

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-Chemical Plant (EU-2) Existent Equipments but without use	C-106, CENTRIFUGE	QII-1	E-491 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	S-1441, RECEIVER	QII-1	E-491 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	C-109, CENTRIFUGE	QII-1	E-491 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	S-1442, RECEIVER	QII-1	E-498 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	S-1631, RECEIVER	QII-1	E-1631 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-5006, RECEIVER	QII-1	E-1910 A (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	DT-118, RECEIVER	QII-1	E-1311 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	K-120, REACTOR	QII-1	E-120 A/B Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	K-91, REACTOR	QII-1	E-91 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-107, RECEIVER	QII-1	E-107 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-115, RECEIVER	QII-1	E-115 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-125, RECEIVER	QII-1	E-125 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-61, RECEIVER	QII-1	E-1432 A/B (Non affected by Pharma MACT)

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-86, RECEIVER	QII-1	E-1621 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-87, RECEIVER	QII-1	E-87 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	RF-121, RECEIVER	QII-1	E-121 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	RF-122, RECEIVER	QII-1	E-122 A/B (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	R-108, RECEIVER	QII-1	E-498, E-499 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	ID-114, DRYING TOMBOLA	QII-3	DC-X-434 (Non affected by Pharma MACT)
EU-Chemical Plant (EU-2) Existent Equipments but without use	S-5002, RECEIVER	QII-1	E-5002 (Non affected by Pharma MACT)

INFORMATION ABOUT THE EMISSION SOURCES

LIST OF EMISSION UNITS OF TANK FARM (EU-7)

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-TANK FARM (EU-7) Existen tanks in use			
	TANK SI-9	SI-9 (Insignificant)	E-420
	TANQK ST-10	SI-9 (Insignificant)	E-420 and/or E-421
	TANK SI-13	SI-13	E-424
	TANK SI-14A	SI-14	E-425
	TANK SI-14B	SI-14	E-425
	TANK R-407	R-407 (Insignificant)	NON APPLICABLE
	TANK ST-440	SI-440	E-440
	TANK ST-441	SI-441	E-441
	Leaks Components (Pumps, Filters, Flanges, Valves Conectors, PRD, Instrumentations, open end valves, open end lines, etc.)	FUGITIVES	LDAR Programs of RCRA Subpart BB and LDAR of Pharma MACI
	TANK SI-442	SI-442	E-442
	TANK SI-445	SI-445	E-445
	TANK SI-446	SI-446	E-446
	TANK SI-1021	SI-1021	NON APPLICABLE
	TANK SI-1031	SI-1031 (Insignificant)	NON APPLICABLE
EU-Tank Farm (EU-7) IDLE	VI-1 TANK	(Insignificant) (VI-1-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-2 TANK	(Insignificant) (VI-2-SI)	Conservation vent

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-Tank Farm (EU-7) IDLE	VI-3 TANK	(Insignificant) (VI-3-ST)	Conservation vent & Vent Condenser
EU-Tank Farm (EU-7) IDLE	VT-4 TANK	(Insignificant) (VI-4-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-5 TANK	(Insignificant) (VI-5-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-6 TANK	(Insignificant) (VI-6-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-8 TANK	(Insignificant) (VI-8-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-11 TANK	(Insignificant) (VI-11-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-12 TANK	(Insignificant) (VI-12-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-13 TANK	(Insignificant) (VI-13-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-14 TANK	(Insignificant) (VI-14-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	VI-15 TANK	(Insignificant) (VI-15-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-1 TANK	(Insignificant) (IA-1-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-2 TANK	(Insignificant) (IA-2-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-3 TANK	(Insignificant) (IA-3-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-4 TANK	(Insignificant) (IA-4-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-5 TANK	(Insignificant) (IA-5-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-6 TANK	(Insignificant) (IA-6-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-7 TANK	(Insignificant) (IA-7-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-8 TANK	(Insignificant) (IA-8-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-9 TANK	(Insignificant) (IA-9-ST)	Conservation vent
EU-Tank Farm (EU-7) IDLE	IA-10 TANK	(Insignificant) (IA-10-ST)	Conservation vent

