# MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

NOVEMBER 16, 2020

PERMIT TO INSTALL 416-93J

ISSUED TO
PERRIGO COMPANY PLC

LOCATED AT 655 HOOKER ROAD PLANT NO. 4 ALLEGAN, MICHIGAN 49010

> IN THE COUNTY OF ALLEGAN

# STATE REGISTRATION NUMBER B7276

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

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# **PERMIT TO INSTALL**

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#### **COMMON ACRONYMS**

AQD Air Quality Division

BACT Best Available Control Technology

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

COMS Continuous Opacity Monitoring System

Department/department/EGLE Michigan Department of Environment, Great Lakes, and Energy

EU Emission Unit FG Flexible Group

GACS Gallons of Applied Coating Solids

GC General Condition
GHGs Greenhouse Gases

HVLP High Volume Low Pressure\*

ID Identification

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan Air Emissions Reporting System

MAP Malfunction Abatement Plan MSDS Material Safety Data Sheet

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standard for Hazardous Air Pollutants

NSPS New Source Performance Standards

NSR New Source Review
PS Performance Specification

PSD Prevention of Significant Deterioration

PTE Permanent Total Enclosure

PTI Permit to Install

RACT Reasonable Available Control Technology

ROP Renewable Operating Permit

SC Special Condition

SCR Selective Catalytic Reduction SNCR Selective Non-Catalytic Reduction

SRN State Registration Number

TBD To Be Determined

TEQ Toxicity Equivalence Quotient

USEPA/EPA United States Environmental Protection Agency

VE Visible Emissions

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

## **POLLUTANT / MEASUREMENT ABBREVIATIONS**

acfm Actual cubic feet per minute

BTU **British Thermal Unit** °C **Degrees Celsius** CO Carbon Monoxide

CO<sub>2</sub>e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter °F Degrees Fahrenheit

Grains gr

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

ΗP Horsepower  $H_2S$ Hydrogen Sulfide

kW Kilowatt lb Pound Meter m Milligram mg Millimeter mm MM Million MW Megawatts

**NMOC** Non-Methane Organic Compounds

 $NO_{x}$ Oxides of Nitrogen

Nanogram ng

PM Particulate Matter

Particulate Matter equal to or less than 10 microns in diameter PM10 Particulate Matter equal to or less than 2.5 microns in diameter PM2.5

Pounds per hour pph Parts per million ppm

ppmv Parts per million by volume ppmw Parts per million by weight

psia Pounds per square inch absolute Pounds per square inch gauge psig

Standard cubic feet scf

Seconds sec Sulfur Dioxide  $SO_2$ 

TAC **Toxic Air Contaminant** 

Temp Temperature

THC Total Hydrocarbons Tons per year tpy Microgram μg

μm Micrometer or Micron

VOC Volatile Organic Compounds

Year yr

#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

# **EMISSION UNIT SPECIAL CONDITIONS**

# **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

	Emission Unit Description	
Emission Unit ID	(Including Process Equipment & Control Device(s))	Flexible Group ID
EU4VAC1	Compression and coating tablet transfer operations. Emissions	FGPLANT4,
	are controlled by vacuum system with Equipment Identification Number (EIN) 105753.	FGPLANT4CLEAN
EU4VAC2	Upper and lower Glatt and bulk dispensing general area	FGPLANT4,
	emissions. Emissions are controlled by vacuum system with EIN 105757.	FGPLANT4CLEAN
EU4VAC4	New compression and coating suite tablet transfer operations.	FGPLANT4,
	Emissions are controlled by vacuum system with EIN 105763.	FGPLANT4CLEAN
EU4DUSTCOLL1	Tablet compression area. Emissions are controlled by dust	FGPLANT4,
	collector with EIN 105738.	FGPLANT4CLEAN
EU4DUSTCOLL2	Tablet coater A4R26. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 102832.	FGPLANT4CLEAN
EU4DUSTCOLL3	Tablet coater A4R28. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 101881.	FGPLANT4CLEAN
EU4DUSTCOLL4	Tablet coater A4R31. Emissions are controlled by dust collector	FGPLANT4,
	DCS404 with EIN 101736.	FGPLANT4CLEAN
EU4DUSTCOLL5	Tablet coater A4R29. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 101756.	FGPLANT4CLEAN
EU4DUSTCOLL6	Upper and lower mixing area. Emissions are controlled by dust	FGPLANT4,
	collector with EIN 105741.	FGPLANT4CLEAN
EU4DUSTCOLL7	V-shell 75 cubic foot mixer/dry powder blender. Emissions are controlled by dust collector DCS407.	FGPLANT4CLEAN
EU4DUSTCOLL8	100-liter batch style tablet coater. Emissions are controlled by cartridge dust collector DCS408 with EIN 138426.	FGPLANT4CLEAN
EU4GLATT500#1	Glatt 500 #1 aqueous granulator.	FGPLANT4,
		FGPLANT4CLEAN
EU4GLATT500#2	Glatt 500 #2 aqueous granulator.	FGPLANT4,
		FGPLANT4CLEAN
EU4DUSTCOLL9	Tablet coater A4R34. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 103173.	FGPLANT4CLEAN
EU4DUSTCOLL10	Tablet coater A4R32. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 103179.	FGPLANT4CLEAN
EU4DUSTCOLL11	Tablet coater A4R33. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 108089.	FGPLANT4CLEAN
EU4DUSTCOLL12	Tablet compression. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 108089.	FGPLANT4CLEAN
EU4GLATT120	Glatt 120.	FGPLANT4,
		FGPLANT4CLEAN
EU4DUSTCOLL16	New tablet coater A4R35. Emissions are controlled by dust	FGPLANT4,
	collector with EIN 111881.	FGPLANT4CLEAN
EU4DUSTCOLL14	Cetirizine mixing unit. Emissions are controlled by dust collector	FGPLANT4,
	with EIN 111014.	FGPLANT4CLEAN
EU4DUSTCOLL15	Cetirizine compression suite. Emissions are controlled by dust	FGPLANT4,
	collector with EIN 111015.	FGPLANT4CLEAN
EU4DUSTCOLL17	Batch tablet coating machine. Emissions are controlled by	FGPLANT4,
	cartridge dust collector DCS417.	FGPLANT4CLEAN

