

Fact Sheet



For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on April 21, 2014.

Permit Number: **R30-05700011-2014 (1 of 3)**
Application Received: **August 4, 2016**
Plant Identification Number: **057-00011**
Permittee: **Alliant Techsystems Operations LLC**
Facility Name: **Allegany Ballistics Laboratory**
Mailing Address: **210 State Route 956, Rocket Center, WV 26726-3548**

Permit Action Number: *SM01* Revised: *December 5, 2017*

Physical Location: Rocket Center, Mineral County, West Virginia
UTM Coordinates: 686.47 km Easting • 4381.25 km Northing • Zone 17
Directions: Left on plant access road from State Route 956 at the North Branch of the Potomac River.

Facility Description

SIC Codes: Primary - 3764, Secondary – 3089

Fabrication of both steel and composite structure rocket motor and warhead cases, production of propellants and explosives which are loaded into above cases and all associated case preparation and testing for motors.

The facility is located at two plants - Plant 1 and Plant 2. For Title V Permit purposes the facility operations were divided into the following Parts:

- Part 1 - Motor Manufacturing,
- Part 2 - Composites Manufacturing and Metal Fabrication,
- Part 3 - Miscellaneous Units.

This Permit covers Part 1 of the facility - Motor Manufacturing operations.

The purpose of this modification is to address the addition of a new rocket motor chamber preparation processing operation.

Emissions Summary

According to Table 2 of the Engineering Evaluation for R13-3334, the facility's PTE will increase as follows:

Pollutant	Increase in PTE (TPY)
PM	0.15
VOCs	20.27
Total HAPs	5.55

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 122.12 tons per year of Carbon Monoxide, 124.29 tons per year of Nitrogen Oxides, 289.14 tons per year of Sulfur Dioxide, 130.71 TPY of Volatile Organic Compounds, over 10 tons per year each of Hydrochloric Acid and Toluene, and over 25 tons per year of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Alliant Techsystems Operations LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	Fugitive dust, particulate matter, and visible emissions
	45CSR13	NSR permit.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards For Hazardous Air Pollutants
	40 C.F.R. 63, Subpart GG	Aerospace manufacturing and Rework Facilities

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-3334	9/11/2017	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

Equipment Changes

The following equipment associated with the Rocket Motor Preparation Process was added to the Emission Units Table:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Z-1S	Fugitive	Mandrel Release Coating Table	2017	N/A	
Z-2S	Fugitive	Adapter Degreasing Table	2017	N/A	
Z-3S	Z-3E	BR-127 Primer Booth	2017	2 gal/hr	Z-1C
Z-4S	Z-4E	Adapter/BR-127 Oven	2017	N/A	
Z-5S	Fugitive	Interior Degreasing Exhaust & Drying	2017	N/A	
Z-7S	Z-7E	Chemlok Mixing Hood	2017	N/A	
Z-8S	Z-8E	Chemlok Application Booth	2017	1 gal/hr	Z-2C
Z-9S	Z-9E	Chemlok/bondliner Application Booth	2017	N/A	Z-5C
Z-10S	Fugitive	Insulator Prep Exhaust	2017	N/A	
Z-11S	Z-11E	Oven for Insulator Drying	2017	N/A	
Z-12S	Z-12E	Bondliner Mixing Hood	2017	N/A	
Z-13S	Z-13E	Bondliner Application Booth	2017	1 gal/hr	Z-3C
Z-14S	Z-14E	Bondliner Drying Station	2017	N/A	
Z-15S	Z-15E	Case Machining	2017	2 units/hr	Z-4C
Z-16S	Fugitive	End Closure Adapter Wiping Station	2017	N/A	

The following control devices associated with the Rocket Motor Preparation Process were added to the Emission Units Table:

Control Device ID	Emission Point ID	Control Device Description	Year Installed	Design Capacity
Z-1C	Z-3E	Global Finishing Solutions Wave Filter	2017	90.00% efficiency
Z-2C	Z-8E	Global Finishing Solutions Wave Filter	2017	90.00% efficiency
Z-3C	Z-13E	Global Finishing Solutions Wave Filter	2017	90.00% efficiency
Z-4C	Z-14E	Aget Manufacturing Company Model: 30SN100-PL-SP Dry Cyclone Collector	2017	80.00% efficiency
		13.5 oz. Napped Polypropylene Sateen Fabric Filter with Cab-O-Sil preload powder	2017	99.93% efficiency
Z-5C	Z-9E	Global Finishing Solutions Wave Filter	2017	90.00% efficiency

40CFR63, Subpart GG (National Emission Standards for Aerospace Manufacturing Operations), Section 63.745-Standards: Primer, topcoat, and specialty coating application operations.

