

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

August 5, 2014

**PERMIT TO INSTALL
99-10B**

ISSUED TO
Royal Adhesives & Sealants, LLC

LOCATED AT
4401 Page Avenue
Michigan Center, Michigan

IN THE COUNTY OF
Jackson

STATE REGISTRATION NUMBER
A1932

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: July 2, 2014	
DATE PERMIT TO INSTALL APPROVED: August 5, 2014	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO ₂ e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H ₂ S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfuction Abatement Plan	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
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	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (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.

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 R 336.1370(2). **(R 336.1370)**

13. 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
EU-MIXOP1_1	Mixer #1 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 1250 lb/hr. Emissions are controlled by SED Torit dust collector, formerly known as dust collector #1.	FG-SEDMIXERS
EU-MIXOP1_2	Mixer #2 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 850 lb/hr. Emissions are controlled by SED Torit dust collector formerly known as dust collector #1.	FG-SEDMIXERS
EU-MIXOP1_4	Mixer #4 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 160 lb/hr. Emissions are uncontrolled.	FG-SEDMIXERS
EU-MIXOP1_5	Mixer #5 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 670 lb/hr. Emissions are controlled by SED Torit dust collector, formerly known as dust collector #1.	FG-SEDMIXERS
EU-MIXOP1_6	Mixer #6 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 670 lb/hr. Emissions are controlled by SED Torit dust collector, formerly known as dust collector #1.	FG-SEDMIXERS
EU-MIXOP1_8	Mixer #8 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 1000 lb/hr. Emissions are controlled by SED Torit dust collector, formerly known as dust collector #1.	FG-SEDMIXERS
EU-MIXOP1_9	Mixer #9 associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 500 lb/hr. Emissions are controlled by the Micro Air dust collector and exhausted indoors.	FG-SEDMIXERS
EU-MIXOP1_QM	Quick mix mixer associated with Mixing Operation #1 in the specialty extrusion department (SED). Maximum capacity is 150 lb/hr. Emissions are controlled by a Torit dust collector and exhausted indoors.	FG-SEDMIXERS
EU-DLMIX_DBL1	DBL#1 Mixer associated with the Dolphin Line. Maximum capacity is 200 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EU-DLMIX_DBL2	DBL#2Mixer associated with the Dolphin Line. Maximum capacity is 200 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_300G	300G Mixer associated with the Dolphin Line. Maximum capacity is 300 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_COW	Cowles Mixer associated with the Dolphin Line. Maximum capacity is 200 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_SHAR	Shar Mixer associated with the Dolphin Line. Maximum capacity is 318 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_HSD4	HSD #4 Mixer associated with the Dolphin Line. Maximum capacity is 10 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_MEY	Meyer Mixer associated with the Dolphin Line. Maximum capacity is 200 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_CC1	CC #1 Mixer associated with the Dolphin Line. Maximum capacity is 10 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-DLMIX_CC3	CC #3 Mixer associated with the Dolphin Line. Maximum capacity is 25 gallons per batch. Emissions are uncontrolled and exhausted indoors.	FG-DOLPHIN
EU-MIX_D1	Butyl Rubber Caulking Mixer WP5.	FG-CAULK
EU-MIX_WP2	Butyl Rubber Caulking Mixer WP2.	FG-CAULK
EU-MIX_WP1	Butyl Rubber Caulking Mixer WP1.	FG-CAULK
EU-MIX_BUSS	Butyl Rubber Caulking Mixer Buss.	FG-CAULK
EU-S_EA	3,500 gallon ethyl acetate storage tank in the South Tank Farm.	
EU-EPDM_PRIMING1	Priming unit #1 for solvent primer application on EPDM/TPO roofing tape.	FG-EPDMPRIMING
EU-EPDM_PRIMING2	Priming unit #2 for solvent primer application on EPDM/TPO roofing tape.	FG-EPDMPRIMING
EU-KALAR	Kalar production line consisting of a banbury mixer, extruder/pelletizer, conveyor, shaker/cooling, and rotating drum cooler. Maximum capacity is 650 pounds per hour and emissions are controlled by Kalar Torit dust collector and exhausted indoors.	NA

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EU-KALENE	Kalene production line consisting of an extruder, heating lines, and drain tank. Maximum capacity is 300 pounds per hour and emissions are controlled by thermal oxidizer TO1.	FG-TO1
EU-ISOLENE	Isolene production line consisting of an extruder, heating lines, and drain tank. Maximum capacity is 300 pounds per hour and emissions are controlled by thermal oxidizer TO1.	FG-TO1
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: EU-KALAR