	Emission Unit Description	
Emission Unit ID	(Including Process Equipment & Control Device(s))	Flexible Group ID
EU4DUSTCOLL18	Mixing and compression equipment. Emissions are controlled by	FGPLANT4,
	cartridge dust collector DCS418.	FGPLANT4CLEAN
EU4DUSTCOLL19	Dispensing and granulation equipment. Emissions are controlled	FGPLANT4,
	by cartridge dust collector DCS419.	FGPLANT4CLEAN
EU4GLATT#3	Fluid bed processor controlled by built in dust collector.	FGPLANT4,
		FGPLANT4CLEAN
EU4GLATT#4	High shear granulator/fluid bed processor with a built in dust	FGPLANT4,
	collector. Emissions are also controlled by cartridge dust collector	FGPLANT4CLEAN
	DCS421.	
EU4DUSTCOLL22	Batch tablet coating machine. Emissions are controlled by	FGPLANT4,
	cartridge dust collector DCS422.	FGPLANT4CLEAN
EU4DUSTCOLL23	Tablet coating suite general area emissions controlled by	FGPLANT4,
	cartridge dust collector DCS423.	FGPLANT4CLEAN
EU4GLATT500#5	500-liter granulator/fluid bed processor with an associated	FGPLANT4CLEAN
	cartridge dust collector DCS424.	

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

# EU4DUSTCOLL7 EMISSION UNIT CONDITIONS

### **DESCRIPTION**

V-shell 75 cubic foot mixer / dry powder blender. Emissions are controlled by dust collector DCS407.

Flexible Group ID: FGPLANT4CLEAN

## POLLUTION CONTROL EQUIPMENT

**Dust collector DCS407** 

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.030 pph <sup>1</sup>	Hourly	EU4DUSTCOLL7	SC VI.3	R 336.1224, R 336.1225

## II. MATERIAL LIMIT(S)

- 1. The permittee shall not use a material in EU4DUSTCOLL7 if any of the following is true for the material. (R 336.1225)
  - a) It has an AQD screening level less than the predicted ambient impact in Appendix A for the averaging time associated with the screening level.
  - b) A note associated with an AQD screening level applies to the material an additional screening level less than the predicted ambient impact in Appendix A for the averaging time associated with the additional screening level.
  - c) It has an allowable concentration less than the predicted ambient impact in Appendix A for the averaging time associated with the allowable concentration.

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU4DUSTCOLL7 unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dust collector includes submitting an operation and maintenance plan for approval to the District Supervisor within 60 days after permit approval and implementing the approved plan. (R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))
- 2. The permittee shall equip and maintain the dust collector with a differential pressure monitoring device. (R 336.1224, R 336.1225, R 336.1331, R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1910)
- The permittee shall keep, in a satisfactory manner, records of dust collector inspection data and corrective actions resulting from implementation of the dust collector operation & maintenance plan required by SC IV.1. (R 336.1910)
- 3. Before using in EU4DUSTCOLL7 any material for which the permittee requests an AQD toxics determination for EU4DUSTCOLL7 pursuant to SC VII.1, the permittee shall follow the procedure below.<sup>1</sup> (R 336.1225)
  - a) The permittee shall determine whether the material is a TAC, based on the definition of toxic air contaminant in Rule 120 (R 336.1120).
  - b) The permittee shall record all the following:
    - i. The material's name and either its Chemical Abstract Service Registry Number (CAS Number) or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
    - ii. If applicable, the basis for determining the material is not a TAC, including resources used to make this determination.
    - iii. If the permittee determines the material is a TAC, the allowable concentration and averaging time the permittee determines for the TAC, including resources used to make this determination.
    - iv. The maximum one-hour emission rate for the material, which is the emission limit in SC I.1.
    - v. The active permit number.
    - vi. The date when the permittee proposes to begin using the material in EU4DUSTCOLL7.
  - c) The permittee shall not use the material in EU4DUSTCOLL7 until after one of the following has occurred:
    - i. The permittee has received AQD communication that the material is not a TAC.
    - The permittee has received AQD communication of the allowable concentration(s) and averaging time(s) for the material.
    - iii. Thirty days have passed since submitting the report specified in SC VII.1.
- 4. The permittee shall keep a record of all materials processed in EU4DUSTCOLL7 during each calendar month. The record shall also include the information listed in a., b., and c. below for each material meeting one of the following criteria.<sup>1</sup> (R 336.1225)
  - The material is listed in the Table of Materials in Appendix A or addressed in note A to the table.
  - The permittee has requested an AQD toxics determination for EU4DUSTCOLL7 for the material.
  - a) Name
  - b) CAS Number or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
  - c) One of the following, whichever is applicable:
    - i. AQD screening level and the associated averaging time
    - ii. Allowable concentration and the associated averaging time
    - iii. Basis for determining the material is not a TAC.

### VII. REPORTING

- 1. This condition applies to any material for which the permittee requests an AQD toxics determination for EU4DUSTCOLL7. No less than 30 days before first using the material in EU4DUSTCOLL7, the permittee shall submit all records required by SC VI.3.b to the AQD District Supervisor in an acceptable format. The AQD will do one of the following within 30 days of receipt of the submittal.<sup>1</sup> (R 336.1225)
  - a) Communicate that the material is not a TAC.
  - b) Communicate one or more allowable concentrations and associated averaging times the permittee shall use for the material for compliance with SC II.1.

# VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDCS407	20.1	44.3	R 336.1225, 40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

## Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# EUDUSTCOLL8 EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Describe the Emission Unit.

Flexible Group ID: FGPLANT4CLEAN

# **POLLUTION CONTROL EQUIPMENT**

Cartridge dust collector DCS408

## I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1	. PM	0.020 pph <sup>1</sup>	Hourly	EU4DUSTCOLL8	SC VI.3	R 336.1224, R 336.1225

## II. MATERIAL LIMIT(S)

- 1. The permittee shall not use a material in EU4DUSTCOLL8 if any of the following is true for the material. (R 336.1225)
  - a) It has an AQD screening level less than the predicted ambient impact in Appendix B for the averaging time associated with the screening level.
  - b) A note associated with an AQD screening level applies to the material an additional screening level less than the predicted ambient impact in Appendix B for the averaging time associated with the additional screening level.
  - c) It has an allowable concentration less than the predicted ambient impact in Appendix B for the averaging time associated with the allowable concentration.

