

## **2014 DISCRETE EMISSION REDUCTION CREDIT (DERC) FLOW CONTROL LIMIT**

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The DERC flow control limit is the total daily amount of nitrogen oxides (NO<sub>x</sub>) 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). The flow control limit helps to ensure that DERC use will not interfere with the attainment and maintenance of the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS) in the DFW area.

The 2014 DFW DERC flow control limit is 24.3 tons per day (tpd) and the calculation of this value is detailed below.

### **Estimation of 2014 Flow Control Limit**

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 2014 flow control limit 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](#).<sup>1</sup>

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

#### **Variable C<sub>1</sub>**

**C<sub>1</sub>** = 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), **C<sub>1</sub>** refers to the estimated emission reductions due to the replacement of older mobile sources (both on-road 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 **C<sub>1</sub>** changes annually.

- The 2013 through 2014 on-road and non-road fleet turnover values are 31.82 tpd and 8.26 tpd, respectively.

The value of **C<sub>1</sub>** is **40.08 tpd**.

#### **Variable C<sub>2</sub>**

**C<sub>2</sub>** = 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 SIP revision or any other SIP requirements that rely on fleet turnover reductions.

- The 2014 required contingency requirements of 18.91 tpd are specified in the [DFW AD SIP revision adopted December 7, 2011](#).<sup>2</sup>

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

The DFW AD SIP revision relies on 0.1 tpd of fleet turnover reductions to replace potential emission reductions that may have been lost as a result of granting an exemption for certain ovens from the 30 TAC Chapter 117 emission specifications for attainment demonstration. For additional details regarding the exemption and associated use of fleet turnover, please see the [DFW AD SIP revision adopted March](#)

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<sup>1</sup> 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](http://www.tceq.state.tx.us/assets/public/implementation/air/sip/dfw/DFW_DERC_SIP_ADOPTION_Narrative_Final.pdf)

<sup>2</sup> Project No. 2010-022-SIP-NR, Section 4.9, Table 4-3, Page 4-14,  
[http://www.tceq.texas.gov/asset/public/implementation/air/sip/dfw/ad\\_2011/10022SIP\\_ado\\_111811.pdf](http://www.tceq.texas.gov/asset/public/implementation/air/sip/dfw/ad_2011/10022SIP_ado_111811.pdf)

## 2014 Flow Control

[10, 2010](#).<sup>3</sup> Therefore, to be conservative, **C<sub>2</sub>** was increased to account for the 0.1 tpd to offset the Chapter 117 exemption emissions increase.

The 2014 value of **C<sub>2</sub>** is **19.01 tpd**.

### Variables **D<sub>1</sub>** and **D<sub>2</sub>**

**D<sub>1</sub>** = DERCs generated on or after March 1, 2009 and approved for use in the previous calendar year or 2009.

**D<sub>2</sub>** = DERCs generated on or after March 1, 2009 and used in previous calendar year or 2009.

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

The value for both **D<sub>1</sub>** and **D<sub>2</sub>** is **0 tpd**.

### 2014 Flow Control Limit

Based on the values of the variables **B**, **C<sub>1</sub>**, **C<sub>2</sub>**, **D<sub>1</sub>**, and **D<sub>2</sub>** the 2014 flow control is **24.3 tpd**.

- The 2014 flow control limit is higher than the 2013 DFW DERC flow control limit because of the increase in the 2014 on-road and non-road fleet turnover values. The 2014 on-road fleet turnover value is based on MOVES2010b.

### Apportionment of the 2014 Flow Control Limit

Based on the 2014 DERC Intent to Use Applications received, the apportionment of the 2014 flow control is provided in Table 1: *2014 Flow Control Apportionment*.

**Table 1: 2014 Flow Control Apportionment**

| Company Name                       | Site Name                             | County Name | Requested Total Use Tons <sup>a,b</sup> | Requested TPD | Approved TPD <sup>b</sup> |
|------------------------------------|---------------------------------------|-------------|---|---------------|---------------------------|
| Luminant Generation Company, LLC   | Lake Hubbard Steam Electric Station   | Dallas      | 1916.3 <sup>a</sup>                     | 5.25          | 5.25                      |
| ExTex La Porte Limited Partnership | Mountain Creek Steam Electric Station | Dallas      | 10.0                                    | 3.0           | 3.0                       |
| Total                              |                                       |             |   |               | 8.25                      |

<sup>a</sup> Amounts include the required 5% compliance margin for intents greater than 10 tons, but amounts do not include the 10% environmental contribution.

<sup>b</sup> The Requested Total Use Tons is applicable to the 2014 calendar year DERC Intent to Use request for each site and is approved with the approval of the request [§101.376(d)(A) & (d)(B)(i)]. The Approved TPD is associated with the DERC Flow Control Limit, which is based on a tpd limit and approved with the release of the DERC Flow Control Limit Report [§101.379(c) & (c)(2)(a)].

### Contact Information

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<sup>3</sup> 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/dfw\\_sip021809/PdfNo2\\_ADOPTIONPrefilingNarrativeDFW\\_RRC\\_SIP.pdf](http://www.tceq.state.tx.us/assets/public/implementation/air/sip/dfw/dfw_sip021809/PdfNo2_ADOPTIONPrefilingNarrativeDFW_RRC_SIP.pdf)