MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

EFFECTIVE DATE: October 9, 2012

ISSUED TO

AVON AUTOMOTIVE - CADILLAC DIVISION

State Registration Number (SRN): A9365

LOCATED AT

603 West Seventh Street, Cadillac, Wexford County, Michigan 49601

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A9365-2012

Expiration Date: October 9, 2017

Administratively Complete ROP Renewal Application Due Between 4/9/16 and 4/9/17

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-A9365-2012

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Janis Denman, Cadillac District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, or are state only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. (R 336.1213(5))
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. (R 336.1213(5)(a), R 336.1214a(5))
- Those conditions that are hereby incorporated in federally enforceable Source-Wide PTI No. MI-PTI-- pursuant to Rule 201(2)(c) are designated by footnote two. (R 336.1213(5)(b), R 336.1214a(3))

General Provisions

- 1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
- 2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. (R 336.1213(1)(b))
- 3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. (R 336.1213(1)(c))
- 4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
- 5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (R 336.1213(1)(e))

- 6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (R 336.1213(1)(f))
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. (R 336.1213(1)(g))
- 8. This ROP does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))

Equipment & Design

- 9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)

Emission Limits

- 11. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. (R 336.1301(1) in pertinent part):
 - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
 - b. A limit specified by an applicable federal new source performance standard.
- 12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901(b))

Testing/Sampling

- 13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). (R 336.2001)
- 14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3), R 336.2003(1))
- 15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate (R 336.1213(3)(b)):

- a. The date, location, time, and method of sampling or measurements.
- b. The dates the analyses of the samples were performed.
- c. The company or entity that performed the analyses of the samples.
- d. The analytical techniques or methods used.
- e. The results of the analyses.
- f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
- 17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. (R 336.1213(1)(e), R 336.1213(3)(b)(ii))

Certification & Reporting

- 18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. (R 336.1213(4)(c))
- 20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. (R 336.1213(4)(c))
- 21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. (R 336.1213(3)(c))
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
- 23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
- 24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. (R 336.1212(6))
- 25. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA. (R 336.1912)

Permit Shield

- 26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. (R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

- 27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. (R 336.1213(6)(b)(i))
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. (R 336.1213(6)(b)(ii))
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))

d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d. Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f))
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. (R 336.1215, R 336.1216)
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). (R 336.1219(2))
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. (R 336.1210(9))
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. (R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))

Reopenings

- 34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. (R 336.1217(2)(a)(i))
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. (R 336.1217(2)(a)(iii))
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. (R 336.1210(7))

Stratospheric Ozone Protection

- 36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
- 37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, Part 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR, Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). (40 CFR, Part 68)

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. (R 336.1213(12))

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. ² (R 336.1201(1))

- 44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. ² (R 336.1201(8), Section 5510 of Act 451)
- 45. The terms and conditions of a PTI 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 the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. (R 336.1219)
- 46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. ² (R 336.1201(4))

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

C. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

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

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|--|--|---------------------|
| EUMIXER1 | Rubber mixer with associated rubber mill and cooling conveyor. Baghouse control. | 7/13/98 | FGMIXERS |
| EUMIXER2 | Rubber mixer with associated rubber mill and cooling conveyor. Baghouse control. | 7/13/98 | FGMIXERS |
| EU-LINE138 | Rubber parts process center including two rubber/plastic extruders and one surface preparation adhesion promoter/solvent applicator controlled by a catalytic oxidizer. | 6/30/03 | NA |
| EU-CADBAR148 | Low perm CADbar process center including three rubber/plastic extruders, one pre-cure hot air oven, one shared post cure autoclave and one surface preparation adhesion promoter/solvent controlled by a catalytic oxidizer. | 5/29/98 | FG-AOS, FGCADBAR |
| EU-CADBAR152 | Low perm CADbar process center including five rubber/plastic extruders, one pre-cure hot air oven, one shared post cure autoclave and two surface preparation adhesion promoter/solvent applicators controlled by a catalytic oxidizer. | 1/20/11 | FG-AOS FGCADBAR |
| EU-CADBAR153 | Low perm CADbar process center including three rubber/plastic extruders, one pre-cure hot air oven, one shared post cure autoclave and one surface preparation adhesion promoter/solvent applicator controlled by a catalytic oxidizer. | 5/29/98 | FG-AOS FGCADBAR |
| EU-CADBAR154 | Low perm CADbar process center including five rubber/plastic extruders, one shared precure autoclave, one shared post cure autoclave and two surface preparation adhesion promoter/solvent applicators controlled by a catalytic oxidizer. | 5/29/98 3/9/11 | FG-AOS, FGCADBAR |

| PTI No: MI-PTI-A9365-2012 | | | | | |
|---------------------------|--|-------------------|-------------------|--|--|
| Emission Unit ID | Emission Unit Description | Installation | Flexible Group ID | | |
| | (Including Process Equipment & Control | Date/ | | | |
| | Device(s)) | Modification Date | | | |
| EU-CADBAR156 | Low perm CADbar process center including | 5/29/98 | FG-AOS | | |
| | five rubber/plastic extruders, one shared pre- | | FGCADBAR | | |
| | cure autoclave, one shared post cure | | | | |
| | autoclave and two surface preparation | | | | |
| | adhesion promoter/solvent applicators | | | | |
| | controlled by a catalytic oxidizer. | | | | |
| EU-CADBAR161 | Low perm CADbar process center including | 10/2/02 | FG-AOS | | |
| | five rubber/plastic extruders, one shared pre- | | FGCADBAR | | |
| | cure autoclave, one shared post cure | | | | |
| | autoclave and two surface preparation | | | | |
| | adhesion promoter/solvent applicators | | | | |
| ELL OTODI W | controlled by a catalytic oxidizer. | F (00 (00 | FO 400 | | |
| EU-CTRPknitline | CTRP process center with three rubber/plastic | 5/29/98 | FG-AOS | | |
| | extruders and one surface preparation | | | | |
| | adhesion promoter/solvent applicator | | | | |
| EUAUTOCLAVE1 | controlled by a catalytic oxidizer. | F/40/07 | FGAUTOCLAVE | | |
| EUAUTOCLAVET | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE2 | curing of unvulcanized rubber. | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVEZ | Autoclave steam pressure vessel used for the curing of unvulcanized rubber. | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE3 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE3 | | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE4 | curing of unvulcanized rubber. Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE4 | curing of unvulcanized rubber. | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE5 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVES | curing of unvulcanized rubber. | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE6 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVEO | curing of unvulcanized rubber. | 5/19/97 | FGAUTOCLAVE | | |
| EUAUTOCLAVE7 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| LOADTOCLAVET | curing of unvulcanized rubber. | 3/13/31 | TOAUTOCLAVE | | |
| EUAUTOCLAVE8 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| LOAOTOCLAVLO | curing of unvulcanized rubber. | 3/13/31 | TOAUTOCLAVE | | |
| EUAUTOCLAVE9 | Autoclave steam pressure vessel used for the | 5/19/97 | FGAUTOCLAVE | | |
| 20/10/1002/1725 | curing of unvulcanized rubber. | 0/10/01 | 10/10/00/2/17 | | |
| EUMW1 | Microwave and hot air oven rubber curing | 5/19/97 | NA | | |
| LOWIVVI | operations. | 0/10/07 | 14/1 | | |
| EU-CUREOVEN | A natural gas fired post cure oven used for | 8/14/07 | NA | | |
| | vulcanizing molded and extruded rubber | G/ 1 1/ G1 | 10. | | |
| | products. | | | | |
| EULCM106 | Liquid Cure Media (LCM) rubber curing | 7/14/03 | FG-LCM | | |
| | operations | .,,. | . 5 25 | | |
| EULCM108 | Liquid Cure Media (LCM) rubber curing | 7/14/03 | FG-LCM | | |
| | operations | | | | |
| EULCM128 | Liquid Cure Media (LCM) rubber curing | 7/14/03 | FG-LCM | | |
| ···- v | operations | | | | |
| EU-RULE290 | Any emission unit that emits air contaminants | NA | FGRULE290 | | |
| | and is exempt from the requirements of Rule | | | | |
| | 201 pursuant to Rules 278 and 290. | | | | |
| | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 1 | | | |

