

Air Permit Review

Permit Issue Date: DRAFT

Region: Winston-Salem Regional Office
County: Guilford
NC Facility ID: 4100822
Inspector's Name: Eric Hudson
Date of Last Inspection: 04/07/2009
Compliance Code: 3 / Compliance - inspection

Facility Data	Permit Applicability (this application only)
Applicant (Facility's Name): Thomas Built Buses - Courtesy Road Facility Address: Thomas Built Buses - Courtesy Road 1408 Courtesy Road High Point, NC 27260 SIC: 3713 / Truck And Bus Bodies NAICS: 336211 / Motor Vehicle Body Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V	SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other: 112(j)

Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4100822.09B Date Received: 12/18/2009 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 03209/T18 Existing Permit Issue Date: 01/30/2009 Existing Permit Expiration Date: 09/30/2010
Dwight Bradshaw Environmental Manager (336) 881-6507 P O Box 2450 High Point, NC 27261	Jeff Allen Vice President of Operations (336) 889-4871 PO Box 2450 High Point, NC 27261	Dwight Bradshaw Environmental Manager (336) 881-6507 P O Box 2450 High Point, NC 27261	

Review Engineer: Kevin Godwin Review Engineer's Signature: _____ Date: _____	Comments / Recommendations: Issue 03209/T19 Permit Issue Date: Permit Expiration Date:
--	--

I. Introduction and Purpose of Application

- A. Thomas Built Buses (TBB) operates a bus manufacturing plant at this Guilford County site that is currently operating under Title V permit No. 03209T18. This application to renew the existing Title V permit (4100822.09B) was received by DAQ on December 23, 2009, and is currently covered by the Title V application shield.
- B. Presently, TBB has two other open applications in-house. One application (4100882.08C) is for the 2nd step of a significant modification under 15A NCAC 02Q .0516. The other application (4100882.09A) is the 2nd step of a 112(j) application. This review will serve to consolidate the two applications into the permit renewal.

II. Changes to Existing Title V Air Permit

The following table provides a summary of changes made to existing Title V Air Permit

Page(s)	Section	Description of Change(s)
Cover letter	N/A	Updated text.
N/A	N/A	Removed 64 HP diesel generator from insignificant activity list.

Page(s)	Section	Description of Change(s)
Permit cover page	N/A	Updated text.
3	Table of emission sources	<ul style="list-style-type: none"> - Removed woodworking equipment (ID No. ES-WD1) and associated control equipment. - Removed No. 2 fuel oil as fuel in boilers. - Included bagfilter (ID No. CDBV1) installed on laser cutting operation (ID No. ES-LC)
Old page No. 5	2.1 A.	Removed woodworking equipment (ID No. ES-WD1) and associated control equipment.
	2.1 B.2., C.3., and D.2.	Updated V.E. condition to current shell version (TVCOND62).
9	2.1 B.5.	Included 112(j) language for natural gas-fired boilers and process heaters.
Old page No. 13	2.2 A.1.	Removed “The Permittee is allowed to paint small parts in the old paint booths up to 120 days after initial start-up of the new booths. After this date, the old booths shall be removed from operation.”
Old page No. 14	2.2 A.3.	Removed “A. The Permittee shall complete the initial compliance demonstration for the initial compliance period ending on April 30, 2008 or as amended by the rule, according to the requirements of Section 2.2 A. 3.c.ii.B below. The Permittee shall determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The demonstration shall include the calculations according to Section 2.2 A. 3.c.ii.B below and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Section 2.2 A. 3.b. above.
Old page No. 20	2.2 A.3.	Removed “f. The Permittee shall submit the notification of compliance status required by 63.9(h) by May 30, 2008 .”
Old page No. 22	2.2 A.4.	Removed “e. The Permittee shall submit the notification of compliance status required by 63.9(h) by March 1, 2008 or as amended by the rule. The notification of compliance status must contain the following information and the information in 63.9(h).”
21	3.0	Updated General Conditions to latest shell version (version 3.1).

III. Statement of Compliance

- A. TBB was last inspected on March 30, 2010 by Mr. Eric Hudson of the Winston-Salem Regional Office (WSRO). According to Mr. Hudson’s April 7, 2010 inspection report, based on observations and records review, this facility appeared to be operating in compliance with Air Quality standards and regulations at the time of inspection.
- B. DAQ has not issued and Notices of Violation (NOV) to TBB – Courtesy Road within the past five years.

