

Appendix S – Federal Modification Test

Appendix 5, Table 5-1: Federal Major Modification Analysis

Note

¹ Baseline emissions for existing sources are from the facility's 2018 and 2019 BAQMD Regulation 12-15 Emissions Inventory. Source IDs may repeat to account for different categories of emissions occurring at a single source.

² Post-Project emissions are based on projected actuals for existing sources and PTE for new sources.

Appendix S, Table S-2: Post-Project Emissions Estimates for Combustion Devices

Source ID	Description	Post-Project Status	Emission Type	2019 Throughput		Post-Project Throughput		2019 Emissions ¹ (tons/year)						Post-Project Emissions ² (tons/year)							
				Rate	Units	Rate	Units	NOx	SO ₂	CO	POC	PM ₁₀	PM _{2.5}	GHGs (MT)	NOx	SO ₂	CO	POC	PM ₁₀	PM _{2.5}	GHGs (MT)
11	U240 B-201 Heater	Operational	Combustion	56	MMBtu/hr	33	MMBtu/hr	11	13	0.39	1.2	1.6	1.6	29,233	6.8	8.0	0.23	0.71	1.0	1.0	17,492
12	U240 B-202 Heater	Operational	Combustion	16	MMBtu/hr	24	MMBtu/hr	1.8	3.8	0.42	0.34	0.46	0.46	8,271	2.8	5.8	0.64	0.51	0.71	0.71	12,607
13	U240 B-301 Heater	Operational	Combustion	125	MMBtu/hr	93	MMBtu/hr	6.9	30	0.87	2.7	3.7	3.7	66,359	5.2	22	0.65	2.0	2.7	2.7	49,541
45	U246 B-801 A/B Heater	Operational	Combustion	62	MMBtu/hr	24	MMBtu/hr	1.4	0.12	0.82	0.26	0.81	0.81	28,384	0.52	0.046	0.32	0.10	0.31	0.31	10,922
437	Unit 110 Hydrogen Manufacturing Unit	Operational	Hydrogen Plant	12	MMScf/day	17	MMScf/day	--	--	--	--	--	--	100,368	--	--	--	--	--	--	137,269
438	U110 H-1 Furnace (H ₂ Plant Reforming)	Operational	Combustion	140	MMBtu/hr	191	MMBtu/hr	3.6	4.1	1.3	0.15	4.6	4.6	16,261	5.0	5.7	1.8	0.20	6.3	6.3	22,239

Notes:

¹ Obtained directly from the facility's 2019 BAAQMD Rule 12-15 Emissions Inventory.

² Post-project emissions were estimated using 2019 throughput and emissions and post-project projected rates.

Abbreviations:

CO - carbon monoxide

GHG - greenhouse gas

hr - hour

Mbbl - thousand barrels

Mgal - thousand gallons

MMBtu - million British thermal units

MT - metric ton

NOx - nitrogen oxides

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

POC - precursor organic compounds

SO₂ - sulfur dioxide

yr - year