New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1464-00030/00199
Renewal Number: 3
01/24/2018

Facility Identification Data
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Tonawanda, NY 14150

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Owner Classification: Corporation/Partnership

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Permit Description

Introduction
The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project
This permitting action will renew the Title V Air Permit and permit a multi-year project to increase production. The project is a major modification that will expand operations by increasing the utilization of
the six current Banbury rubber mixers and installing a new Banbury rubber mixer. Production of passenger/light truck tires increased from approximately 5,000 tires per day to 10,000 tires per day along with maintaining current production of 5,000 motorcycle tires per day and 2,000 medium truck/bus tires per day for a facility wide rubber production capacity of 250 million pounds of rubber tire components per year. Since this project removed a bottleneck in prior facility operations, facility wide emissions were evaluated to determine New Source Review (NSR) applicability. The facility is an existing major source for both nonattainment NSR and Prevention of Significant Deterioration. The only pollutant to have a Project Emission Potential greater than its Significant Project Threshold are volatile organic compounds (VOC’s). The facility does not have any contemporaneous decreases in VOC emissions so the project is subject to control requirements that meet the definition of Lowest Achievable Emission Rate (LAER) for VOC and to use Emission Reduction Credits (ERCs) to offset the increase in VOC emissions. For the existing Banbury mixers, the bulk of the VOC emissions are in the form of ethanol which is formed as a result of using organo-silane coupling agents. Of the six current Banbury mixers, only mixers 8 and 9 (emission sources 0ES08 and 0ES09) are equipped with the appropriate raw material feed systems to accommodate the use of large quantities of the coupling agent. As part of this modification, Phase 1, the exhaust from these two mixers will be routed to a new regenerative thermal oxidizer (RTO #1, emission source RTO01) to comply with the LAER requirements of NSR. LAER for Phase 1 is 3.4 lb pounds of VOCs per hour. Phase 2 is the installation of a new Banbury mixer, Mixer 10, (emission source 0ES0A) which can incorporate large quantities of the coupling agents. Its exhaust will be routed to the same RTO (RTO #1) to meet the LAER requirement. LAER for Phase 2 of the project is 5.1 pounds of VOCs per hour. The facility will be using 137.93 tons of VOC ERCs, they created from reductions in 1993, to offset the increase in VOC emissions. They are also accepting a facility wide VOC cap of 201.5 tons/year on a rolling 12-month total basis. In the application the new Banbury mixer is identified as Mixer A, however when it is installed it will be identified as Mixer 10. The permit refers to it as Mixer 10.

The facility requested to change the way they proposed operating the RTO in the modification application, from using it for all rubber mixes to only using it for mixes that include the organo-saline coupling agent. This request was approved. The organo-saline coupling agent is used in approximately 34% of the rubber mixed. The facility calculated a 5,197 pound per year increase in VOC emissions if non-coupling agent rubber mixing exhaust was not controlled by the RTO. At the same time, NOx would decrease 1,647 pounds per year if the RTO did not operate for the non-organo-saline coupling agent rubber mixes. An air dispersion impact analysis showed that the ambient VOC concentrations would meet the Short-term Guidance Concentration and Annual Guidance Concentrations in DAR-1. A RACT analysis was conducted on the VOC emission increase, and concluded that the extra electricity and natural gas needed to operate the RTO would exceed the VOC RACT economic feasibility threshold of $5000 per ton VOC reduced.

The facility previously had an emission cap that limited ethanol emissions to 39 tons per year to avoid applicability of NSR. As part of the modification, these operations were expanded and ethanol emissions have a potential of greater than 39 tons. This cap stays in effect until the RTO is operating, then the facility must meet the LAER and facility VOC cap permit conditions.

A prior permit modification which was incorporated with the Ren 2 Mod 0 Title V permit allowed for the usage of resorcinol as a raw material. Emissions of resorcinol from that project were considered VOC’s. The projected increase was less than 20 tons of VOC. As a result, that modification was subject to the reasonable possibility provisions under 6 NYCRR Part 231-11.2(b) with recordkeeping requirements for a period of five years. The five year period has come to a close with annual VOC emissions from the usage of resorcinol below 20 tons in accordance with Part 231-11.2(b). Since there is no longer a reasonable
possibility that the modification to add resorcinol as a raw material triggered the Significant Project Threshold of 40 tons VOC, the condition limiting its usage has been removed from the Ren 3 Mod 0 Title V permit. New resorcinol information was presented in a May 24, 2017 letter from GHD, Sumitomo’s consultant. It demonstrated that resorcinol emissions would act like a particulate, not a VOC, due to the temperature of the exhaust and resorcinol’s physical properties.

For pollutants other than VOC, the emissions increases from the project were less than the applicability thresholds for a major modification under Part 231. However, since the emissions from the existing sources were based on projected facility output, the facility is required to comply with the reasonable possibility provisions of Part 231. For a period of at least five years after the issuance of the Ren 3 Mod 0 the facility will maintain a description of the modification including the sources associated with the project and their project emission potential.

The following minor permit modifications have occurred since the last Title V permit was issued and have been added to this permit:
- A heat recovery unit that boilers 1, 2, 5 and 6 can exhaust through, emission point 00005, was added to the boiler house in late 2010. This increased the energy efficiency of the boiler house. This did not result any new emissions.
- A natural gas emergency generator was installed in May 2011 to provide electric backup to the facilities information system. The 268 hp engine is subject to the New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60 subpart JJJJ. Subpart JJJJ conditions have been added to the permit.
- A new rotoclone hydrostatic precipitator was added to the MTR Finishing Department in March 2012. This included emission point 10011 and is subject to the same particulate and visible emission requirements as the existing rotoclone.
- Banbury rubber mixer #11’s two-wing rotor was replaced with a six-wing rotor in early 2013. This increased the number of batches of rubber produced hourly which increased the potential VOC emissions less than 3 tons a year from emission points 01H17 and 01F15. The increase was below New Source Review and Prevention of Significant Deterioration programs. The VOC emissions are below 3 pounds and hour so a VOC RACT review was not required.

This permit renewal included an updated Volatile Organic Compound Reasonably Available Control Technology (VOC RACT) Analysis for the whole facility. The case-by-case RACT Analysis demonstrated that only the Banbury rubber mixers and their take-away conveyors triggered the RACT applicability thresholds in 6NYCRR Part 212-3. The analysis concluded that it was not technically or economically feasible to install emission controls on the mixers or their take-away conveyor. An updated RACT Analysis will be due with the next permit renewal application. The Analysis was initiated before the facility decided to install regenerative thermal oxidizers (RTO’S) to control VOC’s from Banbury mixers #8 and #9 for LAER and NSR.

Permit conditions were revised to use updated information, permit conditions were added for revised regulations and for new regulations that now apply to the facility and permit conditions were removed that no longer apply. The following changes were made to the permit: changed all references to ‘Dunlop’, ‘Goodyear Dunlop Tires North America’, ‘GDTNA’ or similar where changed to ‘this facility’ or similar; updated the NOx emission cap emission factors to the current emission factors in EPA’s AP-42 document; updated the boiler particulate compliance demonstration permit condition with the current sulfur in fuel limit in 6 NYCRR Part 225-1 which continues to demonstrate compliance; added a condition for the new
sulfur in fuel requirements in 6 NYCRR Part 225-1; added a condition for the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 subpart JJJJJJ which requires fuel oil monitoring to evaluate applicability; consolidated the Continuous Assurance Monitoring (CAM, 40 CFR Part 64) permit conditions into one; added permit conditions for 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines that apply to the fire pump emergency engine and lighting emergency generator; added permit conditions for 40 CFR 63 Subpart JJJJ, New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines that applies to the information system emergency generator; corrected errors with emission source and emission point identifications; and corrected typos.