EU-CTRPknitline EMISSION UNIT CONDITIONS

<u>DESCRIPTION</u> - CTRP process center with three rubber/plastic extruders and one surface preparation adhesion promoter/solvent applicator.

Flexible Group ID: FG-AOS

<u>POLLUTION CONTROL EQUIPMENT</u> - Catalytic Oxidizer controlling emissions from the surface preparation/adhesion promoter applicators.

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|---|---|---|----------------------------------|--|
| 1. VOC | 2000 pounds per calendar month ² | Month | EU-CTRPknitline surface preparation adhesion promoter/solvent applicators. | SC VI.2 | R 336.1225, R 336.1702(a) R 336.1205(1)(a) |
| 2. VOC | 10.0 tons per year ² | 12-month rolling time period as determined at the end of each calendar month | EU-CTRPknitline surface preparation adhesion promoter/solvent applicators. | SC VI.2 | R 336.1225, R 336.1702(a) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---|----------|-------|------------------------------------|-----------|-------------------------------|--|
| 1 | I. NA | | | | | |

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. All waste adhesion promoters/solvents shall be collected and stored in closed containers to minimize emissions to the ambient air.² (R 336.1370, R 336.1702)
- 2. The permittee shall not operate the surface preparation adhesion promoter/solvent applicator portion of EU-CTRPknitline unless the catalytic oxidizer is installed, maintained and operated in a satisfactory manner (except as specified under FG-AOS).² (R 336.1225, R 336.1702, R 336.1901, R 336.1910)
- 3. Satisfactory operation of the catalytic oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) and a minimum catalyst bed inlet temperature of 650°F.² (R 336.1205(3), R 336.1225, R 336.1702, R 336.1901)
- 4. The permittee shall not operate the catalytic oxidizer unless the continuous temperature monitoring and recording system is installed and operating properly. (R 336.213(2))

5. The permittee shall calibrate, maintain and operate, in a satisfactory manner, a temperature monitoring device to monitor and record the catalytic converter inlet temperature on a continuous basis.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 64.6(c)(1)(iii))

6. The permittee shall maintain the catalyst in the catalytic oxidizer in accordance with the procedures in the manufacturer's operation and maintenance manual including high temperature de-carbonization, dust removal and testing and repair/replacement of the catalyst. (R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The catalytic oxidizer shall be designed with a maximum space velocity of 15,000 inverse hours.² (R 336.1205(3), R 336.1225, R 336.1702(a))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permitee shall determine the capture efficiency of the pollution control system and destruction efficiency of the catalytic oxidizer by testing at owner's expense, in accordance with Department requirements once every five years. (R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each adhesion promoter/solvent, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be made available to the Department upon request.² (R 336.1225, R 336.1702, R 336.1901)
- 2. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information²: (R 336.1205(1)(a), R 336.1225, R 336.1702, R 336.1901)
 - a. Description and VOC content, in weight percent or pounds per gallon, of each adhesive used.
 - b. Pounds or gallons of each adhesive used.
 - c. VOC mass emission calculations determining the monthly emission rate in pounds per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- 3. Emission calculations shall be performed as specified in **Appendix 7** or an alternative method approved by the AQD District Supervisor. For calculating emissions, permittee shall use the most recent capture efficiency as demonstrated through testing and approved by AQD.² (R 336.1225, R 336.1702(a), R 336.1901)
- 4. The permittteee shall utilize catatlytic oxidizer inlet temperature as an indicator of the proper functioning of the catalytic oxidizer. A minimum inlet temperature of 650 Degrees F defines proper function of the catalytic converter. (40 CFR 64.6(c)(1)(i and ii)
- 5. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for the catalytic oxidizer: (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 64.6(c)(1)(iii))
 - a. Hours of operation of the catalytic oxidizer.
 - b. Continuously monitored inlet temperature to the catalytic oxidizer.
 - c. Excursions as described in VI.5 and the corrective actions taken.

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6. The permittee shall use the minimum inlet temperature to the catalytic oxidizer to assure compliance with the VOC limit. An Inlet temperature below 650 degrees F is an excursion and shall trigger the shut down of EUCTRPknitline. (40 CFR 64.6(c)(2)

- 7. Upon detecting an excursion or exceedances, the owner or operator shall restore operation of EUCTRPKnitline (including the baghouse and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance. (40 CFR 64.7(d))
- 8. The permittee shall conduct all catalyst bed inlet temperature monitoring continuously at all times that EU-CTRPKnitline is operating. Data recorded during monitor malfunctions, repair activities and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
- 9. The permittee shall, at all times, maintain the inlet temperature monitoring system, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (40 CFR 64.7(b))
- 10. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of capture efficiency and destruction efficiency includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004)
- 5. Each semi-annual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and or exceedances. (40 CFR 64.9(a)(2)(i))
- Each semi-annual report of monitoring deviations shall include summary information on inlet temperature monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(ii))
- 7. The permittee shall promptly notify AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. (40 CFR 64.7(e))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|--|--|
| 1. SV-Oxidizer | 20 ¹ | 24 ¹ | R 336.1225, R 336.1901 40 CFR 52.21 (c) and (d) |

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall implement and maintain a preventative maintenance/malfunction abatement plan for EUCTRPKnitline. The plan shall include, at a minimum, procedures for maintaining and operating in a satisfactory manner the catalytic oxidizer and monitoring equipment, identification and descriptions of operating variables, and a program for corrective action for malfunction events. If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the preventative maintenance/malfunction abatement plan within 45 days after such an event occurs.² (R 336.1911)
- 2. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. (40 CFR, Part 64)

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-Line138 EMISSION UNIT CONDITIONS

<u>**DESCRIPTION**</u> - Rubber parts process center including two rubber/plastic extruders and one surface preparation adhesion promoter/solvent applicator.

