# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

September 17, 2018

PERMIT TO INSTALL 73-17A

> ISSUED TO Zoetis LLC

LOCATED AT 2605 East Kilgore Road Kalamazoo, Michigan

IN THE COUNTY OF

Kalamazoo

# STATE REGISTRATION NUMBER B7149

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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).

 DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

 August 15, 2018

 DATE PERMIT TO INSTALL APPROVED:
 SIGNATURE:

 September 17, 2018
 SIGNATURE:

 DATE PERMIT VOIDED:
 SIGNATURE:

 DATE PERMIT REVOKED:
 SIGNATURE:

# PERMIT TO INSTALL

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# **Common Abbreviations / Acronyms**

	Common Acronyms	F	Pollutant / Measurement Abbreviations
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	со	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit
department	Quality	gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H <sub>2</sub> S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental	NOx	Oxides of Nitrogen
	Quality	ng	Nanogram
MSDS NA	Material Safety Data Sheet Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for		Particulate Matter equal to or less than 2.5
	Hazardous Air Pollutants	PM2.5	microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection	μg	Microgram
		μm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

# **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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (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 conditions 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 R 336.1301, 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 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.
- 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 R 336.1370(2). (R 336.1370)
- The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

# SPECIAL CONDITIONS

# EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID			
EUB248OSD	Oral solid dosage manufacturing equipment including weighing, blending, milling, tablet pressing, and tablet coating equipment and support operations. Maximum batch size is 400 kilograms.	FGOSD&FBGD			
	Pilot scale batch fluidized bed granulator dryer. Maximum batch size is 60 kilograms.	FGOSD&FBGD			
	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 336.1290.				

# The following conditions apply to: EUB248OSD

**<u>DESCRIPTION</u>**: Oral solid dosage manufacturing equipment including weighing, blending, milling, tablet pressing, and tablet coating equipment and support operations. Maximum batch size is 400 kilograms.

# Flexible Group ID: FGOSD&FBGD

#### **POLLUTION CONTROL EQUIPMENT:**

Four dust collectors, each followed by a HEPA filter: OSDBlendDC, OSDTabletDC, OSDCoaterDC, and OSDPackagingDC

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	2.9 tpy	12-month rolling time period as determined at the end of each calendar month	EUB248OSD	SC VI.3	R 336.1702(a)
2. PM	0.12 lb/hr	Hourly	EUB248OSD	SC IV.1	R 336.1224, R 336.1225, R 336.1331
3. PM10	0.12 lb/hr	Hourly	EUB248OSD	SC IV.1	40 CFR 52.21(c)&(d)
4. PM2.5	0.12 lb/hr	Hourly	EUB248OSD	SC IV.1	40 CFR 52.21(c)&(d)

# II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Total material processed <sup>A</sup>	123,930 lbs per month <sup>1</sup>	Calendar month	EUB248OSD batches	SC VI.4	R 336.1225, R 336.1226(a)

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
2. Each API material <sup>B</sup> processed	43,375 lbs per month <sup>1</sup>	Calendar month	EUB248OSD batches	SC VI.4	R 336.1225, R 336.1226(a)
<ul> <li><sup>A</sup> "Total material processed" does not include coating materials.</li> <li><sup>B</sup> "API material" refers to materials that are active pharmaceutical ingredients.</li> </ul>					

"API material" refers to materials that are active pharmaceutical ingredients.

# **III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

# **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate the blending equipment, the tablet press, or the tablet coater unless the associated dust collector with HEPA filter is installed, maintained, and operated in a satisfactory manner. (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 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 336.1226(a), R 336.1702(a))
- 2. The permittee shall keep a record of the cleanup solvent used in EUB248OSD during 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 336.1702(a))
- 3. The permittee shall calculate the VOC emission rate from EUB248OSD monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1702(a))
- 4. The permittee shall keep, in a satisfactory manner, all monthly records listed below, as required by SC II.1 and II.2, on file at the facility and make them available to the Department upon request.<sup>1</sup> (R 336.1225, R 336.1226(a))
  - a. Total material processed in EUB248OSD batches, excluding coating material.
  - b. Each API material processed in EUB248OSD batches.
- 5. The permittee shall conduct a monthly visible emissions check of the emission control devices listed below during routine operating conditions. For this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions, the permittee shall inspect the particulate filter and perform any maintenance required to eliminate visible emissions. (R 336.1910)
  - a. OSDBlendDC
  - b. OSDTabletDC
  - c. OSDCoaterDC
  - d. OSDPackagingDC