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU4DUSTCOLL8 unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dust collector includes submitting an operation and maintenance plan for approval to the District Supervisor within 60 days after permit approval and implementing the approved plan. (R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))
- 2. The permittee shall equip and maintain the dust collector with a differential pressure monitoring device. (R 336.1224, R 336.1225, R 336.1331, R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1910)
- The permittee shall keep, in a satisfactory manner, records of dust collector inspection data and corrective actions resulting from implementation of the dust collector operation & maintenance plan required by SC IV.1. (R 336.1910)
- 3. Before using in EU4DUSTCOLL8 any material for which the permittee requests an AQD toxics determination for EU4DUSTCOLL8 pursuant to SC VII.1, the permittee shall follow the procedure below. (R 336.1225)
  - a) The permittee shall determine whether the material is a TAC, based on the definition of toxic air contaminant in Rule 120 (R 336.1120).
  - b) The permittee shall record all the following:
    - i. The material's name and either its Chemical Abstract Service Registry Number (CAS Number) or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
    - ii. If applicable, the basis for determining the material is not a TAC, including resources used to make this determination.
    - iii. If the permittee determines the material is a TAC, the allowable concentration and averaging time the permittee determines for the TAC, including resources used to make this determination.
    - iv. The maximum one-hour emission rate for the material, which is the emission limit in SC I.1.
    - v. The active permit number.
    - vi. The date when the permittee proposes to begin using the material in EU4DUSTCOLL8.
  - c) The permittee shall not use the material in EU4DUSTCOLL8 until after one of the following has occurred:
    - i. The permittee has received AQD communication that the material is not a TAC.
    - ii. The permittee has received AQD communication of the allowable concentration(s) and averaging time(s) for the material.
    - iii. Thirty days have passed since submitting the report specified in SC VII.1.
- 4. The permittee shall keep a record of all materials processed in EU4DUSTCOLL8 during each calendar month. The record shall also include the information listed in a., b., and c. below for each material meeting one of the following criteria.<sup>1</sup> (R 336.1225)
  - The material is listed in the Table of Materials in Appendix B or addressed in note A to the table.
  - The permittee has requested an AQD toxics determination for EU4DUSTCOLL8 for the material.
  - a) Name
  - b) CAS Number or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
  - c) One of the following, whichever is applicable:
    - i. AQD screening level and the associated averaging time
    - ii. Allowable concentration and the associated averaging time
    - iii. Basis for determining the material is not a TAC.

### VII. REPORTING

- 1. This condition applies to any material for which the permittee requests an AQD toxics determination for EU4DUSTCOLL8. No less than 30 days before first using the material in EU4DUSTCOLL8, the permittee shall submit all records required by SC VI.3.b to the AQD District Supervisor in an acceptable format. The AQD will do one of the following within 30 days of receipt of the submittal: (R 336.1225)
  - a) Communicate that the material is not a TAC.
  - b) Communicate one or more allowable concentrations and associated averaging times the permittee shall use for the material for compliance with SC II.1.

# VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDCS408	18	70	R 336.1225, 40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

## Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# EU4GLATT500#5 EMISSION UNIT CONDITIONS

### **DESCRIPTION**

500-liter granulator/fluid bed processor with an associated cartridge dust collector DCS424.

Flexible Group ID: FGPLANT4CLEAN

## **POLLUTION CONTROL EQUIPMENT**

Cartridge dust collector DCS424

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.032 pph	Hourly	EU4GLATT500#5	SC VI.3	R 336.1224,
					R 336.1225,
					40 CFR 52.21(c)&(d)

## II. MATERIAL LIMIT(S)

- 1. The permittee shall not use a material in EU4GLATT500#5 if any of the following is true for the material.<sup>1</sup> (R 336.1225)
  - a) It has an AQD screening level less than the predicted ambient impact in Appendix C for the averaging time associated with the screening level.
  - b) A note associated with an AQD screening level applies to the material an additional screening level less than the predicted ambient impact in Appendix C for the averaging time associated with the additional screening level.
  - c) It has an allowable concentration less than the predicted ambient impact in Appendix C for the averaging time associated with the allowable concentration.

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU4GLATT500#5 unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dust collector includes submitting an operation and maintenance plan for approval to the District Supervisor within 60 days after permit approval and implementing the approved plan. (R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))
- 2. The permittee shall equip and maintain the dust collector with a differential pressure monitoring device. (R 336.1224, R 336.1225, R 336.1331, R 336.1910)

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1910)
- The permittee shall keep, in a satisfactory manner, records of dust collector inspection data and corrective actions resulting from implementation of the dust collector operation & maintenance plan required by SC IV.1. (R 336.1910)
- 3. Before using in EU4GLATT500#5 any material for which the permittee requests an AQD toxics determination for EU4GLATT500#5 pursuant to SC VII.1, the permittee shall follow the procedure below.<sup>1</sup> (R 336.1225)
  - a) The permittee shall determine whether the material is a TAC, based on the definition of toxic air contaminant in Rule 120 (R 336.1120).
  - b) The permittee shall record all the following:
    - i. The material's name and either its Chemical Abstract Service Registry Number (CAS Number) or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
    - ii. If applicable, the basis for determining the material is not a TAC, including resources used to make this determination.
    - iii. If the permittee determines the material is a TAC, the allowable concentration and averaging time the permittee determines for the TAC, including resources used to make this determination.
    - iv. The maximum one-hour emission rate for the material, which is the emission limit in SC I.1.
    - v. The active permit number.
    - vi. The date when the permittee proposes to begin using the material in EU4GLATT500#5.
  - c) The permittee shall not use the material in EU4GLATT500#5 until after one of the following has occurred:
    - i. The permittee has received AQD communication that the material is not a TAC.
    - ii. The permittee has received AQD communication of the allowable concentration(s) and averaging time(s) for the material.
    - iii. Thirty days have passed since submitting the report specified in SC VII.1.
- 4. The permittee shall keep a record of all materials processed in EU4GLATT500#5 during each calendar month. The record shall also include the information listed in a., b., and c. below for each material meeting one of the following criteria. (R 336.1225)
  - The material is listed in the Table of Materials in Appendix C or addressed in note A to the table.
  - The permittee has requested an AQD toxics determination for EU4GLATT500#5 for the material.
  - a) Name
  - b) CAS Number or another identifier specific to the substance. If no CAS Number or other publicly available identifier is available, the chemical structure or partial chemical structure must be recorded in enough detail to adequately describe the compound.
  - c) One of the following, whichever is applicable:
    - i. AQD screening level and the associated averaging time
    - ii. Allowable concentration and the associated averaging time
    - iii. Basis for determining the material is not a TAC.

