sub>) for new turbine firing natural gas with a heat input at peak load > 50 MMBtu/h and ≤ 850 MMBtu/h.
- [§60.4320\(a\)-Table 1|6](#) NO<sub>x</sub> emission limit (150 ng/J of useful output) for new turbine firing natural gas with a heat input at peak load > 50 MMBtu/h and ≤ 850 MMBtu/h.
- [§60.4320\(a\)-Table 1|7](#) NO<sub>x</sub> emission limit (15 ppm at 15 percent O<sub>2</sub>) for new, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h.
- [§60.4320\(a\)-Table 1|8](#) NO<sub>x</sub> emission limit (150 ng/J of useful output) for new, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h.
- [§60.4320\(a\)-Table 1|9](#) NO<sub>x</sub> emission limit (96 ppm at 15 percent O<sub>2</sub>) for new turbine firing fuel other than natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|10](#) NO<sub>x</sub> emission limit (1,100 ng/J of useful output) for new turbine firing fuels other than natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|11](#) NO<sub>x</sub> emission limit (150 ppm at 15 percent O<sub>2</sub>) for new mechanical drive turbine firing fuels other than natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|12](#) NO<sub>x</sub> emission limit (1,100 ng/J of useful output) for new mechanical drive turbine firing fuels other than natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|13](#) NO<sub>x</sub> emission limit (150 ppm at 15 percent O<sub>2</sub>) for new mechanical drive turbine firing fuels other than natural gas with a heat input at peak load ≤ 50 MMBtu/h.
- [§60.4320\(a\)-Table 1|14](#) NO<sub>x</sub> emission limit (460 ng/J of useful output) for new

mechanical drive turbine firing fuels other than natural gas with a heat input at peak load  $> 50$  MMBtu/h and  $\leq 850$  MMBtu/h.

- [§60.4320\(a\)-Table 1|15](#) NOx emission limit (42 ppm at 15 percent O<sub>2</sub>) for new, modified, or reconstructed turbine firing natural gas with a heat input at peak load  $> 850$  MMBtu/h.
- [§60.4320\(a\)-Table 1|16](#) NOx emission limit (160 ng/J of useful output) for new, modified, or reconstructed turbine firing natural gas with a heat input at peak load  $> 850$  MMBtu/h.
- [§60.4320\(a\)-Table 1|17](#) NOx emission limit (150 ppm at 15 percent O<sub>2</sub>) for modified, or reconstructed turbine with a heat input at peak load  $\leq 50$  MMBtu/h.
- [§60.4320\(a\)-Table 1|18](#) NOx emission limit (1,100 ng/J of useful output) for modified, or reconstructed turbine with a heat input at peak load  $\leq 50$  MMBtu/h.
- [§60.4320\(a\)-Table 1|19](#) NOx emission limit (42 ppm at 15 percent O<sub>2</sub>) for modified, or reconstructed turbine firing natural gas with a heat input at peak load  $\geq 50$  MMBtu/h.
- [§60.4320\(a\)-Table 1|20](#) NOx emission limit (250 ng/J of useful output) for modified, or reconstructed turbine firing natural gas with a heat input at peak load  $\geq 50$  MMBtu/h.
- [§60.4320\(a\)-Table 1|21](#) NOx emission limit (96 ppm at 15 percent O<sub>2</sub>) for modified, or reconstructed turbine firing fuels other than natural gas with a heat input at peak load  $\geq 50$  MMBtu/h and  $\leq 850$  MMBtu/h.
- [§60.4320\(a\)-Table 1|22](#) NOx emission limit (590 ng/J of useful output) for modified, or reconstructed turbine firing fuels other than natural gas with a heat input at peak load  $\geq 50$  MMBtu/h and  $\leq 850$  MMBtu/h.
- [§60.4320\(a\)-Table 1|29](#) NOx emission limit (150 ppm at 15 percent O<sub>2</sub>) for turbines operating at less than 75 percent of peak load or operating at temperatures less than 0 F with  $\leq 30$  MW output.
- [§60.4320\(a\)-Table 1|30](#) NOx emission limit (1,100 ng/J of useful output) for turbines operating at less than 75 percent of peak load or operating at temperatures less than 0 F with  $\leq 30$  MW output.
- [§60.4320\(a\)-Table 1|31](#) NOx emission limit (96 ppm at 15 percent O<sub>2</sub>) for turbines operating at less than 75 percent of peak load or operating at temperatures less than 0 F with  $> 30$  MW output.
- [§60.4320\(a\)-Table 1|32](#) NOx emission limit (590 ng/J of useful output) for turbines operating at less than 75 percent of peak load or operating at temperatures less than 0 F with  $> 30$  MW output.
- [§60.4320\(a\)-Table 1|27](#) NOx emission limit (54 ppm at 15 percent O<sub>2</sub>) for heat recovery units operating independent of the combustion turbine.
- [§60.4320\(a\)-Table 1|28](#) NOx emission limit (1,100 ng/J of useful output) for heat recovery units operating independent of the combustion turbine.
- [§60.4330\(a\)\(1\)](#) SO<sub>2</sub> discharge emission limit 110 ng/J of gross output for the combustion turbine.
- [§60.4330\(a\)\(2\)](#) SO<sub>2</sub> emission limit for stationary combustion turbines for any fuel which contains total sulfur with potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

- [§60.4330\(a\)\(3\)](#) SO<sub>2</sub> emission limit for stationary combustion turbines burning at least 50% biogas on a calendar month basis, as determined based on total heat input.
- [§60.4330\(b\)\(1\)](#) SO<sub>2</sub> discharge emission limit 780 ng/J of gross output for the combustion turbine.
- [§60.4330\(b\)\(2\)](#) SO<sub>2</sub> emission limit for stationary combustion turbines for any fuel which contains total sulfur with potential sulfur emissions in excess of 180 ng SO<sub>2</sub>/J heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

These relationship entry screens and flowcharts are for use by sources subject to the Texas Federal Operating Permits Program only and are subject to revision.

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