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-Tank Farm (EU-7) IDLE	ST-11 TANK	(Insignificant) (ST-11)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	ST-12 TANK	(Insignificant) (ST-12)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	ST-401 TANK	(Insignificant) (ST-401)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	ST-402 TANK	(Insignificant) (ST-402)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-1 Tank	(Insignificant) (TQ-1)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-2 Tank	(Insignificant) (TQ-2)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-3 Tank	(Insignificant) (TQ-3)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-4 Tank	(Insignificant) (TQ-4)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-5 Tank	(Insignificant) (TQ-5)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	TQ-6 Tank	(Insignificant) (TQ-6)	Conservation vent & vent condenser
EU-Tank Farm (EU-7) IDLE	R-1 Tank	(Insignificant) (R-1)	Not Applicable
EU-Tank Farm (EU-7) IDLE	R-2 Tank	(Insignificant) (R-2)	Not Applicable
EU-Tank Farm (EU-7) IDLE	R-3 Tank	(Insignificant) (R-3)	Not Applicable
EU-Tank Farm (EU-7) IDLE	R-4 Tank	(Insignificant) (R-4)	Not Applicable

NOTE:

Tanks SI-9, SI-10, R-407, SI-1031, ST-11, ST-401, and ST-402 are considered insignificant activities because the capacity is less than 10,000 gallons. Appendix B (3)(ii)(N) of the RCAP.

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU-Tank Farm (EU-7) OTHERS TANKS IN USE			
	S-2001 Tank	S-2001	E-2001
	S-2002 Tank	S-2002	E-2002
	2-416 Tank	S-416	E-416
	R-417-01-Tank	R-417-01	E-417-01
	R-417-02Tank	R-417-02	E-417-02
	R-111 Tank	R-111	E-491
	S-1632 Tank	S-1632	E-1632
	R-316 Tank	R-316	E-402
	S-5178 Tank	S-5178	E-5178-01
	R-67 (S-6003) Tank	R-67	KC-127 A and/or KC-127 B
	S-2004 Tank	S-2004	KC-127 A and/or KC-127 B

Attachment 2: Status of Tank Farm Tanks (EU-7)

TANK	STATUS
ST-9	Existing and In Service
ST-10	Existing and In Service
ST-13	Existing and In Service
ST-14A	Existing and In Service
ST-14B	Existing and In Service
R-407	Existing and In Service
ST-440	Existing and In Service
ST-441	Existing and In Service
S-2001	Existing and In Service Process Tank
S-2002	Existing and In Service Process Tank
S-416	Existing and In Service Process Tank
R-417-01	Existing and In Service Process Tank
R-417-02	Existing and In Service Process Tank
R-111	Existing and In Service Process Tank
S-1632	Existing and In Service Process Tank
R-316	Existing and In Service Process Tank
S-5178	Existing and In Service Process Tank
R-67 (S-6003)	Existing and In Service Process Tank
S-2004	Existing and In Service Process Tank
ST-442	Unused Existing Tank
ST-445	Unused Existing Tank
ST-446	Unused Existing Tank
ST-1021	Unused Existing Tank
ST-1031	Unused Existing Tank
ST-11	Unused Existing Tank
ST-12	Unused Existing Tank
ST-401	Unused Existing Tank
ST-402	Unused Existing Tank

Attachment 3-Calculation Methodology

Pfizer Pharmaceuticals LLC (Cruce Dávila) shall calculate monthly the annual emissions of the facility to demonstrate compliance with the emission limits included in Section IV of this permit, based in a rolling period of twelve (12) month period. Pfizer Pharmaceuticals LLC (Cruce Dávila) shall utilize the calculation methodology included in this attachment to calculate the annual emissions that must be included in the annual compliance certification required in condition 7 of Section III of this permit.

1. General Requirements

As of the approval date of this permit, Pfizer Pharmaceuticals LLC (Cruce Dávila) shall calculate the monthly emissions of the facility and shall add them to the previous monthly emissions since the first month until reaching twelve (12) months. The calculations must be completed before the ending of the month. Once completed the calculations for the twelve (12) months, Pfizer shall calculate the month 13 and shall add them to the emissions of the previous eleven (11) months, and so on. The annual emissions of the facility based in the rolling period of twelve (12) months shall not exceed the emission limits included in the Section IV of this permit.

2. Storage Tanks

Pfizer Pharmaceuticals LLC (Cruce Dávila) shall calculate the emissions using the computer program Emission Master, which is structured using the following documents of the Federal Environment Protection Agency called *Control of Volatile Organic Compound Emissions from Batch Proceses*, *Compilation of Air Pollution Emission Factors and Control of Volatile Organic Emissions from Manufacturing Synthesized Pharmaceutical Products*.

Pfizer Cruce Dávila shall use the monthly data and the stored liquid characteristics for each tank to realize the calculations. All outstanding information of the tank as the diameter, tank type, operation volume, shell colors, if the tank operates at vaccum or in pressure, etc., those that apply, shall be used as data for emission calculations. Pfizer shall maintain in a logbook all the information about the liquid used, chemical composition, tank geometry and the emissions with or without control. If no control equipment is used, the emissions without control shall be considered the actual emissions.

