

2013 DISCRETE EMISSION REDUCTION (DERC) FLOW CONTROL LIMIT

The DERC Flow Control is the total daily amount of nitrogen oxides (NO_x) DERCs allowed for use in the Dallas Fort-Worth 1997 eight-hour nonattainment area (DFW area) (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) to ensure the noninterference of DERC use with the attainment and maintenance of the 1997 ozone National Ambient Air Quality Standard.

The 2013 DFW DERC flow control limit (2013 flow control) is 16.9 tons per day (tpd), detailed below.

Estimation of 2013 Flow Control

Per 30 Texas Administrative Code §101.379(c)(2)(A), the DFW DERC flow control limit is based on the following equation.

$$\text{Flow Control Limit} = B + (C_1 - C_2) + (D_1 - D_2)$$

Each variable used to determine the 2013 flow control is detailed below.

Variable B

B = 2009 annual flow control in DFW Eight-Hour Ozone Attainment Demonstration (AD) State Implementation Plan (SIP) Revision for 1997 eight-hour ozone standard. The value of **B** is constant.

- Details regarding **B** can be found in the [DFW AD SIP revision, adopted December 10, 2008](#)¹.

The value of **B** is **3.2 tpd**.

Variable C1

C1 = the estimated emission reductions associated with fleet turnover from mobile sources during the previous calendar year. Based on the definition of mobile sources in §101.370(17), **C1** refers to the estimated emission reductions due to the replacement of older mobile sources (both on and non-road vehicles) built to less stringent emission standards in the fleet by newer mobile sources built in compliance with more stringent standards in the previous calendar year. The value of **C1** changes annually.

Inclusion of Non-Road Fleet Turnover

Prior to this year, to be consistent with the contingency analysis of previous DFW AD SIP revisions, reductions due to non-road fleet turnover were not used to offset DERC usage and hence not included in the estimation of variable C1. The reductions due to non-road fleet turnover were included in the 2013 flow control for the following reasons:

1. The [current DFW AD SIP revision, adopted December 7, 2011](#), quantifies and uses both on-road and non-road fleet turnover emission reduction estimates in its contingency analysis and plan.
2. Non-road fleet turnover has not otherwise been relied upon in the SIP and therefore is available for use to offset DERC usage.

The 2012 through 2013 non-road fleet turnover is **7.45 tpd**².

2012 through 2013 On-Road Fleet Turnover

The 2012 through 2013 on-road fleet turnover NO_x reductions for the DFW area was determined as detailed in the supplemental document, [2012 through 2013 DFW on-road fleet turnover NO_x reductions](#). The 2012 through 2013 on-road fleet turnover is **25.26 tons per ozone season day**³.

The 2013 value of **C1** is **32.71 tpd**.

¹ Project No. 2008-016-SIP-NR, Section 4.2.6.8, Pages 4-1 & 4-2,

http://www.tceq.state.tx.us/assets/public/implementation/air/sip/dfw/DFW_DERC_SIP_ADOPTION_Narrative_Final.pdf

² Project No. 2010-022-SIP-NR, Section 4.9, Table 4-3, Page 4-14,

http://www.tceq.texas.gov/assets/public/implementation/air/sip/dfw/ad_2011/10022SIP_ado_111811.pdf

³ Supplemental Document, [2012 through 2013 DFW on-road fleet turnover NO_x reductions](#).

<http://www.tceq.texas.gov/assets/public/implementation/air/banking/reports/2012-2013onroadfleettturnover.pdf>

Variable C2

C2= emission reduction associated with the contingency requirement for the current calendar year. This value may change from year to year and is based on the contingency requirements specified in the latest adopted DFW AD or reasonable further progress (RFP) SIP revision or any other SIP requirements that rely on fleet turnover reductions.

- The 2013 required contingency requirements of 18.91 (NO_x) is specified in the [current DFW AD SIP revision, Adopted December 7, 2011](#)⁴.

Accounting for use of On-Road Fleet Turnover for other SIP requirements

To offset the potential loss to the DFW control strategy due to an exemption for low-temperature drying and curing ovens used in wet-laid, non-woven fiber mat manufacturing in which nitrogen-containing resins or other additives are used and in mineral wool-type fiberglass manufacturing from 30 TAC Chapter 117 emission specifications for attainment demonstration the DFW AD SIP revision relies on 0.1 tpd of fleet turnover reductions. Details regarding the exemption and its offset through fleet turnover can be found in the [DFW AD SIP revision, Adopted March 10, 2010](#)⁵. Therefore, to be conservative **C2** was increased to account for the 0.1 tpd to offset the Chapter 117 exemption emissions increase.

The 2013 value of **C2** is **19.01 tpd**.

Variables D1 and D2

D1 = DERCS generated on or after March 1, 2009, and approved for use in the previous calendar year or the 2009 control period.

D2 = DERCS generated on or after March 1, 2009, and used in previous calendar year or 2009 control period.

- Currently, there are no DERCS in the DFW area that were generated on or after March 1, 2009.

The value for both **D1** and **D2** is **0.0 tpd**.

2013 Flow Control

Based on the values of the variables **B**, **C1**, **C2**, **D1**, and **D2** the 2013 flow control is **16.9 tpd**.

Apportionment of 2013 Flow Control

Based on the 2013 DERC Intent to Use Applications received, the apportionment of the 2013 flow control is provided in Table 1: *2013 Flow Control Apportionment*.

Table 1: 2013 Flow Control Apportionment

Company Name	Site Name	County Name	Requested Total Use Tons	Requested TPD	Approved TPD
Luminant Generation Company, LLC	Lake Hubbard, Eagle Mountain	Dallas, Tarrant	1,921.5 ^a	5.25	5.25
ExTex La Porte Limited Partnership	Mountain Creek Steam Electric Station	Dallas	10.0	3.00	3.00
Total			1,931.5	8.25	8.25

^a Amount includes the required 5% compliance margin for intents greater than 10 tons but does not include the 10% environmental contribution.

Contact Information

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⁴ Project No. 2010-022-SIP-NR, Section 4.9, Table 4-3, Page 4-14, http://www.tceq.texas.gov/assets/public/implementation/air/sip/dfw/ad_2011/10022SIP_ado_111811.pdf

⁵ Project No. 2009-021-SIP-NR, Section 4.2.2, Table 4-3, Pages 4-2 and 4-9, http://www.tceq.state.tx.us/assets/public/implementation/air/sip/dfw_sip021809/PdfNo2_ADOPTIONPrefilingNarrativeDFW_RRC_SIP.pdf