# VII. <u>REPORTING</u>

NA

# VIII. STACK/VENT RESTRICTIONS

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. SV-OSDCOATERDC (OSD Coating Dust Collector)	26	28	40 CFR 52.21(c) & (d)
2. SV-OSDBLENDDC (OSD Blending Dust Collector)	16	28	40 CFR 52.21(c) & (d)
3. SV-OSDTABLETDC (OSD Tableting Dust Collector)	14	28	40 CFR 52.21(c) & (d)
4. SV-OSDPACKAGNGDC (OSD Packaging Dust Collector)	14	28	40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENTS

NA

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

#### The following conditions apply to: EUPilotFBGD

**DESCRIPTION:** Pilot scale batch fluidized bed granulator dryer. Maximum batch size is 60 kilograms.

Flexible Group ID: FGOSD&FBGD

#### **POLLUTION CONTROL EQUIPMENT:**

One dust collector followed by a HEPA filter: PILOTFBGDDC

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	3.8 tpy	12-month rolling time period as determined at the end of each calendar month		SC VI.2, VI.3	R 336.1702(a)

# II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Solid raw material processed	4,100 lbs per month	Calendar month	EUPilotFBGD	SC VI.4	40 CFR 52.21(c)&(d)
2. Total organic solvent use <sup>A</sup>	7,600 lbs per year	12-month rolling time period as determined at the end of each calendar month	EUPilotFBGD	SC VI.2	R 336.1224, R 336.1702(a)
3. Organic solvent use	30 kg per batch1	Each solvent-based batch	EUPilotFBGD	SC VI.6	R 336.1225
<sup>A</sup> "Organic solvent use" includes organic chemical use as a solvent in EUPilotFBGD batches and organic solvent use for cleanup of equipment in EUPilotFBGD.					

# III. PROCESS/OPERATIONAL RESTRICTIONS

NA

# IV. DESIGN/EQUIPMENT PARAMETERS

 The permittee shall not operate EUPilotFBGD unless the FBGD dust collector with HEPA filter is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))

#### 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 and 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 336.1702(a), 40 CFR 52.21(c)&(d))
- 2. The permittee shall keep a record of the organic solvents used in EUPilotFBGD during each calendar month and during the 12-month rolling time period ending that 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 336.1702(a))
- 3. The permittee shall calculate the VOC emission rate from EUPilotFBGD monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1702(a))**
- 4. The permittee shall keep a record of the amount of solid raw material processed in EUPilotFBGD during 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. (40 CFR 52.21(c)&(d))
- 5. The permittee shall conduct a monthly visible emissions check of the FBGD dust collector during routine operating conditions. For this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions, the permittee shall inspect the particulate filter and perform any maintenance required to eliminate visible emissions. (R 336.1910)
- 6. The permittee shall keep a record of the amount of organic solvent used in each organic solvent-based batch processed in EUPilotFBGD. 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.<sup>1</sup> (R 336.1225)

#### VII. <u>REPORTING</u>

NA

#### VIII. STACK/VENT RESTRICTIONS

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	Minimum	Underlying
	Diameter/Dimensions	Height Above	Applicable
	(inches)	Ground (feet)	Requirements
1. SV-PILOTFBGDDC (Fluid Bed Granulator Dryer [Pilot Plant])	14	32	40 CFR 52.21(c) & (d)

#### IX. OTHER REQUIREMENTS

NA

#### Footnotes:

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

#### FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGOSD&FBGD	The oral solid dosage manufacturing equipment and the pilot scale fluidized bed granulator dryer.	EUB248OSD, EUPilotFBGD

#### The following conditions apply to: FGOSD&FBGD

**DESCRIPTION:** The oral solid dosage manufacturing equipment and the pilot scale fluidized bed granulator dryer.

Emission Units: EUB248OSD, EUPilotFBGD

#### **POLLUTION CONTROL EQUIPMENT:**

Five dust collectors, each followed by a HEPA filter, as listed for EUB248OSD and EUPilotFBGD

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Category 226(a) TAC <sup>A</sup>	Less than 10 lbs/month <sup>1</sup>	Calendar month	FGOSD&FBGD	SC VI.2	R 336.1225, R 336.1226(a)
2. Each Category 226(a) TAC	Less than 0.14 lb/hr <sup>1</sup>	Hourly	FGOSD&FBGD	EUB248OSD SC IV.1 and EUPilotFBGD SC IV.2	R 336.1225, R 336.1226(a)

A "Category 226(a) TAC" is a TAC that meets all the criteria listed below, except that any TAC with "Y" in the "Rule 225" column or designated with a "D" footnote in the table in Appendix A is not a Category 226(a) TAC.

