

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

B265849310

FACILITY: Kerr Corporation / Romo Manufacturing		SRN / ID: B2658
LOCATION: 28200 Wick Road, ROMULUS		DISTRICT: Detroit
CITY: ROMULUS		COUNTY: WAYNE
CONTACT: Emily Hughes , EHS Manager		ACTIVITY DATE: 06/28/2019
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

COMPANY NAME : Kavo Kerr- Romulus Manufacturing and Distribution Center
FACILITY ADDRESS : 28200 Wick Road, Romulus 48174
STATE REGISTRAT. NUMBER : B2658
SIC CODE :
EPA SOURCE CLASS :
EPA POLLUTANT CLASS :
LEVEL OF INSPECTION : PCE
DATE OF INSPECTION : 6/28/19
TIME OF INSPECTION : 11:53 AM
DATE OF REPORT : 08/12/19
REASON FOR INSPECTION : Scheduled Inspection
INSPECTED BY : Jorge Acevedo
PERSONNEL PRESENT : Emily Hughes, EHS Manager
FACILITY PHONE NUMBER :
FACILITY FAX NUMBER :

Inspection Narrative:

On September June 28, 2019, Air Quality Division (AQD) staff conducted a partial compliance evaluation of the Kavo Kerr Corporation facility. I arrived at the facility at 11:53AM. There was no security, but a kiosk to check in. I signed into the kiosk, and waited awhile. I tried calling Ms. Hughes and left a message. I left the facility at 12:45PM. Ms. Hughes called me later in the day and said that she was out of town and the facility was closed for the fourth of July holiday. I made arrangements with Ms. Hughes to come back once the facility came back from holiday. I arrived on July 10, 2019 at 11:40AM. I checked into the security kiosk. Ms. Hughes came out to the lobby and we proceeded to a conference room.

We talked about changes since the last inspection (2015). The facility had several operations close and they reflected those changes in a permit to install (350-07C, issued January 5, 2018). Ms. Hughes explained that the atomization process is active. The Chemical Process has been discontinued in parts- the stay warm kettle was removed and the size reduction room with a reduction grinder and cyclone was removed. The tank farm is active and Ms. Hughes explained that new raw material tanks were installed.

The mercury process(encapsulated mercury amalgam) has decreased from three machines to one machines. Sterilizing wipes are now manufactured at the facility.

After our discussion, we began the inspection. We began in the PVS Operation. This consisted of mixers ducted to a dust collector. The two mixers were not operating at the time of the inspection. Next, I observed the Perry room from outside. Inside the room, the amalgam capsule process was occurring. Mercury capsules were encapsulated to prevent mercury emissions.

Next, I observed the area that housed the ZEO process. The dust collectors were taken out and the room was now used for storage. After observing the process, we entered the reactor room. This area once housed the Sta-Warm Kettle. The kettle was no longer there and no processes were running during the inspection. The next process Ms. Hughes showed me was the area which once housed the size reduction room. The equipment was removed. Next, I observed the pigment mix room. It is controlled by a dust collector. There was no activity at the time of the inspection.

We walked through the warehouse, which was in process of being expanded. After going through warehouse, I observed the atomization process. First, the raw materials of copper, tin, and silver alloy billets are received and weighed. An electrically powered induction furnace is used to melt silver, tin, and copper-based alloy billets and alloy powders under vacuum. The resultant molten alloy is poured into a chamber located below the furnace where it is exposed to a stream of nitrogen gas. The nitrogen gas flows opposite to the molten metal, which atomizes the material. Excess gases and airborne particulate emissions resulting from the atomizer are directed to a separate existing cyclone and dust collector.

We went to the Metrex area of the facility. I observed filling lines. One was a rotary line for gallon jugs and a smaller line for one of their sterilizer wipes. Ventilation is interlocked and the line cannot run without the ventilation online. Next, I observed four deionized water tanks and a tank farm. Several tanks containing isopropanol and glutaraldehyde were observed.

After observing the facility, we went back to the conference room. I requested records that are required by the permit to install. I left the facility at 12:45PM.

Facility Background:

The Kerr Corporation, established in 1965, has been bought out by Sybron Dental Specialties. Kerr is in the business of manufacturing dental supplies such as dental tools, silver fillings, dental impressions, casting materials, and other commercial impression mold materials. Kerr, in 2017, became part of the KavoKerr Corporation. The Romulus facility is about 200,000 sq. ft.