Annual emission limits (caps) from previous permits were carried into this permit. The caps include:
- Capping fugitive volatile organic compounds (VOC) to less than 142.5 ton per year (tpy) to create 52 tpy of VOC Emission Reduction Credits (ERC’s). These ERC’s were created when VOC emissions decreased due to process changes, adding air condition to the facility and reducing solvent usage in the 1991-1993 time period.
- Capping individual Hazardous Air Pollutants (HAPs) emissions to less than 10 tpy to stay below the major source applicability limit of 10 tpy.
- Capping total HAP emissions to less than 25 tpy to stay below the major source applicability limit of 25 tpy.
- Capping Oxides of Nitrogen (NOx) to less than 100 tpy to stay below the major source applicability criteria of 100 tpy. This cap keeps the facility below the 100 tpy applicability criteria for NOx RACT also.

**Attainment Status**

SUMITOMO RUBBER USA LLC is located in the town of TONAWANDA in the county of ERIE. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

<table>
<thead>
<tr>
<th>Criteria Pollutant</th>
<th>Attainment Status</th>
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<tbody>
<tr>
<td>Particulate Matter (PM)</td>
<td>ATTAINMENT</td>
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<tr>
<td>Particulate Matters &lt; 10µ in diameter (PM10)</td>
<td>ATTAINMENT</td>
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<tr>
<td>Sulfur Dioxide (SO2)</td>
<td>ATTAINMENT</td>
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<tr>
<td>Ozone*</td>
<td>MARGINAL NON-ATTAINMENT</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOx)**</td>
<td>ATTAINMENT</td>
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<tr>
<td>Carbon Monoxide (CO)</td>
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* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.
** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

**Facility Description:**
Sumitomo Rubber USA, LLC acquired the facility in April 2016. It was formerly known as Goodyear Dunlop Tires North America LTD (GDTNA). The Buffalo New York facility, is located at 10 Sheridan Dr. in the Town of Tonawanda, Erie County. The facility has approximately 1.9 million square feet of
manufacturing and warehousing on 130+ acres of land. The facility produces truck, motorcycle and automobile tires.

The facility consists of eight emission units, where emission unit (EU) 0-0EU01 includes all 5 boilers, a boiler house heat exchanger and the three emergency engines to provide process and heating steam; EU 0-0EU02 includes raw material handling and rubber mixing to make rubber compounds; EU 0-0EU03 includes tread extrusion processes using temperature controlled dies; EU 0-0EU04 includes calendering, where a continuous textile or steel wires are bonded to one or two layers of rubber; EU 0-0EU05 includes assembling tires from multiple pieces of rubber which are loaded into isostatic presses that vulcanize (cure) the tire; EU 0-0EU06 includes testing the tires for uniformity and shaping to meet specifications; EU 0-0EU07 includes Quality Assurance and Quality Control destructive testing; and EU 0-0EU08 includes the electron processing system (EBR) which pre-cures rubber. Finished tires are stored on site in a warehouse.

Permit Structure and Description of Operations
The Title V permit for SUMITOMO RUBBER USA LLC is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

SUMITOMO RUBBER USA LLC is defined by the following emission unit(s):

Emission unit 00EU01 - Steam is produced by a combination of five (5) boilers that are fired by either natural gas (P001) or #6 fuel oil (P002). Boilers number one (1) and two (2) exhaust through emission point 00001. These built-up boilers, manufactured by Babcock & Wilcox, are rated at 59.00 MMBtu/hr each. Boilers number five (5) and six (6) exhaust through emission point 00003. These built-up boilers, manufactured by Babcock & Wilcox, are rated at 60.00 MMBtu/hr each. Boiler number seven (7) exhausts through emission point 00004. This package boiler, manufactured by Cleaver Brooks, is rated at 29.30 MMBtu/hr and operates on natural gas only. Boilers (1), (2), (5) and (6) have the ability to exhaust to a heat recovery unit prior to release through emission point 00005.

This emission unit also includes three emergency engines, which are exempt from air permitting provided each engine operates less than 500 hours per year. The engines are included in this permit to document their presence and because they are subject to federal regulations for engines.
- Diesel fire pump engine (0ES61) with associated emission point 00007,
- Natural gas information system backup generator (0ES52) with associated emission point 00006, and
- Natural gas backup lighting generator (0ES62) with associated emission point 00008.

Emission unit 00EU01 is associated with the following emission points (EP):
00001, 00003, 00004, 00005, 00006, 00007, 00008
Process: 001 is located at 01, Building 22 - NATURAL GAS COMBUSTION - Steam is produced by a combination of five (5) boilers that are fired by natural gas. Boilers number (1) and (2) exhaust through emission point 00001. These built-up boilers, manufactured by Babcock & Wilcox, are rated at 59.00 MMBtu/hr each. Boilers number (5) and (6) exhaust through emission point 00003. These built-up boilers, manufactured by Babcock & Wilcox, are rated at 60.00 MMBtu/hr each. Boiler number seven (7) exhausts through emission point 00004. This package boiler, manufactured by Cleaver Brooks, is rated at 29.30 MMBtu/hr. Boilers (1), (2), (5) and (6) have the ability to exhaust to a heat recovery unit prior to release through emission point 00005. Both the emergency information system generator and the emergency lighting generator are also fueled by natural gas.

Process: 002 is located at 01, Building 22 - OIL COMBUSTION - Steam is produced by a combination of 4 boilers that are fired by #6 fuel oil. Boilers number (1) and (2) exhaust through emission point 00001. These built-up boilers, manufactured by Babcock & Wilcox, are rated at 59 MMBtu/hr each. Boilers number (5) and (6) exhaust through emission point 3. These built-up boilers, manufactured by Babcock & Wilcox are rated at 60 MMBtu/hr each. Boilers (1), (2), (5) and (6) have the ability to exhaust to a heat recovery unit prior to release through emission point 00005. This process also includes the emergency diesel fire pump engine.


Process: 1EG Two emergency engines fueled by natural gas that power electrical generators. The Information System (IS) generator is a Olympian Power Systems 268 horse power (200 kW) unit, installed on December 12, 2011. The Backup Lighting Generator uses a Waukesha engine rated at 360 horsepower and was installed in 1997.

Emission unit 00EU02 - Raw materials handling and mixing. Rubber is mixed in either base or final (also known as productive or non-productive) Banbury mixers. Base mixers take natural and synthetic rubber and combine them with carbon black, pigments and oils to produce a rubber stock that is further processed in the finish mixers. A fan is used to pull dust and fumes (VOC's) off of each mixer and through a dust collector. Once the rubber stock is mixed it is rolled into a continuous sheet which is sent to a soap/water dip tank. This soap solution coats the rubber sheet so that it does not stick to itself. A hood over the dip tank for each mixer exhausts through an uncontrolled emission point. From the soap tank the rubber stock is sent to a conveyor where ambient room air is blown across the sheet to dry the water and soap solution off of the rubber stock before it is stacked onto a pallet. Final mixers take rubber stock that has already passed through the base mixers and add various additives such as accelerators, zinc oxides, retarders, antioxidants and softeners to produce specific types of rubber used for tire components. Organo-silane coupling agents are added to some tread compounds mixed in the Banbury mixers. The purpose of the organo-silane coupling agent is to bond the rubbers, silicas, and carbon black and assist in cross-linking for vulcanization of the tire. Ethanol is evolved during the reaction of silica, rubber and other compounds in the rubber mixture. The rate of ethanol evolution is dependent on several factors, including the concentrations of silica and organo-silane in the mixture and the mixing temperature.

The facility is undertaking a two phase project to increase production:
PHASE 1
A regenerative thermal oxidizer (Emission Control RTO01) will be constructed and used to control VOC emissions from existing Banbury Mixers 8 and 9 (existing Emission Sources 0ES08 and 0ES09). The RTO will be located downstream of the dust collectors that control PM emissions from Mixers 8 and 9 (existing Emission Controls EC08A and EC09A). Emission point 00160 will be constructed to vent emissions from the RTO to the atmosphere. Existing Emission Points 00138 (Mixer 8) and 00151 (Mixer 9) will be repurposed as alternate/RTO bypass emission points for use when: the rubber mixed doesn’t include organo-silane couplers; to protect the RTO from upset conditions; to vent the mixer exhaust fans during startup or shutdown of the RTO; and at times the mixers are not operating.