• It is not a carcinogen

• It is not listed in Table 20 of Rule 226 (R 336.1226)

• It has emissions < 0.14 lb/hr and < 10 lb/month

#### II. MATERIAL LIMITS

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

NA

# IV. DESIGN/EQUIPMENT PARAMETERS

NA

# 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.<sup>1</sup> (R 336.1225, R 336.1226(a))
- For each Category 226(a) TAC used in EUB248OSD, the permittee shall calculate the monthly emission rate from FGOSD&FBGD monthly, for the preceding month, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>1</sup> (R 336.1225, R 336.1226(a))
- 3. The requirements of SC VI.4 apply, as described below, when the permittee plans to use a material in FGOSD&FBGD that was not identified in the application for Permit to Install No. 73-17A and that has not been submitted to the AQD pursuant to SC VII.1. Appendix A lists materials identified in the application for Permit to Install No. 73-17A.<sup>1</sup>
  - a. If the permittee does not choose to rely on an exemption from the Permit to Install requirement to use the material in FGOSD&FBGD, all the provisions of SC VI.4 apply.
  - b. If an exemption from the Permit to Install requirement applies to use of the material, and if the permittee chooses to rely on such exemption from the Permit to Install requirement to use the material in FGOSD&FBGD, SC VI.4 does not apply.

# (R 336.1225, R 336.1226(a))

- 4. Except as allowed by SC VI.3.b, before using in FGOSD&FBGD any material that was not identified in the application for Permit to Install No. 73-17A and that has not been submitted to the AQD pursuant to SC VII.1, the permittee shall follow the procedure below.<sup>1</sup>
  - 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. If the material is a TAC, the permittee shall determine whether the material is a carcinogen as defined in Rule 103 (R 336.1103) or is listed in Table 20 of Rule 226 (R 336.1226). If the material is a TAC and is either a carcinogen as defined in Rule 103 or is listed in Table 20, this procedure does not apply, and the material may only be used in FGOSD&FBGD through a Permit to Install or through an exemption from the Permit to Install requirement.
  - c. Regardless of the determination for SC VI.4.a above, the permittee shall calculate the maximum calendar month and maximum one-hour emission rates of the material. Calculated emission rates shall include the maximum monthly emissions and the maximum emissions for any one-hour period during operation. The maximum emissions shall be based on all of the following:
    - i. The maximum emissions-generating operating scenarios.
    - ii. The nature of the activities that cause the emissions.
    - iii. The composition of the products being made.
    - iv. The maximum usage/throughput allowed for EUB248OSD and EUPilotFBGD.
  - d. 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. The maximum monthly and maximum one-hour emission rates for the material, with supporting calculations.
    - iv. If applicable, the basis for determining the material is not a carcinogen and is not listed in Table 20, including resources used and information retrieved about the material.

- v. The applicable emission unit ID.
- vi. The active permit number.
- vii. The date when the permittee proposes to begin using the material in FGOSD&FBGD.
- e. The permittee shall not use the material in FGOSD&FBGD 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 that the material is not a carcinogen and is not listed in Table 20.
  - iii. Thirty days have passed since submitting the report required by SC VII.1.

(R 336.1225, R 336.1226(a))

# VII. <u>REPORTING</u>

- 1. No less than 30 days before first using in FGOSD&FBGD any material that was not identified in the application for Permit to Install No. 73-17A and that has not been submitted to the AQD pursuant to this Special Condition, and only when the permittee does not choose to rely on an exemption from the Permit to Install requirement to use the material in FGOSD&FBGD, the permittee shall submit all records required by SC VI.4.d 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>
  - a. Communicate that the material is not a TAC.
  - b. Communicate that the material is not a carcinogen and is not listed in Table 20.
  - c. Communicate that the material is a carcinogen or is listed in Table 20. In this event, the API material shall not be used in FGOSD&FBGD unless either a Permit to Install has been approved that includes use of the API material in FGOSD&FBGD or an exemption from the Permit to Install requirement applies to use of the API material in FGOSD&FBGD.
  - (R 336.1225, R 336.1226(a))

