

TABLE 1

The District's Average Effluent Aluminum Values under Various Calculation Scenarios (ug/l)

	A	B	C	D	E
	(Typical Low Flow Months, 2005-2008, As Used in Statement Of Basis Analysis) ¹	(Typical Low Flow Months, 2005-2008, Including 3 Data Points Excluded from Statement Of Basis Analysis) ²	(Actual Low Flow Conditions* during Typical Low Flow Months, 2005-2008, As Stated in RTC) ³	(Actual Low Flow Conditions* during Any Months, 2004-2008, As Proposed by the District in its Petition) ⁴	(All Data Collected, 2004-2008, Regardless Of Flow Conditions, as Requested by the District In its Comments) ⁵
Detection Limit	117	113	111	104	96
Values Assigned	103	98	90	87	90
To Results Reported as Non-Detect (ug/l)	124	118	120	106	95

¹ The Region used the District's WET test data from June 2005, July 2005, October 31, 2005, October 2006, July 2007, October 2007, and July 2008 in these calculations. See SOB at 7, Appendix A; RTC at 2. In the Statement of Basis, the Region incorrectly reflected the 117 ug/l value as 127 ug/l.

² The Region used the data contained in note 1, as well as three additional data points from the District's WET test data that were collected during typical low flow months, including October 10, 2005, July 2006, and October 2008, which the Region excluded in its development of the aluminum effluent limitation in the Draft Permit Modification.

³ The Region used the District's WET test data from June 2005, July 2006, October 2006, July 2007, October 2007, July 2008, and October 2008 in these calculations.

⁴ The Region used the District's WET test data from July 2004, June 2005, April 2006, July 2006, October 2006, July 2007, October 2007, July 2008, and October 2008 in these calculations. See Dist. Pet. at 8.

⁵ The Region used all the data from Exhibit B to the District's Petition, as well as two additional data points, namely results from the District's January 7, 2004 and January 9, 2004 WET tests, that the District excluded from its Exhibit B. See Dist. Pet. at Ex. B.

* The Region never established a flow threshold that constitutes "actual low flow conditions." For purposes of demonstrating the results of screening data points based on actual instream flow conditions, however, the Region used 508 cfs, as this value represents the flow the District incorrectly understood the Region to have accepted as representing low flow conditions. See Dist. Pet. at 8. The flow data used by the Region was collected by the United States Geological Survey (USGS) flow gage No. 01112500 (Blackstone River at Woonsocket, RI).

SCENARIO A CALCULATIONS

Typical Low Flow Months, as Used in the Statement of Basis (2005-2008)

**Non-Detect Data Assigned
Value 100 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	100*
7/11/2005	80
10/31/2005	90
10/23/2006	100*
7/9/2007	344
10/15/2007	45
7/7/2008	63
Average	117

**Non-Detect Data Assigned
Value of 50 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	50*
7/11/2005	80
10/31/2005	90
10/23/2006	50*
7/9/2007	344
10/15/2007	45
7/7/2008	63
Average	103

Non-Detect Data Excluded

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/11/2005	80
10/31/2005	90
7/9/2007	344
10/15/2007	45
7/7/2008	63
Average	124

*Results reported as non-detect (or below the method detection limit of 100 ug/l) on the District's WET reports for its aluminum effluent values.

SCENARIO B CALCULATIONS

Typical Low Flow Months, Including Three Typical Low Flow Data Points
Excluded from the Statement of Basis Analysis (2005-2008)

**Non-Detect Data Assigned
Value 100 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	100*
7/11/2005	80
10/10/2005	180
10/31/2005	90
7/10/2006	100*
10/23/2006	100*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	113

**Non-Detect Data Assigned
Value of 50 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	50*
7/11/2005	80
10/10/2005	180
10/31/2005	90
7/10/2006	50*
10/23/2006	50*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	98

Non-Detect Data Excluded

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/11/2005	80
10/10/2005	180
10/31/2005	90
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	118

*Results reported as non-detect (or below the method detection limit of 100 ug/l) on the District's WET reports for its aluminum effluent values.

