

Fact Sheet



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

Permit Number: **R30-05700011-2025 (1 of 3)**
Application Received: **January 10, 2024 (renewal) / November 30, 2023 (SM03)**
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**

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 four plants - Plant 1, Plant 2, Plant 3 and Plant 4. 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.

Significant Modification SM03 is included with this renewal permitting action and is based on recently issued permit R13-3651. It covers the construction of Plant 4, which includes installation and operation of a new Aerospace Production Line for manufacturing of an aerospace product.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2023 Actual Emissions
Carbon Monoxide (CO)	84.72	20.63
Nitrogen Oxides (NO _x)	63.34	23.76
Particulate Matter (PM _{2.5})	6.42	4.01
Particulate Matter (PM ₁₀)	17.97	7.89
Total Particulate Matter (TSP)	30.62	7.93
Sulfur Dioxide (SO ₂)	28.97	0.23
Volatile Organic Compounds (VOC)	197.25	29.58

PM₁₀ and PM_{2.5} are components of TSP.

Hazardous Air Pollutants	Potential Emissions	2023 Actual Emissions
Acetonitrile	0.27	0.01
Antimony compounds*	0.01	< 0.01
Benzene	0.37	0.15
Bis (2-Ethylhexyl) Phthalate	0.20	0.02
Cadmium compounds*	< 0.01	< 0.01
Chloroform	0.10	0.05
Chromium*	0.01	< 0.01
Chromium compounds (not identified) *	0.14	0.02
Cobalt*	< 0.01	< 0.01
Diethyl phthalate	0.20	0.03
Ethyl benzene	0.62	0.26
Formaldehyde	0.03	< 0.01
Glycol ether compounds	0.06	< 0.01
Hexane	0.80	0.08
Hydrochloric Acid	6.44	3.65
Lead*	< 0.01	< 0.01

Hazardous Air Pollutants	Potential Emissions	2023 Actual Emissions
Lead compounds*	1.98	0.27
Mercury*	< 0.01	< 0.01
Methanol	1.81	0.15
Methyl isobutyl ketone (MIBK)	2.06	0.48
Methylene chloride	2.0	1.09
Naphthalene	0.02	< 0.01
Nickel*	< 0.01	< 0.01
Phenol	0.16	< 0.01
Strontium chromate*	< 0.01	< 0.01
Styrene	0.37	0.02
Toluene	10.79	1.56
Trichloroethylene (TCE)	0.13	0
Xylenes (Mixed Isomers)	18.63	1.28
Zinc chromate*	< 0.01	< 0.01
Other (not specified)	0.1	0.04
Total HAPs	47.29	< 9.29

* Component of TSP emissions in Plantwide Emission Summary table above

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

Title V Program Applicability Basis

This facility has the potential to emit 197.25 TPY of VOC, 10.79 TPY of Toluene, 18.63 TPY of Xylene and 47.29 TPY 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	Pre-construction permits
	WV Code § 22-5-4 (a) (15)	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 61, Subpart M	Asbestos inspection and removal
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
 State Only:	
45CSR4	No objectionable odors.

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>)
R13-1455A	July 18, 2001	
R13-0898C	May 27, 2016	
R13-1694B	November 17, 2003	
R13-2037A	July 26, 2001	
R13-2246A	October 14, 2003	
R13-1782A	July 19, 2001	
R13-1798B	February 17, 2011	
R13-0401B	May 23, 2001	
R13-1047B	March 04, 2002	
R13-3334B	November 17, 2023	
R13-3408A	May 26, 2020	
R13-3534A	January 19, 2024	
R13-3651	July 23, 2024	

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 to the permit including those covered by Significant Modification SM03 (based on permit R13-3651) were included with this renewal permitting action:

1. Emission Units Table 1.1 – added Plant 4 equipment: 4 Downdraft Paint Booths 1 through 4 with control devices P4-1C through P4-4C (Emission Units P4-1S through P4-4S) and 3 Paint Mixing Booths 1 through 3 (Emission Units P4-5S through P4-7S). Also, Process Heaters P3-7S, P3-8S and P3-9S were removed, because they were moved to the part 3 of 3 permit per changes approved under R13-3408A. Also, the following equipment was removed from the table and from the permit, because it was removed from the facility: B-95S, B-102S, J-11S, J-7S and control devices J-2C and J-5C.
2. Active R13, R14, and R19 Permits Table 1.2 – added R13-3651 issued on July 23, 2024.
3. Boilerplate - revised conditions 3.1.6, 3.3.1 and 3.3.1.b.
4. Section 3.1 – added “Operation and Maintenance of Air Pollution Control Equipment” requirement (condition 3.1.12), and removed identical repeated requirements 4.1.14, 8.1.6, 10.1.2 and 12.1.6 for permit streamlining purposes.
5. Section 3.4 – added “Record of Maintenance of Air Pollution Control Equipment” and “Record of Malfunctions of Air Pollution Control Equipment” requirements (conditions 3.4.8 and 3.4.9 respectively), and identical repeated requirements 4.4.8, 4.4.9, 8.4.1, 8.4.2, 10.4.1, 10.4.2, 12.4.2 and 12.4.3 were removed for permit streamlining purposes.
6. Condition 8.1.1 – added a missing line in condition 8.1.1. in the Table 8.1.1.a Material Usage/Losses Limits for source Z-13S (based on R13-3334B).
7. Sections 8.0 and 12.0 were cleaned up to remove some duplicate conditions already contained in the facility-wide requirements of Section 3.0:
 - conditions 8.1.3, 8.1.4, 8.1.5, 12.1.3, 12.1.4 and 12.1.5 (40 C.F.R. §§63.744, 63.745 and 63.748) were removed because identical conditions were already included in the facility-wide limitations and standards requirement 3.1.9 (citations for the conditions from the underlying permits R13-3334 and R13-3534 were already included);
 - conditions 8.4.3 and 12.4.4 (40 C.F.R. §63.752) were removed because an identical condition was already included in the facility-wide recordkeeping requirement 3.4.5 (citations for the conditions from the underlying permits R13-3334 and R13-3534 were already included);
 - condition 12.4.1 (Record of Monitoring) was removed because identical facility-wide recordkeeping requirement 3.4.1 was included in the permit (citation for the underlying permit R13-3534 condition was already included);
 - conditions 8.5.2 and 12.5.2 (40 C.F.R. §63.753) were removed because identical condition 3.5.10 was already included in the permit (citations for the conditions from the underlying permits R13-3334 and R13-3534 were already included);
8. Old Section 11.0 – this section (“GMLRS Rocket Motor Manufacture Process Heaters Requirements (Plant 3, Bldg. 3030A)”) was removed from this permit (part 1 of 3), because requirements for Process Heaters P3-7S, P3-8S and P3-9S were moved to part 3 of 3 permit (Section 4.0) per changes approved under R13-3408A.
9. New Section 11.0 - added requirements for Plant 4 based on permit R13-3651 including 45CSR7 and 40 C.F.R. 63, Subpart GG applicable conditions.
 - 45CSR7 is applicable to the manufacturing process source operation because it has PTE for PM emissions. Since each Downdraft Paint Booth (Emission Units P4-1S through P4-4S) is equipped with filter media (control devices P4-1C through P4-4C) with minimum filterable PM collection rating of 95% (condition 11.1.2.a), the total hourly filterable PM emissions from the manufacturing process are reduced to 0.5 lbs/hr

