

Fact Sheet



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

Permit Number: **R30-05700011-2014 (1 of 3)**
Application Received: **October 18, 2013**
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**

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.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2012 Actual Emissions
Carbon Monoxide (CO)	122.12	48.23
Nitrogen Oxides (NO _x)	124.29	76.64
Particulate Matter (PM _{2.5})	11.80	6.26
Particulate Matter (PM ₁₀)	22.33	9.229
Total Particulate Matter (TSP)	41.79	15.26
Sulfur Dioxide (SO ₂)	289.14	202.35
Volatile Organic Compounds (VOC)	110.44	35.12
<i>PM₁₀ and PM_{2.5} are component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2012 Actual Emissions
Acetonitrile	0.050	0.0105
Antimony compounds*	0.154	0.00352
Benzene	0.0414	0.0080
Beryllium	0.0001	Not reported
Cadmium compounds*	0.0015	0.00046
Chromium*	0.0069	0.00168
Chromium compounds (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
Hydrochloric Acid	26.7135	7.617
Hydrofluoric Acid	2.194	0.546
Isocyanates (mixed)	0.0376	0.0201
Lead *	0.33	0.0670
Lead compounds*	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
Methylene chloride	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
TOTAL:	58.677	13.761

* 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 (CO₂e) 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:	45CSR6	Open burning prohibited.
	45CSR7	Fugitive dust, particulate matter, and visible emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for sources

	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. Part 61	Asbestos inspection and removal
	40 C.F.R. 63, Subpart GG	Aerospace manufacturing and Rework Facilities
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
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

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0401B	05/23/2001	
R13-0898B	04/27/2004	
R13-1047B	03/04/2002	
R13-1455A	07/18/2001	
R13-1694B	11/17/2003	
R13-1782A	07/19/2001	
R13-1798B	02/17/2011	
R13-2037A	07/26/2001	
R13-2246A	10/14/2003	

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 April 20, 2009:

- AA01 (September 24, 2010) - changed facility name from ATK Tactical Propulsion & Controls Division to ATK Missile Subsystems & Components Division.
- MM01 (June 23, 2011) - increased the hourly emissions (VOC, PM and HAP) of the paint booths located in Bldg. 392 to allow for full unit painting if needed rather than just stenciling. The revision was based on permit R13-1798B modification.

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

1. Table of Contents – “Appendix B” and “Appendix C” were re-named to “Attachment B” and “Attachment C” for consistency purposes. Therefore, word “Appendix” was deleted in the requirement 6.4.1 in two instances.
2. Emission Units Table 1.1 changes:
 - Group 002 - added Stencil Booth-420 Bay 3 (2-18S) that previously was missed. The booth emission rates are below the level required for obtaining a pre-construction permit, but 45CSR7 and 40 C.F.R. 63, Subpart GG are applicable.
 - Group 003 – 150 Gallon Mixer 311 (3-3S) was removed from the table because it was destroyed by explosion in May of 2010, and was replaced by new 300 Gallon Mixer-375 (3-6S). The new mixer doesn't require a permit because it doesn't utilize or produce regulated pollutants, and it doesn't have any applicable requirements.
 - Group 00C - Weigh-Out and Mixing Hood (C-2S), Inhibiting Area (C-3S) and Vacuum Pump (C-4S) (gas generator fabrication operations) were moved from building 356 to building 180 in order to remove extraneous operations from building 356. No direct vents from these operations.
 - Group 00J - Automated Case Painting System (J-7S) was moved from building 2031 to building 368. Pittsburgh Spray Booths-2031 (B-95S and B-102S) were moved from building 368 to building 2031 (from Part 2 to Part 1). Both changes of location were done to better accommodate product flow. Installed Stenciling Booth 2039 (J-11S). The booth PTE rates are below the level required for obtaining a pre-construction permit, but 45CSR7 and 40 C.F.R. 63, Subpart GG are applicable.
 - Control Devices – added Fabric Filters 2-8C and J-5C (control device for newly added Stencil Booth-Bay 3 (2-18S) and Stenciling Booth 2039 (J-11S)).
 - Added footnotes to describe abbreviations NDV, NE and OS.
3. Requirements 3.1.9 and 3.2.4 – added references to new stencil booths J-11S and 2-18S because they are subject to the same 40 C.F.R. 63, Subpart GG requirements as other stencil booths (J-8S and J-10S - Emission Points J-5E and J-7E).
4. Requirements 3.1.12 and 3.5.12 (45CSR§§42-3.1, 4.1, 4.2 and 4.5) - deleted because the rule 45CSR42 was repealed by S.B. 253 on June 1, 2012.
5. Requirements 3.2.2 and 3.4.7 – added references to new stencil booths J-11S and 2-18S (Emission Points 2-15E and J-8E) because they are subject to the same 45CSR7 monitoring and recordkeeping requirements as other stencil booths (J-8S and J-10S - Emission Points J-5E and J-7E).
6. Condition 3.7.2(d) language was updated to reflect current situation.

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) Compliance Assurance Monitoring (CAM) Plan – there were no PSEUs added during all the modifications since the previous renewal permit was issued (April 20, 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: March 3, 2014
Ending Date: April 2, 2014

Point of Contact

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

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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.