IV. Review of Applicable Regulations

- A. Two dry-filter type paint lines (**ID Nos. ES-D-Line and ES-Minotour line**) and associated natural gas-fired curing ovens, Electrostatic dry powder coating operation equipped with powder recovery including a 2.8 million Btu per hour dry off oven, overhead oven consisting of 2 zones with a 2.8 million Btu per hour burner each, 1.65 million Btu per hour side wall air makeup units (**ID No. ES-PP02**), and Metal body joining operation using adhesives (**ID No. ES-MJ**)

1. Applicable Regulations

- 15A NCAC 02D .0515
- 15A NCAC 02D .0521
- 15A NCAC 02D .1806
- 15A NCAC 02D .0958
- 15A NCAC 02D .0516
- 15A NCAC 02D .1111 – Subparts PPPP and MMMM
- 15A NCAC 02Q .1100 (*State-enforceable only*)
- 15A NCAC 02Q .0705 (*State-enforceable only*)

2. No new applicable regulations apply to these sources as part of this Title V permit renewal. No regulatory review is required at this time.

- B. Two natural gas-fired boilers (25.1 and 13.8 million Btu per hour heat input, **ID Nos. ES-CB600 and ES-CONT400**, respectively), and Natural gas-fired process hot water heater (15 million Btu per hour heat input; **ID No. ES-1**)

1. Applicable Regulations

- 15A NCAC 02D .0503
- 15A NCAC 02D .0516
- 15A NCAC 02D .0521
- 15A NCAC 02D .0524 (*ID No. ES-1 only*)

2. **15A NCAC 2D .1109 – CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters** – On July 20, 2007, the D.C. Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General’s office has determined that the NESHAP vacatur equates to the failure of the U.S. EPA to promulgate a standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) standards required under CAA §112(j), commonly referred to as the MACT “hammer” provisions, have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

On September 14, 2009, the NC DAQ received a Part 2 MACT “Hammer” application from this facility asking that the NC DAQ establish 112(j) emissions limitations in accordance with NC DAQ’s recommendations.

No control technologies for the control of CO, metals, Hg, or HCl were identified for natural gas fired boilers in the state of North Carolina, nor were any such technologies identified in a North Carolina query using U.S. EPA’s AirControlNet software (v4.1). The NC DAQ has determined that MACT is the use of best work practice standards for natural gas combustion sources of this size, consistent with the provisions in CAA § 112(d)(2)(D). Best work practice standards in this case shall include the annual inspection and maintenance of the boiler as follows:

To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:

- i. Inspect the burner, and clean or replace any components of the burner as*

- necessary;*
- ii. *Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,*
- iii. *Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.*

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

In addition, the Permittee will be required to record the results of the annual inspection in a log (written or electronic format), which shall be retained on-site and made available to an authorized representative upon request.

3. No other new applicable regulations apply to these sources as part of this Title V permit renewal. No additional regulatory review is required at this time.

D. Laser Cutting Operations (**ID Nos. ES-LC**) and associated bagfilter (4,064 square feet of filter area, ID No CDBV1)

1. Applicable Regulations
 - 15A NCAC 02D .0515
 - 15A NCAC 02D .0521
2. No new applicable regulations apply to this source as part of this Title V permit renewal. No regulatory review is required at this time.
3. When the laser cutting operations were permitted, the bagfilter was inadvertently left off the permit. Since the bagfilter may possibly vent outside, it must be permitted. Before control PM/PM-10 emissions are estimated to be 0.206 lb.hr. The DAQ bagfilter spreadsheet was used to verify a reasonable control efficiency of 99.8%. After control emissions are reported in the application as 2.06E-04 lb/hr. Compliance with 02D .0515 and .0521 is expected.

E. Diesel fired emergency generator (**ID No. ES-D21**)

1. Applicable Regulations
 - 15A NCAC 02D .1111 – Subpart ZZZZ
2. No new regulations apply to this source as part of this Title V permit renewal. No regulatory review is required at this time.

V. Compliance Assurance Monitoring

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all of the following criteria:

- Criteria #1: the unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;
- Criteria #2: the unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source; and
- Criteria #3: the unit is not exempt under 40 CFR 64.2(b).

As stated in the renewal application, CAM does not apply to control devices at TBB since no pollutant specific emission units meet all of the criteria.