DESCRIPTION: Kalar production line consisting of a banbury mixer, extruder/pelletizer, conveyor, shaker/cooling, and rotating drum cooler. Maximum capacity is 650 pounds per hour and emissions are controlled by Kalar Torit dust collector and exhausted indoors.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Torit dust collector

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.01 lbs per 1,000 lbs exhaust gas	Test Protocol*	EU-KALAR	GC 13	R 336.1331
2. PM10	0.01 tpy	12-month rolling time period as determined at the end of each calendar month	EU-KALAR	SC VI.1	R 336.1205, 40 CFR 52.21(c) & (d)

*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-KALAR unless the Torit dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1225, R 336.1301, 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 keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for PM10 for EU-KALAR. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(3), 40 CFR 52.21(c) & (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-S EA

DESCRIPTION: 3,500 gallon ethyl acetate storage tank

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Conservation vents

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	0.3 tpy	12-month rolling time period as determined at the end of each calendar month	EU-S_EA	SC VI.1	R 336.1205, R 336.1702(a)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-S_EA unless the conservation vents are installed and operating properly. (R 336.1702(a))

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 keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for VOC for EU-S_EA. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(3), R 336.1702(a))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

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-SEDMIXERS	A collection of mixers used to manufacture butyl tape compounds and ethylene vinyl acetate compounds. Some mixers utilize dust collectors to control emissions (SED Torit dust collector which is vented to the ambient air, and a Torit dust collector and a Micro Air dust collector which are both vented to the in-plant environment).	EU-MIXOP1_1, EU-MIXOP1_2, EU-MIXOP1_4, EU-MIXOP1_5, EU-MIXOP1_6, EU-MIXOP1_8, EU-MIXOP1_9, EU-MIXOP1_QM
FG-DOLPHIN	A collection of mixers used to manufacture solvent-based adhesives, sealants, and coatings.	EU-DLMIX_DBL1, EU-DLMIX_DBL2, EU-DLMIX_300G, EU-DLMIX_COW, EU-DLMIX_SHAR, EU-DLMIX_HSD4, EU-DLMIX_MEY, EU-DLMIX_CC1, EU-DLMIX_CC3
FG-CAULK	Solvent based butyl caulking manufacturing.	EU-MIX_D1, EU-MIX_WP2, EU-MIX_WP1, EU-MIX_BUSS
FG-EPDMPRIMING	Priming units 1 and 2 for solvent primer application on EPDM/TPO roofing tape.	EU-EPDM_PRIMING1, EU-EPDM_PRIMING2
FG-TO1	Two rubber extrusion lines controlled by common thermal oxidizer TO1.	EU-KALENE, EU-ISOLENE
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to: FG-SEDMIXERS

DESCRIPTION: A collection of mixers used to manufacture butyl tape compounds and ethylene vinyl acetate compounds. Some mixers utilize dust collectors to control emissions.

Emission Units: EU-MIXOP1_1, EU-MIXOP1_2, EU-MIXOP1_4, EU-MIXOP1_5, EU-MIXOP1_6, EU-MIXOP1_8, EU-MIXOP1_9, EU-MIXOP1_QM

POLLUTION CONTROL EQUIPMENT: EU-MIXOP1_1, EU-MIXOP1_2, EU-MIXOP1_5, EU-MIXOP1_6, and EU-MIXOP1_8 are controlled by SED Torit dust collector (formerly dust collector #1); EU-MIXOP1_9 is controlled by the Micro Air Dust Collector vented to the in-plant environment; EU-MIXOP1_QM is controlled by the Torit Dust Collector vented to the in-plant environment.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10	2.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-SEDMIXERS	SC VI.1, SC VI.3	R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Talc	1,198 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-SEDMIXERS	SC VI.1	R 336.1225
2. Silica	519 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-SEDMIXERS	SC VI.1	R 336.1225

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the following emission units unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))**

Emission unit	Dust collector
EU-MIXOP1_1	SED Torit dust collector
EU-MIXOP1_2	SED Torit dust collector
EU-MIXOP1_5	SED Torit dust collector
EU-MIXOP1_6	SED Torit dust collector
EU-MIXOP1_8	SED Torit dust collector
EU-MIXOP1_9	Micro Air Dust Collector
EU-MIXOP1_QM	Torit Dust Collector

