

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

November 29, 2018

**PERMIT TO INSTALL
37-17C**

**ISSUED TO
AKWEL**

**LOCATED AT
603 West Seventh Street
Cadillac, Michigan**

**IN THE COUNTY OF
Wexford**

**STATE REGISTRATION NUMBER
A9365**

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: October 2, 2018	
DATE PERMIT TO INSTALL APPROVED: November 29, 2018	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	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	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO _{2e}	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		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.

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)	Installation Date / Modification Date	Flexible Group ID
EU-TURBO101	Turbo hose manufacturing extruder line	to be determined	FGTURBO
EU-TURBO102	Turbo hose manufacturing extruder line	to be determined	FGTURBO
EU-TURBO103	Turbo hose manufacturing extruder line	to be determined	FGTURBO
EUAUTOCLAVE1	Autoclave ID 200 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	5/19/1997	FGAUTOCLAVE
EUAUTOCLAVE2	Autoclave ID 217 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Cadbar lines.	5/19/1997	FGAUTOCLAVE
EUAUTOCLAVE3	Autoclave ID 203 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	to be determined	FGAUTOCLAVE
EUAUTOCLAVE4	Autoclave ID 204 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	to be determined	FGAUTOCLAVE
EUAUTOCLAVE5	Autoclave ID 205 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Cadbar lines.	to be determined	FGAUTOCLAVE
EUAUTOCLAVE6	Autoclave ID 206 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Cadbar lines.	to be determined	FGAUTOCLAVE
EUAUTOCLAVE7	Autoclave ID 207 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	5/19/1997	FGAUTOCLAVE
EUAUTOCLAVE8	Autoclave ID 208 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	10/10/2016	FGAUTOCLAVE
EUAUTOCLAVE9	Autoclave ID 209 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Conventional lines.	5/19/1997	FGAUTOCLAVE
EUAUTOCLAVE10	Autoclave ID 4020- steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Cadbar lines.	8/30/2003	FGAUTOCLAVE
EUAUTOCLAVE11	Autoclave ID 211 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Turbo lines.	to be determined	FGAUTOCLAVE
EUAUTOCLAVE12	Autoclave ID 212 - steam pressure vessel used for the curing of unvulcanized rubber. Associated with the Turbo lines.	to be determined	FGAUTOCLAVE
EUCUREOVEN01	A natural gas fired post cure oven used for vulcanizing molded and extruded rubber products.	8/14/07	FGCUREOVENS

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUCUREOVEN02	An electric post cure oven used for vulcanizing molded and extruded rubber products.	1/30/2012	FGCUREOVENS
EUCUREOVEN03	A natural gas fired post cure oven with cooling booth used for vulcanizing molded and extruded rubber products.	to be determined	FGCUREOVENS
EUCUREOVEN04	A natural gas fired post cure oven with cooling booth used for vulcanizing molded and extruded rubber products.	to be determined	FGCUREOVENS
EUCUREOVEN05	A natural gas fired post cure oven with cooling booth used for vulcanizing molded and extruded rubber products.	to be determined	FGCUREOVENS
EUCUREOVEN06	A natural gas fired post cure oven with cooling booth used for vulcanizing molded and extruded rubber products.	to be determined	FGCUREOVENS
EUCUREOVEN07	A natural gas fired post cure oven with cooling booth used for vulcanizing molded and extruded rubber products.	to be determined	FGCUREOVENS
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.			