Complaint History:

None

Outstanding Lows:

None

Operating Schedule/Production Rate:

16 hours a day, 5 days a week and 50 weeks a year, a third shift is added when necessary

Process Description & Control Equipment:

Romulus Manufacturing and Distribution Center operates a dental product and disinfectant manufacturing facility in Romulus. Metrex Process and General Chemical production are the operations that occur at the facility.

APPLICABLE RULES/PERMIT CONDITIONS:

Permit to Install 350-07C was issued on January 5, 2018. Compliance with the permit conditions are evaluated below.

The following conditions apply to: EU-OP1A

DESCRIPTION: A eighty (80) kilowatt electric furnace that heats copper, silver, and tin, and a product hopper controlled by a cyclone followed by a cartridge type dust collector. This is part of the alloy atomization process.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Cyclone and cartridge type dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.003 lbs per 1000	Test Protocol*	EU-OP1A	Undetermined- Stack Test needed to

	lbs of exhaust gases calculated on a dry gas basis.			determine emission rate.
2. PM-10	0.02 pph	Test Protocol*	EU-OP1A	Undetermined- Stack Test needed to determine emission rate.
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP1A unless the cyclone and cartridge type dust collector are installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Dust Collector installed.

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the cartridge type dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure gauge installed.

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log was observed

VII. REPORTING

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. SV00001	10.0	50.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Stack height and diameter not measured.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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The following conditions apply to: EU-OP2A

DESCRIPTION: An oversize screen and reduction grinder controlled by a Dustex 2-Bay dust collector. This is part of the alloy atomization process.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Dustex 2-Bay dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.01 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP1A	Undetermined- Stack test needed to determine concentration in exhaust.
2. PM-10	0.27 pph	Test Protocol*	EU-OP1A	Undetermined- Stack test needed to determine emission rate.
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP2A unless the Dustex dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance-Dust collector was installed.

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the Dustex dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure gauge installed

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log present.

VII. REPORTING

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. SV00002	18.0	30.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Measurements of Stack height and diameter were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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The following conditions apply to: EU-OP4A

DESCRIPTION: A heat treat process, a twenty (20) kilowatt alloy dryer, and a table press all controlled by a Dustex 3-Bay dust collector. This is part of the alloy atomization process.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Dustex 3-Bay dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.01 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP4A	Undetermined- Stack test needed to determine concentration in exhaust.
2. PM-10	0.4 pph	Test Protocol*	EU-OP4A	Undetermined- Stack test needed to determine emission rate.
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP4A unless the Dustex dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Not operating

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the Dustex dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Not operating

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Not operating

VII. REPORTING

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. SV00003	20.0	30.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Measurements of Stack height and diameter were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-OP5A

DESCRIPTION: A capsule filling room that is equipped with two (2) metal powder separation cyclones and a vacuum system. Room emissions are controlled by a Torit dust collector. This is part of the alloy atomization process.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Torit dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.0093 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP5A	Undetermined- Stack Test needed to determine concentration of exhaust
2. PM-10	0.21 pph	Test Protocol*	EU-OP5A	Undetermined- Stack Test needed to determine emission rate
3. Mercury	0.0032 pph	Test Protocol*	EU-OP5A	Undetermined- Stack test needed to determine emission rate. However, mercury is encapsulated so mercury emissions are predicted to be zero.

* Test protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP4A unless the Torit dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Dust collector is installed

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the Torit dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure gauge is installed.

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log present.

VII. REPORTING

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. SV00004	15.0	10.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SV-Vacuum	15.0	10.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Stack Height and Diameter measurements were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-OP1P

DESCRIPTION: A base room planetary mixer and weight scale, and a catalyst room dispersion mixer and weight scale controlled by a cartridge filter dust collector that is shared with EU-OP3M. This is a Poly Vinyl Silicone (PVS) process in which liquids, powders, and vinyl fluid are mixed and packaged as a two-part (catalyst and base) quick-set dental impression product.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Cartridge filter dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.005 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP1P	Undetermined- Stack Test needed to determine concentration in exhaust.
2. PM-10	0.135 pph	Test Protocol*	EU-OP1P	Undetermined- Stack Test needed to determine emission rate.
3. PM-2.5	0.135 pph	Test Protocol*	EU-OP1P	Undetermined- Stack Test needed to determine emission rate.
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

1. The permittee shall not process more than 133,500 tons of powder materials/additives per 12-month rolling time period as determined at the end of each calendar month through EU-OP1P. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Records received show that less than 100 tons of powder were processed.