### VII. REPORTING

- 1. This condition applies to any material for which the permittee requests an AQD toxics determination for EU4GLATT500#5. No less than 30 days before first using the material in EU4GLATT500#5, the permittee shall submit all records required by SC VI.3.b to the AQD District Supervisor in an acceptable format. The AQD will do one of the following within 30 days of receipt of the submittal: (R 336.1225)
  - a) Communicate that the material is not a TAC.
  - b) Communicate one or more allowable concentrations and associated averaging times the permittee shall use for the material for compliance with SC II.1.

# VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDCS424	24	70	R 336.1225, 40 CFR 52.21(c) & (d)
1. 00000121		70	

# IX. OTHER REQUIREMENT(S)

NA

## Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# **FLEXIBLE GROUP SPECIAL CONDITIONS**

# FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

		A
		Associated
Flexible Group ID	Flexible Group Description	Emission Unit IDs
FGPLANT4	Plant 4 production operations, excluding	EU4VAC1, EU4VAC2, EU4VAC4,
	EU4DUSTCOLL7, EU4DUSTCOLL8, and	EU4DUSTCOLL1, EU4DUSTCOLL2,
	EU4GLATT500#5	EU4DUSTCOLL3, EU4DUSTCOLL4,
		EU4DUSTCOLL5, EU4DUSTCOLL6,
		EU4GLATT500#1, EU4GLATT500#2,
		EU4DUSTCOLL9, EU4DUSTCOLL10,
		EU4DUSTCOLL11, EU4DUSTCOLL12,
		EU4GLATT120, EU4DUSTCOLL16,
		EU4DUSTCOLL14, EU4DUSTCOLL15,
		EU4DUSTCOLL17, EU4DUSTCOLL18,
		EU4DUSTCOLL19, EU4GLATT#3,
		EU4GLATT#4, EU4DUSTCOLL22,
		EU4DUSTCOLL23
FGPLANT4CLEAN	Plant 4 cleaning activities	EU4VAC1, EU4VAC2, EU4VAC4,
		EU4DUSTCOLL1, EU4DUSTCOLL2,
		EU4DUSTCOLL3, EU4DUSTCOLL4,
		EU4DUSTCOLL5, EU4DUSTCOLL6,
		EU4DUSTCOLL7, EU4DUSTCOLL8,
		EU4GLATT500#1, EU4GLATT500#2,
		EU4DUSTCOLL9, EU4DUSTCOLL10,
		EU4DUSTCOLL11, EU4DUSTCOLL12,
		EU4GLATT120, EU4DUSTCOLL16,
		EU4DUSTCOLL14, EU4DUSTCOLL15,
		EU4DUSTCOLL17, EU4DUSTCOLL18,
		EU4DUSTCOLL19, EU4GLATT#3,
		EU4GLATT#4, EU4DUSTCOLL22,
		EU4DUSTCOLL23, EU4GLATT500#5

# FGPLANT4 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Plant 4 production operations, excluding EU4DUSTCOLL7, EU4DUSTCOLL8, and EU4GLATT500#5

Emission Unit: EU4VAC1, EU4VAC2, EU4VAC4, EU4DUSTCOLL1, EU4DUSTCOLL2, EU4DUSTCOLL3, EU4DUSTCOLL4, EU4DUSTCOLL5, EU4DUSTCOLL6, EU4GLATT500#1, EU4GLATT500#2, EU4DUSTCOLL9, EU4DUSTCOLL10, EU4DUSTCOLL11, EU4DUSTCOLL12, EU4GLATT120, EU4DUSTCOLL16, EU4DUSTCOLL14, EU4DUSTCOLL15, EU4DUSTCOLL17, EU4DUSTCOLL18, EU4DUSTCOLL19, EU4GLATT#3, EU4GLATT#4, EU4DUSTCOLL22, EU4DUSTCOLL23

## POLLUTION CONTROL EQUIPMENT

Various dust collectors

## I. EMISSION LIMIT(S)

					Underlying	
		Time Period /		Monitoring /	Applicable	
Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Requirements	
1. PM	0.005 pph <sup>1</sup>	Test Protocol*	EU4VAC1	GC 13, SC VI.3	R 336.1225	
2. PM	0.005 pph <sup>1</sup>	Test Protocol*	EU4VAC2	GC 13, SC VI.3	R 336.1225	
3. PM	0.005 pph <sup>1</sup>	Test Protocol*	EU4VAC4	GC 13, SC VI.3	R 336.1225	
4. PM	0.032 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL1	GC 13, SC VI.3	R 336.1225	
5. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL2	GC 13, SC VI.3	R 336.1225	
6. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL3	GC 13, SC VI.3	R 336.1225	
7. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL4	GC 13, SC VI.3	R 336.1225	
8. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL5	GC 13, SC VI.3	R 336.1225	
9. PM	0.014 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL6	GC 13, SC VI.3	R 336.1225	
10. PM	0.315 pph <sup>1</sup>	Test Protocol*	EU4GLATT500#1	GC 13, SC VI.3	R 336.1225	
11. PM	0.315 pph <sup>1</sup>	Test Protocol*	EU4GLATT500#2	GC 13, SC VI.3	R 336.1225	
12. PM	0.032 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL9	GC 13, SC VI.3	R 336.1225	
13. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL10	GC 13, SC VI.3	R 336.1225	
14. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL11	GC 13, SC VI.3	R 336.1225	
15. PM	0.016 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL12	GC 13, SC VI.3	R 336.1225	
16. PM	0.014 pph <sup>1</sup>	Test Protocol*	EU4GLATT120	GC 13, SC VI.3	R 336.1225	
17. PM	0.032 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL16	GC 13, SC VI.3	R 336.1225	
18. PM	0.003 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL14	GC 13, SC VI.3	R 336.1225	
19. PM	0.002 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL15	GC 13, SC VI.3	R 336.1225	
20. PM	0.020 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL17	GC 13, SC VI.3	R 336.1225	
21. PM	0.036 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL18	GC 13, SC VI.3	R 336.1225	
22. PM	0.043 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL19	GC 13, SC VI.3	R 336.1225	
23. PM	0.315 pph <sup>1</sup>	Test Protocol*	EU4GLATT#3	GC 13, SC VI.3	R 336.1225	
24. PM	0.315 pph <sup>1</sup>	Test Protocol*	EU4GLATT#4	GC 13, SC VI.3	R 336.1225	
25. PM	0.021 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL22	GC 13, SC VI.3	R 336.1225	
26. PM	0.013 pph <sup>1</sup>	Test Protocol*	EU4DUSTCOLL23	GC 13, SC VI.3	R 336.1225	
*Test Protocol shall specify averaging time						