Flexible Group ID: NA

<u>POLLUTION CONTROL EQUIPMENT</u> - Catalytic Oxidizer controlling emissions from the surface preparation/adhesion promoter applicators.

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|----------------------|---|-----------|-------------------------------|--|
| 1. VOC | 8.4 tpy ² | 12-month rolling time period as determined at the end of each calendar month | • • | SC VI.2 | R 336.1702(a) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---|----------|-------|------------------------------------|-----------------------------------|--|
| I | AV | | | | |

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. All waste adhesion promoters/solvents shall be collected and stored in closed containers so as to minimize emissions to ambient air.² (R 336.1370, R 336.1702)
- The permittee shall not operate the surface preparation adhesion promoter/solvent applicator portion of EU-Line138 unless the catalytic oxidizer is installed, maintained and operated in a satisfactory manner.² (R 336.1225, R 336.1702, R 336.1901, R 336.1910)
- 3. Satisfactory operation of the catalytic oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight), a minimum catalyst bed inlet temperature of 650°F.² (R 336.1205(3), R 336.1225, R 336.1702, R 336.1901)
- 4. Permittee shall not operate the catalytic oxidizer unless the continuous temperature monitoring and recording system is installed and operating properly. (R 336.1213(2))
- 5. The permittee shall calibrate, maintain and operate, in a satisfactory manner, a temperature monitoring device to monitor and record the catalytic converter inlet temperature on a continuous basis.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 64.6(c)(1))
- 6. The Permittee shall maintain the catalyst in the catalytic oxidizer in accordance with the procedures in the manufacturer's operation and maintenance manual including high temperature de-carbonization, dust removal and testing and repair/replacement of the catalyst. (R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The catalytic oxidizer shall be designed with a maximum space velocity of 15,000 inverse hours.² (R 336.1205(3), R 336.1225, R 336.1702(a))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permitee shall determine the capture efficiency of the pollution control system and destruction efficiency of the catalytic oxidizer by testing at owner's expense, in accordance with Department requirements once every five years. (R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each adhesion promoter/solvent, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be made available to the Department upon request.² (R 336.1225, R 336.1702(a), R 336.1901)
- 2. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information²: (R 336.1225, R 336.1702(a), R 336.1901)
 - a. Description of each adhesive used.
 - b. Pounds or gallons of each adhesive used.

 - c. VOC content, in weight percent or pounds per gallon, of each adhesive used.d. VOC mass emission calculations determining the monthly emission rate in pounds per calendar month.
 - e. 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.
- 3. Emission calculations shall be performed as specified in Appendix 7 or an alternative method approved by the AQD District Supervisor. For calculating emissions, permittee shall use the most recent capture efficiency as demonstrated through testing and approved by AQD.² (R 336.1225, R 336.1702(a), R 336.1901)
- 4. The permitteee shall utilize catatlytic oxidizer inlet temperature as an indicator of the proper functioning of the catalytic oxidizer. A minimum inlet temperature of 650 Degrees F defines proper function of the catalytic converter. (40 CFR 64.6(c)(1)(i and ii)
- 5. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for the catalytic oxidizer:² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 64.6(c)(1)(iii))
 - a. Hours of operation of the catalytic oxidizer.
 - b. Continuously monitored Inlet temperature to the catalytic oxidizer.
 - c. Excursions as described in VI.5 and the corrective actions taken.
- 6. The permittee shall use the minimum inlet temperature to the catalytic oxidizer to assure compliance with the VOC limit. An Inlet temperature below 650 degrees F is an excursion and shall trigger the shutdown of EULine138. (40 CFR 64.6(c)(2)
- 7. Upon detecting an excursion or exceedances, the owner or operator shall restore operation of EULine138 (including the baghouse and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance. (40 CFR 64.7(d))

8. The permittee shall conduct all catalyst bed inlet temperature monitoring continuously at all times that EU-Line138 is operating. Data recorded during monitor malfunctions, repair activities and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))

- 9. The permittee shall, at all times, maintain the inlet temperature monitoring system, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (40 CFR 64.7(b))
- 10. All records shall be made available to the Department upon request.2 (R 336.1213(1)(d)(ii))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of capture efficiency and destruction efficiency includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004)
- 5. Each semi-annual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and or exceedances. (40 CFR 64.9(a)(2)(i))
- 6. Each semi-annual report of monitoring deviations shall include summary information on inlet temperature monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(i))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|--|---------------------------------------|
| 1. SV-Oxidizer | 20 ¹ | 24 ¹ | R 336.1225, R 336.1901, 40 CFR |
| | | | 52.21(c) and (d) |

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain a preventative maintenance/malfunction abatement plan for EULine138. The plan shall include, at a minimum, procedures for maintaining and operating in a satisfactory manner the catalytic oxidizer and monitoring equipment, identification and descriptions of operating variables, and a program for corrective action for malfunction events. If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the preventative maintenance/malfunction abatement plan within 45 days after such an event occurs.² (R 336.1911)

2. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. (40 CFR Part 64)

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EUMW1 EMISSION UNIT CONDITIONS

<u>DESCRIPTION</u> - Microwave and hot air oven rubber curing operations.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT - NA

I. EMISSION LIMIT(S)

| | Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|-----------|----------------------------------|---|-----------|-------------------------------|--|
| 1. | VOC | 1.4 pounds per hour ² | | EUMW1 | SC VI.1 | R 336.1702(a) |
| 2. | VOC | 4.6 tpy ² | 12-month rolling time period as determined at the end of each calendar month | EUMW1 | SC VI.1 | R 336.1702(a) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|-----------|--|---------------------------------|-----------|-------------------------------|--|
| 1. | EPDM (#8) | 2,900,014 pounds per year ² | | EUMW1 | | R 336.1205(1)- (a)(ii)(C) |
| 2. | NEOPRENE | 691,156 pounds per vear ² | | EUMW1 | SC VI.1 | R 336.1205(1)- (a)(ii)(C) |

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. There shall be no visible emissions from EUMW1. (R 336.1301(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information²: (R 336.1201(3), R 336.1213(3))
 - a. Hours of operation of the microwave curing line.
 - b. The total pounds of each rubber compound processed.
 - 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.
- 2. All records shall be made available to the Department upon request. (R 336.1201(3), R 336.1213(3))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| | Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|----|-----------------|--|------------------------------------|---------------------------------------|
| 1. | SVMW105A | 22 ² | 17.5 ² | R 336.1702(a) |
| 2. | SVMW105B | 22 ² | 18 ² | R 336.1702(a) |
| 3. | SVMW105B | 48 ² | 17.5 ² | R 336.1702(a) |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-CUREOVEN EMISSION UNIT CONDITIONS