(below the allowable rate per 45CSR§7-4.1 and Table 45-7A). Also, 20% opacity limit (45CSR§7-3.1) is applicable and included under condition 11.1.2.c.

- 40 C.F.R. 63, Subpart GG is applicable to the aerospace production line at Plant 4 since it is a part of an aerospace manufacturing facility which is a major source of HAPs (per 40 C.F.R. §63.741(a)). Spray booths, cleaning and coating operations are affected sources per 40 C.F.R. §63.741(c).
- Some of the requirements identical to the requirements of the underlying permit R13-3651 were already included with (or were moved to) the facility-wide section of this permit: condition 3.1.9 (40 C.F.R. §§63.744, 63.745 and 63.748, citations for the underlying requirements 4.1.3, 4.1.4 and 4.1.5 were added), condition 3.1.12 (citation for the underlying requirement 4.1.5 was added), conditions 3.4.1, 3.4.8 and 3.4.9 (citations for the underlying requirements 4.4.1, 4.4.2 and 4.4.3 were added), condition 3.4.5 (40 C.F.R. §63.752, citation for the underlying requirement 4.4.4 was added) and condition 3.5.10 (40 C.F.R. §63.753, citation for the underlying requirement 4.5.2 was added).

Non-Applicability Determinations

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

1. The following requirements have been determined not to be applicable to the subject facility due to the following (included with the current Permit Shield, condition 3.7.2):
 - 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.
 - 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.
 - 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, commonly referred to as Plant 2, which is currently being investigated under the RCRA corrective action program, that could potentially require some form of active groundwater remediation or treatment within the next five to ten years. This site would also be exempted since it is being managed under a RCRA corrective action.
 - 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.
2. CAM Rule (40 C.F.R. 64) - the Alliant Techsystems Operations LLC, Allegany Ballistics Laboratory Motor Manufacturing Facility (Part 1 of 3) does not own or operate a subject pollutant specific emissions unit as defined in 40 C.F.R. §64.1, because all plant control devices either have potential pre-control device annual emissions of applicable regulated air pollutants that are less than major source threshold, and thus are exempt per 40 C.F.R. §64.2(a)(3), or are already subject to a Title V permit that specifies a continuous compliance determination method as defined in 40 C.F.R. §64.1, and thus are exempt from CAM requirements per 40 C.F.R. §64.2(b)(1)(vi), or are not subject to a regulated air pollutant emission limitation or standard, and thus are not subject to CAM requirements per 40 C.F.R. §64.2(a)(1). There were no new PSEU units added during Significant Modification SM01, SM02, SM03, minor modifications MM01, MM02 and the renewal:
 - SM01 – two paint booths (Emission Unit IDs 2-19S and 2-20S) were added with PM emission limits (23 lbs/yr and 7 lbs/yr respectively) and control devices (filters 2-9C and 2-10C) with minimum of 95%

- control efficiency for PM. Based on the efficiency of the filters, before control device emissions for the paint booths 2-19S and 2-20S were estimated at 460 lbs/yr and 140 lbs/yr (respectively). These emissions are significantly lower than major source threshold of 100 TPY. Therefore, they are exempt from requirements of CAM per 40 C.F.R. §64.2(a)(3);
- SM02 / MM02 – CAM is not applicable because there were no new PSEUs added to the facility during these modifications;
 - SM03 - out of 7 new Paint Booths, 4 Paint Booths (Emission Units P4-1S through P4-4S) have control devices (P4-1C through P4-4C) with minimum efficiency of 95% for PM emissions. Estimated total PM emissions after control devices are 83.57 lbs/yr, and before control devices - maximum of 0.84 TPY of PM (which is less than major source threshold of 100 TPY). Therefore, they are exempt from requirements of CAM per 40 C.F.R. §64.2(a)(3);
 - MM01 – CAM is not applicable because there were no new PSEUs added, and emissions from the existing units were not increased.

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: November 21, 2024

Ending Date: December 23, 2024

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.