RACT III Submittal
Point Breeze Wharf RACT Cost Effectiveness Summary - Non-gasoline Loading

	A	B	C	D	E	F	G	H				I	J
Control Option	Potential Throughput (bbl/yr)[1]	Current Emission Rate (lb VOC/Mbbl)[2]	VOC Potential Emissions (TPY)	Control Efficiency (%)	Maximum Post Control VOC Emissions (TPY)	Potential VOC Reduced (TPY)	2015 Total Capital Cost ($)	2021 Capital Cost ($)	2015 O&M Cost ($)	2021 O&M Cost ($)	2021 Annualized Cost[3] ($)	2021 Cost Effectiveness ($/Ton)	2015 Annualized Cost[3] ($)	2015 Cost Effectiveness ($/Ton)
Thermal Incinerator	1,482,000	35.08	25.99	98%	0.5	25.5	898,727	1,142,777	278,274	353,840	539,822	21,192	424,538	16,666
Flare	1,482,000	35.08	25.99	98%	0.5	25.5	812,785	1,033,498	220,116	279,889	448,086	17,591	352,393	13,834
Adsorption	1,482,000	35.08	25.99	98%	0.5	25.5	589,117	749,093	176,470	224,390	346,302	13,595	272,346	10,692
Condenser	1,482,000	35.08	25.99	61%	10.2	15.8	1,105,993	1,406,327	277,915	353,383	582,256	36,961	457,910	29,068
Calculation			= A * B * 8760 / 2000		= C * (1 - D)	= C - E							= (G * ACF) + H	= I / F

Notes:
[1] Potential Throughput (bbl/yr) = 1,311,000 bbls/yr of Reformate + 171,000 bbls/yr of Naphtha
[2] Current Emission Rate (lb VOC/Mbbl) = (25.99 tons/yr * 2,000 lb/ton) / (1,482,000 bbls/yr *(1 Mbbl/1,000 bbls))
[3] See "RACT Cost Summary" tab for details on the Annualized Cost Factor (ACF).

Table 2. Chemical Engineering Plant Cost Index (CEPCI)

Year	Value	Units	Reference	Notes
2015 $ (average)	556.8		2	
2021 $ (average)	708.0		2	CEPCI 2021 annual average value