

## RETROFIT OF EXISTING BOILERS

Area	Site Applicability	Boiler Size (design heat input)	NO <sub>x</sub> Limit	Rule Citation in 30 T.A.C.
Beaumont/Port Arthur (BPA): Hardin, Jefferson, and Orange Counties	Major NO <sub>x</sub> sites (≥50 tpy NO <sub>x</sub> )	≥40 MMBtu/hr In operation on or before 11/15/92.	0.10 lb NO <sub>x</sub> /MMBtu (82 ppmv NO <sub>x</sub> @3% O <sub>2</sub> ) 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 <sub>x</sub> sites (≥50 tpy NO <sub>x</sub> )	≥40 MMBtu/hr In operation on or before 11/15/92.	30 ppmv NO <sub>x</sub> @3% O <sub>2</sub> 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 <sub>x</sub> 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 <sub>x</sub> per year design capacity to emit.	0.036 lb NO <sub>x</sub> /MMBtu (30 ppmv NO <sub>x</sub> @3% O <sub>2</sub> ) Comply by 3/31/05.	§117.475(c)(1) §117.534(2)(C)
	Sites ≥10 tpy NO <sub>x</sub> as above, but less than major NO <sub>x</sub> source (< 25 tpy NO <sub>x</sub> 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 <sub>x</sub> allocation based on 0.036 lb NO <sub>x</sub> /MMBtu Cap reductions 2004-2008.	§101.351 §117.475(c)(1) §101.353
	Major NO <sub>x</sub> sites (≥25 tpy NO <sub>x</sub> potential to emit)	> 2 and < 40 MMBtu/hr	Cap-and-trade compliance. 0.036 lb NO <sub>x</sub> /MMBtu Cap reductions 2004-2008.	§101.351 §117.206(c)(1) §101.353
	Major NO <sub>x</sub> sites	≥40 and < 100 MMBtu/hr	Cap-and-trade compliance. 0.030 lb NO <sub>x</sub> /MMBtu Cap reductions 2004-2008.	§101.351 §117.206(c)(1) §101.353
	Major NO <sub>x</sub> sites	≥100 MMBtu/hr	Cap-and-trade compliance. 0.020 lb NO <sub>x</sub> /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 <sup>1</sup> (0.06 lb/MMBtu) Comply 3/07 ETx; 3/08WTx	§116.811(3)(A) §116.779(c) §116.771

## NEW BOILERS

Area	Site	Boiler Size (design heat input)	NO <sub>x</sub> Limit <sup>2</sup>	Rule Citation In 30 T.A.C.
Statewide - requirements starting with manufacturing dates of 7/1/2002 (or 1/1/2005 where noted)	Any	$\leq 75,000$ Btu/hr $\leq 75,000$ Btu/hr (1/1/05) $> 75,000$ & $\leq 400,000$ Btu/hr $> 400,000$ & $\leq 2$ 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 <sup>3</sup> )	Any	$> 2$ and $\leq 10$ MMBtu/hr	None	§106.183 Permit-by-Rule
Statewide (see also HGA <sup>3</sup> )	Any	$> 10$ and $\leq 40$ MMBtu/hr	0.10 lb/MMBtu	§106.183 Permit-by-Rule
Statewide (see also HGA <sup>3</sup> )	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 <sub>x</sub> 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 <sub>x</sub> per year design capacity to emit.	0.036 lb NO <sub>x</sub> /MMBtu (30 ppmv NO <sub>x</sub> @3% O <sub>2</sub> ) Comply by 3/31/05. Permit authorization still required.	§117.475(c)(1) §117.534(2)(C)
	Sites $\geq 10$ tpy NO <sub>x</sub> 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 <sub>x</sub> allocation but must obtain NO <sub>x</sub> allowance to cover emissions. Permit authorization still required.	§117.353(b)

<sup>1</sup>Voluntary 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.

<sup>2</sup>Major NO<sub>x</sub> sources in BPA, DFW, or HGA must not significantly increase site NO<sub>x</sub> unless lowest achievable emission rate (LAER) technology is applied and offsets are obtained. Citation: 30 T.A.C. §116.150.

<sup>3</sup>Under 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<sub>x</sub> 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>