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP1P unless the cartridge filter dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Dust collector installed

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the cartridge filter dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure gauge installed

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log present

3. The permittee shall keep, in a satisfactory manner, records of the amount of powder materials/additives processed in tons per 12-month rolling time period as determined at the end of each calendar month for EU-OP1P. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Records were received.

VII. REPORTING

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. SV00011	22.4	12.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Stack height and diameter measurements were not taken

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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The following conditions apply to: EU-OP6C

DESCRIPTION: A reactor room that consists of a Sta-Warm kettle and two (2) reaction vessels (Pfaudler #1 and #2). The Sta-Warm kettle and Pfaudler #1 are controlled by exhaust filter and carbon pads. This is part of the chemical process area.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Exhaust filter and carbon pads

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.01 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP6C Sta-Warm Kettle and Pfaudler #1	Not operating
2. PM-10	0.02 pph	Test Protocol*	EU-OP6C Sta-Warm Kettle and Pfaudler #1	Not operating
3. PM	0.1 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP6C Pfaudler #2	Not operating
4. PM-10	0.18 pph	Test Protocol*	EU-OP6C Pfaudler #2	Not operating
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

1. The permittee shall not produce more than 28,000 pounds of resin per 12-month rolling time period as determined at the end of each calendar month in EU-OP6C. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

- Process is not Operating

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the Sta-Warm kettle and Pfaudler #1 portions of EU-OP6C unless the exhaust filter and carbon pads are installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

- Process is not Operating

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the exhaust filter and carbon pads on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Process was not operating

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Process was not operating

3. The permittee shall keep, in a satisfactory manner, records of the amount of resin produced in pounds per 12-month rolling time period as determined at the end of each calendar month for EU-OP6C. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Process was not operating

VII. REPORTING

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:

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Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Height Above Ground (feet)	Underlying Applicable Requirements
1. SV00014	7.0	22.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SV-Pfaunder #2	16.0	20.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Stack height and diameter measurements were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-OP7C

DESCRIPTION: A size reduction room with a reduction grinder and cyclone separator controlled by a cartridge type dust collector. This is part of the chemical process area.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Cartridge type dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating	Equipment	Compliance Determination

		Scenario		
1. PM	0.01 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP7C	Undetermined-A Stack Test would be needed to determine concentration of exhaust gas.
2. PM-10	0.027 pph	Test Protocol*	EU-OP7C	Undetermined- A Stack Test would be needed to determine emission rate.
* Test protocol shall specify averaging time.				

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP7C unless the cartridge type dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Process not operating.

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the cartridge type dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Process not operating

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Process not operating

VII. REPORTING

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. SV00015	10.0	8.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Measurements were not taken regarding height and diameter.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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The following conditions apply to: EU-OP3M

DESCRIPTION: An Activator ribbon blender, filling and inking station, and a pigment station all controlled by a cartridge filter dust collector that is shared with EU-OP1P. This is part of the chemical process area.

Flexible Group ID: FG-MAP

POLLUTION CONTROL EQUIPMENT: Cartridge filter dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.01 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	EU-OP3M	Undetermined-A Stack Test would be needed to determine concentration of exhaust gas.
2. PM-10	0.27 pph	Test Protocol*	EU-OP3M	Undetermined- A Stack Test would be needed to determine emission rate.
3. PM-2.5	0.27 pph	Test Protocol*	EU-OP3M	Undetermined-A Stack Test would be needed to determine emission rate.

* Test protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-OP3M unless the cartridge filter dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- dust collector was installed at the time of the inspection.

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 install, calibrate, maintain and operate in a satisfactory manner, a device to monitor the pressure drop on the cartridge filter dust collector on a continuous basis. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure drop monitor installed.

2. The permittee shall complete all required inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log present.

VII. REPORTING

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. SV00011	22.4	12.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Stack height and diameter measurements were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

¹This 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
FG-ChemProcess	A portion of the chemical process area which is controlled by a common Torit Donaldson dust collector. Stack ID SV00013	EU-OP1C and EU-OP2C
FG-OP2M	All storage tanks in the tank room that consists of fourteen (14) tanks with agitators, four (4) raw material storage tanks, a waste product tank and a pH adjustment tank. Each tank is less than 40,000 gallons and is equipped with a conservation vent and an emergency vent. The tank room has a general ventilation exhaust. This is part of the METREX process area.	
FG-MAP	Flexible group for requiring a malfunction abatement plan for each of the control devices associated with the processes.	EU-OP1A, EU-OP2A, EU-OP4A, EU-OP5A, EU-OP1P, EU-OP1C, EU-OP2C, EU-OP6C, EU-OP7C, EU-OP3M, FG-OP2M

