

# 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: **June 12, 2018**  
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: *SM02*      Revised: *December 11, 2018*

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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.

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### 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 processing operation, *The Guided Multiple Launch Rocket System (GMLRS)*, covered by permit R13-3408.

### Emissions Summary

As a result of this significant modification, the facility's PTE will increase as follows:

Pollutant	Increase in PTE (TPY) For the GMRLS	New Facility-Wide PTE (TPY)*
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.20	23.22
NO <sub>x</sub>	0.33	41.31
CO	0.55	59.97
SO <sub>2</sub>	< 0.01	33.67
VOCs	32.24	144.75
HAPs	0.2	53.06

\* Includes PTE from this modification and reduction in Facility-Wide PTE (as compared to 2014 renewal Fact Sheet) resulting from replacement of coal and #6 oil boilers (Nos. 15, 16 and 17) with 10 natural gas boilers in 2016 (Part 3 of the facility).

### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 144.75 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:	45CSR2	To Prevent and Control Particulate Air Pollution from the Combustion of Fuel in Indirect Heat Exchangers
	45CSR7	To Prevent and Control Particulate Matter (PM) Air Pollution from Manufacturing Processes and Associated Operations
	45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Dioxide
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards For Hazardous Air Pollutants
	40 C.F.R. 63 Subpart DDDDD	National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters

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 ( <i>if any</i> )
R13-3408	October 12, 2018	

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

The following changes associated with this modification based on the underlying permit R13-3408 were added to the permit:

1. Emission Units Table 1.1 – Sections “Building 3040”, “Building 3030A” and “Building 3030” were added to the Table. Also, a control device C1 & Vac. Pump for a Mixer (Emission Unit ID P3-10S) was added to the Control Devices Section.
2. Section 9.0 was added to include requirements for the emission sources located in Bldg. 3040.
3. Section 10.0 was added to include requirements for emission sources located in Bldg. 3030.
4. Section 11.0 was added to include requirements for the new Process Heaters (Emission Unit IDs P3-7S, P3-8S, & P3-9S) located in Building 3030A. The applicable requirements include 40 C.F.R. 63 Subpart DDDDD.

Heater	Design capacity	Year installed	Fuel	Source of HAP emissions
P3-7S	0.5 MMBtu/hr	2018 (new)	Natural gas	Major
P3-8S	0.5 MMBtu/hr	2018 (new)	Natural gas	Major
P3-9S	0.5 MMBtu/hr	2018 (new)	Natural gas	Major

The process heaters are designed to burn gas 1 fuel only (natural gas). Since the heaters have a heat input capacity of less than 5 MMBtu/hr each and designed to burn gas 1 fuel, per 40 C.F.R. §63.7540(a)(12) requirements, tune-ups need to be conducted once per 5 years starting no later than 61 months after initial compliance date (start up date) per 40 C.F.R. §63.7510(g), §63.7515(d) and §63.7495(a). Requirements of the underlying permit R13-3408 were included in this section with

additional applicable conditions of 40 C.F.R. 63 Subpart DDDDD: 40 C.F.R. §§63.7545(e)(1) and (e)(8) language was added to requirement 11.5.1 (underlying R13-3408 condition 6.4.1); 40 C.F.R. §§63.7550(b)(1) through (b)(5) and §63.7550(c)(5)(xvii) language was added to requirements 11.5.2 and 11.5.3 (underlying R13-3408 condition 6.4.2). Also, a typo was corrected in condition 11.5.1: underlying R13-3408 requirement 6.4.1 referenced a non-existing R13-3408 “Condition 4.1.3”, which was replaced with a reference to a correct R13-3408 condition 6.1.2.a (operating permit “Condition 11.1.2.a”).

### **Non-Applicability Determinations**

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

1. Requirements 4.1.4, 4.4.2 and 4.4.3 of the underlying permit R13-3408 were left out because there are no control devices listed for the emission sources located in building 3040.
2. 40 C.F.R. 63, Subpart GG “Aerospace Manufacturing and Rework Facilities” – this subpart is applicable to major sources of HAPs engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components. This regulation is not applicable to the cleaning activities that involve wash tanks and disassembly work areas because cleaning of mold tooling and/or casting manifolds does not involve cleaning of aerospace components. In the ignitor/nozzle assembly work area, these components are hand-wiped with a cleaning solvent during the assembly of the unit and are exposed to a strong oxidizer, which is the ammonium perchlorate based solid propellant rocket motor; therefore, the solvent cleaning of these components during the proposed assembly process are exempt from cleaning requirements of 40 C.F.R. §63.744 by meeting the exemption of 40 C.F.R. §63.744(e)(2). The surface coating (stenciling labels) in the assembly area only involve applying the coating to the shipping container and therefore is not an affected source under Subpart GG. No other activities are subject or potentially subject to requirements of Part 63 Subpart GG.
3. 40 C.F.R. 64, Compliance Assurance Monitoring (CAM) – Mixer P3-10S is the only potential PSEU added during this significant modification since it has a VOC emission limit in requirement 10.1.1.d (1.57 TPY) and VOC control device (Vacuum Pump). Since the Vacuum Pump removes 95% of VOC, the pre-control device VOC emissions are estimated at 31.2 TPY (below the major source threshold of 100 TPY). Therefore, CAM is not applicable per 40 C.F.R. §64.2(a)(3).

### **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: October 26, 2018  
Ending Date: November 26, 2018

### **Point of Contact**

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

Natalya V. Chertkovsky-Veselova  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE

Charleston, WV 25304  
Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478  
[natalya.v.chertkovsky@wv.gov](mailto:natalya.v.chertkovsky@wv.gov)

**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.