PHASE 2
A planned future Banbury mixer, Mixer 10, will be constructed in Phase 2 of this project. The Banbury Mixer is identified as Emission Source 0ES0A, which generates the majority of VOC emissions and all of the PM emissions. Emission Source ES0AB refers to the roller die take away conveyor and dip tank for the rubber from Mixer 10 which generate a small amount of VOC emissions. Emission Point 00161 will be constructed to vent emissions from the take-away conveyor and dip tank. A dust collector/baghouse (Emission Control EC0AA) will be constructed and used to control PM emissions from the planned future Mixer 10. When rubber with organo-silane coupling agent is mixed, the emissions from the dust collector/baghouse will be directed to the RTO to control VOC emissions from Mixer 10, and then out Emission Point 00160. When rubber is mixed without organo-silane coupling agent, the mixer exhaust will go to the PM dust collector and then will be directed to Emission Point 00162 instead of the RTO.

Emission unit 00EU02 is associated with the following emission points (EP):
00125, 00126, 00128, 00129, 00132, 00134, 00135, 00138, 00140, 00144, 00146, 00147, 00151, 00152, 00155, 00160, 00161, 00162, 01F15, 01H17
Process: 003 is located at MEZZANINE, Building 01 - RUBBER MIXING DEPARTMENT 201. Natural rubber, synthetic rubber, carbon black, oils and pigments are mixed together in variable speed, shear type Banbury mixers. A fan is used to pull dust and fumes (VOC's) from each mixer and through a dust collector. After mixing, the rubber stock is coated with a water and soap solution and is dried via fans blowing ambient air across the rubber stock. The mixed rubber stock is further processed in the facility and provided as tire components.

The Mixing Department will be modified to include three new emission points (00160, 00161 and 00162), two new emission sources (0ES0A - planned future Mixer 10 and ES0AB - the associated roller die take-away conveyor/dip tank), and two emission controls (RTO01 – an regenerative thermal oxidizer (RTO) used to control VOC emissions from Banbury Mixers 8, 9 and 10 and EC0AA - a dust collector used to control PM from the planned future Banbury Mixer 10). Existing emission points for Mixers 8 and 9, EP 00138 and EP 00151, will be re-purposed as alternate/RTO bypass emission points for use when: the rubber mixed doesn’t include organo-silane couplers; to protect the RTO from upset conditions; to vent the mixer exhaust fans during startup or shutdown of the RTO; and at times the mixers are not operating. When rubber with organo-silane coupling agent is mixed, the emissions downstream of Mixer 8, 9 and 10 dust collectors will be directed to the RTO to control VOC emissions and then out Emission Point 00160. When rubber is mixed without organo-silane coupling agent, the mixer’s exhaust will continue to be directed to the dust collectors but emissions downstream of the dust collectors will be directed to Emission Point 00138 for Mixer 8, Emission Point 00140 for Mixer 9, and Emission Point 00162 for Mixer 10 instead of the RTO. A high efficiency cartridge filter will be installed between the primary mixer dust collectors and the RTO to minimize particulate matter that may enter the RTO. The pre-RTO filter system is a secondary level of control in addition to the primary particulate matter control dust collectors for Mixers 8, 9, and 10 (i.e., EC08A, EC09A, and EC0AA). Mixer 10 was referred to as Mixer A in most of the application submissions.
Emission unit 00EU03 - Tread extrusion is performed to combine several types of previously mixed rubber compounds. The extruder consists of a power driven screw within a stationary cylinder. A die is attached to the head of the screw to produce the desired shape or cross section of the extruded rubber. Extrusion can be performed with both warm or cold rubber feed. The extruder is jacketed to maintain the desired operating temperature.

Emission unit 00EU03 is associated with the following emission points (EP):
00213, 00214, 00215, 00218, 00221, 00406, 00413, 00808, 00809, 00810, 01010, 02-19

Process: 004 is located at 01, Building 02 - TREAD EXTRUDING - Extrusion is often performed to combine several types of previously mixed rubber compounds. The extruder consists of a power driven screw within a stationary cylinder. A die is attached to the head of the screw to produce the desired shape or cross section of the extruded rubber. Extrusion can be performed with both warm or cold rubber feed. The extruder is jacketed to maintain the desired operating temperatures. In this process the tread portion of the different types of tires manufactured are extruded. The extruded rubber treads are marked with a letter/number identification code and striped with ink. Ink is transferred to the tread surface by an offset printer and/or an inkjet printer. Treads are cut to length and some of the ends are sprayed with a sticky cement solution to make them tacky for the building. These treads will be used later in the tire building area.

Process: 005 is located at 01, Building 04 - SIDEWALL EXTRUDING - Extrusion is often performed to combine several types of previously mixed rubber compounds. The extruder consists of a power driven screw within a stationary cylinder. A die is attached to the head of the screw to produce the desired shape or cross section of the extruded rubber. Extrusion can be performed with both warm or cold rubber feed. The extruder is jacketed to maintain the desired operating temperature. In this process the sidewall portion of the different types of tires manufactured are extruded. These sidewalls will be used later in the tire building area.

Process: 006 is located at 01, Building 02 - PROFILE EXTRUDING - Extrusion is often performed to combine several types of previously mixed rubber compounds. The extruder consists of a power driven screw within a stationary cylinder. A die is attached to the head of the screw to produce the desired shape or cross section of the extruded rubber. Extrusion can be performed with both warm or cold rubber feed. The extruder is jacketed to maintain the desired operating temperature. In this process the profile portion of the different types of tires manufactured are extruded. These profiles will be used later in the tire building area.

Process: 007 is located at 01, Building 02 - INNER LINER EXTRUDING - Extrusion is often performed to combine several types of previously mixed rubber compounds. The extruder consists of a power driven screw within a stationary cylinder. A die is attached to the head of the screw to produce the desired shape or cross section of the extruded rubber. Extrusion can be performed with both warm or cold rubber feed. The extruder is jacketed to maintain the desired operating temperature. In this process the inner liner portion of the different types of tires manufactured are extruded. These inner liners will be used later in the tire building area.

Process: 07A is located at Dept 238, Building 04 - STRIP EXTRUSION to combine several types of previously mixed rubber compounds. Extruder consists of a power driven screw with a stationary cylinder. A die is attached to the head of the screw to produce the desired shape of rubber. The extruder, located in Dept 238, is identified as ES21A and will have a warming mill, (ES22A) and vent out EP 00413. Ink is transferred to the tread surface by an offset printer and or inkjet using water based inks.

Process: P09 is located at 1, Building 02 - Calendering, extrusion of sticky, thin rubber underlayment aides in adhering tread to carcass of tire during construction.
Emission unit 00EU04 - The calendering process is used to bond a continuous textile or numerous steel wires to one (1) or two (2) layers of rubber for use in the tire building process. The continuous textile product, or the numerous steel wires, pass through a series of rollers which one (1) or two (2) rubber strips also pass through. Under pressure and elevated temperatures induced by the rollers, the rubber is bonded to the textile product or steel wires. The nip of the rollers can be adjusted to vary the thickness of the calendered product. The rubberized fabric/steel wires are then cooled and cut to the proper dimension.

Emission unit 00EU04 is associated with the following emission points (EP): 00219, 00220, 00402, 00412

Process: 009 is located at 01, Building 04 - FABRIC CALENDERING DEPARTMENT 202. As tire plies are being wound up in a fabric liner, the liner is being sucked clean of lint and dust particles. The fabric for making tire plies is then coated with a thin film of rubber on both sides in the calender. The heat and vapor from this process are exhausted through a hood exhaust.

