

NARRATIVE

TO: Jeng-Hon Su
FROM: Ginger Payment
DATE: September 7, 2021

Facility Name: **Hitachi Astemo Americas, Inc.**
AIRS No.: 297-00038
Location: Monroe, GA (Walton County)
Application #: 27961
Date of Application: May 26, 2021

Background Information

Hitachi Astemo Americas, Inc. (hereinafter "facility") is an existing facility for manufacturing automobile parts which is located at 1000 Unisia Drive, Monroe (Walton County). The facility is a true minor with regard to Title V regulations and was issued Permit No. 3714-297-0038-B-02-0 on February 2, 2017. The facility manufactures parts including propeller shafts, timing control gears, cam timers, and steering mechanisms for the automotive industry. Other activities include numerous automated and robotic manufacturing processes; two spray paint booths with a water curtain and a small emergency generator. The fuel burning equipment burns natural gas.

The facility is comprised of 3 Buildings

Building 1: Office space, break room, assembly area for VTC Lines. No process emissions.
Building 2: Office space, break room, assembly area for propeller shaft lines, and two automated paint booths. The paint booths have a 0.8 MMBTU/hr cure oven and is controlled by a water curtain system.
Building 3: Office space, break room, assembly area for VDP-4, BEPS, PEPS, and P/S Gear lines. No process emissions.

Purpose of Application

Application No. 27961 was submitted on May 26, 2021 to request a name change and for the construction and operation of a SIP exempted rework paint booth.

The name of the company has changed from Hitachi Automotive Systems Americas, Inc. to Hitachi Astemo Americas, Inc. The address for the facility will remain the same.

The rework booth (PB3) will be used to perform re-work and touch-ups and will include a dry filter for the three-sided enclosure. Emissions will be exhausted through a duct in the roof using a 12,000 CFM fan.

Because the emissions from the rework booth (PB3) are below the exemption thresholds, a public advisory was not issued for this application.

Updated Equipment List

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
PB1	Paint Booth	1997	WC	Water Curtain
PB2	Paint Booth	1997	WC	Water Curtain
PB3*	Re-work Paint Booth	2021*	CD1*	Dry Filter
CU	Paint Booth and Touch Ups	2016	---	---
GEN1	Backup Generator	2017	---	---

*proposed within current application

Emissions Summary

The emissions from the proposed rework paint booth are based on the projected material usage and the VOC/HAP content of the material used. A coating efficiency of 60% applied is assumed for the HVLP spray guns. Because this booth does not exhaust to the water curtain, all VOC and HAP emissions are assumed exhausted.

The facility maintains records of all products used at the facility and calculates monthly and twelve month rolling total VOC and HAP emissions. The potential emissions are based on the actual emissions and projected to 8,760 hours from the normal operating schedule.

Facility-Wide Emissions (in tons per year)

Pollutant	Potential Emissions			Actual Emissions		
	Before Mod.	After Mod.	Emissions Change	Before Mod.	After Mod.	Emissions Change
PM/PM ₁₀ /PM _{2.5}	0.95	1.005	0.055	0.95	1.005	0.055
NO _x	0.34	0.34	--	0.34	0.34	--
SO ₂	2.12E-03	2.12E-03	--	2.12E-03	2.12E-03	--
CO	0.29	0.29	--	0.29	0.29	--
VOC	91.3	91.537	0.237	91.3	91.537	0.237
Max. Individual HAP	1.73	1.732	0.002	1.73	1.732	0.002
Total HAP	2.26	2.263	0.003	2.26	2.263	0.003
Total GHG (if applicable)	420	420	--	420	420	--

Regulatory Applicability

There are no changes to applicable rules and regulations due to this application. The facility is not subject to 40 CFR 63 Subpart XXXXXX - NESHAP: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories because the SIC code for the facility is not one of the targeted SIC codes for applicability to this rule. The facility is also not subject to 40 CFR 63 Subpart HHHHHH - *NESHAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources* because the facility does not use any of the targeted compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) and they do not any paint stripping using methylene chloride (MeCl).

Permit Conditions

- Condition 7.3 is a new condition which requires the facility to calculate monthly VOC emissions from the entire facility. The condition was added to ensure the VOC emissions are being monitored.
- Condition 7.4 is a new condition which requires the facility to use the monthly VOC emissions to determine the 12-month rolling total VOC emissions. This condition was added to ensure that the VOC emissions remain below major source thresholds.

Toxic Impact Assessment

A toxic impact assessment was not necessary for this application because the potential emissions for both pollutants were below the respective MER (minimum emission rate). The potential emissions for methyl isobutyl ketone are 3,464 lb/yr and the MER is 4.53×10^5 lb/yr. The potential emissions for ethyl benzene are 1,038 lb/yr and the MER is 2.43×10^5 lb/yr.

Summary & Recommendations

I recommend issuance of Permit Amendment No. 3714-297-0038-B-02-1 to Hitachi Astemo Americas, Inc. for a name change and construction and operation of an exempted rework booth (PB3). The name of the facility has changed from Hitachi Automotive Systems Americas, Inc. to Hitachi Astemo Americas, Inc. A public advisory was not issued for this application. The platform was reviewed for accuracy. The Northeast District Office will continue to be responsible for compliance of the facility.