<u>DESCRIPTION</u> - A natural gas fired post cure oven used for vulcanizing molded and extruded rubber products.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT – NA

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

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------------------|----------------------|---|-------------|-------------------------------|--|
| 1. VOC | 5.0 tpy ² | 12-month rolling time period as determined at the end of each calendar month | EU-CUREOVEN | SC VI.1 | R 336.1702(a) |
| 2. Aggregate HAPs | 2.0 tpy ² | 12-month rolling time period as determined at the end of each calendar month | EU-CUREOVEN | SC VI.1 | R 336.205(3) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|----------|--|---|-------------|-------------------------------|---|
| 1. | ECO | 100,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | EU-CUREOVEN | SC VI.1 | R 336.1225, R 336.1702(a), R 336.1901 |
| 2. | EPDM | 1,800,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | EU-CUREOVEN | SC VI.1 | R 336.1225, R 336.1702(a), R 336.1901 |
| 3. | Vamac | 1,800,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | EU-CUREOVEN | SC VI.1 | R 336.1225, R 336.1702(a), R 336.1901 |

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information²: (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)
 - a. Hours of operation of the post curing oven.
 - 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) |
|-------------|------------------------------------|
| ECO | 1.72e-03 |
| EPDM | 8.25e-04 |
| Vamac | 4.58e-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) |
|-------------|-------------------------------------|
| ECO | 7.31e-04 |
| EPDM | 9.76e-04 |
| Vamac | 1.16e-04 |

2. All records shall be made available to the Department upon request.2 (R 336.1205(3), R 336.1702(a))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|-------------------------------------|--|--|
| 1. SV-CUREOVEN | 72 | 2222 | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

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 |
|-------------------|--|--|
| Flexible Gloup ID | Flexible Group Description | Emission Unit IDs |
| FGMIXERS | Two rubber mixers at Plant 1 each with an associated | EUMIXER1, EUMIXER2 |
| | rubber mill and cooling conveyor and baghouse control. | |
| FGCADBAR | Six low perm CADbar process centers at Plant 1. | EU-CADBAR148 EU-CADBAR152 EU-CADBAR153 |
| | | EU-CADBAR154 EU-CADBAR156 EU-CADBAR161 |
| FG-AOS | Alternative Operating Scenario for the facility in the event that the catalytic oxidizer malfunctions. | EU-CADBAR148 EU-CADBAR152 EU-CADBAR153 EU-CADBAR154 EU-CADBAR156 EU-CADBAR161 EU-CTRPknitline EU-Line 138 |
| FGAUTOCLAVE | Nine autoclave steam pressure vessels for the curing of unvulcanized rubber at Plant 1. | EUAUTOCLAVE1 EUAUTOCLAVE2 EUAUTOCLAVE3 EUAUTOCLAVE4 EUAUTOCLAVE5 EUAUTOCLAVE6 EUAUTOCLAVE7 EUAUTOCLAVE8 EUAUTOCLAVE9 |
| FG-LCM | Three Liquid Cure Media rubber-curing operations at Plant 1. | EULCM106 EULCM108 EULCM128 |
| FGRULE290 | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. Includes the print pan cleaner and the CTRP assembly. | |

FGMIXERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Two rubber mixers at Plant 1 each with an associated rubber mill and cooling conveyor

Emission Units: EUMIXER1, EUMIXER2

POLLUTION CONTROL EQUIPMENT – Baghouse control

I. EMISSION LIMIT(S)

| | Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|-----------------------|---|--|-----------|----------------------------------|--|
| 1. | Particulate Matter | 0.01 pounds per 1000 pounds of exhaust gases (dry gas basis) ² | | FGMIXERS | SC V.1, VI.2 | R 336.1331(1)(c) |
| 2. | Particulate Matter | 1.22 pounds per hour ² | | FGMIXERS | SC V.1, VI.2 | R 336.1331(1)(c) |
| 3. | Particulate Matter | 5.3 tpy ² | | FGMIXERS | SC V.1, VI.2 | R 336.1331(1)(c) |
| 4. | VOC | 2.2 pounds per hour ² | | FGMIXERS | SC VI.1, | R 336.1702(a) |
| 5. | VOC | 4.9 tpy ² | 12-month rolling time period as determined at the end of each calendar month | FGMIXERS | SC VI.1 | R 336.1702(a) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | • • | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|----------|-------|------------------------------------|-----|-------------------------------|--|
| 1. | NA | | | | | |

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate the mixing process unless the dust collector and the intake ducts around the hopper entry points are installed and operating properly.² (R 336.1910)
- 2. The permittee shall calibrate, maintain and operate differential pressure gauges on each mixer baghouse and monitor the differential pressure on a continuous basis. (R 336.1901, 40 CFR 64.6(c)(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information²: R 336.1213(3)) (R 336.1702(a))
 - a. Hours of operation of the mixing process.
 - b. The total pounds of each compound of rubber processed.
 - c. VOC emission calculations determining the total mass emissions from the mixing process in tons per month; and a 12-month rolling time period mass emission at the end of each calendar month using emission factors from the table in **Appendix 7** or others as approved by the District Supervisor.
 - d. Particulate emission calculations determining the total mass emissions from the mixing process in tons per year at the end of each calendar month using emission factors acceptable to the District Supervisor.
- 2. The permittee shall conduct and record monthly non-certified visible emissions observations for each of the mixer process baghouses. Observations must be conducted during operation of the process. If visible emissions are observed, the permittee shall also note the following in the record: (R 336.1213(3))
 - a. The cause of the visible emissions.
 - b. The total duration of the visible emission incident.
 - c. Corrective actions taken to eliminate the visible emissions.
- 3. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii))
- 4. The permittee shall utilize non-certified visible emissions (VE) observations and differential pressure measurements as indicators of the proper functioning of the baghouse. The appropriate range of VE is no VE, the appropriate differential pressure range defining proper function of the baghouse is 1 to 4 inches w.c. (40 CFR 64.6(c)(1)(i and ii))
- 5. The permittee shall conduct monthly non-certified VE observations and measurements of the baghouse differential pressure. VE observations must be made by an observer familiar with VE observation protocols and with the operation of the baghouse. The differential pressure test gauge shall be tested and calibrated in accordance with the manufacturer's recommendations. Each VE observations shall be recorded. Baghouse differential pressure measurements shall be observed continuously over a 5-minute period and recorded. (40 CFR 64.6(c)(1(iii))
- 6. The permittee shall use VE and differential pressure to assure compliance with the Particulate Matter(PM) limit. An excursion for PM shall be any observation of visible emissions and any differential pressure gauge reading less than 1 inch w.c. or greater than 4 inches w.c. This condition does not affect compliance with R 336.1301. (40 CFR 64.6(c)(2))
- 7. The permittee shall conduct all data collection at the required intervals while FGMIXERS is operating. (40 CFR 64.6(c)(3), 64.7(c))
- 8. Upon detecting an excursion or exceedances, the owner or operator shall restore operation of FGMIXERS (including the baghouse and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance. (40 CFR 64.7(d))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of capture efficiency and destruction efficiency includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004)
- 5. Each semi-annual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and or exceedances. (40 CFR 64.9(a)(2)(i))
- 6. Each semi-annual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(i))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|-------------------------------------|------------------------------------|---------------------------------------|
| 1. SVBAGHOUSE1 | NA | 12 ² | R 336.1301(1)(c)) |
| 2. SVBAGHOUSE2 | NA | 12 ² | R 336.1301(1)(c)) |
| 3. SVBAGHOUSE3 | NA | 10 ² | R 336.1301(1)(c)) |