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 keep, in a satisfactory manner, monthly and 12-month rolling time period records of the following:
- a) The total amount of powder used in FG-SEDMIXERS.
 - b) The total amount of talc used in FG-SEDMIXERS.
 - c) The total amount of silica used in FG-SEDMIXERS.
- The permittee shall keep all records on file at the facility and make them available to the Department upon request.¹ **(R 336.1225)**
2. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for PM10 for FG-SEDMIXERS. 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, 40 CFR 52.21(c) & (d))**

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. SVSEDDUSTCOLLECTOR ^A	15 x 12	10	R 336.1225, 40 CFR 52.21(c) & (d)
^A discharged horizontally			

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-DOLPHIN

DESCRIPTION: A collection of mixers used to manufacture solvent-based adhesives, sealants, and coatings.

Emission Units: EU-DLMIX_DBL1, EU-DLMIX_DBL2, EU-DLMIX_300G, EU-DLMIX_COW, EU-DLMIX_SHAR, EU-DLMIX_HSD4, EU-DLMIX_MEY, EU-DLMIX_CC1, EU-DLMIX_CC3

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10	1.5 tpy	12-month rolling time period as determined at the end of each calendar month	FG-DOLPHIN	SC VI.1, VI.4	R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d)
2. VOC	5.88 pph	Test Protocol*	FG-DOLPHIN	GC 13	R 336.1225, R 336.1702(a)
3. VOC	10 tpy	12-month rolling time period as determined at the end of each calendar month	FG-DOLPHIN	SC VI.2, VI.4	R 336.1205, R 336.1225, R 336.1702(a)
4. Methanol	3.25 pph ¹	Test Protocol*	FG-DOLPHIN	GC 13	R 336.1225
5. Xylene	0.5 pph ¹	Test Protocol*	FG-DOLPHIN	GC 13	R 336.1225

*Test Protocol shall specify averaging time

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Talc	1,980 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-DOLPHIN	SC VI.1	R 336.1225
2. Silica	195 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-DOLPHIN	SC VI.1	R 336.1225

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 keep, in a satisfactory manner, monthly and 12-month rolling time period records of the following:
 - a) The total amount of powder used in FG-DOLPHIN.
 - b) The total amount of talc used in FG-DOLPHIN.
 - c) The total amount of silica used in FG-DOLPHIN.The permittee shall keep all records on file at the facility and make them available to the Department upon request.¹ **(R 336.1225)**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amount of solvent and ethyl benzene used in FG-DOLPHIN. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
3. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for PM10 and VOC for FG-DOLPHIN. 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, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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-CAULK

DESCRIPTION: Solvent based butyl caulking manufacturing.

Emission Units: EU-MIX_D1, EU-MIX_WP2, EU-MIX_WP1, EU-MIX_BUSS

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	30.12 tpy	12-month rolling time period as determined at the end of each calendar month	FG-CAULK	SC VI.1, VI.3	R 336.1205, R 336.1702(a)
2. PM10	1.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-CAULK	SC VI.2, VI.3	R 336.1205, 40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-MIX_D1, EU-MIX_WP2, EU-MIX_WP1, or EU-MIX_BUSS unless its cover is installed and operating properly except as needed for the addition of solid materials. **(R 336.1205, R 336.1702(a))**

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 keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for VOC for FG-CAULK. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1702)**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for PM10 for FG-CAULK. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21(c) & (d))**

3. The permittee shall keep, in a satisfactory manner, the following monthly records:
- a. Gallons and/or pounds used of each VOC containing material;
 - b. VOC content, in pounds per gallon or pounds per pound, of each material;
 - c. Pounds used of each powder material.
- The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3), R 336.1702(a), 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: FG-EPDMPRIMING

DESCRIPTION: Priming units 1 and 2 for solvent primer application on EPDM/TPO roofing tape.

Emission Units: EU-EPDM_PRIMING1, EU-EPDM_PRIMING2

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	25.5 pph	Test Protocol*	FG-EPDMPRIMING	GC 13, SC VI.1	R 336.1205, R 336.1225, R 336.1702(a)
2. VOC	30 tpy	12-month rolling time period as determined at the end of each calendar month	FG-EPDMPRIMING	SC II.1, VI.1	R 336.1205, R 336.1225, R 336.1702(a)

*Test Protocol shall specify averaging time

II. MATERIAL LIMITS

1. The permittee shall not use more than 56,470 pounds of EPDM Primer (as applied) per 12-month rolling time period as determined at the end of each calendar month in FG-EPDMPRIMING. **(R 336.1205)**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The applicant shall equip and maintain FG-EPDMPRIMING with roll coaters (rollers) applicators or similar technology with comparable transfer efficiency. **(R 336.1702(d))**