## II. MATERIAL LIMIT(S)

1. The permittee shall limit the usage in FGPLANT4 of each raw material such that the ratio of the amount of each raw material used to the total raw material usage does not exceed the ratio of the allowable concentration to the predicted ambient impact, based on a 12-month rolling time period, as determined at the end of each calendar month, as described in equation 1 below. For each raw material with an AQD established screening level, the allowable concentration shall be the AQD screening level. For each raw material listed in the table below, the allowable concentration listed in the table below shall be used. If the AQD develops a raw material specific screening level for a raw material listed in the table below, the permittee may use the AQD screening level instead of the allowable concentration listed in the table below. For raw materials not listed below for which there is no AQD screening level, the allowable concentration shall be determined according to Rules 231 and 232 (R 336.1231 and R 336.1232), except that the allowable concentration shall not exceed 15 μg/m³ on an annual average. For each raw material, the predicted ambient impact used shall have the same averaging time as the allowable concentration.¹ (R 336.1225)

Equation 1: RMR = AC/PAI, where

RMR = the allowed raw material ratio for each raw material (raw material usage divided by total raw material throughput)

AC = the allowable concentration (AQD screening level or value from the table below if there is no AQD screening level for the raw material)

PAI = the predicted ambient impact for total particulate matter, as listed below for each averaging time

1 hour PAI =  $6.75 \mu g/m^3$ 24 hour PAI =  $2.95 \mu g/m^3$  8 hour PAI =  $4.38 \mu g/m^3$ Annual PAI =  $0.43 \mu g/m^3$ 

Raw Material	Allowable Concentration (µg/m³)	Concentration Averaging Time	Raw Material	Allowable Concentration (µg/m³)	Concentration Averaging Time
Caffeine	0.1	Annual	Gemfibrozil	0.1	Annual
phenylephrine hydrochloride	0.1	Annual	fd&c red #40	0.1	Annual
d-(+)-lactose (anhydrous)	0.1	Annual	loperamide hydrochloride	0.1	Annual
d-mannitol	0.1	Annual	naproxen sodium	15	Annual
glyceryl guaiacolate	0.1	Annual	Cimetidine	0.1	Annual
Acetaminophen	15	Annual	fd&c blue #1	0.1	Annual
sodium saccharin	0.1	Annual	Famotidine	0.1	Annual
chlorpheniramine maleate	0.1	Annual	cetirizine dihydrochloride	0.1	Annual
sodium lauryl sulfate	0.1	Annual	berry flavor	0.1	Annual
pseudoephedrine hydrochloride	0.1	Annual	peppermint flavor 1	0.1	Annual
fd&c yellow no. 6	0.1	Annual	Prosweet	0.1	Annual
d&c red no. 7	0.1	Annual	Croscarmellose	15	Annual
Dicalcium phosphate, dibasic	0.1	Annual	RM Metho K100LV Prem CR	0.1	Annual
dibasic dicalcium phosphate, dihydrate	0.1	Annual	RM Methocel K3 Prem LV	0.1	Annual
d&c yellow no. 10	0.1	Annual	RM Dextrates, NF	0.1	Annual
carnauba wax	0.1	Annual	RM Loratadine	0.1	Annual
microcrystalline cellulose	15	Annual	RM Avicel PH 200	0.1	Annual
Maltodextrin	0.1	Annual	RM Lustre Clear LC103	0.1	Annual

Raw Material	Allowable Concentration (µg/m³)	Concentration Averaging Time	Raw Material	Allowable Concentration (µg/m³)	Concentration Averaging Time
clemastine hydrogen fumarate	0.1	Annual	RM Methocel K4M Premium	0.1	Annual
Ibuprofen	15	Annual	RM Syloid 244 FP	0.1	Annual
Naproxen	0.1	Annual	RM Sucralose NF	0.1	Annual
Aspartame	0.1	Annual	RM Klucel EXF Pharm	0.1	Annual
Acryl-eze Pink93O13920	0.1	Annual	Stearic acid, NF, Veg, GMO Free	0.1	Annual
Clemast fum pregran	0.1	Annual	Copovidone	0.1	Annual
Dextromethorphan	0.1	Annual	Flavor BBA 45467	0.1	Annual
Diphenhydramine citrate	0.1	Annual	Glyceryl behenate	0.1	Annual
Flavor Giv RD-11,368	0.1	Annual	Hydroxyl cellulose	0.1	Annual
Guaifenesin	0.1	Annual	Starch Glycolate	0.1	Annual
Natrosol	0.1	Annual	Opacode	0.1	Annual
Starch	0.1	Annual	Cabosil M-5	0.1	Annual
Sugar compressible	0.1	Annual	Calcium Carbonate	0.1	Annual
T-masked famotidine granule	0.1	Annual	Synthetic Red Iron Oxide	0.1	Annual

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate any emission unit in FGPLANT4 unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each of the dust collectors includes submitting an operation and maintenance plan for approval to the District Supervisor within 60 days after permit approval. (R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))
- 2. The permittee shall equip and maintain each dust collector with a differential pressure monitoring device. (R 336.1225, R 336.1331, R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep, in a satisfactory manner, records of dust collector inspection data and corrective actions resulting from implementation of the dust collector operation & maintenance plan required by SC IV.1. (R 336.1225, R 336.1331, R 336.1910)
- 3. The permittee shall keep, in a satisfactory manner, monthly production records for FGPLANT4 to show compliance with the material usage limits in SC II.1 on file at the facility and make them available to the Department upon request.<sup>1</sup> (R 336.1225)

