

Appendix E
Itasca Railroad Emission Estimates

Itasca Railroad Emissions Estimates (Proposed)

SD40T-2 Emission Calculations

Locomotive: SD40T - 2 Size: 2,000 HP
 Gallons/Year 144,288

Tier	Emissions			
	Nox tpy	CO tpy	PM tpy	VOC tpy
0	28.31	4.23	1.07	1.59
1	22.11	4.23	1.07	1.56
2	16.38	4.23	0.57	0.86

*Based on "Emission Factors for Locomotives" EPA420-F-97-051 (December 1997)

SD20 Adjustable Tier Types

Pollutant	Locomotive Type Percentage			Emissions
	Tier 0	Tier 1	Tier 2	tpy
NOx	0	0	0	0.00
CO	0	0	0	0.00
PM	0	0	0	0.00
VOC	0	0	0	0.00

SD18 Emission Calculations

Locomotive: SD-18 Size: 1,800 HP
 Gallons/Year 125,091

Tier	Emissions			
	Nox tpy	CO tpy	PM tpy	VOC tpy
0	24.54	3.67	0.92	1.38
1	19.17	3.67	0.92	1.35
2	14.20	3.67	0.50	0.74

*Based on "Emission Factors for Locomotives" EPA420-F-97-051 (December 1997)

SD18 Adjustable Tier Types

Pollutant	Locomotive Type Percentage			Emissions
	Tier 0	Tier 1	Tier 2	tpy
NOx	0	0	0	0.00
CO	0	0	0	0.00
PM	0	0	0	0.00
VOC	0	0	0	0.00

Proposed Emission Factors (g/gal)

Tier	NOx	CO	PM	VOC
0	178	26.6	6.7	10
1	139	26.6	6.7	9.8
2	103.0	26.6	3.6	5.4

*Based on "Emission Factors for Locomotives" EPA420-F-97-051 (December 1997)

Tier 0: Manufactured from 1973 through 2001
Tier 1: Manufactured from 2002 through 2004
Tier 2: Manufactured in 2005 or later