Process: 010 is located at 01, Building 02 - STEEL CALENDERING DEPARTMENT 602. Rubber stock is warmed up prior to being fed to a steel cord calendering line. Fumes from the warming mill are captured and exhausted to the atmosphere via emission point 00219. After warming, the rubber stock is calendered (rolled between/around steel wire) to form a sheet of rubber with wire embedded within it. The fumes from the calendering process are captured and exhausted to the atmosphere via emission point 00220.

Emission unit 00EU05 - The various components of a tire (bead, sidewall and tread) are manually assembled. The green tire is then sprayed with a release agent to aide in the molding/curing process. The green tire is loaded into an isostatic press that forms and vulcanizes the green tire. The tire is pressed and vulcanized by the same operation.

Emission unit 00EU05 is associated with the following emission points (EP): 01404, 01405, 01409, 01410

Process: 011 is located at 01, Building 11 - DEPARTMENT 209. The inside green truck tires and motorcycle tires are sprayed with a water-based coating. The constituents of the coating are as follows: 50 to 60 percent water, 10 to 20 percent silicone, and 20 to 30 percent mica. An estimated 5 percent of the product will be emitted to the emission points due to overspray. Emissions of VOCs are fugitive.

Process: 012 is located at 01, Building 10 - TIRE BUILDING DEPARTMENT 214. The inside of green motorcycle tires are sprayed with a water-based coating. The constituents of the coating are as follows: 50 to 60 percent water, 10 to 20 percent silicone, and 20 to 30 percent mica. An estimated 5 percent of the product will be emitted to the emission point due to overspray. Emissions of VOC's are fugitive.

Process: 013 is located at 01, Building 14 - TIRE BUILDING DEPARTMENT 236. The inside of green truck and passenger car tires are sprayed with a water-based coating at 4 spray booths. All four spray booths and the bladder assembly station, together, are identified as emission source 0ES32. The constituents of the coating are as follows: 50 to 60 percent water, 10 to 20 percent silicone, and 20 to 30 percent mica. An estimated 5 percent of the product will be emitted to the emission points due to overspray. The resulting emissions will be vented to the atmosphere via emission point 01404 for the light truck radial and passenger car tire spray booth. Emission points 01405 and 01408 are for the original equipment tires spray booths. Emission point 01409 is part of the bladder assembly station.
Process: 13A is located at 01, Building 14 - GREEN TIRE INSERT DEPT. 614 - Green tires are loaded into an isostatic press that forms and vulcanizes the tire. The tire is vulcanized and pressed by the same operation. Emissions from the tire presses are fugitive in nature as they exhaust through large ventilation fans located in a raised section of the roof above the tire presses. All of the tire presses are grouped into one emission source, 0ES56.

Emission unit 00EU06 - Tires are tested for uniformity prior to shipment. During this process, excess rubber is sometimes mechanically ground off the tire to bring it into permissible specifications.

Emission unit 00EU06 is associated with the following emission points (EP):
00812, 01011, 01312, 01406
Process: 014 is located at 01, Building 08 - MTR FINISHING DEPT. 613. Cured tires are sent to finishing dept. 614 (MTR finishing) where they are tested for uniformity. A small percentage (approx. 1%) are determined to be "out of specifications" and as such require grinding to remove rubber to bring them back into the range of acceptable tolerances for tire uniformity. Occupied in bldg 8 and 10.

Process: 015 is located at 01, Building 12 - FINISHING, DEPT. 237. Cured tires are sent to finishing dept. 237 where they are tested for uniformity. A small percentage (approximately 1%) are determined to be "out of specifications" and as such require grinding to remove rubber to bring them back into the range of acceptable tolerances for the uniformity. Occupied in bldg 12,13 and 14.

Emission unit 00EU07 - Tires are tested for QA/QC purposes. This involves cutting up samples of tires for analytical testing and inspection.

Emission unit 00EU07 is associated with the following emission points (EP):
00614, 00615
Process: P07 is located at Building 06 - Cutting and buffing of tires to perform QA/QC.

Emission unit 00EU08 - Rubber ply (synthetic fabric i.e. nylon, polyester, etc. covered on both sides with rubber stock) is directed through a field of high energy radiation which pre-cures the rubber. This electron processing system (known as EBR unit) is similar to a microwave in that the high energy is produced by high voltage DC, accelerated and directed at the rubber ply. This high voltage electric energy produces ozone which will be exhausted by a powered fan without any control equipment. Past experience and manufactures data indicate that up to 0.5 pounds of ozone can be generated per hour of operation.

Emission unit 00EU08 is associated with the following emission points (EP):
00410
Process: P08 is located at 1, Building 04 - Electron processing system (ERB)- rubber ply is directed through a high voltage field which partly cures the rubber. Ozone is given off the high voltage equipment which is collected and exhausted through a fan and out a stack. No control equipment.

SUMITOMO RUBBER USA LLC is subject to Title V requirements. This determination is based on the following information:
The facility is a major source of volatile organic compound (VOC) emissions, which are capped at 201.5 tons per year, on a 12-month rolling total basis. It is major for sulfur dioxide (SO2), the PTE is 545 tons per year. The emissions of individual Hazardous Air Pollutants (HAPs), total HAP’s, and Oxides of Nitrogen (NOx) are capped below the major source thresholds. Potential emissions of lead and carbon monoxide are below major source thresholds.

Program Applicability

The following chart summarizes the applicability of SUMITOMO RUBBER USA LLC with regards to the principal air pollution regulatory programs:

<table>
<thead>
<tr>
<th>Regulatory Program</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSD</td>
<td>NO</td>
</tr>
<tr>
<td>NSR (non-attainment)</td>
<td>YES</td>
</tr>
<tr>
<td>NESHAP (40 CFR Part 61)</td>
<td>NO</td>
</tr>
<tr>
<td>NESHAP (MACT - 40 CFR Part 63)</td>
<td>YES</td>
</tr>
<tr>
<td>NSPS</td>
<td>YES</td>
</tr>
<tr>
<td>TITLE IV</td>
<td>NO</td>
</tr>
<tr>
<td>TITLE V</td>
<td>YES</td>
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<tr>
<td>TITLE VI</td>
<td>NO</td>
</tr>
<tr>
<td>RACT</td>
<td>YES</td>
</tr>
<tr>
<td>SIP</td>
<td>YES</td>
</tr>
</tbody>
</table>

NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP’s).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.
NSPS  New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV  Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI  Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC’s (chlorofluorocarbons), HCFC’s (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT  Reasonably Available Control Technology (6 NYCRR Parts 212-3, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC’s and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP  State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status
Facility is in compliance with all requirements.

SIC Codes
SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3011</td>
<td>TIRES AND INNER TUBES</td>
</tr>
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</table>

SCC Codes
SCC or Source Classification Code is a code developed and used by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC’s.

<table>
<thead>
<tr>
<th>SCC Code</th>
<th>Description</th>
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<tr>
<td>1-02-004-02</td>
<td>EXTERNAL COMBUSTION BOILERS - INDUSTRIAL</td>
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</table>
New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 9-1464-00030/00199
Renewal Number: 3
01/24/2018

1-02-006-02
INDUSTRIAL BOILER - RESIDUAL OIL
10-100 MMBtu/HR **

2-02-001-02
EXTERNAL COMBUSTION BOILERS - INDUSTRIAL
INDUSTRIAL BOILER - NATURAL GAS
10-100 MMBtu/HR

2-02-002-02
INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL)
Reciprocating

3-08-001-06
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
Green Tire Spraying

3-08-001-13
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
TREAD EXTRUDER

3-08-001-14
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
SIDEWALL EXTRUDER

3-08-001-15
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
CALENDERING

3-08-001-23
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
Green Tire Spraying

3-08-001-26
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
TIRE CURING

3-08-001-27
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
COMPOUNDING

3-08-001-30
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
SIDEWALL EXTRUDER

3-08-001-31
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
CALENDERING

3-08-001-33
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE MANUFACTURE
FINISHING

3-08-005-01
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS - TIRE RETREADING
Tire Buffing Machines

3-08-010-02
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
RUBBER AND MISC PLASTIC PRODUCTS - PLASTIC PRODUCTS MANUFACTURING
PLASTIC PRODUCTS MFG: EXTRUDER
Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.’s contain a ‘NY’ designation within them. These are not true CAS No.’s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.’s do not do. As an example, volatile organic compounds or VOC’s are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term ‘HAP’ refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

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<th>Cas No.</th>
<th>Contaminant</th>
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<th>PTE tons/yr</th>
<th>Actual lbs/yr</th>
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</table>
**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A:** Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

**Item B:** Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.2(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Item C:** Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**Item D:** Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**Item E:** Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**Item F:** Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

**Item G:** Property Rights - 6 NYCRR 201-6.4(a)(6)
This permit does not convey any property rights of any sort or any exclusive privilege.