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The following conditions apply to: FG-ChemProcess

DESCRIPTION: A portion of the chemical process area which is controlled by a common Torit Donaldson dust collector. Stack ID SV00013

Emission Units: EU-OP1C and EU-OP2C

POLLUTION CONTROL EQUIPMENT: Torit Donaldson Dust Collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. PM	0.002 lbs per 1000 lbs of exhaust gases calculated on a dry gas basis.	Test Protocol*	FG-ChemProcess	Undetermined-Stack test needed to determine concentration in exhaust gas.
2. PM-10	0.09 pph	Test Protocol*	FG-ChemProcess	Undetermined-Stack Test needed to determine pm-10 emission rate.

* Test protocol shall specify averaging time.

II. MATERIAL LIMITS

1. The permittee shall not process more than 14,400 pounds of material per calendar day through FG-ChemProcess. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Records were received. Process Rate was well below 14,400 pounds of material per day.

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FG-ChemProcess unless the Torit Donaldson dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- Dust collector was installed.

2. The permittee shall not operate FG-ChemProcess unless a gauge, which measures the pressure

drop across the Torit Donaldson dust collector, is installed, maintained and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21(c) and (d))

Compliance- Pressure drop gauge was installed.

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 inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1901)

Compliance- Inspection log present near collector.

2. The permittee shall keep, in a satisfactory manner, records of the amount of material processed in pounds per calendar day through FG-ChemProcess. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Records are kept.

3. The permittee shall inspect the pressure drop monitors of FG-ChemProcess on a daily basis and keep, in a satisfactory manner, records of the inspections. The inspection records shall include the date, the time, the initials of the person(s) inspecting the pressure drop readings from the inspection. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

Compliance- Record log present. Unit not used daily.

VII. REPORTING

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. SV00013	16.0	41.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Undetermined- Measurements of Stack Height and Diameter were not taken.

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

-

The following conditions apply to: FG-OP2M

DESCRIPTION: All storage tanks in the tank room that consists of fourteen (14) tanks with agitators, four (4) raw material storage tanks, a waste product tank and a pH adjustment tank. Each tank is less than 40,000 gallons and is equipped with a conservation vent and an emergency vent. The tank room has a general ventilation exhaust. This is part of the METREX process area.

Emission Units: Storage Tanks

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Determination
1. VOCs	13.8 tpy	12-month rolling time period as determined at the end of each calendar month	FG-OP2M	Compliance- Emissions were below 1 ton per year.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall only store or transfer materials in FG-OP2M that are volatile organic compounds or noncarcinogenic liquids having a true vapor pressure of 1.5 psia or less at actual storage conditions. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

Compliance- MSDS were received. Liquids stored had vapor pressure of less than 1.5 psia.

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 inspections and monitoring in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Records are kept.

2. The permittee shall keep, in a satisfactory manner, monthly records of the type and physical properties of the materials stored in FG-OP2M. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Records are kept.

3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each VOC containing material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702)

Compliance- MSDS were provided at time of the inspection.

4. The permittee shall keep the following information on a monthly basis for FG-OP2M:

Gallons of each VOC containing material used.

VOC content of each VOC containing material.

VOC mass emission calculations determining the monthly emission rate in tons per calendar month.

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.

Hours of operations.

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))

Compliance- Records are kept.

VII. REPORTING

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:

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: FG-MAP

DESCRIPTION: Flexible group for requiring a malfunction abatement plan for each of the control devices associated with the processes.

Emission Units: EU-OP1A, EU-OP2A, EU-OP4A, EU-OP5A, EU-OP1P, EU-OP1C, EU-OP2C, EU-OP6C, EU-OP7C, EU-OP3M, FG-OP2M

POLLUTION CONTROL EQUIPMENT: See Emission Unit Descriptions

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the emission units specified in FG-MAP unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the air-cleaning devices, has been submitted within 180 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:

- a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1224, R 336.1225, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

Compliance- MAP is written on file.

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))

NA

VII. REPORTING

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:

NA

IX. OTHER REQUIREMENTS

NA

Applicable Fugitive Dust Control Plan Conditions:

N/A

MAERS REPORT REVIEW:

Pollutant	2018 Emissions(TPY)
PM10	1.3
VOC	3.5

FINAL COMPLIANCE DETERMINATION

It appears that Kavo Kerr/Romulus Manufacturing is operating in compliance with all applicable requirements.

NAME

[Handwritten signature]

DATE

8-28-19

SUPERVISOR

W.M.