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
FGTURBO	Three Turbo hose manufacturing extruder lines	EU-TURBO101 EU-TURBO102 EU-TURBO103
FGAUTOCLAVE	Twelve autoclave steam pressure vessels for the curing of unvulcanized rubber.	EUAUTOCLAVE1 EUAUTOCLAVE2 EUAUTOCLAVE3 EUAUTOCLAVE4 EUAUTOCLAVE5 EUAUTOCLAVE6 EUAUTOCLAVE7 EUAUTOCLAVE8 EUAUTOCLAVE9 EUAUTOCLAVE10 EUAUTOCLAVE11 EUAUTOCLAVE12
FGCUREOVENS	Six natural gas fired, and one electric post cure ovens used for vulcanizing molded and extruded rubber products.	EU-CUREOVEN01 EU-CUREOVEN02 EU-CUREOVEN03 EU-CUREOVEN04 EU-CUREOVEN05 EU-CUREOVEN06 EU-CUREOVEN07

The following conditions apply to:
FGTURBO

DESCRIPTION: Three Turbo hose manufacturing extruder lines

Emission Units: EU-TURBO101, EU-TURBO102, EU-TURBO103

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	6.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGTURBO	SC VI.1	R 336.1702(s)

II. MATERIAL LIMITS

1. The materials used in FGTURBO shall not contain any organic solvents. **(R 336.1205, R 336.1224)**
2. The permittee shall process only VAMAC/AEM and/or Neoprene in FGTURBO. **(R 336.1205)**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a monthly record, acceptable to the AQD District Supervisor, of the following information: **(R 336.1205(3), R 336.1225, R 336.1702(a))**
 - a. Hours of operation of FGTURBO.
 - b. Total pounds of each rubber compound processed (per month and 12-month rolling time period).
 - c. VOC emission calculations determining the mass emission rate from the process. Annual emission rates to be calculated on a 12-month rolling time period as determined at the end of each calendar month. The following emission factors shall be used to do the calculations:

Rubber/plastic Type	Extrusion Emission Factor (lb VOC/lb Rubber)
VAMAC/AEM	4.58e-03
Neoprene	7.86e-06

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:

1. The permittee shall not discharge the emissions from FGTURBO directly into the atmosphere.
(R 336.1205(3), R 336.1225)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
FGAUTOCLAVE

DESCRIPTION: Twelve autoclave steam pressure vessels for the curing of unvulcanized rubber.

Emission Units: EUAUTOCLAVE1, EUAUTOCLAVE2, EUAUTOCLAVE3, EUAUTOCLAVE4, EUAUTOCLAVE5, EUAUTOCLAVE6, EUAUTOCLAVE7, EUAUTOCLAVE8, EUAUTOCLAVE9, EUAUTOCLAVE10, EUAUTOCLAVE11, EUAUTOCLAVE12

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	3.5 pph	Monthly average	FGAUTOCLAVE	SC VI.1	R 336.1702(a)
2. VOC	15.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGAUTOCLAVE	SC VI.1	R 336.1702(a)

II. MATERIAL LIMITS

1. The permittee shall process only the following uncured rubber materials in FGAUTOCLAVE:

- Epichlorohydrin (ECO)
- Hypalon
- Nitrile (NBR)
- Fluoroelastomer (VAMAC/FKM)
- Fluoroelastomer THV
- Chlorinated Polyethylene (CPE)
- EPDM
- Neoprene
- (R 336.1205)**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a monthly record, acceptable to the AQD District Supervisor, of the following information: **(R 336.1702(a))**
 - a. Hours of operation of FG-AUTOCLAVE.
 - b. The total pounds of rubber material processed.
 - c. The amount of each type of rubber material processed.
 - d. Calculations for each individual type of rubber material processed in FG-AUTOCLAVE.
 - e. Calculations for the total VOC mass emission rates in pounds per hour and tons per 12-month rolling time period for FG-AUTOCLAVE using the following emission factors or others as approved by the AQD District Supervisor.