# VIII. STACK/VENT RESTRICTIONS

NA

# IX. OTHER REQUIREMENTS

NA

#### Footnotes:

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

#### APPENDICES

# Appendix A: Materials Identified as Emitted in PTI Application No. 73-17A

The following table lists materials identified in Permit to Install application No. 73-17A as emitted from FGOSD&FBGD, along with related AQD determinations made during review of the application. It does not list materials used in FGOSD&FBGD through exemptions from the requirement of Rule 201 to obtain a Permit to Install or materials submitted to the AQD through the process identified in the Special Conditions for FGOSD&FBGD.

Material	CAS Number	TAC <sup>A</sup>	Rule 226(a)(ii) <sup>B</sup>	Rule 225 <sup>c</sup>
Talc	14807-96-6	Y	N	Y
2,6-Di-tert-butyl-p-cresol	128-37-0	Y	N	Y
Isopropyl alcohol	67-63-0	Y	Y	Y
Acetone	67-64-1	Y	Y	Y
Polyethylene glycol	25322-68-3	Y	Y	Y
Butylated hydroxyanisole	25013-16-5	ΥD		
Ethyl alcohol	64-17-5	Y	Y	Y
Microcrystalline Cellulose	9004-34-6	Ν		
Lactose Monohydrate	5989-81-1	Ν		
Palatable Base Granules (consisting of sugar; maize starch; and calcium phosphate dibasic, anhydrous)		Ν		
Sugar	57-50-1	Ν		
Maize starch	9005-25-8	Ν		
Calcium phosphate dibasic, anhydrous	7757-93-9	ΥD		
Hydroxy Propyl Methyl Cellulose	9004-65-3	ΥD		
Sodium Chloride	7647-14-5	ΥD		
Water	7732-18-5	Ν		
Red Iron Oxide Non-Irradiated	1309-37-1	Ν		
Lecithin		Ν		
Sodium Starch Glycolate	9063-38-1	Ν		
Medium Chain Triglycerides		Ν		
Polysorbate 80	9005-65-6	ΥD		
Polyvinyl alcohol (polymer)	9002-89-5	ΥD		
Glycerol Mono-Stearate	31566-31-1	Ν		
Xanthan Gum	11138-66-2	N		
AFB Palatant (includes 10% sodium sulfate)		Ν		
Sodium Sulfate	7757-82-6	N		
Monosodium phosphate	7558-80-7	ΥD		
Brewer Yeast	84604-16-0	Ν		
Egg Flavor		N		
Chicken Flavor		N		
Hydroxy Propyl Cellulose	9004-65-3	ΥD		
Soybean Oil	8001-22-7	Ν		
Corn Starch		Ν		
Liver Powder		Ν		
Wheat Germ		Ν		
Sugar	57-50-1	N		
Dextrate	50-99-7	Ν		
Dextrate	39404-33-6	Ν		
Dextrate	68131-37-3	Ν		