V. TESTING/SAMPLING

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

1. The VOC content, water content, density, solids weight fraction and solids volume fraction of any ink or coating as applied and as received shall be determined using federal Reference Test Method 24 (coatings only) or Method 24A (inks or coatings). Upon prior approval of the District Supervisor, Air Quality Division, VOC content of any material used in FG-EPDMPRIMING may alternatively be determined from manufacturer's formulation data. **(R 336.1702(d), R 336.2001, R 336.2002, R 336.2003, R 336.2004, R 336.2040)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, the following records:
 - a) Monthly record of each material used in the FG-EPDMPRIMING:
 - i) The identification of each product;
 - ii) The VOC content in pounds per gallon (minus water) or weight percent as received and as applied for each product used in FG-EPDMPRIMING;
 - iii) The amount in gallons or pounds of each product used; and
 - b) Monthly VOC emission calculations determining a 12-month rolling time period emission rate in tons per year for FG-EPDMPRIMING.

The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(d))**

2. The permittee shall maintain a current listing of the chemical composition of each material, including the weight percentage of each component. The data may consist of material safety data sheets, manufacturer's formulation data, or both. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

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. SV-EPDM_PRIMING1	24 ¹	30 ¹	R 336.1225
2. SV-EPDM_PRIMING2	24 ¹	30 ¹	R 336.1225

IX. OTHER REQUIREMENTS

1. All waste material shall be captured and stored in closed containers and be disposed of in an acceptable manner in compliance with all-applicable rules and regulations. **(R 336.1205, R 336.1225, R 336.1702(a))**

Footnotes:

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

The following conditions apply to: FG-TO1

DESCRIPTION: Two rubber extrusion lines

Emission Units: EU-KALENE, EU-ISOLENE

POLLUTION CONTROL EQUIPMENT: Thermal oxidizer TO1

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	0.57 pph	Test Protocol*	FG-TO1	GC 13	R 336.1225, R 336.1702(a)
2. VOC	2.5 tpy	12-month rolling time period as determined at the end of each calendar month	FG-TO1	SC VI.3	R 336.1205, R 336.1702(a)

*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 FG-TO1 unless the thermal oxidizer is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes maintaining a minimum combustion chamber temperature of 1500°F and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, the permittee may use an average temperature of 1500°F based upon a three-hour rolling average. (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of FG-TO1. (R 336.1205, R 336.1225, R 336.1702(a), 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 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 336.1205, R 336.1225, R 336.1702(a), R 336.1910)

2. The permittee shall monitor, in a satisfactory manner, the temperature in the combustion chamber of the thermal oxidizer on a continuous basis, during operation of FG-TO1. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall keep the following information on a monthly basis for FG-TO1:
 - a) Pounds of each rubber material used.
 - b) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - c) 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1702(a))**
4. The permittee shall keep, in a satisfactory manner, continuous records of the temperature in the thermal oxidizer. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

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. SV-TO1	15 ¹	49 ¹	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply Source-Wide to: FGFACILITY

DESCRIPTION All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT: Various dust collectors and filters, conservation vents and a baghouse.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10	50 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1205(3)
2. VOC	85 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1205(3)
3. Each individual HAP	8.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1205(3)
4. Total HAPs	15 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1205(3)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Talc	3,178 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205, R 336.1225

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 keep, in a satisfactory manner, the following monthly records:
 - a. Gallons and/or pounds used of each VOC and HAP containing material;
 - b. HAP content, in pounds per gallon or pounds per pound, of each material;
 - c. VOC content, in pounds per gallon or pounds per pound, of each material;
 - d. Pounds used of each powder material.

The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3), R 336.1225, R 336.1702(a))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for PM10, VOC, each individual HAP, and total HAPs for FGFACILITY. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period talc usage records for FGFACILITY. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

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. SV-Fan#1 ^B	24 x 24	9	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-Fan#2 ^B	28 x 28	12	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-Fan#3 ^B	28 x 28	1	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-Fan#4 ^B	60 x 60	NA	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-Fan#5	48	30	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-Fan#6 ^B	28 x 28	12	R 336.1225, 40 CFR 52.21(c) & (d)

^B This vent is not required to discharge unobstructed vertically upwards to the ambient air.

IX. OTHER REQUIREMENTS

NA