VI. MACT Applicability

- A. TBB is a major source of hazardous air pollutants (HAP). The facility is subject to both 40 CFR Part 63 Subpart MMMM “Miscellaneous Metal Parts and Products Surface Coating” and Subpart PPPP “Plastic Parts and Products Surface Coating”, with Subpart PPPP being the most stringent. The existing permit includes language pertaining to both MACTs. To simplify monitoring, recordkeeping, and reporting requirements, it was decided by DAQ in October 2006 that the facility will be in compliance by complying with the more stringent of the two MACTs.
- B. Pursuant to 40 CFR 63.4490, for each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period. According to the most recent inspection report, the last notification of compliance status was post marked January 2009 and indicated compliance with emissions averaging between 0.031 and 0.032 lb HAP/lb solids for each 12-month period. Therefore, compliance is indicated.
- C. The diesel-fired emergency generator (665 horsepower, **ID No. ES-D21**) is subject to 40 CFR Part 63 Subpart ZZZZ. The existing permit includes a condition pertaining to MACT Subpart ZZZZ applicability. According to the most recent inspection report, TBB fulfilled the initial notification requirement in June 2005.

VII. Prevention of Significant Deterioration (PSD)

Since operations at TBB are not included in the listing of 28 source categories with a 100 tpy major source threshold, it is subject to a 250 tpy major source threshold. TBB does not have the potential to emit criteria pollutants greater than the 250 tpy PSD applicability threshold. Therefore, TBB is minor with regard to PSD.

VIII. New Source Performance Standards (NSPS)

The natural gas-fired water heater (15 million Btu per hour heat input, **ID No. ES-1**) is subject to NSPS Subpart Dc. As required by NSPS, the facility shall record and maintain records of the amounts of natural gas fired during each month.

IX. Insignificant Activities

In past permit revisions, DAQ has deemed the following sources insignificant activities under 15A NCAC 02Q .0503(8).

Emission Source Id. No.	Emission Source Description
IES-8	Antifreeze storage tank (1,500 gallons capacity)
IES-14	Spray booth used in R&D
IES-15	Various welding operations
IES-20	Segmented horizontal storage tank (diesel fuel-2000 gallon capacity, transmission fluid-750 gallon capacity, antifreeze-1500 gallon capacity and engine oil-750 gallon capacity)
IES-4	six day tanks (80 gallons each)
IES-D22	64 HP diesel fired generator
IES-1, IES-2, and IES-3	Three metal parts washing systems
IES-16 and IES-17	Two parts washers

X. Actual Emissions Summary

The following table provides a summary of actual criteria pollutant emissions as reported in the Annual Air Pollutant Emissions Inventory:

Pollutant	2008 emissions (tpy)	2007 emissions (tpy)
CO	2.91	2.57
NOx	3.55	3.07

Pollutant	2008 emissions (tpy)	2007 emissions (tpy)
PM/TSP	0.79	1.02
PM-10	0.79	1.02
SO2	0.05	0.02
VOC	82.9	108.27
Largest HAP	1.67	1.57

XI. Title V Permit History

03209T14	October 2005	Previous Title V Renewal
03209T15	January 2006	Administrative Amendment to correct semi-annual reporting periods from March 1 to January 30
03209T16	September 2007	Significant modification for inclusion of MACT Subpart M and PPM requirements
03209T17	December 2007	Minor modification to replace two existing paint lines and remove spray booth (ES-CHASSIS) as it was not installed
03209T18	January 2009	Minor modification to change identification numbers and add laser cutting operation (ES-LC) controlled by bagfilter

XII. Other Regulatory Considerations

- An application fee is not required for this renewal application.
- A consistency determination is not required for this renewal application.
- A Professional Engineer's seal is not required for this renewal application.
- The reduction and recycling activities form was included with the application (A4).
- According to the latest inspection report, the facility does not store any materials greater than the 112(r) applicability threshold.
- The renewal application was signed by Mr. Jeff Allen, Vice President of Operations, on December 17, 2009.

XIII. Draft/Proposed Permit Review Summary

- Mr. Eric Hudson (WSRO) was provided a draft on May 21, 2010
- Mr. Dwight Bradshaw (TBB) was provided a draft on May 21, 2010.
- NC DAQ published a Public Notice of the proposed Title V permit in the legal classified section of... on...
- EPA Region 4 was provided a draft on

XIV. Recommendations

The Title V Air Permit Renewal application for Thomas Built Buses - Courtesy Road Facility, in High Point, Guilford County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility appears to be complying or is expected to achieve compliance as specified in the permit with all applicable requirements.

Issue Air Quality Permit No. 03209T19.