

# Fact Sheet



## For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05700011-2014 (3 of 3)**  
Application Received: **February 10, 2014**  
Plant Identification Number: **057-00011**  
Permittee: **Alliant Techsystems Operations LLC**  
Facility Name: **Allegheny Ballistics Laboratory**  
Mailing Address: **210 State Route 956, Rocket Center, WV 26726-3548**

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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 3 of the facility - Miscellaneous Units.

## Emissions Summary

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2012 Actual Emissions</b>
Carbon Monoxide (CO)	122.12	48.23
Nitrogen Oxides (NO <sub>x</sub> )	124.29	76.64
Particulate Matter (PM <sub>2.5</sub> )	11.80	6.26
Particulate Matter (PM <sub>10</sub> )	22.33	9.229
Total Particulate Matter (TSP)	41.79	15.26
Sulfur Dioxide (SO <sub>2</sub> )	289.14	202.35
Volatile Organic Compounds (VOC)	110.44	35.12
<i>PM<sub>10</sub> and PM<sub>2.5</sub> are component of TSP.</i>		
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2012 Actual Emissions</b>
Acetonitrile	0.050	0.0105
Antimony compounds*	1.154	0.00352
Benzene	0.0414	0.0080
Beryllium	0.0001	Not reported
Cadmium compounds*	0.0015	0.00046
Chromium*	0.0069	0.00168
<b>Chromium compounds</b> (not identified)*	0.0277	0.00895
Cobalt*	0.0091	0.00432
Diocyl phthalate	0.3439	0.0583
Ethyl benzene	0.3456	0.0323
Ethylene glycol	0.0464	0.0225
Formaldehyde	0.0047	0.0034
Glycol ether compounds	4.4905	0.0038
Hexane	0.3459	0.1249
<b>Hydrochloric Acid</b>	26.7135	7.617
<b>Hydrofluoric Acid</b>	2.194	0.546
Isocyanates (mixed)	0.0376	0.0201
<b>Lead *</b>	0.33	0.0670
<b>Lead compounds*</b>	0.3298	0.3130

Hazardous Air Pollutants	Potential Emissions	2012 Actual Emissions
Mercury*	0.0014	0.00039
Methanol	0.4742	0.1822
Methyl isobutyl ketone (MIBK)	1.43	0.3482
Methyl tert butyl ether	0.1193	0.0230
<b>Methylene chloride</b>	1.995	1.569
Nickel*	0.1685	0.06027
Phenol	0.0497	0.0140
Strontium chromate*	0.0017	0.00009
Styrene	0.2167	0.0250
Toluene	14.5305	2.4576
Trichloroethylene (TCE)	0.0112	0.0000
Xylene	3.2068	0.2341
Zinc chromate*	0.0001	0.00001
<b>TOTAL:</b>	<b>58.678</b>	<b>13.760</b>

\* Component of TSP emissions in Plant-wide Emission Summary table above

*Some of the above HAPs may be counted as PM or VOCs.*

This facility does not have the potential to emit equal to or greater than 100,000 tons per year of carbon dioxide equivalent (CO<sub>2</sub>e) and 100 tons per year of greenhouse gases (GHGs) on a mass basis.

### Title V Program Applicability Basis

This facility has 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, 110.44 TPY of Volatile Organic Compounds, over 10 tons per year of each 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate/Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR7	Fugitive dust, particulate matter, and visible emissions
	45CSR10	Sulfur oxides emissions

	45CSR13	Preconstruction permits for sources
	45CSR16	New Stationary Sources 40C.F.R.60 (NSPS)
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards For Hazardous Air Pollutants
	40 C.F.R. 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
	40 C.F.R. 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
	40 C.F.R. 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
State Only:	45CSR4	No objectionable odors.
	45CSR27	Toxic Air Pollutants

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**

<b>Permit or Consent Order Number</b>	<b>Date of Issuance</b>	<b>Permit Determinations or Amendments That Affect the Permit (if any)</b>
R13-0974A	05/23/2001	
R13-1771B	04/27/2004	
R13-2023C	05/05/2014	
R13-2301A	07/13/2001	
C60-C020	09/30/2010	

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 modifications have occurred to the first Title V renewal permit since its issuance on August 10, 2009:

AA01 - change of facility name from ATK Tactical Propulsion & Controls Division to ATK Missile Subsystems & Components Division.

MM01 - modification to include engines EG-1 through 10, permitted under the Class II General Permit G60-C020, in the Title V permit.

The following changes will be incorporated during this Title V renewal:

