

Calculations

Exhaust Flowrate = 19,635 dscfm  
Design Production Rate = 125 ton/hr  
Actual Production Rate (see **note** to the right) = 100 ton/hr  
Annual Operating hours= 2,240 hr/yr  
Actual Annual Production Rate= 224,000 ton/yr  
Annual Production Limit (see **note** to the right) = 325,000 ton/yr

from application dated October 4, 1995  
280°8=2240 hr/yr from application dated November 14, 2023  
100 ton/hr \* 2240 hr/yr = 224,000 ton/yr

**Note:** If there is an agreed upon annual production limit in (ton/yr) enter it here,  
if there is an agreed upon operating hours limit (hr/yr) enter the value for [operating hours limit (hr/yr)] \* [Actual Production Rate (ton/hr)],  
if there is no agreed upon production or operating hours limit, enter the value for [8,760 (hr/yr)] \* [Actual Production Rate (ton/hr)].

Actual Emissions		Natural Gas/Batch Mix				No. 2 Fuel Oil/Batch Mix				Waste Oil/Batch Mix				Worst case	
	Actual Production Rate (ton/hr)	AP-42 Table	Emission Factor (lb/ton)	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	AP-42 Table	Emission Factor (lb/ton)	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	AP-42 Table	Emission Factor (lb/ton)	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)	Actual Emissions (lb/hr)	Actual Emissions (ton/yr)
PM (uncontrolled)	100	11.1-3				11.1-3	32	3,200.00	3,584.00	11.1-3				3,200.00	3,584.00
PM (fabric filter)	100	11.1-3				11.1-3	0.042	4.20	4.70	11.1-3				4.20	4.70
SO2	100	11.1-7				11.1-7	0.088	8.80	9.86	11.1-7				8.80	9.86
CO	100	11.1-7				11.1-7	0.4	40.00	44.80	11.1-7				40.00	44.80
VOC	100	11.1-8				11.1-8	0.0082	0.82	0.92	11.1-8				0.82	0.92
NOx	100	11.1-7				11.1-7	0.12	12.00	13.44	11.1-7				12.00	13.44

Equations used in calculations:  
[Actual Emissions (lb/hr)] = 100 (ton/hr) x [Emission Factor (lb/ton)]  
[Actual Emissions (ton/yr)] = 325,000 (ton/yr) x [Emission Factor (lb/ton)] / [2,000 lb/ton]

Potential Emissions		Natural Gas/Batch Mix				No. 2 Fuel Oil/Batch Mix				Waste Oil/Batch Mix				Worst case	
	Potential Production Rate (ton/hr)	AP-42 Table	Emission Factor (lb/ton)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	AP-42 Table	Emission Factor (lb/ton)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	AP-42 Table	Emission Factor (lb/ton)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)
PM (uncontrolled)	125	11.1-3				11.1-3	32	4,000.00	5,200.00	11.1-3				4,000.00	5,200.00
PM (fabric filter)	125	11.1-3				11.1-3	0.042	5.25	6.83	11.1-3				5.25	6.83
SO2	125	11.1-7				11.1-7	0.088	11.00	14.30	11.1-7				11.00	14.30
CO	125	11.1-7				11.1-7	0.4	50.00	65.00	11.1-7				50.00	65.00
VOC	125	11.1-8				11.1-8	0.0082	1.03	1.33	11.1-8				1.03	1.33
NOx	125	11.1-7				11.1-7	0.12	15.00	19.50	11.1-7				15.00	19.50

Equations used in calculations:  
[Potential Emissions (lb/hr)] = 125 (ton/hr) x [Emission Factor (lb/ton)]  
[Potential Emissions (ton/yr)] = 325,000 (ton/yr) x [Emission Factor (lb/ton)] / [2,000 lb/ton]  
[Unrestricted PTE - at 8,760 hr/yr (ton/yr)] = 125 (ton/hr) x [Emission Factor (lb/ton)] x [8,760 hr/yr] / [2,000 lb/ton]

Allowable Emissions

SO2

Allowable = Potential, set by TAPCR 1200-3-14-.03(5)  
[Allowable (lb/hr)] = [Actual Production Rate (ton/hr)] x [Emission Factor (lb/ton)]  
[Allowable (ton/yr)] = [Emission Factor (lb/ton)] x [325,000 (ton/yr)] / [2,000 (lb/ton)]

Natural Gas		No. 2 Fuel Oil		Waste Oil		Worst case	
lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
0.00	0.00	11.00	14.30	0.00	0.00	11.00	14.30

CO, VOC, NOx

Allowable = Potential, set by TAPCR 1200-3-7-.07(2)  
[Allowable (ton/yr)] = [Emission Factor (lb/ton)] x [325,000 (ton/yr)] / [2,000 (lb/ton)]

Natural Gas		No. 2 Fuel Oil		Waste Oil	
lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
0.00	0.00	65.00	0.00	0.00	0.00
0.00	0.00	1.33	0.00	0.00	0.00
0.00	0.00	19.50	0.00	0.00	0.00

CO  
VOC  
NOx

PM

TAPCR 1200-03-07-.04(2)				
Pollutant	Emission Factor (gr/dscf)	PM Emissions (lb/hr)	PM Emissions (lb/yr)	PM Emissions (tpy)
PM	0.25	42.08	109395.00	54.70

TAPCR 1200-03-07-.04(1)				
Pollutant	Emission Factor (gr/dscf)	PM Emissions (lb/hr)	PM Emissions (lb/yr)	PM Emissions (tpy)
PM	0.02	3.37	29486.16	14.74

Allowable Emissions TAPCR 1200-03-07-.03(1) Table 2

17.31°125°0.16 37.48 lb/hr  
48.72 tpy  
8760 hours 164.16 tpy

PM Allowable emission= 37.48 lb/hr