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall implement and maintain a preventative maintenance/malfunction abatement plan for FGMIXERS. The plan shall include, at a minimum, procedures for maintaining and operating in a satisfactory manner the baghouse and monitoring equipment, identification and descriptions of operating variables, and a program for corrective action for malfunction events. If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the preventative maintenance/malfunction abatement plan within 45 days after such an event occurs. (R 336.1911)
- 2. The premittee shall promptly notify AQD for the need to made to made to made to the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. (40 CFR 64.7(e))

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PTI No: MI-PTI-A9365-2012

3. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. (40 CFR Part 64)

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCADBAR FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Six low perm CADbar process centers at Plant 1

Emission Unit: EU-CADBAR148, EU-CADBAR152, EU-CADBAR153, EU-CADBAR154, EU-CADBAR156, EU-CADBAR161

<u>POLLUTION CONTROL EQUIPMENT</u> – Catalytic Oxidizer controlling emissions from the surface preparation/adhesion promoter applicators.

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

| | Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|-----------|-----------------------|------------------------------------|----------------------|-------------------------------|--|
| 1. | VOC | 39.2 tpy ² | 12-month rolling time | Rubber/Plastic | SC VI.2 | R 336.1702(a) |
| | | | period as determined at | curing processes | | |
| | | | the end of each calendar | | | |
| | | | month | | | |
| 2. | VOC | 35.4 tpy ² | 12-month rolling time | Surface preparation | SC VI.3 | R 336.1702(a) |
| | | | period as determined at | adhesion | | |
| | | | the end of each calendar | | | |
| | | | month | applicator processes | | |
| 3. | Toluene | Less than 9.0 | 12-month rolling time | EU-CADBAR161 | SC VI.4 | R 336.1205(3) |
| | | tpy ² | period as determined at | | | |
| | | | the end of each calendar | | | |
| | | | month | | | |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|----------|--|---|-----------|-------------------------------|--|
| 1. | ECO | 5,150,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | FGCADBAR | SC VI.2 SC VI.4 | R 336.1205(3), R 336.1225, R 336.1702, R 336.1901 |
| 2. | Hypalon | 2,150,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | FGCADBAR | SC VI.2 SC VI.4 | R 336.1205(3), R 336.1225, R 336.1702, R 336.1901 |
| 3. | Nitrile | 3,650,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | FGCADBAR | SC VI.2 SC VI.4 | R 336.1205(3), R 336.1225, R 336.1702, R 336.1901 |
| 4. | FKM | 1,500,000 pounds per year ² | 12-month rolling time period as determined at the end of each calendar month | FGCADBAR | SC VI.2 SC VI.4 | R 336.1205(3), R 336.1225, R 336.1702, R 336.1901 |

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable |
|----|----------|---------------------------------|---------------------------------|-----------|-------------------------------|--------------------------|
| | | | | | | Requirements |
| 5. | THV | 1,000,000 | 12-month rolling time | FGCADBAR | SC VI.2 | R 336.1205(3), |
| | | pounds per year ² | period as determined at | | SC VI.4 | R 336.1225, |
| | | year ² | the end of each calendar | | | R 336.1702, |
| | | | month | | | R 336.1901 |
| 6. | CPE | 3,000,000 | 12-month rolling time | FGCADBAR | SC VI.2 | R 336.1205(3), |
| | | pounds per year ² | period as determined at | | SC VI.4 | R 336.1225, |
| | | year 2 | the end of each calendar | | | R 336.1702, |
| | | | month | | | R 336.1901 |
| 7. | EPDM | 1,500,000 | 12-month rolling time | FGCADBAR | SC VI.2 | R 336.1205(3), |
| | | pounds per year ² | period as determined at | | SC VI.4 | R 336.1225, |
| | | year ² | the end of each calendar | | | R 336.1702, |
| | | | month | | | R 336.1901 |

III. PROCESS/OPERATIONAL RESTRICTION(S)

- All waste adhesion promoters/solvents shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations.² (R 336.1224, R 336.1225, R 336.1702, R 336.1901)
- 2. The permittee shall not operate the surface preparation adhesion promoter/solvent applicator portions of FGCADBAR unless the catalytic oxidizer is installed, maintained and operated in a satisfactory manner (except as specified under FG-AOS). (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)
- 3. Satisfactory operation of the catalytic oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight), and a minimum catalyst bed inlet temperature of 650°F² (R 336.1205(3), R 336.1225, R 336.1702, R 336.1901)
- Permittee shall not operate the catalytic oxidizer unless the continuous temperature monitoring and recording system is installed and operating properly.² (R 336.1205(3), R 336.1225, R 336.1702, R 336.1901, R 336.1910)
- The permittee shall calibrate, maintain and operate, in a satisfactory manner, a temperature monitoring device to monitor and record the catalytic converter inlet temperature on a continuous basis.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR 64.6(c)(1))
- 6. The Permittee shall maintain the catalyst in the catalytic oxidizer in accordance with the procedures in the manufacturer's operation and maintenance manual including high temperature de-carbonization, dust removal and testing and repair/replacement of the catalyst. (R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The catalytic oxidizer shall be designed with a maximum space velocity of 15,000 inverse hours.² (R 336.1205(3), R 336.1225, R 336.1702(a))

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

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permitee shall determine the capture efficiency of the pollution control system and destruction efficiency of the catalytic oxidizer by testing at owner's expense, in accordance with Department requirements once every five years. (R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each adhesion promoter/solvent, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be made available to the Department upon request.² (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)
- 2. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for rubber/plastic curing processes of FGCADBAR²: **(R 336.1702, R 336.1901)**
 - a. Description and quantity (pounds) of each rubber/plastic type produced.
 - b. VOC mass emission calculations for each rubber/plastic type produced in FGCADBAR determining monthly emissions in tons using the following emission factors:

| Rubber Type | Emission Factor (lb VOC/lb Rubber) |
|-------------|------------------------------------|
| ECO | 1.75e-03 |
| Hypalon | 1.32e-02 |
| Nitrile | 5.39e-04 |
| FKM | 4.58e-03 |
| THV | 4.58e-03 |
| CPE | 9.01e-03 |
| EPDM | 7.00e-05 |