SCENARIO C CALCULATIONS

Actual Low Flow Conditions during Typical Low Flow Months (2005-2008),
Which the Region Stated it Used in the Response to Comments

**Non-Detect Data Assigned
Value 100 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	100*
7/10/2006	100*
10/23/2006	100*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	111

**Non-Detect Data Assigned
Value of 50 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
6/27/2005	50*
7/10/2006	50*
10/23/2006	50*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	90

Non-Detect Data Excluded

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	120

*Results reported as non-detect (or below the method detection limit of 100 ug/l) on the District's WET reports for its aluminum effluent values.

SCENARIO D CALCULATIONS

Actual Low Flow Conditions during Any Months (2004-2008),

Which the District Proposed in its Petition¹

**Non-Detect Data Assigned
Value 100 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/12/2004	48
6/27/2005	100*
4/3/2006	110
7/10/2006	100*
10/23/2006	100*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	104

**Non-Detect Data Assigned
Value of 50 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/12/2004	48
6/27/2005	50*
4/3/2006	110
7/10/2006	50*
10/23/2006	50*
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	87

Non-Detect Data Excluded

Wet Test Date	Aluminum in District's Effluent (ug/l)
7/12/2004	48
4/3/2006	110
7/9/2007	344
10/15/2007	45
7/7/2008	63
10/13/2008	26
Average	106

*Results reported as non-detect (or below the method detection limit of 100 ug/l) on the District's WET reports for its aluminum effluent values.

¹ See Dist. Pet. at 8.

SCENARIO E CALCULATIONS

All Data Collected (2004-2008), Regardless of Flow Conditions,
Which the District Requested in its Comments¹

**Non-Detect Data Assigned
Value 100 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
1/5/2004	59
1/7/2004	89
1/9/2004	85
4/12/2004	52
7/12/2004	48
10/4/2004	27
1/3/2005	140
4/25/2005	240
6/27/2005	100*
7/11/2005	80
10/10/2005	180
10/31/2005	90
1/9/2006	70
4/3/2006	110
7/10/2006	100*
10/23/2006	100*
1/8/2007	70
4/23/2007	28
7/9/2007	344
10/15/2007	45
1/14/2008	60
4/14/2008	96
7/7/2008	63
10/13/2008	26
Average	96

**Non-Detect Data Assigned
Value of 50 ug/l**

Wet Test Date	Aluminum in District's Effluent (ug/l)
1/5/2004	59
1/7/2004	89
1/9/2004	85
4/12/2004	52
7/12/2004	48
10/4/2004	27
1/3/2005	140
4/25/2005	240
6/27/2005	50*
7/11/2005	80
10/10/2005	180
10/31/2005	90
1/9/2006	70
4/3/2006	110
7/10/2006	50*
10/23/2006	50*
1/8/2007	70
4/23/2007	28
7/9/2007	344
10/15/2007	45
1/14/2008	60
4/14/2008	96
7/7/2008	63
10/13/2008	26
Average	90

Non-Detect Data Excluded

Wet Test Date	Aluminum in District's Effluent (ug/l)
1/5/2004	59
1/7/2004	89
1/9/2004	85
4/12/2004	52
7/12/2004	48
10/4/2004	27
1/3/2005	140
4/25/2005	240
7/11/2005	80
10/10/2005	180
10/31/2005	90
1/9/2006	70
4/3/2006	110
1/8/2007	70
4/23/2007	28
7/9/2007	344
10/15/2007	45
1/14/2008	60
4/14/2008	96
7/7/2008	63
10/13/2008	26
Average	95

*Results reported as non-detect (or below the method detection limit of 100 ug/l) on the District's WET reports for its aluminum effluent values.

¹ See Dist. Comments at 2-3.