This section of 40CFR63, Subpart GG had previously been deemed as not applicable to this facility since specialty coatings were used for all painting operations. However, this section was recently revised, and it now also applies for specialty coatings. Consequently, the following changes were made to existing permit language:

- The permit shield (condition 3.7.2.b) was deleted to remove mention of 40CFR63, Subpart GG, Section 63.745.
- Condition 3.4.6, recordkeeping requirements to maintain the previously claimed exemption, was removed since it is no longer necessary.

New Rocket Motor Chamber Preparation Processing Operation Requirements

R13-3334 was written specifically to address these new operations. Some permit conditions in R13-3334 were already included in this Title V permit. The citations for these Title V permit conditions were updated to add conditions from R13-3334 as follows:

Title V Permit Condition	Summary of Permit Condition	R13-3334 Permit Condition
3.1.9	40CFR63, Subpart GG Standards (§§ 63.744 and 63.748) -Added §63.745 requirements to existing condition	4.1.7
3.1.10	Particulate Matter Emissions	3.1.7 and 4.1.8
3.2.4	40CFR63, Subpart GG Monitoring Requirements (§ 63.751)	4.2.4
3.4.1	Records of Monitoring Information	4.4.1
3.4.5	40CFR63, Subpart GG Recordkeeping Requirements (§ 63.752)	4.4.4
3.5.10	40CFR63, Subpart GG Reporting Requirements (§ 63.753)	4.5.2

Section 8.0: Rocket Motor Chamber Preparation Process

All remaining requirements for the Rocket Motor Chamber Preparation Process not previously included elsewhere in the permit were included in this section. These new permit conditions are as follows:

Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3334 Permit Condition
8.1.1	PM ₁₀ , HAP, and VOC Emission Limits	N/A ¹	4.1.1
8.1.2	Only use coatings listed in application	N/A	4.1.2
8.1.3	Daily record of batch production and yearly production limit	N/A	4.1.3
8.1.4	Production limits by emission unit	N/A	4.1.4
8.1.5	Control devices required when paint booths and machining operations are in use	N/A	4.1.5
8.1.6	Control device efficiency	45CSR§7-5.1.	4.1.6
8.1.7	Operation and maintenance of air pollution control equipment	45CSR§13-5.11	4.1.9
8.2.1	Fabric filter checks and continuous monitoring of pressure drop across filters	N/A	4.2.1
8.2.2	Filter replacement logsheet	N/A	4.2.2
8.2.3	Usage records of primer and application booths and emission calculations	N/A	4.2.3
8.4.1	Record of maintenance of air pollution control equipment	N/A	4.4.2
8.4.2	Record of malfunctions of air pollution control equipment	N/A	4.4.3
8.4.3	Records of maintenance and operations of fugitive dust control equipment	N/A	4.4.5
8.5.1	Reporting of violations of visible emissions requirements	N/A	4.5.1

¹Compliance with this condition demonstrates compliance with 45 CSR§7-4.1 for Z-15E.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 45CSR21– Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. The facility is not located in a county that is currently subject to 45CSR21, and is therefore currently exempt from this regulation.
- b. 40CFR63, Subpart PPP – National Emission Standards for Polyether Polyol Production. The facility manufactures Terathane Polyethylene Glycol Block Copolymer (TPEG), which is a Polyether Polyol. However, the operation is exempted from this MACT because there are no HAPs used or generated during the manufacturing operation.
- c. 40CFR63, Subpart GGGGG – National Emission Standards for Site Remediation. The facility currently has two sites under remediation for groundwater contamination. These sites are both CERCLA (“Superfund”) sites and are thus exempt from the MACT requirements. The facility also has a third site, which is currently being investigated under the RCRA corrective action program, that is expected to begin some form of remediation within the next five years. This site would also be exempted since it is being managed under a RCRA corrective action. In addition, none of the sites would generate emissions of more than 1 megagram per year of HAPs
- d. 40CFR63, Subpart PPPPP – National Emission Standards for Hazardous Air Pollutants from Engine Test Sells/Stands. This rule applies to the X-Range Static Rocket Motor Firing facility (Group 00Q).

However, per 40CFR§§63.9290(b) and (d)(2) it is exempt from the requirements of this subpart because this facility was existing on May 14, 2002 and it is used exclusively for rocket motor testing.

- e. 40CFR63, Subpart WWWW – National Emission Standards for Reinforced Plastic Composites Manufacturing. The facility manufactures composite based rocket motor chambers and aircraft components. However, the facility is exempt from this MACT because none of the resin or fiber systems used, contain HAPs.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Tuesday, October 24, 2017
Ending Date: Monday, November 27, 2017

Point of Contact

All written comments should be addressed to the following individual and office:

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Division of Air Quality
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Charleston, WV 25304
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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.