To obtain the emissions by tank by month, Pfizer shall add emissions with or without control, of all the storage tanks, adding the emissions of VOC and HAP by month of each tank.

The computer program Emission Master, shall use the metereological data of Puerto Rico, if it is available and is is possible to use on the program for the emission calculations of the tanks. If not, Pfizer shall use the metereological data more representative of Puerto Rico that it is the Corpus Christi, Texas.

3. Equipment leak

Pfizer Pharmaceuticals LLC (Cruce Dávila) shall calculate the emissions from equipment leaks of the emission unit of Chemical Plant (EU-2) and hazardous waste tanks associated to the emission unit of Chemical Plant (EU-2) using emission factors generated specifically for those activities. The emission factors were generated using the rank method of monitoring (also known as leak/no-leak) of EPA.

The following tables present the emission factors for batches applicable to Pfizer Pharmaceuticals LLC (Cruce Dávila):

Table 1: Represents the emission factors for the train #1 with the hazardous waste tanks associated to train #1.

POLLUTANTS	CLASIFICACION	EMISSION FACTORS (KG/BATCH)
IPA	VOC	7.6553
ETFA	VOC	0.2539
Sodium Methoxide	VOC	0.3562
4-MAP	VOC	0.1823
MeOh	HAP	0.3206

Table 2: Represents the emission factors for the train #2 with the hazardous waste tanks associated to train #2.

POLLUTANTS	CLASIFICACION	EMISSION FACTORS (KG/BATCH)
IPA	VOC	6.481
ETFA	VOC	0.2859
Sodium Methoxide	VOC	0.4012
4-MAP	VOC	0.2053
MeOh	HAP	0.3343

The emissions of equipment leaks for the associated components of Train #1, Train #2 and hazardous waste associated to these two trains shall be obtained multiplying the emission factors for the batch manufactured during the month.

Pfizer Pharmaceuticals LLC (Cruce Dávila) shall calculate the resulting emissions of the equipment leaks of the emission unit of tanks Farm (EU-7) using Average SOCFI emission factors.

Table 3: Represents the Average SOCFI emission factors for the storage tanks of the raw material in the emission unit of the tank farm (EU-7).

EQUIPMENT TYPE	SERVICE	EMISSION FACTORS (KG/HR)
Valves	Gas	0.00597
Valves	Light Liquid	0.00403
Seal of Pumps	Light Liquid	0.0199
Seal of Compressor	Gas	0.228
Valves of Security	Gas	0.104
Connectors (flanges, instrumentation, monitoring points)	All	0.00183
Open Lines	All	0.0017
Connections	All	0.0150

The emissions of equipment leaks for the associated components of raw material tanks shall be obtained multiplying the emission factor and for the exposure time of the equipment.

Appendix A - Definitions and Abbreviations

I. Definitions:

1. **Act** – US Clean Air Act, as amended, 42 *U.S.* 7401, *et seq*
2. **Responsible Official** – See definition for Responsible Official as established in the Environmental Quality Board Regulations for the Control of Atmospheric Pollution (1995).
3. **Regulations**- Environmental Quality Board Regulations for the Control of Atmospheric Pollution.
4. **Permittee** – Person and entity to which the Puerto Rico Environmental Quality Board has issued an Emission Source Operation Permit covered under Title V.
5. **Title V** - Title V of the US Clean Air Act (42 *U.S.C.* 7661).

II. Abbreviations

1. **BTu** British Thermal Unit
2. **CFR** Code of Federal Regulations
3. **CO** Carbon Monoxide
4. **HAP** Hazardous Air Pollutant
5. **EPA** US Environmental Protection Agency
6. **EQB** Puerto Rico Environmental Quality Board
7. **MACT₁** Maximum Available Control Technology
8. **MACT₂** Maximum Achievable Control Technology
9. **NAQS** National Air Quality Standards
10. **NESHAP** National Emission Standards for Hazardous Air Pollutants
11. **NO_x** Nitrogen Oxide
12. **NSPS** New Source Performance Standards
13. **PM** Particulate Matter
14. **PM₁₀** Particulate matter with a mass median aerodynamic diameter equal or less than 10 micrometers

15. **PSNSS** Performance Standards for New Stationary Sources
16. **RCAP** Environmental Quality Board Regulations for the Control of Atmospheric Pollution
17. **SIC** Standard Industrial Classification
18. **SO₂** Sulfur Dioxide
19. **TOC** Total Organic Compounds
20. **VOC** Volatile Organic Compounds