# VII. REPORTING

NA

# VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

2. 1.2 1.15	Maximum Exhaust Diameter / Dimensions	Minimum Height Above Ground	Underlying Applicable
Stack & Vent ID	(inches)	(feet)	Requirements
1. SVVCS401	10	63	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVVCS402	8	44.7	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVVCS404	10	63	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVDCS401	20	77	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVDCS402	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVDCS403	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVDCS404	18	61	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVDCS405	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVDCS406	20.1	63	R 336.1225, 40 CFR 52.21(c) & (d)
10 SVDCS409	20.1	77	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVDCS410	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVDCS411	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVDCS412	15	63	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVDCS414	8	47.9	R 336.1225, 40 CFR 52.21(c) & (d)
15. SVDCS415	8	48	R 336.1225, 40 CFR 52.21(c) & (d)
16. SVDCS416	24	66	R 336.1225, 40 CFR 52.21(c) & (d)
17. SVGLAT120	20.1	68	R 336.1225, 40 CFR 52.21(c) & (d)
18. SVGLAT500N	20.1	63	R 336.1225, 40 CFR 52.21(c) & (d)
19. SVGLAT500S	20.1	63	R 336.1225, 40 CFR 52.21(c) & (d)
20. SV4DUSTCOLL17	18	70	R 336.1225, 40 CFR 52.21(c) & (d)
21. SV4DUSTCOLL18	26	70	R 336.1225, 40 CFR 52.21(c) & (d)
22. SV4DUSTCOLL19	26	70	R 336.1225, 40 CFR 52.21(c) & (d)
23. SV4GLATT#3	24	70	R 336.1225, 40 CFR 52.21(c) & (d)
24. SVDCS421	24	70	R 336.1225, 40 CFR 52.21(c) & (d)
25. SVDCS422	18	70	R 336.1225, 40 CFR 52.21(c) & (d)
26. SVDCS423	18	70	R 336.1225, 40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

## Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# FGPLANT4CLEAN FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Plant 4 cleaning activities

Emission Unit: EU4VAC1, EU4VAC2, EU4VAC4, EU4DUSTCOLL1, EU4DUSTCOLL2, EU4DUSTCOLL3, EU4DUSTCOLL4, EU4DUSTCOLL5, EU4DUSTCOLL6, EU4DUSTCOLL7, EU4DUSTCOLL8, EU4GLATT500#1, EU4GLATT500#2, EU4DUSTCOLL9, EU4DUSTCOLL10, EU4DUSTCOLL11, EU4DUSTCOLL12, EU4GLATT120, EU4DUSTCOLL16, EU4DUSTCOLL14, EU4DUSTCOLL15, EU4DUSTCOLL17, EU4DUSTCOLL18, EU4DUSTCOLL19, EU4GLATT#3, EU4GLATT#4, EU4DUSTCOLL22, EU4DUSTCOLL23, EU4GLATT500#5

## POLLUTION CONTROL EQUIPMENT

NA

## I. <u>EMISSION LIMIT(S)</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	36 tpy	12-month rolling time period as determined at the end of	FGPLANT4CLEAN	SC VI.5	R 336.1225, R 336.1702
		each calendar month	(cicaring solvent use)		17 330.17 02

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. <u>TESTING/SAMPLING</u>

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

## VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep the following information on a monthly basis for the use of cleaning solvents in FGPLANT4CLEAN:
  - a) Gallons of each solvent used and reclaimed.
  - b) VOC content, in pounds per gallon, of each solvent used.

- c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
- d) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

## VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

## IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# APPENDIX A: Predicted Ambient Impacts and Allowable Concentrations for EU4DUSTCOLL7

Predicted Ambient Impacts for EU4DUSTCOLL7 as determined for PTI No. 416-93I

Averaging time	Impact, µg/m <sup>3</sup>
One hour	1.64
Eight hours	0.628
24 hours	0.353
Annual	0.050

PTI application No. 416-93I identified the following materials as emitted from EU4DUSTCOLL7. A predicted ambient impact (PAI) equal to or lower than the "Allowable Concentration" for each material represents a PAI that was determined to meet the requirement of Rule 225 for EU4DUSTCOLL7 for PTI No. 416-93I.

## **Table of Materials**

Material	CAS Number	Allowable Concentration (µg/m³) A	Concentration Averaging Time A
Caffeine	58-08-2	0.1	Annual
phenylephrine hydrochloride	61-76-7	0.1	Annual
d-(+)-lactose (anhydrous)	64044-51-5	0.1	Annual
d-mannitol	69-65-8	0.1	Annual
glyceryl guaiacolate / Guaifenesin	93-14-1	5	Annual
Acetaminophen	103-90-2	12	Annual
sodium saccharin	128-44-9	0.1	Annual
sodium lauryl sulfate	151-21-3	0.1	Annual
pseudoephedrine hydrochloride	345-78-8	0.1	Annual
fd&c yellow no. 6	2783-94-0	0.1	Annual
d&c red no. 7	5281-04-9	0.1	Annual
Dicalcium phosphate, dibasic	7757-93-9	0.1	Annual
dibasic dicalcium phosphate, dihydrate	7789-77-7	0.1	Annual
d&c yellow no. 10	8004-92-0	0.1	Annual
carnauba wax	8015-86-9	0.1	Annual
Maltodextrin	9050-36-6	0.1	Annual
clemastine hydrogen fumarate	4070-80-8	0.1	Annual
Ibuprofen	15687-27-1	12	Annual
Naproxen / naproxen sodium	26159-34-2	12	Annual
Aspartame	22839-47-0	0.1	Annual
Clemast fum pregran	14976-57-9	0.1	Annual
Dextromethorphan	6700-34-1	0.4	Annual
Diphenhydramine citrate	88637-37-0	0.1	Annual
Flavor Giv RD-11,368 / peppermint flavor 1	8006-90-4	0.1	Annual
Natrosol	9004-62-0	0.1	Annual
Gemfibrozil	25812-30-0	0.1	Annual
fd&c red #40	25956-17-6	0.1	Annual
loperamide hydrochloride	34552-83-5	0.1	Annual
Cimetidine	51481-61-9	0.1	Annual
fd&c blue #1	68921-42-6	0.1	Annual
Famotidine	76824-35-6	0.1	Annual
cetirizine dihydrochloride	83881-52-1	0.1	Annual
Croscarmellose	74811-65-7	12	Annual

