

INFORMATION ABOUT THE EMISSION SOURCES

LIST OF EMISSION UNITS OF OZONE DEPLETING SUBSTANCES (EU-9)

Emission Unit Identification number	Emission unit Description	Emission Point Number or Fugitive Emissions	Control Device Identification Number
EU- Ozone Depleting Substances (EU-9)			
	Activation and verification point ("testing point") of CFC as propulsor agent of the medicine in the pharmaceutical production area.	PHI-7	Activated carbon filter
	TANK CFC-12 A	EXENT	NON APPLICABLE
	TANK CFC-12 B	EXENT	NON APPLICABLE
	TANK CFC-114 A	EXENT	NON APPLICABLE
	TANK CFC-114 B	EXENT	NON APPLICABLE
	TANK CFC-114 C	EXENT	NON APPLICABLE
	TANK CFC-114 D	EXENT	NON APPLICABLE
	TANK CFC-114 E	EXENT	NON APPLICABLE
	MIXING TANK CFC- 12 / 114	EXENT	NON APPLICABLE

Attachment 2-Calculation Methodology

Abraxis BioScience Manufacturing, LLC 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. Abraxis BioScience Manufacturing, LLC 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, Abraxis BioScience Manufacturing, LLC 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. Combustion Sources

Abraxis BioScience Manufacturing, LLC shall use the emission factors of AP-42 to calculate the resulting emissions of fuel use, unless a stack test is realized and the approved emission factors obtained are used.

The following tables present the applicable emission factors of AP-42 of Abraxis BioScience Manufacturing, LLC:

Table 1: Represents the AP-42 factors, Table 1.3-1, for the boilers less than 100 MMBtu/hr for the fuel #5. Table 1.3-3 for the TOC Factor.

POLLUTANTS	FACTORS (LB/1,000 GALLONS)
SO _x	157*S
NO _x	55
CO	5
PM	9.19(S) + 3.22
TOC	1.28

S indicates that the 1% for sulfur weight in the fuel have to be multiplied for the given value. For example, if the fuel has 1% of sulfur, then S=1.

Table 2: Represents the AP-42 factors, Table 1.3-1, for the boilers less than 100 MMBtu/hr for the distillate fuel (diesel or WP-4). Table 1.3-3 for the TOC Factor.

POLLUTANTS	FACTORS (LB/1,000 GALLONS)
SO _x	142*S
NO _x	20
CO	5
PM	2
TOC	0.252

S indicates that the 1% for sulfur weight in the fuel have to be multiplied for the given value. For the example, if the fuel has 1% of sulfur, then S=1.

Table 3: Represents the AP-42 factors, Table 1.3-1, for the boilers less than 100 MMBtu/hr for the distillate fuel (diesel or WP-4). Table 1.3-3 for the TOC Factor.

POLLUTANTS	FACTORS (LB/1,000 GALLONS)
SO _x	142*S
NO _x	20
CO	5
PM	2
TOC	0.252

Table 4: Represents the AP-42 factors, Table 3.3-1, for the emergency generators and fire pumps with combustion motors less than 600 hp for distillate fuel (diesel).

POLLUTANTS	FACTORS (Lb/MMBtu)
SO _x	0.29
NO _x	4.41
CO	0.95
PM	0.31
TOC	0.36

Table 5: Represents the AP-42 factors, Table 3.4-1, for the emergency generators with combustion motors greater than 600 hp for distillate fuel (diesel).

POLLUTANTS	FACTORS (Lb/MMBtu)
SO _x	0.505
NO _x	3.2
CO	0.85
PM	0.0573
TOC	0.0819

Abraxis BioScience Manufacturing, LLC shall calculate the resulting emissions of the combustion equipment in a period of 365 rotative days.

3. Ozone Depleting Substances

Abraxis BioScience Manufacturing, LLC shall calculate the resulting emissions of the pharmaceutical production that uses CFC as propellants agents in the Ozone Depleting Substances (EU-9) using generated emissions factors specifically for those activities.

The following table presents the applicable emission factors for produced units applicable to Abraxis BioScience Manufacturing, LLC:

Table 6: Represents the emission factors for the pharmaceutical production that use CFC as propellants agents.

POLLUTANT	EMISSION FACTOR (kg/ producible unit)
Mixture of CFC-12 and CFC-114	0.0001

4. Wastewater Pretreatment Plant

Abraxis BioScience Manufacturing, LLC shall calculate the resulting emissions of the Wastewater Pretreatment Plant using a laboratory analysis combination and calculations using engineering criteria. The permittee shall determine and register the atmospheric pollutants emissions in a monthly base.

Once the actual emissions value is obtained for the period of each month, Pfizer shall include it in the comparison with the permissible emission limit.

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