

TCEQ NO_x LIMITS FOR INDUSTRIAL, COMMERCIAL, & INSTITUTIONAL NATURAL GAS FIRED BOILERS 03/05

RETROFIT OF EXISTING BOILERS

Area	Site Applicability	Boiler Size (design heat input)	NO _x Limit	Rule Citation in 30 T.A.C.
Beaumont/Port Arthur (BPA): Hardin, Jefferson, and Orange Counties	Major NO _x sites (≥50 tpy NO _x)	≥40 MMBtu/hr In operation on or before 11/15/92.	0.10 lb NO _x /MMBtu (82 ppmv NO _x @3% O ₂) Comply: 2/3 by 5/1/03; all by 5/1/05.	§117.206(a)(1) §117.520(a)(3)
Dallas/Fort Worth (DFW): Collin, Dallas, Denton, and Tarrant Counties	Major NO _x sites (≥50 tpy NO _x)	≥40 MMBtu/hr In operation on or before 11/15/92.	30 ppmv NO _x @3% O ₂ Comply by 3/31/02.	§117.206(b)(1) §117.520(b)
Houston/Galveston (HGA): Harris, Galveston, Brazoria, Chambers, Fort Bend, Liberty, Montgomery, and Waller Counties	Sites with less than 10 tons NO _x per year design capacity to emit, from units subject to §117.206 or §117.475, are not in cap-and-trade. (citation: §101.351)	> 2 MMBtu/hr Size limited by site 10 tons NO _x per year design capacity to emit.	0.036 lb NO _x /MMBtu (30 ppmv NO _x @3% O ₂) Comply by 3/31/05.	§117.475(c)(1) §117.534(2)(C)
	Sites ≥10 tpy NO _x as above, but less than major NO _x source (< 25 tpy NO _x potential to emit from all emitting sources)	> 2 MMBtu/hr but limited by site classification as non-major (minor) source.	Cap-and-trade compliance. NO _x allocation based on 0.036 lb NO _x /MMBtu Cap reductions 2004-2008.	§101.351 §117.475(c)(1) §101.353
	Major NO _x sites (≥25 tpy NO _x potential to emit)	>2 and <40 MMBtu/hr	Cap-and-trade compliance. 0.036 lb NO _x /MMBtu Cap reductions 2004-2008.	§101.351 §117.206(c)(1) §101.353
	Major NO _x sites	≥40 and <100 MMBtu/hr	Cap-and-trade compliance. 0.030 lb NO _x /MMBtu Cap reductions 2004-2008.	§101.351 §117.206(c)(1) §101.353
	Major NO _x sites	≥100 MMBtu/hr	Cap-and-trade compliance. 0.020 lb NO _x /MMBtu Cap reductions 2004-2008.	§101.351 §117.206(c)(1) §101.353
Statewide	Old boilers	≥40 MMBtu/hr Grandfathered units (constructed before 9/71)	120-month old BACT ¹ (0.06 lb/MMBtu) Comply 3/07 ETx; 3/08WTx	§116.811(3)(A) §116.779(c) §116.771

TCEQ NO_x LIMITS FOR INDUSTRIAL, COMMERCIAL, & INSTITUTIONAL NATURAL GAS FIRED BOILERS 03/05

Area	Site	Boiler Size (design heat input)	NO _x Limit ²	Rule Citation In 30 T.A.C.
Statewide - requirements starting with manufacturing dates of 7/1/2002 (or 1/1/2007 where noted)	Any	$\leq 75,000$ Btu/hr $\leq 75,000$ Btu/hr (1/1/07) $> 75,000$ & $\leq 400,000$ Btu/hr $> 400,000$ & ≤ 2 MM Btu/hr	40 ng/J heat output (55 ppm) 10 ng/J heat output (15 ppm) 40 ng/J heat output (55 ppm) 30 ppm (0.037 lb/MMBtu)	§117.465(1) §117.465(2) §117.465(3) §117.465(4)
Statewide (see also HGA ³)	Any	> 2 and ≤ 10 MMBtu/hr	None	§106.183 Permit-by-Rule
Statewide (see also HGA ³)	Any	> 10 and ≤ 40 MMBtu/hr	0.10 lb/MMBtu	§106.183 Permit-by-Rule
Statewide (see also HGA ³)	Any	> 40 MMBtu/hr	Best Available Control Technology (case-by-case) 3/03 guidance - 9 ppmv	§116.111(a)(2) (C) New Source Permit
HGA	Sites with less than 10 tons NO _x per year design capacity to emit, from units subject to §117.206 or §117.475, are not in cap-and-trade. (citation: §101.351)	> 2 MMBtu/hr Size limited by 10 tons NO _x per year design capacity to emit.	0.036 lb NO _x /MMBtu (30 ppmv NO _x @3% O ₂) Comply by 3/31/05. Permit authorization still required.	§117.475(c)(1) §117.534(2)(C)
	Sites ≥ 10 tpy NO _x design capacity to emit from units subject to §117.206 or §117.475, must participate in cap-and-trade compliance. (citation: §101.351)	> 2 MMBtu/hr	New units after 1/2/01 get no NO _x allocation but must obtain NO _x allowance to cover emissions. Permit authorization still required.	§117.353(b)

¹Voluntary Emission Reduction Permit (VERP) and Existing Facility Permits. Under VERP rules, facilities in ozone nonattainment areas may require more stringent limit in accordance with §116.811(3)(B). VERP emission controls should be installed within three years of permit issuance.

²Major NO_x sources in BPA, DFW, or HGA must not significantly increase site NO_x unless lowest achievable emission rate (LAER) technology is applied and offsets are obtained. Citation: 30 T.A.C. §116.150.

³Under Texas law, all new or modified air pollutant emitting facilities statewide have to obtain permit authorization, either under Chapter 106 or 116. Separately and additionally, Chapter 117 requires NO_x reductions in specific areas in order to meet federal ambient ozone standards.

Download rules from TCEQ website: <http://www.tnrc.state.tx.us/oprd/rules/index.html>