Material	CAS Number	Allowable Concentration (µg/m³) A	Concentration Averaging Time <sup>A</sup>
RM Metho K100LV Prem CR / RM Methocel K3 Prem LV / RM Avicel PH 200 / RM Methocel K4M Premium	9004-65-3	0.1	Annual
RM Dextrates, NF	68131-37-3	0.1	Annual
RM Loratadine	79794-75-5	0.1	Annual
RM Sucralose NF	56038-13-2	0.1	Annual
RM Klucel EXF Pharm / Hydroxyl cellulose	9004-64-2	0.1	Annual
Stearic acid, NF, Veg, GMO Free	57-11-4	100	8 hour
Copovidone	25086-89-9	0.1	Annual
Glyceryl behenate	94201-62-4	0.1	Annual
Starch Glycolate	9063-38-1	0.1	Annual
Cabosil M-5	112945-52-5	60	8 hour
Ranitidine HCI	66357-59-3	0.1	Annual
Titanium Dioxide	13463-67-7	24	8 hour

<sup>&</sup>lt;sup>A</sup> The following applies to materials not listed in the Table of Materials above that have AQD screening levels:

- 1. If an AQD screening level for a material not listed in the Table of Materials above is used as the allowable concentration for a material, the averaging time for the allowable concentration shall be the averaging time associated with that AQD screening level. A material may have more than one AQD screening level. For the permittee to use such a material in EU4DUSTCOLL7, each screening level for that material must equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.
- 2. Only initial threshold screening levels or initial risk screening levels may be used as allowable concentrations. No secondary risk screening level shall be used as an allowable concentration.
- 3. Some AQD screening levels include a note with additional information or requirements. For the permittee to use such a material in EU4DUSTCOLL7, in addition to the requirement in item 1 above, each screening level applied to that material in an applicable note must also equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.

# **APPENDIX B: Predicted Ambient Impacts and Allowable Concentrations for EU4DUSTCOLL8**

Predicted Ambient Impacts for EU4DUSTCOLL8 as determined for PTI No. 416-93I.

Averaging time	Impact, µg/m³
One hour	1.138
Eight hours	0.464
24 hours	0.236
Annual	0.035

PTI application No. 416-93I identified the following materials as emitted from EU4DUSTCOLL8. A predicted ambient impact (PAI) equal to or lower than the "Allowable Concentration" for each material represents a PAI that was determined to meet the requirement of Rule 225 for EU4DUSTCOLL8 for PTI No. 416-93I.

## **Table of Materials**

Material	CAS Number	Allowable Concentration (µg/m³) A	Concentration Averaging Time <sup>A</sup>
Caffeine	58-08-2	0.1	Annual
phenylephrine hydrochloride	61-76-7	0.1	Annual
d-(+)-lactose (anhydrous)	64044-51-5	0.1	Annual
d-mannitol	69-65-8	0.1	Annual
glyceryl guaiacolate / Guaifenesin	93-14-1	5	Annual
Acetaminophen	103-90-2	12	Annual
sodium saccharin	128-44-9	0.1	Annual
sodium lauryl sulfate	151-21-3	0.1	Annual
pseudoephedrine hydrochloride	345-78-8	0.1	Annual
fd&c yellow no. 6	2783-94-0	0.1	Annual
d&c red no. 7	5281-04-9	0.1	Annual
Dicalcium phosphate, dibasic	7757-93-9	0.1	Annual
dibasic dicalcium phosphate, dihydrate	7789-77-7	0.1	Annual
d&c yellow no. 10	8004-92-0	0.1	Annual
carnauba wax	8015-86-9	0.1	Annual
Maltodextrin	9050-36-6	0.1	Annual
clemastine hydrogen fumarate	4070-80-8	0.1	Annual
Ibuprofen	15687-27-1	12	Annual
Naproxen / naproxen sodium	26159-34-2	12	Annual
Aspartame	22839-47-0	0.1	Annual
Clemast fum pregran	14976-57-9	0.1	Annual
Dextromethorphan	6700-34-1	0.4	Annual
Diphenhydramine citrate	88637-37-0	0.1	Annual
Flavor Giv RD-11,368 / peppermint flavor 1	8006-90-4	0.1	Annual
Natrosol	9004-62-0	0.1	Annual
Gemfibrozil	25812-30-0	0.1	Annual
fd&c red #40	25956-17-6	0.1	Annual
loperamide hydrochloride	34552-83-5	0.1	Annual
Cimetidine	51481-61-9	0.1	Annual
fd&c blue #1	68921-42-6	0.1	Annual
Famotidine	76824-35-6	0.1	Annual
cetirizine dihydrochloride	83881-52-1	0.1	Annual
Croscarmellose	74811-65-7	12	Annual

Material	CAS Number	Allowable Concentration (µg/m³) A	Concentration Averaging Time A
RM Metho K100LV Prem CR / RM Methocel K3 Prem LV / RM Avicel PH 200 / RM Methocel K4M Premium	9004-65-3	0.1	Annual
RM Dextrates, NF	68131-37-3	0.1	Annual
RM Loratadine	79794-75-5	0.1	Annual
RM Sucralose NF	56038-13-2	0.1	Annual
RM Klucel EXF Pharm / Hydroxyl cellulose	9004-64-2	0.1	Annual
Stearic acid, NF, Veg, GMO Free	57-11-4	100	8 hour
Copovidone	25086-89-9	0.1	Annual
Glyceryl behenate	94201-62-4	0.1	Annual
Starch Glycolate	9063-38-1	0.1	Annual
Cabosil M-5	112945-52-5	60	8 hour
Ranitidine HCI	66357-59-3	0.1	Annual
Titanium Dioxide	13463-67-7	24	8 hour

<sup>&</sup>lt;sup>A</sup> The following applies to materials not listed in the Table of Materials above that have AQD screening levels:

- 1. If an AQD screening level for a material not listed in the Table of Materials above is used as the allowable concentration for a material, the averaging time for the allowable concentration shall be the averaging time associated with that AQD screening level. A material may have more than one AQD screening level. For the permittee to use such a material in EU4DUSTCOLL8, each screening level for that material must equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.
- 2. Only initial threshold screening levels or initial risk screening levels may be used as allowable concentrations. No secondary risk screening level shall be used as an allowable concentration.
- 3. Some AQD screening levels include a note with additional information or requirements. For the permittee to use such a material in EU4DUSTCOLL8, in addition to the requirement in item 1 above, each screening level applied to that material in an applicable note must also equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.