**Item H:** Severability - 6 NYCRR Part 201-6.4(a)(9)
If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

**Item I:** Permit Shield - 6 NYCRR Part 201-6.4(g)
All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or
the environment to stop the emission of air pollutants causing or contributing to such pollution;

ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;

iii. The applicable requirements of Title IV of the Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official
Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6(b)
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5
An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
(3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5
Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all
criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

**Regulatory Analysis**

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Applicability Discussion:
Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

Required emissions tests.
Emission Statements - Applicability
Emission Statements - record keeping requirements.
General Prohibitions - air pollution prohibited
Limiting of Opacity
Limiting of Opacity
Limiting of Opacity
Limiting of Opacity
Limiting of Opacity
Control of Particulate from New and Modified Process Emission Sources
Reasonably Available Control Technology for Major Facilities
Owners or operators of applicable emission points commences construction after August 15, 1994
Open Fires - Prohibitions
Sulfur-in-Fuel Limitations
Particulate Emissions Firing Liquid Fuels Excluding Distillate Oil. (see narrative)
Smoke Emission Limitations.
Permit requirements for new major facilities, NSR major mods, and netting
Reasonable Possibility requirements for insignificant mods - less than 50% with excluded emissions
Certification of emission reductions
Permit content and terms of issuance
Lowest achievable emission rate, LAER
Lowest achievable emission rate, LAER
ECL 19-0301
This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6
Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7
Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4
This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7
Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6
This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the
6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)
This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.4 (c) (3) (ii)
This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (5)
This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)
Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.4 (f) (6)
This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be
subject to an off permit change.

6 NYCRR 202-1.1
This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.1
Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6 NYCRR 202-2.5
This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68
This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F
Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements
In addition to Title V, SUMITOMO RUBBER USA LLC has been determined to be subject to the following regulations:

40 CFR 60.4243 (b) (1)
This condition states how to demonstrate compliance with 40 CFR 60 Subpart JJJJ, New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, by purchasing an EPA certified engine. The information system emergency engine generator is an EPA certified engine.

40 CFR 60.4243 (d)
These conditions state the hour limits in 40 CFR 60 Subpart JJJJ, New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, for emergency engines operating in nonemergency engine situations. If the engine runs more than allowed by regulation then it may not qualify as an emergency engine.
40 CFR 60.542 (a) (3) 
The New Source Standards of Performance for the Rubber Tire Manufacturing Industry, 40 CFR 60 Subpart BBB, limits the grams of VOC emitted per tire cemented. This limit applies to the tread end cementing operations.

40 CFR 60.542 (a) (5) (i) 
The New Source Standards of Performance for the Rubber Tire Manufacturing Industry, 40 CFR 60 Subpart BBB, limits the grams of VOC emitted per tire sprayed with an inside green tire spray for each month. The green tire spray acts as a mold release. As allowed by this regulation, the facility only applies 'water-based sprays' which may have up to 12% by weight of VOC's.

40 CFR 60.542 (a) (5) (ii) 
The New Source Standards of Performance for the Rubber Tire Manufacturing Industry, 40 CFR 60 Subpart BBB, limits the grams of VOC emitted per tire sprayed with an outside green tire spray for each month. The green tire spray acts as a mold release. As allowed by this regulation, the facility only applies 'water-based sprays' which may have up to 12% by weight of VOC's.

40 CFR 63.11194 (a) 
This condition states what constitutes the affected source for the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 subpart JJJJJJ. Since this rule became effective the facility has only burned natural gas and is not subject to the rule. Each boiler that burns oil for more than 48 hours a year will need to comply with the rule. This condition requires the facility to track the number of hours each boiler burns fuel oil to determine applicability.

40 CFR 64.8 
This section lists the elements of a Quality Improvement Plan (QIP). A QIP may be required if a permittee has a number of exceedances or excursions of its Compliance Assurance Monitoring (CAM) program during a reporting period.

40 CFR Part 60, Subpart JJJJ 
The permit condition states that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR 60 Subpart JJJJ, New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and directs any questions concerning compliance and/or enforcement to EPA Region 2. This applies to the natural gas engine of the information system emergency generator.

40 CFR Part 63, Subpart JJJJJJ 
The permit condition states that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources and directs any questions concerning compliance and/or enforcement to EPA Region 2. This applies to the four boilers that can burn
oil if they burn oil for more than 48 hours in a calendar year.

40 CFR Part 63, Subpart ZZZZ
The permit condition states that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and directs any questions concerning compliance and/or enforcement to EPA Region 2. This applies to the natural gas engine of the lighting system emergency generator and the diesel engine associated with the emergency fire pump.

40 CFR Part 64
The federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64, requires monitoring of control device, capture system, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. It applies to emission units that use a control device to comply with certain standards and limitations and that have potential pre-control device emissions equal to or greater than a major source threshold.

Acid Rain program requirements; stratospheric ozone protection requirements; post-1990 New Source Performance Standards, Emission Guidelines, and National Emission Standards for Hazardous Air Pollutants; and some other limitations are exempt from CAM. However, many of the exempt requirements are subject to less stringent periodic monitoring under 40 CFR Part 70 and 6NYCRR Subpart 201-6.

CAM applies to the dust collectors associated with the raw material/rubber Banbary mixers in emission unit 0-EU01.

6 NYCRR 200.3
No person shall make a false statement in connection with applications, plans, specifications and/or reports submitted pursuant to this Subchapter.

6 NYCRR 211.1
This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 212-1.6 (a)
This provisions requires that the facility owner or operator not cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water. The permit conditions address emission monitoring to evaluate compliance. The emission sources and controls subject to this citation are operated following good operating practices, and by doing so will demonstrate compliance with the opacity standard. An EPA Method 9 test may be performed upon request.

6 NYCRR 212-2.4 (b)
Particulate emissions from any process emission source, which received a B or C Environmental Rating, and for which an application was received by the department after July 1, 1973 are restricted to 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis. The permit conditions address compliance monitoring to evaluate compliance.
6 NYCRR 212-3.1 (a)
This provision states that owners and/or operators of facilities which emit volatile organic compounds or nitrogen oxides in amounts greater than the applicability emission rates found in 212-3(a)(1) and (2) must submit a plan to reduce those emissions and be in compliance by a specific date.

6 NYCRR 212-3.1 (f)
This provision states that owners and/or operators of emission points located at applicable facilities and commence construction after August 15, 1994 must submit a Reasonably Available Control Technology (RACT) demonstration for nitrogen oxides and volatile organic compound (VOC) emissions with each application for a permit to operate. RACT must be implemented on these emission points when operation commences. A RACT analysis is not required for new emission points with NOx and VOC emission rate potentials less than 3.0 pounds per hour and actual emissions in the absence of control equipment less than 15.0 pounds per day at facilities located outside of the Lower Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, and Woodbury and New York City metropolitan area.

An updated VOC RACT Analysis was submitted with the Renewal 3 Title V application dated February 9, 2015. Portions were revised and submitted October 12, 2016 and June 27, 2017. The evaluation concluded that VOC RACT was not economically feasible, thus no controls are required. Only emissions points in the mixing emission unit, 0EU02, fit the criteria for a RACT Analysis.