- c. VOC mass emission calculations for each rubber/plastic type produced in FGCADBAR determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month using the above emission factors.
- 3. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for the surface preparation processes of FGCADBAR:² (R 336.1225, R 336.1702(a), R 336.1901)
 - a. Description of each adhesive used.
 - b. Pounds or gallons of each adhesive used.
 - c. VOC content, in weight percent or pounds per gallon, of each adhesive used.
 - VOC mass emission calculations from determining the monthly emission rate in pounds per calendar month
 - e. 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.
- 4. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for EU-CADBAR161: (R 336.1205(3), R 336.1225, R 336.1901)
 - a. Pounds or gallons of toluene adhesive used.
 - b. Toluene content, in weight percent or pounds per gallon, of each adhesive used.
 - c. Description and quantity (pounds) of each rubber/plastic type produced.
 - d. Total (adhesive and rubber/plastic) toluene 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.

| Rubber/plastic Type | Hot Air Cure Emission Factor (lb Toluene/lb Rubber) | Extrusion Emission Factor (lb Toluene/lb Rubber) | Autoclave Cure Emission Factor (lb Toluene/lb Rubber) |
|------------------------|--|---|--|
| ECO | 5.68e-04 | 1.24e-05 | 3.90e-04 |
| Hypalon | 7.79e-06 | 1.69e-07 | 2.12e-05 |
| Nitrile | 1.70e-05 | 3.69e-07 | 4.18e-06 |

| FKM | 4.31e-06 | 9.37e-08 | 2.96e-06 |
|------|----------|----------|----------|
| THV | 4.31e-06 | 9.37e-08 | 2.96e-06 |
| CPE | 7.39e-08 | 3.4e-06 | 1.25e-05 |
| EPDM | NA | 3.52e-06 | 6.65e-05 |

- Emission calculations shall be performed as specified in Appendix 7 or an alternative method approved by the AQD District Supervisor. For calculating emissions, permittee shall use the most recent capture efficiency as demonstrated through testing and approved by AQD.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)
- 6. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information for the catalytic oxidizer: (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)(64.6(c)(1)(iii))
 - a. Hours of operation of the catalytic oxidizer.
 - b. Continuously monitored inlet temperature to the catalytic oxidizer.
 - c. Excursions as described in VI.7 and the corrective actions taken.
- 7. The permitteee shall utilize catatlytic oxidizer inlet temperature as an indicator of the proper functioning of the catalytic oxidizer. A minimum inlet temperature of 650 Degrees F defines proper function of the catalytic converter. (40 CFR 64.6(c)(2))
- 8. The permittee shall use the minimum inlet temperature to the catalytic oxidizer to assure compliance with the VOC limit. An Inlet temperatures below 650 degrees F is an excursion and shall trigger the shut down of FGCADBAR. (40 CFR 64.6(c)(2)
- 9. Upon detecting an excursion or exceedances, the owner or operator shall restore operation of FGCADBAR (including the baghouse and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance. (40 CFR 64.7(d))
- 10. The permittee shall conduct all catalyst bed inlet temperature monitoring continuously at all times that FGCADBAR is operating. Data recorded during monitor malfunctions, repair activities and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
- 11. The permittee shall, at all times, maintain the inlet temperature monitoring system, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (40 CFR 64.7(b))
- 12. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of capture efficiency and destruction efficiency includes

the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004)

- 5. Each semi-annual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and or exceedances. (40 CFR 64.9(a)(2)(i))
- 6. Each semi-annual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(i))
- The permittee shall promptly notify AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. (40 CFR 64.7(e))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------------|--|--|--|
| 1. SV-Oxidizer | 20 ² | 24 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 2. SV-Precure148/152 | 10 ² | 25 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 3. SV-Postcure148/152 | 10 ² | 26 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 4. SV-Precure153 | 10 ² | 25 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 5. SV-Postcure153 | 10 ² | 26 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 6. SV-Precure154 | 2 ² | 222 | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 7. SV-Postcure154 | 10 ² | 26 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 8. SV-Precure156 | 2 ² | 222 | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 9. SV-Postcure156 | 10 ² | 26 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 10. SV-Precure161 | 2 ² | 222 | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|--------------------|-------------------------------------|------------------------------------|--|
| 11. SV-Postcure161 | 10 ² | 34.5 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The notification shall be submitted to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal. (R336.1225(4))
- 2. The permittee shall implement and maintain a preventative maintenance/malfunction abatement plan for FGCADBAR. The plan shall include, at a minimum, procedures for maintaining and operating in a satisfactory manner the catalytic oxidizer and monitoring equipment, identification and descriptions of operating variables, and a program for corrective action for malfunction events. If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the preventative maintenance/malfunction abatement plan within 45 days after such an event occurs. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, R 336.1911)
- 3. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. (40 CFR, Part 64)

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-AOS FLEXIBLE GROUP CONDITIONS

<u>DESCRIPTION</u> – Alternative Operating Scenario for the facility in the event that the catalytic oxidizer malfunctions.

Emission Units: The surface preparation portions of EU-CADBAR148, EU-CADBAR152, EU-CADBAR153, EU-CADBAR154, EU-CADBAR156, EU-CADBAR161, EU-CTRPknitline, EU-LINE138

POLLUTION CONTROL EQUIPMENT - NA

I. EMISSION LIMIT(S)*

| | Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|---------------|---|------------------------------------|--|-------------------------------|--|
| 1. | Cyclohexanone | 5.7 pounds per hour ¹ | hourly | EU-LINE138 EU-CTRPknitline FGCADBAR* | SC VI.1 | R 336.1225, R 336.1901 |
| 2. | Cyclohexanone | 45.6 pounds per 8-hours ¹ | 8-hour | EU-LINE138 EU-CTRPknitline FGCADBAR* | SC VI.1 | R 336.1225, R 336.1901 |
| 3. | Toluene | 4.8 pounds per hour ¹ | hourly | EU-LINE138 SC VI.1 EU-CTRPknitline FGCADBAR* | | R 336.1225, R 336.1901 |
| 4. | Toluene | 115.2 pounds per 24-hours ¹ | 24-hour | EU-LINE138 EU-CTRPknitline FGCADBAR* | SC VI.1 | R 336.1225, R 336.1901 |

^{*}The surface preparation portions only of these lines

II. MATERIAL LIMIT(S)

| Material | Limit | Time Period/ Operating Scenario | • • | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----------|-------|------------------------------------|-----|-------------------------------|--|
| NA | | | | | - |