Polydextrose	68424-04-4	ΥD		
Hydroxypropyl Methylcellulose Phthalate	9050-31-1	N		
Gelatin	9000-70-8	N		
	9000-70-8	N		
Hydrolyzed Vegetable Protein		+		
Calcium Carbonate		N		
Calcium Phosphate Tribasic	7758-87-4	N		
Calcium Sulfate		N		
Cellulose Acetate	9004-35-7	N		
Cellulose Acetate Phthalate	9004-38-0	Y	Y	
Cellulose, Powdered		Ν		
Citric Acid Monohydrate	5949-29-1	N		
Croscarmellose Sodium	9004-62-0	Ν		
Cyclodextrin	7585-39-9	Y	Y	
Dextrose (Corn Sugar & Starch Sugar)		N	-	
Ethylcellulose	9004-57-3	N		
Fructose	3004-37-3	N		
	8027-56-3	+		
Glucose Liquid		N		
Hydroxyethyl cellulose	9004-62-0	N		
Maltodextrin	9050-36-6	N		
Mannitol	69-65-8	N		
Polymethacrylates	24938-16-7	Y	Y	
Polymethacrylates	9010-88-2	Y	Y	
Polymethacrylates	25086-15-1	Y	Y	
Polymethacrylates	33434-24-1	Y	Y	
Starch - Pregelatinized	9005-25-8	N		
Starch - Sterilizable		Ν		
Sucrose	57-50-1	Ν		
Compressible Sugar	64294-03-7	Ν		
Compressible Sugar	66748-03-6	Ν		
Confectioner's Sugar	57-50-1, 9005-25-8	N		
Sugar Spheres		N		
Microcrystalline Wax	63231-60-7	N		
Magnesium stearate	557-04-0	Y	Y	Y
Meglumine	6284-40-8	Ý	Y	1
Colloidal silicon dioxide	112926-00-8	Ý	Ŷ	Y
Calcium stearate	1592-23-0	Ý	Ŷ	•
Carboxymethylcellulose calcium	2595-14-7	Ý	Ŷ	
Carboxymethylcellulose sodium	9004-32-4	Ý	Ŷ	Y
Decanedioic acid	109-43-3	Ý	Ŷ	
Diethyl phthalate	84-66-2	Ý	Ŷ	Y
Glycerin	56-81-5	Ý	Ŷ	Y
Poloxamer	9003-11-6	Y	Y	Y
Fumed silica	60676-86-0	Y	Ŷ	
Methacrylic acid-ethyl acrylate copolymer	25212-88-8	Y	Y	
Povidone	9003-39-8	Y	Y	Y
Propylene glycol	57-55-6	Y	Y	
Sodium lauryl sulfate	151-21-3	Y	Y	
Sulfuric acid	7664-93-9	Y		Y
Triacetin	102-76-1	Y	Y	Y
Triethyl citrate	77-93-0	Y	Y	Y
Titanium dioxide	13463-67-7	Y	Y	Y
Carprofen	53716-49-7	Y	Y	

Ivermectin	70288-86-7	Y	Y	
Lasalocid sodium	25999-20-6	Y	Y	
Milbemycin oxime	129496-10-2	Y	Y	
Monensin Sodium	22373-78-0	Y	Y	
Nicarbazin	330-95-0	Y	Y	
Praziquantel	55268-74-1	Y	Y	
Selamectin	220119-17-5	Y	Y	
Tiamulin hydrogen fumarate	55297-96-6	Y	Y	
Toceranib phosphate	874819-74-6	Y	Y	
Disodium EDTA	6381-92-6	Y	Y	
Amorphous Silica	112926-00-8	Y	Y	Y
FD&C Blue #2	860-22-0	Y	Y	
Ponceau 4R	2611-82-7	Y	Y	
FD&C Yellow #6	2783-94-0	Y	Y	
FD&C Blue #1	3844-45-9	Y	Y	
FD&C Red #40	25956-17-6	Y	Y	
Oclacitinib maleate	1208319-27-0	Y	Y	
Mavacoxib	170569-88-7	Y	Y	
Moxidectin	113507-06-5	Y	Y	
Pyrantel pamoate	22204-24-6	Y	Y	
Sarolaner	1398609-39-6	Y	Y	
Toceranib	356068-94-5	Y	Y	

- <sup>A</sup> Indicates an AQD determination during the review of PTI No. 73-17A on whether the material is a toxic air contaminant (TAC):
  - "Y" indicates the material is a TAC.
  - "N" indicates the material is not a TAC.
- <sup>B</sup> Indicates an AQD determination during the review of PTI No. 73-17A on whether the material meets the criteria of Rule 226(a)(ii):
  - "Y" indicates the material is not a carcinogen and is not listed in Table 20.
  - "N" indicates the material is a carcinogen or is listed in Table 20, or both.
  - If there is no entry in this column for a material, the AQD made no determination.
- <sup>c</sup> Indicates an AQD determination during the review of PTI No. 73-17A on whether the emission rate for the material the applicant provided to the AQD met the requirement of Rule 225(1).
  - "Y" indicates the AQD made this determination for the material.
  - If there is no entry in this column for a material, the AQD made no determination.
- <sup>D</sup> Applies to an AQD determination that a material is a TAC, as in note A above. The AQD has not established a screening level for any TAC with this note, but has determined that in lieu of setting a screening level, the primary NAAQS for particulate matter (PM2.5, PM10) are reasonable and appropriate health protective levels for the particulate. The AQD considered the combined ambient impact of all particulate TAC emissions from the process in the review of PTI No. 73-17A.