Rubber Material	Emission Factor (Same factors used as lb HAP per lb of rubber and lb VOC per lb of rubber material processed)
EPDM (#8)	0.00604
Neoprene (#11)	0.000318
Nitrile NBR (#14)	0.000716
Fluoroelastomer VAMAC/FKM and THV	0.0000796
Hypalon (#15)	0.000720
CPE (#21)	0.000338
ECO (#23)	0.000502

2. All records shall be made available to the Department upon request. **(R 336.1201(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	Stack Purpose	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVAC1-200A	Main Stack	2 ¹	24.5 ¹	R 336.1225
2. SVAC1-200B	Vent Hood	24 ¹	24.5 ¹	R 336.1225
3. SVAC1-200C	Safety Relief*	2 ¹	24.5 ¹	R 336.1225
4. SVAC3-203A	Main Stack	12 ¹ (at diffuser)	27 ¹	R 336.1225
5. SVAC3-203B	Vent Hood	24 ¹	27 ¹	R 336.1225
6. SVAC3-203C	Safety Relief*	3 ¹	27 ¹	R 336.1225
7. SVAC3-203D	Safety Relief*	3 ¹	27 ¹	R 336.1225
8. SVAC4-204A	Main Stack	14.5 ¹ (at diffuser)	34 ¹	R 336.1225
9. SVAC4-204B	Vent Hood	24 ¹	34 ¹	R 336.1225
10. SVAC4-204C	Safety Relief*	3 ¹	34 ¹	R 336.1225
11. SVAC4-204D	Safety Relief*	3 ¹	34 ¹	R 336.1225
12. SVAC5-205A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
13. SVAC5-205B	Vent Hood	24 ¹	27 ¹	R 336.1225
14. SVAC5-205C	Safety Relief*	3 ¹	27 ¹	R 336.1225
15. SVAC5-205D	Safety Relief*	3 ¹	27 ¹	R 336.1225

Stack & Vent ID	Stack Purpose	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
16. SVAC6-206A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
17. SVAC6-206B	Vent Hood	24 ¹	27 ¹	R 336.1225
18. SVAC6-206C	Safety Relief*	3 ¹	27 ¹	R 336.1225
19. SVAC6-206D	Safety Relief*	3 ¹	27 ¹	R 336.1225
20. SVAC7-207A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
21. SVAC7-207B	Vent Hood	24 ¹	27 ¹	R 336.1225
22. SVAC7-207C	Safety Relief*	3 ¹	27 ¹	R 336.1225
23. SVAC7-207D	Safety Relief*	3 ¹	27 ¹	R 336.1225
24. SVAC8-208A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
25. SVAC8-208B	Vent Hood	24 ¹	27 ¹	R 336.1225
26. SVAC8-208C	Safety Relief*	3 ¹	27 ¹	R 336.1225
27. SVAC8-208D	Safety Relief*	3 ¹	27 ¹	R 336.1225
28. SVAC9-209A	Main Stack	12 ¹ (at diffuser)	27 ¹	R 336.1225
29. SVAC9-209B	Vent Hood	24 ¹	27 ¹	R 336.1225
30. SVAC9-209C	Safety Relief*	3 ¹	27 ¹	R 336.1225
31. SVAC2-217A	Main Stack	3 ¹	24.5 ¹	R 336.1225
32. SVAC2-217B	Vent Hood	24 ¹	24.5 ¹	R 336.1225
33. SVAC2-217C	Safety Relief*	3 ¹	24.5 ¹	R 336.1225
34. SVAC10-4020A	Main Stack	12 ¹ (at diffuser)	27 ¹	R 336.1225
35. SVAC10-4020B	Vent Hood	24 ¹	27 ¹	R 336.1225
36. SVAC10-4020C	Safety Relief*	3 ¹	27 ¹	R 336.1225
37. SVAC11-211A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
38. SVAC11-211B	Vent Hood	24 ¹	27 ¹	R 336.1225
39. SVAC11-211C	Safety Relief*	3 ¹	27 ¹	R 336.1225
40. SVAC11-211D	Safety Relief*	3 ¹	27 ¹	R 336.1225
41. SVAC12-212A	Main Stack	14.5 ¹ (at diffuser)	27 ¹	R 336.1225
42. SVAC12-212B	Vent Hood	24 ¹	27 ¹	R 336.1225
43. SVAC12-212C	Safety Relief*	3 ¹	27 ¹	R 336.1225
44. SVAC12-212D	Safety Relief*	3 ¹	27 ¹	R 336.1225

*Safety reliefs under normal conditions will not be exhausting any emissions

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:
FGCUREOVENS

DESCRIPTION: Six natural gas fired and one electric post cure ovens used for vulcanizing molded and extruded rubber products.