1. MM02 and MM03 – modification based on recently revised permit R13-2023C for replacement of burners in Boilers L-11S and L-12S to allow use of natural gas and fuel oil. Permit R13-2023C superseded and replaced permits R13-2023B and R13-2606A.
  - Emission Units Table 1.1: description of engines L-11S and L-12S was revised;
  - Added new Attachment 1- APPENDIX A of the Permit R13- 2023C. Old Attachments 1 through 4 were –re- numbered to Attachments 2 through 5 accordingly;
  - The following conditions were deleted: 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.1.13, 4.1.14, 4.1.15, 4.1.16, 4.4.3, 4.4.4, 4.4.8;
  - The following conditions were re-numbered: old 4.1.9 to 4.1.7, old 4.1.10 to 4.1.8, old 4.1.11 to 4.1.9; old 4.1.12 to 4.1.10.
  - The following conditions were added: new 4.1.5, new 4.1.6, 4.2.6, 4.2.7, 4.2.8, new 4.4.3, new 4.4.4, new 4.4.8, 4.4.9. 4.5.1, 4.5.2, 4.5.3, 4.5.4.
2. Condition 3.2.1 – updated to reflect that the facility has already conducted 4 consecutive weeks of visible emission observations and is in compliance, therefore monthly visible emission observations are required unless they are found not in compliance.
3. Requirement 3.4.5 - source 8-1S (Exhaust Hood-148) was deleted because this operation no longer exists. It was taken out from the Emission Units Table during the 2009 permit renewal.
4. Condition 3.7.2(d) language was updated to reflect current situation.
5. New requirement 4.1.5 (d) (underlying R13-2023C requirement 4.1.1 (d)) was included with the following modifications:
  - per 45CSR§2-11.1 Boilers L-11S and L-12S are exempt from requirements of 45CSR§2-4.1.b because they have heat input under 10 mm Btu/hr, therefore “45CSR§2-4.1.b” was left out of this requirement ;
  - per 45CSR§10-10.1 Boilers L-11S and L-12S are exempt from requirements of sections 3 and 6 through 8 of this rule because they have heat input under 10 mm Btu/hr, therefore they are not subject to section 45CSR§10-3.3.f and it was left out of this requirement;
6. Requirement 4.1.7 (old 4.1.9) – revised to indicate sections not applicable to the modified Boilers L-11S and L-12S;
  - per 45CSR§2-11.1, the following sections are not applicable because Boilers L-11S and L-12S have heat input under 10 mm Btu/hr : 45CSR§§2-4.1, 4.1.c, 4.2, 8.3.c, 9.1 and 9.3;
  - per 45CSR§2A-3.1.a, rule 45CSR2A is not applicable, therefore 45CSR§§2A-7.1.a.4 and 7.1.a.5 are not applicable.

7. Requirement 4.1.8 – modified to indicate that this condition is not applicable to boilers L-11S and L-12S (see item 5 above for detailed non-applicability explanation), and also applicable section of 45CSR10 was changed from 45CSR§10-3.3.f to 45CSR§10-3.1.e because the facility is located in Priority I Region (Mineral county), and section 45CSR§10-3.3.f is applicable for facilities in Priority III Regions.
8. Condition 4.1.10 (old 4.1.12) – updated MACT placeholder language for 40 C.F.R. 63, Subpart DDDDD for boilers L-1S, L-2S and L-3S. For Boilers L-11S and L-12S, MACT requirements are included with new requirement 4.1.5 (underlying R13-2023C condition 4.1.1).
9. Requirement 4.2.4 – Boilers L-11S and L-12S were excluded from the listed boilers subject to this requirement, because they are subject to new requirement 4.2.7.
10. Requirement 4.2.6 (underlying R13-2023C requirement 4.2.1) – per 40 C.F.R. §60.40c(a), the 40 C.F.R. 60 Subpart Dc applies to boilers with design heat input greater than or equal to 10 mm Btu/hr, therefore Boilers L-11S and L-12S are not subject to the requirements of this subpart, and citation to 40CFR§60.48c(g)(2) was left out of this requirement.
11. Requirement 4.5.4– added applicable section from the 40C.F.R. 63 Subpart DDDDD, §63.7545(f), “What notifications must I submit and when?” for Boilers L-11S and L-12S.
12. Requirement 5.4.4 – fixed typos (“Requirements 5.4.1 and 5.4.3” instead of “Requirements 5.3.1 and 5.3.3”).
13. Requirement 5.4.6 - source ID No. P-6C was deleted because this operation no longer exists. It was taken out from the Emission Units Table during the 2009 permit renewal.
14. Requirements 7.1.1, 7.1.2, 7.1.3, 7.4.1 and 7.5.1 – language was revised according to the 40C.F.R. 63 Subpart ZZZZ amended on January 30, 2013. Also, added new requirements 40C.F.R. §§63.6604(b) and (c) and 63.6650(h) as conditions 7.1.4, 7.1.5, and 7.5.2.

### **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 GG, Section 63.745 – National Emission Standards for Aerospace Manufacturing Operations. The painting operations at this facility are exempted from Section 63.745 Primer and Topcoat operations because Specialty Coatings (definition per §63.742) are used for all painting operations. Specialty Coating applications are covered by Control Technology Guidelines (CTG) EPA-453/R-97-004 enacted under 45CSR21 for RACT control of VOCs. However, the facility is not located in an area that is subject to 45CSR21, and is therefore, not subject to any CTG guidelines for Specialty Coating application.
- (c) 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.
- (d) 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.

- (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.
- (f) Requirements 3.1.11 and 3.5.11 (45CSR§§42-3.1, 4.1, 4.2 and 4.5) – these Greenhouse Gas requirements were deleted because the rule 45CSR42 was repealed by S.B. 253 on June 1, 2012.
- (g) Compliance Assurance Monitoring (CAM) Plan – there were no PSEUs added during all the modifications since the previous renewal permit was issued (August 10, 2009) that satisfied the CAM applicability criteria under 40CFR§64.2(a), therefore CAM is not applicable.

### **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: June 11, 2014  
Ending Date: July 11, 2014

### **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  
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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.