Ethylene Oxide (EtO) Emissions

Emission Source	2017 EtO Emissions (lb/yr)
RTO	101.7
Fugitives	555.7

Model Input Parameters for EtO Emissions Sources

Model ID	Stack Description	Source Type	UTM E[1] (m)	UTM N[1] (m)	Emis %	Modeled EtO Emissions[3] (g/s)	Stack Height		Stack Temperature		Exhaust Gas Flow Rate (cfm)	Exit Velocity		Stack Diameter	
							(ft)	(m)	(°F)	(K)		(ft/s)	(m/s)	(inch)	(m)
EF17	Exhaust Fan	POINT	236,448.9	3,722,282.1	4%	3.197E-04	30.0	9.144	70	294.26	10,000	34.0	10.363	30.0	0.762
EF18	Exhaust Fan	POINT	236,450.5	3,722,304.2	4%	3.197E-04	30.0	9.144	70	294.26	10,000	34.0	10.363	30.0	0.762
EF20	Exhaust Fan	POINT	236,452.0	3,722,280.9	4%	3.197E-04	30.0	9.144	70	294.26	10,000	34.0	10.363	30.0	0.762
EF21	Exhaust Fan	POINT	236,473.6	3,722,300.3	4%	3.197E-04	30.0	9.144	70	294.26	10,000	34.0	10.363	30.0	0.762
EF22	Exhaust Fan	POINT	236,485.7	3,722,302.2	10%	7.993E-04	36.0	10.973	70	294.26	24,000	37.9	11.552	44.0	1.118
EF23	Exhaust Fan	POINT	236,489.1	3,722,324.3	10%	7.993E-04	25.0	7.620	70	294.26	24,000	36.2	11.034	45.0	1.143
EF24	Exhaust Fan	POINT	236,487.8	3,722,345.4	10%	7.993E-04	25.0	7.620	70	294.26	24,000	36.2	11.034	45.0	1.143
EF25	Exhaust Fan	POINT	236,470.2	3,722,347.0	10%	7.993E-04	25.0	7.620	70	294.26	24,000	36.2	11.034	45.0	1.143
EF26	Exhaust Fan	POINT	236,449.8	3,722,348.7	10%	7.993E-04	25.0	7.620	70	294.26	24,000	36.2	11.034	45.0	1.143
EF44*	Exhaust Fan	POINT	236,432.1	3,722,277.0	5%	3.996E-04	28.0	8.534	70	294.26	13,200	40.0	12.192	31.8	0.808
EF45*	Exhaust Fan	POINT	236,433.7	3,722,301.4	5%	3.996E-04	28.0	8.534	70	294.26	13,200	40.0	12.192	31.8	0.808
EF47	Exhaust Fan	POINT	236,429.5	3,722,320.3	8%	6.394E-04	25.0	7.620	70	294.26	21,200	33.5	10.211	44.0	1.118
EF48	Exhaust Fan	POINT	236,431.1	3,722,342.5	8%	6.394E-04	25.0	7.620	70	294.26	21,200	33.5	10.211	44.0	1.118
EF49	Exhaust Fan	POINT	236,445.2	3,722,348.8	8%	6.394E-04	25.0	7.620	70	294.26	21,200	33.5	10.211	44.0	1.118
RTO	regenerative thermal oxidizer	POINT	236,424.2	3,722,295.0	N/A	1.463E-03	50.0	15.240	250	394.26	23,000	30.5	9.296	48.0	1.219

Notes:

1. Coordinates reflect UTM NAD83, Zone 17. EF20 coordinates were revised based on site plan
2. EF44 and EF45 - Roof mounted uplast type fan, modeled diameters were derived from flow rate and exit velocity
3. EF23~26 - Rectangular Duct shows as the round equivalent