Emission Units: EU-CUREOVEN01, EU-CUREOVEN02, EU-CUREOVEN03, EU-CUREOVEN04, EU-CUREOVEN05, EU-CUREOVEN06, EU-CUREOVEN07

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGCUREOVENS	SC VI.1	R 336.1702(a)
2. Aggregate HAPs	2.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGCUREOVENS	SC VI.1	R 336.1205(3)

II. MATERIAL LIMITS

1. The permittee shall process only the following uncured rubber materials in FGCUREOVENS:
Epichlorohydrin (ECO)
Chlorinated Polyethylene (CPE)
Acrylonitrile Butadiene Rubber (NBR)
Vamac/ Ethylene Acrylic Elastomer (AEM)
Fluoroelastomer (FKM)
Neoprene
(R 336.1201(3), R 336.1205)

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a monthly record, acceptable to the AQD District Supervisor, of the following information: (R 336.1205(3), R 336.1225, R 336.1702(a))
 - a. Hours of operation of the post curing ovens.
 - b. The total pounds of each rubber compound processed (per month and 12-month rolling time period).
 - c. VOC emission calculations determining the mass emission rate from the process. Annual emission rates to be calculated on a 12-month rolling time period as determined at the end of each calendar month. The following emission factors shall be used to do the calculations:

Rubber Type	Emission Factor (lb VOC/lb Rubber)
Epichlorohydrin (ECO)	1.72e-03
Chlorinated Polyethylene (CPE)	8.78e-03
Acrylonitrile Butadiene Rubber (NBR)	1.29e-02
Ethylene Acrylic Elastomer (AEM) and Fluoroelastomer (FKM)	4.58e-03
Neoprene	1.84e-03

- d. Aggregate HAPs emission calculations determining the mass emission rate from the process. Annual emission rates to be calculated on a 12-month rolling time period as determined at the end of each calendar month. The following emission factors shall be used to do the calculations:

Rubber Type	Emission Factor (lb HAPs/lb Rubber)
Epichlorohydrin (ECO)	7.31e-04
Chlorinated Polyethylene (CPE)	2.77e-04
Acrylonitrile Butadiene Rubber (NBR)	1.04e-03
Ethylene Acrylic Elastomer (AEM) and Fluoroelastomer (FKM)	1.16e-04
Neoprene	2.81e-04

2. All records shall be made available to the Department upon request. (R 336.1201(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-CUREOVEN01	8 ¹	25 ¹	R 336.1225
2. SV-CUREOVEN02	8 ¹	20 ¹	R 336.1225
3. SV-CUREOVEN03A	8 ¹	25 ¹	R 336.1225
4. SV-CUREOVEN03B	10 ¹	25 ¹	R 336.1225
5. SV-CUREOVEN04A	8 ¹	25 ¹	R 336.1225
6. SV-CUREOVEN04B	10 ¹	25 ¹	R 336.1225
7. SV-CUREOVEN05A	8 ¹	25 ¹	R 336.1225
8. SV-CUREOVEN05B	10 ¹	25 ¹	R 336.1225
9. SV-CUREOVEN06A	8 ¹	25 ¹	R 336.1225
10. SV-CUREOVEN06B	10 ¹	25 ¹	R 336.1225
11. SV-CUREOVEN07A	8 ¹	25 ¹	R 336.1225

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
12. SV-CUREOVEN07B	10 ¹	25 ¹	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:

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