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain records, acceptable to the District Supervisor, of the following information when operating under FG-AOS:² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)
 - a. Daily hours of operation of EU-CTRPknitline and FGCADBAR (per emission unit) when operating uncontrolled.
 - b. Pounds or gallons of each cyclohexanone and toluene adhesive used.
 - c. Cyclohexanone and toluene content, in weight percent or pounds per gallon, of each adhesive used.
 - d. Cyclohexanone mass emission calculations determining the emission rate in pounds per hour and pounds per 8-hours.
 - e. Toluene mass emission calculations determining the emission rate in pounds per hour and pounds per 24-hours.
- 2. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall provide notice when the Alternative Operating Scenario is initiated. The notice shall be submitted to the AQD District Supervisor as soon as reasonably possible, but not later than two (2) business days after initiation of the Alternative Operating Scenario. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports shall be submitted within ten (10) days after the abnormal conditions or malfunction has been corrected that resulted in the initiation of the Alternative Operating Scenario, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all the information required in Rule 912(5). (R 336.1225, R 336.1901, R 336.1912)

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|--------------------------|--|--|---|
| 1. SV-Bypass148/CTRP/152 | 10 ² | 18 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 |
| 2. SV-Bypass154 | 10 ² | 18 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21R 336.1225, R 336.1901, 40 CFR 52.21 |
| 3. SV-Bypass153/156 | 10 ² | 18 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21R 336.1225, R 336.1901, 40 CFR 52.21 |
| 4. SV-Bypass161 | 10 ² | 18 ² | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21R 336.1225, R 336.1901, 40 CFR 52.21 |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FGAUTOCLAVE FLEXIBLE GROUP CONDITIONS

<u>DESCRIPTION</u> - Nine autoclave steam pressure vessels for the curing of unvulcanized rubber.

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

POLLUTION CONTROL EQUIPMENT - NA

I. EMISSION LIMIT(S)

| | Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|-----------|-------------------------------------|---|-------------|-------------------------------|--|
| 1. | VOC | 2.6 pounds per hour ² | Monthly average | FGAUTOCLAVE | SC VI.1 | R 336.1702(a) |
| 2. | VOC | 8.6 tpy ² | 12-month rolling time period as determined at the end of each calendar month | FGAUTOCLAVE | SC VI.1 | R 336.1702(a) |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|----------|-------|------------------------------------|-----------------------------------|--|
| N. | Α | | | | |

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a monthly record, acceptable to the District Supervisor, of the following information:² (R 336.1702(a)) (R 336.1213(3)(b))
 - 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 rate in pounds per hour and tons per 12-month rolling time period for FG-AUTOCLAVE using emission factors from the table in Appendix 7 or others as approved by the District Supervisor.
- 2. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii), R336.1201(3))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|--|---------------------------------------|
| 1. SV48-AC-01 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 2. SV73-AC-01 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 3. SV49-AC-02 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 4. SV72-AC-02 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 5. SV31-AC-03 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 6. SV200-AC-04 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 7. SV140-AC-05 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 8. SV144-AC-06 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 9. SV147-AC-06 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 10. SV152-AC-07 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 11. SV154-AC-07 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 12. SV202-AC-08 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 13. SV203-AC-08 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |
| 14. SV300-AC-09 | 4 ¹ | 24 ¹ | R 336.1225, R 336.1901 |

IX. OTHER REQUIREMENT(S)

NA

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-LCM FLEXIBLE GROUP CONDITIONS

DESCRIPTION - Three Liquid Cure Media rubber-curing operations at Plant 1

Emission Unit: EULCM106, EULCM108, EULCM128

POLLUTION CONTROL EQUIPMENT - NA

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

| | Pollutant | Limit | Time Period/ Operating Scenario | | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---|-----------|------------------------|--|--------|-------------------------------|--|
| 1 | . VOC | 29.6 tons ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |

II. MATERIAL LIMIT(S)

| | Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|----|------------------|-----------------------------------|--|-----------|-------------------------------|--|
| 1. | EPDM (#8) | 10,000,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |
| 2. | Neoprene | 2,000,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |
| 3. | Nitrile | 800,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |
| 4. | Hypalon (#15) | 150,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |
| 5. | CPE (#21) | 1,600,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |
| 6. | ECO (#23) | 1,000,000 pounds ² | 12-month rolling time period as determined at the end of each calendar month | FG-LCM | SC V1.1 | R 336.1702(a), R 336.1225 |

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All waste materials shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable rules and regulations. (R336.1224) (R336.1702(a))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall maintain a minimum exhaust flow rate of 1900 ACFM from each of the stacks listed in VIII. (R 336.1225(1))

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain a monthly record, completed and made available by the 15th day of each calendar month, acceptable to the District Supervisor, of the following information:² (R 336.1702(a), R336.1213(b))
 - a. The identity and monthly amount in pounds, of each rubber produced in FG-LCM.
 - b. VOC mass emission calculations for each rubber type produced in FG-LCM determining monthly emissions in tons using emission factors approved by AQD.
 - c. Total 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 using emission factors listed in Appendix 7.
- 2. All records shall be made available to the Department upon request.² (R 336.1213(1)(d)(ii), R 336.1201(3))

See Appendix 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|--|---|
| 1. SVLCM106A | 12 ² | 32 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 2. SVLCM106B | 12 ² | 32 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 3. SVLCM106C | 12 ² | 32 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 4. SVLCM106D | 12 ² | 32 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 5. SVLCM108A | 12 ² | 34 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 6. SVLCM108B | 12 ² | 34 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 7. SVLCM108C | 12 ² | 34 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 8. SVLCM108D | 12 ² | 34 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 9. SVLCM128A | 12 ² | 33 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 10. SVLCM128B | 12 ² | 33 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 11. SVLCM128C | 12 ² | 33 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |
| 12. SVLCM128D | 12 ² | 33 ² | R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21 |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGRULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Unit:

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

- 1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(i))
- 2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: (R 336.1290(a)(ii))
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A))
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(B))
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(C))
 - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. (R 336.1290(a)(ii)(D))
- 3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: (R 336.1290(a)(iii))
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290(a)(iii)(A))
 - b. The visible emissions from the emission unit are not more than 5 percent opacity in accordance with the methods contained in Rule 303. (R 336.1290(a)(iii)(B))
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. (R 336.1290(a)(iii)(C))

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. (R 336.1290)

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

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. (R 336.1213(3))
 - a. Records identifying each air contaminant that is emitted. (R 336.1213(3))
 - b. Records identifying if each air contaminant is controlled or uncontrolled. (R 336.1213(3))
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. (R 336.1213(3))
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). (R 336.1213(3))
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. (R 336.1213(3), R 336.1290(c))
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. (R 336.1213(3))
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. (R 336.1290(b), R 336.1213(3))
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. (R 336.1213(3))
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. (R 336.1213(3))
- 4. All records shall be made available to the Department upon request. (R 336.1213(1)(d)(ii))

