

Preliminary Analysis - Refinery SRU/TG Units

	Fac ID	Source Type	Device ID	Device	2011 Emissions (lbs)	2011 Emissions (tpd)	Emission Reductions Beyond 2005 BARCT at 2014 BARCT of 2 ppmv or 95% reduction (tpd)	Vendor 1 & 2		Vendor 3	
								PWV with 1.5 Contingency Factor (\$)	CE (\$/ton)	PWV with 1.5 Contingency Factor (\$)	CE (\$/ton)
1	6	Major	952	INCINERATOR	41,066	0.06	0.05	6,945,837	14,243	10,592,611	21,721
2	5	Major	911	INCINERATOR	28,379	0.06	0.05	6,945,837	14,454	8,456,066	17,597
3	5	Major	913	HEATER	12,087						
4	5	Major	927	INCINERATOR	14,276	0.03	0.03	6,945,837	28,734	8,456,066	34,982
5	5	Major	929	HEATER	6,080						
6	5	Major	955	INCINERATOR	40,313	0.07	0.07	6,945,837	10,964	8,456,066	13,348
7	5	Major	957	HEATER	13,035						
8	1	Major	910	INCINERATOR	42,273	0.06	0.06	6,945,837	13,837	10,720,346	21,356
9	1	Major	2413	INCINERATOR	22,337	0.03	0.03	6,945,837	26,186	10,720,346	40,416
10	8	Major	294	thermal INCINERATOR	49,563	0.07	0.06	6,945,837	11,801	10,720,346	18,214
11	8	Major	292	catalytic INCINERATOR	1,010	0.00	0.00	6,945,837	579,312	10,592,611	883,468
12	9	Major	1260	INCINERATOR	7,696	0.01	0.01	6,945,837	76,002	10,592,611	115,906
13	10	Major	175	INCINERATOR	5,674	0.01	0.01	6,945,837	103,086	10,592,611	157,210
14	3	Major	54	INCINERATOR	13,115	0.02	0.02	6,945,837	44,599	10,592,611	68,014
15	3	Large	56	INCINERATOR	4,931	0.01	0.01	6,945,837	118,619	10,592,611	180,898
16	7	Major	436	INCINERATOR	8,030	0.01	0.01	6,945,837	72,841	10,592,611	111,085
17	7	Major	456	INCINERATOR	7,025	0.01	0.01	6,945,837	83,260	10,592,611	126,975
					Total (tpd)	0.43	0.35 (note 1)	Average CE for SCR (\$/ton) (note 2)	15,198	Average CE for scrubber (\$/ton) (note 2)	21,293

Note : 1) Total emissions reduction for 10 cost-effective units = 0.35 tpd

2) Cost effectiveness LCF Method = (CE DCF Method * 1.67). Average CE LCF Method = 25 K - 36 K per ton

3) Cost effectiveness threshold = \$50,000 per ton