However, regenerative thermal oxidizers (RTO) will be installed on the exhaust of Banbury mixers 8 and 9, before the facility exceeds the current 39 ton per year ethanol (VOC) cap that kept facility below the 40 tpy applicability threshold for New Source Review. Rubber production will increase above the 39 tpy cap. The RTO will be installed to meet the Lowest Achievable Emission Rate (LEAR) requirements in 6 NYCRR Part 231-6.5. The use of organo-silane coupling agents releases ethanol during rubber production and tire curing. When Mixer 10 is installed (2018) it will exhaust to RTO #1 too.

6 NYCRR 225-1.2 (e)
Owners and/or operators of any stationary combustion installation in Erie or Niagara County that fires residual oil are limited to the purchase of residual oil with a sulfur content of 0.50 percent sulfur by weight on or after July 1, 2014, and are limited to the firing of residual oil with the same sulfur content on or after July 1, 2016.

6 NYCRR 227-1.2 (a) (2)
This rule limits particulate emissions to 0.20 pound per million Btu heat input from any stationary combustion installation with a maximum heat input capacity exceeding 50 million Btu per hour but no greater than 250 million Btu per hour using oil (other than distillate oil), coal tar, or any liquid fuel derived from coal. This limit applies to the boilers when they fire residual oil.

6 NYCRR 227-1.3
This regulation requires a limitation and compliance monitoring for opacity from a stationary combustion installation. This applies to the boilers in emission unit 0-0EU01.

6 NYCRR 231-11.1
This section contains the permit requirements for new major facilities, NSR major modifications, and
netting for this Part.

6 NYCRR 231-11.2 (b)
This subdivision is referred to as the "Reasonable Possibility" provisions. This citation lists the record keeping requirements for insignificant modifications that are less than 50% of the applicable significant project threshold including excluded emissions as defined in Part 231-4.1(b)(40)(i)(c). The resorcinol (1,3-benzenediol) emissions, a volatile organic compound (VOC), were limited to 11,250 pounds per year when resorcinol became an ingredient in a modified rubber recipe. This is a 5.625 tons per year limit, which is less than 50% of the 40 ton per year applicability threshold for New Source Review and Prevention of Significant Deterioration in 6NYCRR Part 231. NYCRR 231-11.2 (b) is the citation being capped out of in the resorcinol capping condition.

6 NYCRR 231-2.6 (a)
The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The requirements and criteria for creating and certifying emission reduction credits (ERCs) are set forth in section 231-2.6. Emission reduction credits must be created and certified on an emission unit basis.

The facility has created VOC ERC's twice, once by shutting down a number processes and emission points to create 105 tpy VOC ERC, and a second time by reducing the usage of solvents and shutting down a few processes and emission points to create 52 tpy VOC ERC. They currently have 157 tpy of VOC ERC's.

6 NYCRR 231-6.4
This section states that the permit will establish emission limits, as appropriate for each applicable nonattainment contaminant for a proposed NSR major modification (VOC's), Lowest Achievable Emission Rates (LAER) for NSR, public noticing, and documentation of Emission Reduction Credits (ERC's) used. The above may be listed under different regulatory citations.

6 NYCRR 231-6.5
This section outlines what the Lowest Achievable Emission Rate (LAER) is and how it is determined for New Source Review (NSR). LAER was determined to be the use of a regenerative thermal oxidizer (RTO) on the exhaust of Banbury mixers 8, 9 and A. The RTO will be installed after the dust collectors of each mixer. A RTO will be installed to meet the Lowest Achievable Emission Rate (LAER) requirements in 6NYCRR Part 231-6.5. The use of organo-silane coupling agents releases ethanol during rubber production and tire curing.

6 NYCRR Subpart 201-7
This regulation sets forth emission caps that cannot be exceeded by the facility. The caps limit actual emissions to stay below the applicability of the regulations identified. In this permit that caps are:

- Capping individual Hazardous Air Pollutants (HAPs) emissions to 9.9 tpy to stay below the major source applicability limit of 10 tpy.
- Capping total HAP emissions to 24.9 tpy to stay below the major source applicability limit of 25 tpy.
- Capping ethanol emissions to 39 tpy to stay below the New Source Review and Prevention of Significant Deterioration applicability criteria of 40 tpy for volatile organic compounds (VOC). The emission rate potential from each emission point under this cap is less than 3.0 pounds per hour, which is the applicability criteria for conducting a VOC Reasonably Available Control Technology (RACT) analysis in 6NYCRR Part 212-3.1(f).
- Capping Oxides of Nitrogen (NOx) at 99 tpy to stay below the major source applicability criteria of 100 tpy. This cap keeps the facility below the 100 tpy applicability criteria for NOx RACT also.

Compliance Certification

Summary of monitoring activities at SUMITOMO RUBBER USA LLC:

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<th>Location</th>
<th>Cond No.</th>
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Basis for Monitoring

Condition 14 is for 6 NYCRR Part 201-3.2(a) and limits each emergency engine to less than 500 hours per year of operation, on a 12-month rolling total basis. Unresettable hour meters on each engine track run time. The 12-month rolling total is calculated each month to evaluate compliance with the 500-hour limit. If the engines stay below 500 hours of emergency run time they are exempt from air permitting. The engines are included in this permit because they are subject to federal regulations. The three emergency engines include the diesel fire pump engine, the natural gas engine generator for lighting, and the information system natural gas engine generator.

Condition 26, 6 NYCRR Subpart 201-7, limits ethanol emissions to no more than 39 tons per year until the regenerative thermal oxidizer is operating. Title V permit, Renewal 2 Modification 0, contained a 39 tpy ethanol limit to keep emissions below the applicability thresholds of NSR and VOC RACT. The project to expand production and increase use of organo-saline coupling agents will increase ethanol emissions beyond the 39 tpy cap. This triggers applicability of Nonattainment New Source Review (NNSR) for VOC’s, 6 NYCRR Part 231-6.5, which requires the modified source, the rubber mixers, to meet the lowest achievable emission rate (LAER) they can. It was determined that use of a regenerative thermal oxidizer (RTO) will have the lowest achievable emission rate. Therefore, the RTO must be operating before the 12-month rolling total ethanol emissions exceed 39 tons. The RTO must also be operating within 18 months of this permit being issued as required in 6 NYCRR Part 231-3.8.

Condition 27, 6 NYCRR Subpart 201-7, limits actual non-stack fugitive emissions of volatile organic compounds (VOC’s) to less than 142.5 tons per year to create 52 tons of VOC emission reduction credits (ERC’s). In the early 1990’s process modifications including a reduction in solvent use when air
conditioning was installed, the discontinuation of bias passenger and light truck tire production and using less volatile solvents reduced VOC emissions. ERC’s were created for the reduction in VOC emissions. Consumption records are used to determine actual VOC emissions, which are reported semiannually.

Condition 28, 6 NYCRR Subpart 201-7, limits actual emissions of each individual hazardous air pollutant (HAP) to less than 10 tons per year. This keeps the individual HAPs below the major source threshold of 10 tons per year. Chemical usage, rubber production and fuel combustion, along with emission factors are used to calculate the emissions, which are reported semiannually.

Condition 29, 6 NYCRR Subpart 201-7, limits actual emissions of total hazardous air pollutants (HAP’s) to less than 25 tons per year. This keeps the total HAP emissions below the major source threshold of 25 tons per year. Chemical usage, rubber production and fuel combustion, along with emission factors are used to calculate the emissions, which are reported semiannually.

Condition 30, 6 NYCRR Subpart 201-7, limits actual emissions of oxides of nitrogen (NOx) to less than 100 tons per year. This keeps the NOx emissions below the major source threshold of 100 tons per year. It also keeps the NOx emissions below the applicability threshold of 100 tons per year in the Oxides of Nitrogen, Reasonably Available Control Technology (NOx RACT) regulation, 6 NYCRR Part 227-2. NOx emissions are calculated from fuel usage in the boilers using NOx emission factors from EPA’s AP 42 document, Compilation of Air Pollutant Emission Factors. The actual emissions are calculated monthly and reported semiannually. The current AP-42 emission factor for natural gas boilers is 100 lbs per million cubic feet of gas, but the facility will continue to use the emission factor of 140 lbs per million cubic feet, to be consistent with past emission calculations.

