

SRVSA SLUDGE INCINERATOR R2 (U1 OS2) EMISSION CALCULATIONS

TABLE 4

DETERMINATION OF NET EMISSION INCREASE VIA N.J.A.C. 7:27-18.7

	INCREASE IN POTENTIAL TO EMIT (TPY)							
	SO2	TSP	PM-10	PM-2.5	NOx	CO	Pb	VOC
IP	-11.4	-3.11	-7.73	NA	-17.55	-10.13	-0.254	-6.57
INP	0	0	0	0	0	0	0	0
IF	0	0	0	0	0	0	0	0
IA	3.93	1.77	7.71	7.71	13.84	7.33	7.28E-04	6.57
DO	0	0	0	0	0	0	0	0
DC	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Emission Increase (NI)	-7.47	-1.34	-0.02	7.71	-3.71	-2.80	-0.253	0.000
Significant Net Emission Increase Levels	40	25	15	10	25	100	0.6	25

Net Emission Increase (NI) is less than Significant Net Emission Increase for each respective air contaminant, therefore no increases are significant and Subchapter 18 is not applicable. Note that PM-2.5 was not in previous permits and equivalent to PM-10; actual Net Emission Increase for PM-2.5 is 0.00.

$$NI = IP + INP + IF + IA - DO - DC$$

where:

NI = The net emission increase at the facility.

IP = Any increase(s) in the allowable emissions of the air contaminant during the contemporaneous period as authorized by permits issued by the Department.

INP = Any increase(s) in the allowable emissions of the air contaminant during the contemporaneous period which came from any equipment or control apparatus for which no permit was in effect at the time of the increase.

IF = Any increase in the fugitive emissions of the air contaminant from the facility during the contemporaneous period.

IA = Any proposed increase in the allowable emissions of the air contaminant from the newly constructed, reconstructed, or modified equipment or control apparatus which is the subject of the permit application.

DO = Any increase(s) in the allowable emissions of the air contaminant during the contemporaneous period, if emission offsets were secured for these increases from the facility or from another facility.

DC = The sum of all creditable emission reductions at the facility during the contemporaneous period, not including any creditable emission reductions previously used as emission offsets at the facility or any other facility.

TABLE 5							
NEW PERMIT MODIFICATIONS FOR CONTEMPORANEOUS PERIOD							
POTENTIALS TO EMIT (TPY) PER TITLE V OPERATING PERMITS							
Permit Activity Number	Approval Date	Facility Total	U1	U130	U140	Total	NSF Estimate
			Sludge Incinerators	Sludge Thickeners	Bldg. 600 Boiler	Insignificant Source Emissions	
VOC	IP = Net allowable (permitted) increase =		-6.57 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	7.10	7.10	0	NA	14.80	NA
BOP140001	4/20/15	7.10	7.10	0	0	14.80	NA
BOP130001	6/27/16	0.526	0.526	0	0	14.80	NA
NOx	IP = Net allowable (permitted) increase =		-17.55 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	17.9	17.52	0	NA	1.23	NA
BOP140001	4/20/15	17.9	17.52	0	0.31	1.23	NA
BOP130001	6/27/16	0.346	NA	0	0.31	1.23	NA
CO	IP = Net allowable (permitted) increase =		-10.13 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	10.4	10.10	0	NA	0.47	NA
BOP140001	4/20/15	10.4	10.10	0	0.27	0.47	NA
BOP130001	6/27/16	0.269	NA	0	0.27	0.47	NA
SO2	IP = Net allowable (permitted) increase =		-11.40 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	11.4	11.40	0	NA	0.19	NA
BOP140001	4/20/15	11.4	11.40	0	0	0.19	NA
BOP130001	6/27/16	NA	NA	0	0	0.19	NA
TSP	IP = Net allowable (permitted) increase =		-3.11 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	3.11	3.11	0	NA	0.09	NA
BOP140001	4/20/15	3.11	3.11	0	0	0.09	NA
BOP130001	6/27/16	NA	NA	0	0	0.09	NA
PM-10	IP = Net allowable (permitted) increase =		-7.73 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	7.73	7.73	0	NA	0.09	NA
BOP140001	4/20/15	7.73	7.73	0	0	0.09	NA
BOP130001	6/27/16	NA	NA	0	0	0.09	NA
PM-2.5	IP = Net allowable (permitted) increase =		0.00 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	NA	NA	0	NA	NA	NA
BOP140001	4/20/15	NA	NA	0	0	NA	NA
BOP130001	6/27/16	NA	NA	0	0	NA	NA
Lead	IP = Net allowable (permitted) increase =		-0.254 TPY		INP = Net non-permitted increase =		0.00 TPY
BOP120001	1/22/13	0.254	0.254	0	0	NA	NA
BOP140001	4/20/15	0.254	0.254	0	0	NA	NA
BOP130001	6/27/16	NA	NA	0	0	NA	NA