

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office

MEMO

TO: Air Quality Case File OP-32-00065

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DATE: April 14, 2014

RE: Title V Operating Permit Renewal Application OP-32-00065
Specialty Tires of America, Inc.
Indiana Plant
Borough of Indiana, Indiana County
APS 715636 AUTH 827229 PF 280053

BACKGROUND

The Department received a Title V renewal operating permit application on March 12, 2010 from Specialty Tires of America (STA) for their Indiana Plant in the Borough of Indiana, Indiana County. The facility is located near the southwestern border of the borough on Washington St. The SIC and NAICS Codes for the facility are 3011, *Manufacturing – Tires and Inner Tubes* and 326211, *Tire Manufacturing (Except Retreading)*, respectively.

STA is a manufacturer of specialty rubber tires for racing vehicles, antique vehicles, mining, farm and industrial equipment and aircraft. Many of the tires produced here are of bias-ply construction which differs from the radial tire manufacturing industry. Fewer than 5% of the tires made in the United States are bias-ply. The remainder is radial tires for passenger vehicles produced mostly by large tire manufacturing companies such as Goodyear and Firestone. However as older bias-ply tire lines are faded out of production, new radial products will replace them and require new manufacturing processes. Production of tires involves the usage of numerous types of solvents and cements that contain Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) which are emitted into the atmosphere. As a result of the levels of volatile organic compounds (VOC) emitted, STA is a major stationary source as defined in Title I, Part D of the Clean Air Act Amendments. As such, the facility is subject to the Title V permitting requirements adopted at 25 Pa. Code, Chapter 127, Subchapter G.

The previous Title V operating permit expired on September 26, 2010. STA submitted the renewal application to the Department on March 12, 2010. The application was found to be administratively complete and the Department deemed it so on March 24, 2010.

EMISSION INFORMATION

The Title V Permit for the site includes nine (10) sources: Steam Boiler, Undertread Cement, Tread End Cement, Green Tire Building, Other Solvent Usage, Jetzone Pellet Dryer, Banbury Mixers, Tire Buffers, Carbon Black Transfer Station, and Plant Space Heaters. There are no additional sources at the site that are considered trivial or insignificant activities that are not included under one of the emission sources in the operating permit.

In addition to the facility-wide HAP limit, STA has a consecutive 12 month period emission limit of 175.2 tons for VOC which is the primary pollutant of concern at this facility. Emissions of other pollutants are all generally less than 10 tons per year. Actual emissions of VOC from the tire manufacturing process have been relatively close to the facility's 175.2 ton per year limit:

Table I – Actual Facility-Wide VOC Emissions

Year	Actual VOC Emissions In Tons Per Year
2009	133.3
2010	135.6
2011	158.0
2012	164.4
2013	162.9

Despite the amount of VOC emissions, STA does not use any 112b Hazardous Air Pollutants at its facility.

PREVIOUS PERMIT CHANGES

On December 1, 2006, the Department exempted STA from plan approval and operating permit requirements for the addition of a new manufacturing step in the plant's tire buffing area. A new piece of equipment known in the industry as Tire Uniformity Optimizer (TUO) or Force Variation Machine was added. The machine measures multiple forces generated as the tire is spun against a load wheel and compares the readings to a specification. If the wheel does not meet the proper standards the TUO grinds or buffs tread and shoulder areas accordingly to remove very small amounts of material in an effort to meet the required specifications. The TUO processes less than 100 tires per day and is controlled by the existing emission control device C02, Tire Buffer Cyclone Collectors such that there was no increase in emissions from the construction of this source.

On May 12, 2012, the Department exempted STA from plan approval and operating permit requirements for making a physical change to the facility's carbon black handling system which

added new equipment but did not result in an emission increase above the allowable in the operating permit, violate the terms of the permit, or result in an increased ambient impact. STA's carbon black supplier changed from shipping the material in 50 or 80 lbs. bags to 2,000 lbs. super sacks. In order to handle the super sacks, STA had to construct a room with a higher ceiling so that a bridge crane capable of lifting the sacks into totes could be installed. However, the existing control device (C03, Transfer Station Dust Collector) for Source 108, Carbon Black Transfer Station was not modified and is still used to control emissions from this process. The "bag break" equipment formerly used for the smaller bags is no longer used and was subsequently disassembled in August 2012. Therefore, this physical change did not result in any changes to the operating permit.

REGULATORY ANALYSIS

The National Emissions Standards for Hazardous Air Pollutants, Rubber Tire Manufacturing Final Rule was promulgated on July 9, 2002 under 40 CFR Part 63, Subpart XXXX. During the review of this application in 2005, the Department realized the potential applicability of this regulation. Upon reviewing its historical records, STA's consultant discovered that the facility was a major HAP emitting facility for calendar years 2002 and 2003 due to a change in the rubber solvent used which contained a relatively high amounts of hexane and to a lesser degree, toluene. As an existing source however, STA was not required to comply with Subpart XXXX until July 11, 2005. Furthermore, the company had switched solvents in 2004 and did not exceed the HAP major source threshold that year.

In order to accommodate STA's desire to continue as and remain a synthetic minor source of HAPs, the Department entered into Consent Order and Agreement (COA) with STA on July 11, 2005 which was the Subpart XXXX compliance date. In accordance with the COA, STA will not emit more than 9.5 tons of an individual HAP or 24.5 tons of a combination of HAPs in any consecutive 12 month period. In order to ensure that STA does not exceed major source thresholds for HAPs, they must also comply with certain recordkeeping, monitoring and reporting requirements were outlined in the COA and copied over to the renewal permit. Finally, as part of the agreement, STA agreed to pay penalties in the amount of \$7,500 for failure to submit the appropriate notifications required by 40 CFR Section 63.6009(a) and 63.9(b)(2). Therefore, as a synthetic minor facility for purposes of HAP emissions, STA is not subject to Subpart XXXX. The provisions of the COA were incorporated into TVOP-32-00065 when it was issued on September 26, 2005.

Compliance with the particulate matter and sulfur dioxide emission limits will be demonstrated through the use of US EPA's AP-42 Manual and manufacturer's data when available.

CONCLUSIONS AND RECOMMENDATIONS

I have completed my review of Specialty Tires of America's Title V renewal permit application for their facility in Indiana County. STA has met the regulatory requirements associated with this application submittal. The attached proposed operating permit reflects terms and conditions as described in STA's permit application. It is my recommendation to issue a final Title V permit for this facility following the US EPA and public comment periods.