See Appendix 4

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

| AQD | Air Quality Division | MM | Million |
|------------------|---|--------|---|
| acfm | Actual cubic feet per minute | MSDS | Material Safety Data Sheet |
| BACT | Best Available Control Technology | MW | Megawatts |
| BTU | British Thermal Unit | NA | Not Applicable |
| °C | Degrees Celsius | NAAQS | National Ambient Air Quality Standards |
| CAA | Federal Clean Air Act | NESHAP | National Emission Standard for Hazardous Air Pollutants |
| CAM | Compliance Assurance Monitoring | NMOC | Non-methane Organic Compounds |
| CEM | Continuous Emission Monitoring | NOx | Oxides of Nitrogen |
| CFR | Code of Federal Regulations | NSPS | New Source Performance Standards |
| СО | Carbon Monoxide | NSR | New Source Review |
| СОМ | Continuous Opacity Monitoring | PM | Particulate Matter |
| department | Michigan Department of Environmental Quality | PM-10 | Particulate Matter less than 10 microns in diameter |
| dscf | Dry standard cubic foot | pph | Pound per hour |
| dscm | Dry standard cubic meter | ppm | Parts per million |
| EPA | United States Environmental Protection Agency | ppmv | Parts per million by volume |
| EU | Emission Unit | ppmw | Parts per million by weight |
| °F | Degrees Fahrenheit | PS | Performance Specification |
| FG | Flexible Group | PSD | Prevention of Significant Deterioration |
| GACS | Gallon of Applied Coating Solids | psia | Pounds per square inch absolute |
| GC | General Condition | psig | Pounds per square inch gauge |
| gr | Grains | PeTE | Permanent Total Enclosure |
| HAP | Hazardous Air Pollutant | PTI | Permit to Install |
| Hg | Mercury | RACT | Reasonable Available Control Technology |
| hr | Hour | ROP | Renewable Operating Permit |
| HP | Horsepower | SC | Special Condition |
| H ₂ S | Hydrogen Sulfide | scf | Standard cubic feet |
| HVLP | High Volume Low Pressure * | sec | Seconds |
| ID | Identification (Number) | SCR | Selective Catalytic Reduction |
| IRSL | Initial Risk Screening Level | SO_2 | Sulfur Dioxide |
| ITSL | Initial Threshold Screening Level | SRN | State Registration Number |
| LAER | Lowest Achievable Emission Rate | TAC | Toxic Air Contaminant |
| lb | Pound | Temp | Temperature |
| m | Meter | THC | Total Hydrocarbons |
| MACT | Maximum Achievable Control Technology | tpy | Tons per year |
| MAERS | Michigan Air Emissions Reporting System | μg | Microgram |
| MAP | Malfunction Abatement Plan | VE | Visible Emissions |
| MDEQ | Michigan Department of Environmental Quality | VOC | Volatile Organic Compounds |
| mg | Milligram | yr | Year |
| mm | Millimeter | - | |
| | | | |

^{*}For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

All PTIs that were issued after the effective date of ROP No. MI-ROP-A9365-2007a are listed in the table below. PTIs that were incorporated into any prior ROP are listed in the Staff Report.

Source-Wide PTI No MI-PTI-A9365-2007a is being reissued as Source-Wide PTI No. MI-PTI-A9365-2012.

| Permit to Install Number | Description of Equipment | Corresponding Emission Unit(s) or Flexible Group(s) |
|-----------------------------|---|---|
| 31-11 | Installation of one new surface preparation adhesive promoter/solvent applicator on EU-CADBAR154. | FG-CADBAR, FG-AOS |
| 223-10 | Installation of EU-CADBAR152 process line. | FG-CADBAR, FG- AOS |
| 180-10 | Re-Install EU-CADBAR153 process line. | FG-CADBAR, FG-AOS |

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in the appropriate emission unit tables.

VOC and Toluene Emission Calculation Methodology (FGCADBAR, EUCADBAR161, EUCTRPKnitline, **EULINE138):**

VOC Control Efficiency, E = ((Capture Efficiency/100)*(Destruction Efficiency/100))

$$\begin{array}{l}
n \\
\sum A_{ci} B_{ci} C_{ci} \\
i = 1
\end{array}$$

Monthly mass VOC emission rate (tons/month) = (1 - E) as determined at the end of each calendar month

Annual mass VOC or Toluene emission rate (tons/12 month) as determined at the end of each calendar month

Where: A_{ci} = gallons (or pounds See note) of each adhesive (i) consumed during the production run,

B_{ci} = density of each adhesive (i) as received, as lb/gallon,

C_{ci} = percent VOC or Toluene by weight in each adhesive (i) as received,

NOTE: Bci and Cci may be reported separately, but will normally be reported as a single value Bci Cci (lbs VOC/gallon). Or, if Aci is reported in pounds then remove Bci from the equation.

E = VOC or Toluene control efficiency,

k = current calendar month plus 11 preceding calendar months.

VOC Emission Factors – for emission calculations associated with FGMIXERS (From Rubber Manufacturers' Association-dated 8-23-96):

| Compound/ Compound Number | | Emission FactorMixer Process #/# material processed | Emission FactorMill Process #/# material processed |
|------------------------------|-----|---|--|
| EPDM | #8 | 1.47E-05 | 2.14E-05 |
| Neoprene | #11 | 3.28E-05 | 4.79E-05 |
| NBR | #14 | 2.30E-04 | 3.35E-04 |
| Hypalon | #15 | 9.39E-06 | 1.37E-05 |
| Fluoroelastomer #16 | | 8.16E-05 | 1.19E-04 |
| CPE | #21 | 1.57E-04 | 2.28E-0 |
| ECO | #23 | 3.07E-05 | 4.47E-05 |

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VOC Emission Factors - The following emission factors are acceptable for emission calculations associated with FGAUTOCLAVE.

| Compound | Emission Factor |
|-----------------------|------------------------|
| EPDM (#8) | 0.00604 |
| Neoprene (#11) | 0.000318 |
| NBR (#14) | 0.000716 |
| Fluoroelastomer (#16) | 0.0000796 |
| Hypalon (#15) | 0.000720 |
| CPE (#21) | 0.000338 |
| ECO (#23) | 0.000502 |

Following are the emission factors to be used to determine emissions from FG-LCM:

- a. 8.25e-04 lb VOC per lb rubber for EPDM
- b. 1.84e-03 lb VOC per lb rubber for Neoprene
- c. 1.72e-03 lb VOC per lb rubber for ECO
- d. 8.78e-03 lb VOC per lb rubber for CPE
- e. 5.27e-04 lb VOC per lb rubber for Hypalon
- f. 1.29e-02 lb VOC per lb rubber for Nitrile

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.