

**Appendix E      Insignificant Sources Documentation**



### Insignificant Contaminants (Emission Threshold)

Source Id	Insignificant Emission Threshold
30 min Dispersion Factor ug/m3 / g/s	12000

### 30-min Screening POI

Ingredient ID	Contaminant	CAS #	30 min Emission Rate (g/s)	Emission Threshold Concentration [Site Wide ER * B-1 DF * 2]	30 min Facility MAX GLC (ug/m3)	30 min POI Criteria (ug/m3)	Schedule	Limiting Effect	% of Criteria	Model Stage	Significant?
7	CARBON MONOXIDE	630-08-0	5.80E-02	1.39E+03	5	6000	Schedule 2	health	0.1%	Stage 1	Insignificant (Emission Threshold)
316	ETHANOL (ETHYL ALCOHOL)	64-17-5	4.98E-01	1.19E+04	47	19000	1/2-hr Guideline	odour	0.2%	Stage 1	Insignificant (Emission Threshold)
74	TOLUENE	108-88-3	2.15E-02	5.16E+02	2	2000	Schedule 2	odour	0.1%	Stage 1	Insignificant (Emission Threshold)
3554	Dibromoacetonitrile	3252-43-5	7.67E-04	1.84E+01	0	39.6	Future		0.2%	Stage 1	Insignificant (Emission Threshold)

**Diesel Fired Emergency Equipment  
> 600 HP**

Source Information	
Source ID	B51
Description	Emergency Generator
Power Rating (hp)	1000
Testing Load (%)	100%
Weekly Testing Minutes	20
Sensitive Receptor within 500 m?	Y

NO <sub>x</sub> Emission Rate		
LEHDER ID	Contaminant	1/2-hour Emission Rate (g/s)
4	NO <sub>x</sub> AS NO2	2.02

NO <sub>x</sub> Ground-Level Concentration at Sensitive Receptor				
Equipment ID	1/2-hour Dispersion Factor (µg/m <sup>3</sup> /g/s)	POI Concentration (µg/m <sup>3</sup> )	Criteria (µg/m <sup>3</sup> )	Percent of Criteria
B51	94	189.06	500	38%

**Sample Calculations**

**1/2-hour NO<sub>x</sub> Emission Rate:**

1/2-hour Emission Rate (g/s) = Power Rating (hp) x Emission Factor (lb/hp-hr) x Testing Load (%) Conversion Factor from lb/hr to g/s

1/2-hour Emission Rate (g/s) = 1000 x 0.024 x 1 x 0.126 x 20/30

1/2-hour Emission Rate (g/s) = 2.02

**Notes**

GLC = Ground Level Concentration

Emission Factors									
ContID	Contaminant	Generator Power Rating	Emission Factor	Emission Factor Units	Source	Rating	Date	Conversion Factor from lb/hr to g/s	Conversion Factor from hp to kg/yr
4	NITROGEN OXIDES (EXPRESSED AS NO2)	hp	0.024	lb/hp-hr	AP 42 3.4 Table 3.4-1	B	Oct-96	1.26E-01	4.54E-01

**References** AP42 Chapter 3.3 -Gasoline and Diesel Industrial Engines  
<http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf>

**Diesel Fired Emergency Equipment  
> 600 HP**

Source Information	
Source ID	B51
Description	Emergency Generator
Power Rating (hp)	1000
Testing Load (%)	100%
Weekly Testing Minutes	20
Sensitive Receptor within 500 m?	Y

NO <sub>x</sub> Emission Rate		
LEHDER ID	Contaminant	1/2-hour Emission Rate (g/s)
4	NO <sub>x</sub> AS NO2	2.02

NO <sub>x</sub> Ground-Level Concentration at Sensitive Receptor				
Equipment ID	1/2-hour Dispersion Factor (µg/m <sup>3</sup> /g/s)	POI Concentration (µg/m <sup>3</sup> )	Criteria (µg/m <sup>3</sup> )	Percent of Criteria
B51	94	189.06	500	38%

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Emission Factors									
ContID	Contaminant	Generator Power Rating	Emission Factor	Emission Factor Units	Source	Rating	Date	Conversion Factor from lb/hr to g/s	Conversion Factor from hp to kg/yr
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**References** AP42 Chapter 3.4 - Large Stationary Diesel and All Stationary Dual-fuel Engines  
<http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s04.pdf>