# **APPENDIX C: Predicted Ambient Impacts and Allowable Concentrations for EU4GLATT500#5**

Predicted Ambient Impacts for EU4GLATT500#5 as determined for PTI No. 416-93J.

Averaging time	Impact, µg/m <sup>3</sup>
One hour	1.064
Eight hours	0.391
24 hours	0.242
Annual	0.038

PTI application No. 416-93J identified the following materials as emitted from EU4GLATT500#5. A predicted ambient impact (PAI) equal to or lower than the "Allowable Concentration" for each material represents a PAI that was determined to meet the requirement of Rule 225 for EU4GLATT500#5 for PTI No. 416-93J.

## **Table of Materials**

Material	CAS Number	Allowable Concentration (µg/m³) A	Concentration Averaging Time <sup>A</sup>
Caffeine	58-08-2	0.1	Annual
phenylephrine hydrochloride	61-76-7	0.1	Annual
d-(+)-lactose (anhydrous)	64044-51-5	0.1	Annual
d-mannitol	69-65-8	0.1	Annual
glyceryl guaiacolate / Guaifenesin	93-14-1	5	Annual
Acetaminophen	103-90-2	12	Annual
sodium saccharin	128-44-9	0.1	Annual
sodium lauryl sulfate	151-21-3	0.1	Annual
pseudoephédrine hydrochloride	345-78-8	0.1	Annual
fd&c yellow no. 6	2783-94-0	0.1	Annual
d&c red no. 7	5281-04-9	0.1	Annual
Dicalcium phosphate, dibasic	7757-93-9	0.1	Annual
dibasic dicalcium phosphate, dihydrate	7789-77-7	0.1	Annual
d&c yellow no. 10	8004-92-0	0.1	Annual
carnauba wax	8015-86-9	0.1	Annual
Maltodextrin	9050-36-6	0.1	Annual
clemastine hydrogen fumarate	4070-80-8	0.1	Annual
Ibuprofen	15687-27-1	12	Annual
Naproxen / naproxen sodium	26159-34-2	12	Annual
Aspartame	22839-47-0	0.1	Annual
Clemast fum pregran	14976-57-9	0.1	Annual
Dextromethorphan	6700-34-1	0.4	Annual
Diphenhydramine citrate	88637-37-0	0.1	Annual
Flavor Giv RD-11,368 / peppermint flavor 1	8006-90-4	0.1	Annual
Natrosol	9004-62-0	0.1	Annual
Gemfibrozil	25812-30-0	0.1	Annual
fd&c red #40	25956-17-6	0.1	Annual
loperamide hydrochloride	34552-83-5	0.1	Annual
Cimetidine	51481-61-9	0.1	Annual
fd&c blue #1	68921-42-6	0.1	Annual
Famotidine	76824-35-6	0.1	Annual
cetirizine dihydrochloride	83881-52-1	0.1	Annual
Croscarmellose	74811-65-7	12	Annual

Material	CAS Number	Allowable Concentration (µg/m³) <sup>A</sup>	Concentration Averaging Time <sup>A</sup>
RM Metho K100LV Prem CR /			
RM Methocel K3 Prem LV /	9004-65-3	0.1	Annual
RM Avicel PH 200 /	0001000	011	7 1111001
RM Methocel K4M Premium			
RM Dextrates, NF	68131-37-3	0.1	Annual
RM Loratadine	79794-75-5	0.1	Annual
Sucralose NF	56038-13-2	0.1	Annual
Klucel EXF Pharm / Hydroxyl cellulose	9004-64-2	0.1	Annual
Stearic acid, NF, Veg, GMO Free	57-11-4	100	8 hour
Copovidone	25086-89-9	0.1	Annual
Glyceryl behenate	94201-62-4	0.1	Annual
Starch Glycolate	9063-38-1	0.1	Annual
Cabosil M-5	112945-52-5	60	8 hour
chlorpheniramine maleate	113-92-8	12	Annual
chlorpheniramine maleate	113-92-8	35	24 hour
Microcrystalline cellulose Lustre Clear LC103	9004-34-6	12	Annual
Microcrystalline cellulose Lustre Clear LC103	9004-34-6	35	24 hour
Acryl-eze Pink93O13920	No CAS Number	12	Annual
Acryl-eze Pink93O13920	No CAS Number	35	24 hour
Starch	9005-25-8	12	Annual
Starch	9005-25-8	35	24 hour
Synthetic Red Iron Oxide	1332-37-2	Not a TAC B	
Sugar compressible	57-50-1	Not a TAC B	
Calcium carbonate	471-34-1	Not a TAC B	
T-masked famotidine granule	No CAS Number	12	Annual
T-masked famotidine granule	No CAS Number	35	24 hour
berry flavor	No CAS Number	0.4	Annual
Prosweet	No CAS Number	12	Annual
Prosweet	No CAS Number	35	24 hour
Syloid 244 FP	No CAS Number	60	8 hour
Flavor BBA 45467	No CAS Number	0.5	Annual
Opacode	No CAS Number	220	Annual

- <sup>A</sup> The following applies to materials not listed in the Table of Materials above that have AQD screening levels:
  - 1. If an AQD screening level for a material not listed in the Table of Materials above is used as the allowable concentration for a material, the averaging time for the allowable concentration shall be the averaging time associated with that AQD screening level. A material may have more than one AQD screening level. For the permittee to use such a material in EU4GLATT500#5, each screening level for that material must equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.
  - 2. Only initial threshold screening levels or initial risk screening levels may be used as allowable concentrations. No secondary risk screening level shall be used as an allowable concentration.
  - 3. Some AQD screening levels include a note with additional information or requirements. For the permittee to use such a material in EU4GLATT500#5, in addition to the requirement in item 1 above, each screening level applied to that material in an applicable note must also equal or exceed the PAI for the associated averaging time, as noted above in the table of PAIs.
- <sup>B</sup> This material is not a TAC and its emissions are not subject to Rule 225. Therefore, while emissions and use of this material are subject to other conditions of this permit, emissions and use of this material are not subject to Appendix C or to aspects of conditions referencing this appendix.