Condition 32, 6 NYCRR 212-3.1(f), documents that a volatile organic compound (VOC) Reasonably Available Control Technology (RACT) Analysis was conducted. It concluded that only Banbury Mixers 8 and 9 along with their take-away conveyors exceed the VOC RACT applicability thresholds in 6NYCRR Part 212-3 of 15 pounds per day and 3 pounds per hour from each emission point. Mixers 8 and 9 are part of the increased production project and are required to install the Lowest Achievable Emission Rate (LAER) by 6 NYCRR Part 231-6, Non-Attainment New Source Review. LAER was accepted to be the use of a Regenerative Thermal Oxidizer (RTO) with a minimum of 98% destruction efficiency. The RTO meets and exceeds the RACT requirement of 81% control. A technical and economic feasibility was conducted for the two take-away conveyors. It identified three feasible control technologies. It concluded that none were economically feasible. Therefore, no emission controls are required for the take-away conveyors of mixers 8 and 9. The RACT analysis must be updated with the next permit renewal in 5 years.

Condition 33, 6 NYCRR 225-1.2(e), limits the sulfur content of the residual oil (#6 oil) burned in the boilers to 0.50% by weight sulfur. Sulfur content will be provided at each oil delivery by the oil provider. These records will be used to demonstrate compliance. Records will be kept for five years. This is lower than the sulfur in fuel limit in the previous permit because this regulation was updated since the previous permit was issued.

Condition 34, 6 NYCRR 231-2.6(a), documents the creation of 105 tons of volatile organic compound (VOC) emission reduction credits (ERC’s) from process changes, that include emission point shutdowns and reductions in fugitive emissions during the 1995 time frame.
Condition 35, 6 NYCR 231-6.4, documents the use of 137.93 tons of volatile organic compound (VOC) emission reduction credits (ERCs) for a project that increases production. The facility is scheduled to modify operations in two phases. First, the facility will increase utilization of existing equipment and install a regenerative thermal oxidizer (RTO), RTO #1. This phase of the project will increase emissions by 62.10 tons and will require the use of 71.42 tons of ERCs. The second phase of the project will involve the installation of a new Banbury mixer that will use RTO #1 too. The emission increase from the second phase is 57.84 tons and requires the use 66.52 tons of ERCs. A total of 137.93 tons of ERC’s will be used (62.10 + 57.84 = 119.94, 119.94 x 1.15 = 137.93 tons, where the offset ratio is 1.15:1). The number of ERCs required for each phase of the project are documented so that the ERCs can be returned to the ERC registry if one of the phases is not implemented.

Condition 36, 6 NYCRR 231-6.4, established a 201.5 ton per year on a 12-month rolling total basis facility-wide volatile organic compound (VOC) netting limit for the facility’s expansion. The modification project emission potential of VOC’s exceeded the significant project threshold which requires the facility go through a netting exercise. Part of the netting exercise requires the establishment of a ton per year limit equal to project actual emissions or potential to emit of the modification, whichever is used by the applicant.

Condition 37, 6 NYCRR Part 231-11.1, requires the permittee to notify the department within 30 days of commencing construction of the expansion project phases.

Condition 38, 6 NYCRR Part 231-11.2(b), requires the permittee to keep records of the emission calculations for each modified emission source for at least five years, and to document when the modified emission sources commence operation.

Condition 39, 40 CFR 60, subpart JJJJ, explains that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engine. The permit contains a few requirements from this regulation, however, any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA. This regulation applies to the information system natural gas engine emergency generator.

Condition 40, 40 CFR 63, subpart JJJJJJ, explains that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA. The boilers will need to comply with the requirements of this regulation if they burn fuel oil for more than 48 hours a year.

Condition 41, 40 CFR 63, subpart ZZZZ, explains that the New York State Department of Environmental Conservation has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permit contains a few requirements from this regulation, however, any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA. This regulation applies to the lighting natural gas engine emergency generator and the diesel engine emergency fire pump.
Condition 45, 6 NYCRR 227-1.3, limits the opacity from the boilers at 20 percent (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. Visible emission observations are made and recorded daily. If opacity is excessive the facility must identify the problem and correct it. An EPA Method 9 visible emission compliance test must be conducted if corrective actions don’t resolve the excessive opacity within 24 hours. In addition, the boilers will be operated in manner consistent with good operating and maintenance practices, thus ensuring compliance with opacity limitations.

Condition 46, 40 CFR 63 subpart ZZZZ, requires the emergency diesel fire pump engine and the natural gas emergency backup lighting generator engine to meet the operating requirements in the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This includes: following the manufactures instructions, changing the oil and oil filter, inspecting belts, hoses and the air filter, tracking hours of usage, and recording maintenance activities.

Condition 47, 40 CFR 63.11194(a), subpart JJJJJJ, requires the tracking and recording of the hours each boiler fires oil. If a boiler burns oil for more than 48 hours in a calendar year then that boiler will be subject to National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 subpart JJJJJJ. Currently the boilers are considered ‘gas fired’ and not subject to subpart JJJJJJ because they have not burned oil since the March 21, 2014 compliance date of the rule. If a boiler burns oil for more than 48 hours in a calendar year, then it will be considered an ‘oil fired boiler’ and must make notification of the change and comply with the rule requirements within 180 days. The facility anticipates firing only natural gas for the foreseeable future so subpart JJJJJJ requirements are not in the permit.

Condition 49, 40 CFR 63.4243(d), subpart JJJJJJ, limits the number of hours each emergency engine can operate to less than 50 hours per calendar year for nonemergency situations. This is part of the 100 hours a year each emergency engine can operate for maintenance and testing and emergency response as provided in 40 CFR 60.4243(d)(2). The engines at this facility are not part of an emergency response program. If an engine operates for more that the above hours, it may no longer be considered an emergency engine and would need to comply with additional requirements.

Condition 50, 6 NYCRR 212-1.6(a), limits the opacity from the Banbury Mixers to no more than 20 percent (six-minute average). Visible emission observations are made and recorded daily. If opacity is excessive the facility must identify the problem and correct it. An EPA Method 9 visible emission compliance test must be conducted if corrective actions don’t resolve the excessive opacity within 24 hours.

Condition 51, 40 CFR Part 64, provides a reasonable assurance of compliance with the particulate emission limit of 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis, in 6 NYCRR Part 212-2.4(b). The visible emissions and the differential pressure across mixer dust collectors are monitored to ensure the dust collectors are operating properly and emissions comply with the 0.050 grains per cubic foot of exhaust gas limit. This is a Compliance Assurance Monitoring (CAM) condition. Normal operations have no visible emissions. If visible emissions are observed during a daily inspection the facility must take corrective actions to return the emissions to normal. The pressure differential across the dust collectors is monitored weekly. If the pressure differential is outside of the normal operating range it is considered an excursion and corrective actions will be taken. If excursions occur for more than 5% of the operating time a Quality Improvement Plan (QIP) will be developed and implemented to improve the operation of the process or dust control equipment to reduce excursions. A summary of excursions is reported quarterly. Compliance with the particulate limit can ultimately be determined by emission testing.
Condition 52, 6 NYCRR Part 212-3.1(a), requires that the regenerative thermal oxidizer (RTO #1) operate with at least a 98% destruction efficiency, as guaranteed by the manufacturer and used in the Lowest Achievable Emission Rate (LAER) determination. If the 98% destruction efficiency is not met, then emissions shall not exceed 20 ppm as required in condition 53. If VOC loading to the RTO is low then it may not have a 98% destruction efficiency and that is when the alternative 20 ppm emission limit applies. The RTO will be installed to meet the LAER requirement in 6 NYCRR Part 231-6. The RTO offers better VOC control than the 81% required by the VOC Reasonably Available Control Technology (RACT) in 6 YCRR Part 212-3. Initial emission testing will determine if the RTO is operating as designed.

Condition 53, 6 NYCRR Part 212-3.1(a), requires that the regenerative thermal oxidizer (RTO #1) not emit more than 20 parts per million (ppm) VOC, as guaranteed by the manufacturer. If the 98% destruction efficiency is not met, then emissions shall not exceed 20 ppm as required. If the loading to the RTO is low, then the RTO may not be able to meet the destruction efficiency requirement. The ppm limit is an alternative method to show that the RTO is operating properly. The RTO will be installed to meet the LAER requirement in 6 NYCRR Part 231-6. Initial emission testing will determine if the RTO is operating as designed.

Condition 54, 6 NYCRR Part 231-6.5, requires mixers 8 or 9 or 10 to exhaust to the RTO to control the VOC's when mixing rubber with organo-saline coupling agent. The coupling agent emits a significant quantity of ethanol, a VOC. When this coupling agent is not in the rubber mix, then the mixers are not required to use the RTO. The facility is required to submit an operating and recordkeeping plan for department approval that explains how they will demonstrate compliance with this requirement.

The facility requested to change the way they originally proposed operating the RTO, from using it for all rubber mixes to only mixes that include the organo-saline coupling agent. This request was approved after reviewing the change in emissions. The organo-saline coupling agent is used in approximately 34% of the rubber mixed. The facility calculated a 5,197 pound per year increase in VOC emissions if non-coupling agent rubber mixing exhaust was not controlled by the RTO. At the same time, NOx would decrease 1,647 pounds per year if the RTO did not operate for the non-organo-saline coupling agent rubber mixes. An air dispersion impact analysis showed that the ambient VOC concentrations would meet the Short-term Guidance Concentration and Annual Guidance Concentrations in DAR-1. A RACT analysis was conducted on the VOC emission increase, and concluded that the extra electricity and natural gas needed to operate the RTO would exceed the VOC RACT economic feasibility threshold of $5000 per ton VOC reduced.

Condition 55, 6 NYCRR Part 231-6.5, requires emission compliance testing of the regenerative thermal oxidizer (RTO #1) to evaluate compliance with the Lowest Achievable Emission Rate (LAER) of 3.4 pounds of VOCs per hour for Phase 1 of the project. Phase 1 is the increased use of organo-silane coupler in existing mixers 8 and 9. The test will be conducted at the exhaust of the RTO, when it is controlling emissions from Banbury Mixers 8 and 9. Every source included in a NSR major modification must comply with the LAER requirements in Part 231-6.5. A RTO will provide the greatest reduction in VOC emissions from mixers 8 and 9, so it was used to determine LAER.

Condition 56, 6 NYCRR Part 231-6.5, requires that the regenerative thermal oxidizer (RTO #1) to operate at no less than 1500 F as designed by the manufacturer. The temperature will be monitored hourly to ensure the RTO is operating properly to meet the Lowest Achievable Emission Rate (LAER).
Condition 57, 6 NYCRR Part 231-6.5, requires emission compliance testing of the regenerative thermal oxidizer (RTO #1) to evaluate compliance with the Lowest Achievable Emission Rate (LAER) of 5.1 pounds of VOCs per hour for Phase 2 of the project. Phase 2 is the installation of a new rubber Mixer 10 and ducting the exhaust to RTO #1. The test will be conducted at the exhaust of the RTO, when it is controlling emissions from Banbury Mixers 8, 9 and 10. Every source included in an NSR major modification must comply with the LAER requirements in Part 231-6.5. A RTO will provide the greatest reduction in VOC emissions from mixers 8, 9 and 10, so it was used to determine LAER.

Condition 58, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU03. Emission unit 0EU03 is for the extruding operations, where rubber is forced through a die to create a specific shape. All emission sources will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 59, 40CFR 60.542(a)(3), NSPS Subpart BBB, limits the volatile organic compound (VOC) emissions from tread end cementing to no more than 10 grams of VOC per tire cemented for each month. Subpart BBB is the New Source Standards of Performance for the Rubber Tire Manufacturing Industry. A tire is assembled from pieces of rubber, and a cement or adhesive is applied to keep the ends of the tread connected until the tire is cured. Cement use and tire production are tracked to calculate compliance as required by this subpart. The grams of VOC per tread per month are reported semiannually.

Condition 60, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU04. Emission unit 0EU04 is for the calendering operations, where a fabric or steam mesh is sandwiched between two thin pieces of rubber. The pieces are combined into one piece when they go through the roller presses. All emission sources will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 61, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU05. Emission unit 0EU05 is for the tire building and curing operations, where rubber pieces are assembled to build a tire which is then placed in an isostatic press that forms and vulcanizes the tire. All emission sources will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 62, 6 NYCRR Part 231-6.5, sets the Lowest Achievable Emission Rate (LAER) for tire curing at 0.0029 lb of VOC per pound of rubber cured that contains organo-silane coupler. LAER is required because the annual tire curing emissions increase with the production increase project. Emissions will be calculated monthly and used to calculate the 12-month rolling average to demonstrate compliance.

Condition 63, 40CFR 60.542(a)(5)(i), NSPS Subpart BBB, limits the discharge into the atmosphere of no more than 1.2 grams (0.0026 lb) of VOC per tire sprayed with an inside green tire spray for each month. Where the definition of ‘water-based sprays’ is one that contains 12 percent or less, by weight, of VOC as spray. Subpart BBB is the New Source Standards of Performance for the Rubber Tire Manufacturing Industry. Since the facility complies with the above limit by applying only water based sprays containing
less than 1.0 percent, by weight, of VOC, this subpart requires that the VOC content of the sprays be verified and submitted annually.

Condition 64, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU06. Emission unit 0EU06 is for the tire finishing and buffing operations, where cured tires are physically finished and buffed. All the emission sources exhaust through particulate control devices. All emission sources and control devices will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 65, 6 NYCRR 212-2.4(b), limits emissions of particulate to 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis from emission unit 0EU06. Emission unit 0EU06 is for the tire finishing and buffing operations, where cured tires are physically finished and buffed. All the emission sources exhaust through particulate control devices. All emission sources and control devices will be operated in a manner consistent with good operating practices, thus ensuring compliance with particulate limit. An EPA Method 5 emission test will be used to evaluate compliance if requested by the department.

Condition 66, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU07. Emission unit 0EU07 is for the tire section band saw and tire grinder, which are small intermittent operations. The band saw cutting operations and both grinders exhaust through particulate control devices. All emission sources and control devices will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 67, 6 NYCRR 212-1.6(a), limits emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water from emission unit 0EU08. Emission unit 0EU08 is for the ERB (electron processing system) where rubber is pre-cured. This emission source will be operated in a manner consistent with good operating practices, thus ensuring compliance with 20% opacity limit. An EPA Method 9 compliance test will be used to evaluate compliance if requested by the department.

Condition 70, 6 NYCRR 227-1.2(a)(2), limits particulate emissions from the boilers, when they burn oil, to no more than 0.20 pounds per million Btu heat input. A compliance emission test is required once every permit term. The permit is issued for a five-year term. The boilers don't need to burn oil just for emission testing purposes.

Condition 71, 6 NYCRR 227-1.2(a)(2), limits particulate emissions from the boilers, when they burn oil, to no more than 0.20 pounds per million Btu heat input. The facility used emission factors from EPA’s AP-42 document, Compilation of Air Pollutant Emission Factors, and the sulfur content of the fuel oil to demonstrate compliance with the particulate limit. This condition was updated with the revised sulfur in fuel requirement of 0.50% S by weight for residual oil (#6 oil). The calculated emission rate of 0.0566 pounds of particulate/million Btu continues to demonstrate compliance.