

Fact Sheet



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

Permit Number: **R30-05700011-2019 (1 of 3)**
Application Received: **October 17, 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**

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	2017 Actual Emissions
Carbon Monoxide (CO)	59.97	20.06
Nitrogen Oxides (NO _x)	41.31	22.10
Particulate Matter (PM _{2.5})	4.88	1.10
Particulate Matter (PM ₁₀)	12.34	1.11
Total Particulate Matter (TSP)	23.22	2.02
Sulfur Dioxide (SO ₂)	33.67	0.17
Volatile Organic Compounds (VOC)	144.75	23.56
<i>PM₁₀ and PM_{2.5} are component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2017 Actual Emissions
Acetonitrile	0.27	0.03
Antimony compounds*	0.01	0
Benzene	0.37	0.04
Cadmium compounds*	0.01	0
Chloroform	0.10	0.01
Chromium*	0.01	0
Chromium compounds (not identified)*	0.14	0.02
Cobalt*	0.01	0
Diethyl phthalate	0.85	0
Ethyl benzene	0.62	0.06
Formaldehyde	0.03	0.01
Glycol ether compounds	0.06	0
Hexane	0.80	0.07
Hydrochloric Acid	4.40	1.0
Lead*	1.33	0.24
Lead compounds*	0.01	0
Mercury*	0.01	< 0.01
Methanol	1.81	0.16

Hazardous Air Pollutants	Potential Emissions	2017 Actual Emissions
Methyl isobutyl ketone (MIBK)	3.73	0.33
Methylene chloride	2.0	1.12
Nickel*	0.01	0.01
Phenol	0.16	0.02
Strontium chromate*	0.01	0
Toluene	30.89	2.67
Trichloroethylene (TCE)	0.13	0
Xylenes (Mixed Isomers)	5.29	0.46
Zinc chromate*	0.01	0
Other (not specified)	0.10	0
Total HAPs	53.17	< 6.26

* 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 144.75 TPY of VOC, 30.89 TPY of Toluene and 53.17 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	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>)
R13-1455A	07/18/2001	
R13-0898C	05/27/2016	
R13-1694B	11/17/2003	
R13-2037A	07/26/2001	
R13-2246A	10/14/03	
R13-1782A	07/19/2001	
R13-1798B	02/17/2011	
R13-0401B	05/23/2001	
R13-1047B	03/04/2002	
R13-3334	09/11/2017	
R13-3408	10/12/2018	

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 modifications have occurred to the Title V renewal permit since its issuance on April 21, 2014:

- MM01 (August 2, 2016) - addition of a second methylene chloride recovery unit on the nitrate ester sparging operation (covered by permit R13-0898C);
- SM01 (December 5, 2017) - addition of a new rocket motor chamber preparation processing operation (covered by permit R13-3334);

- SM02 (December 11, 2018) - addition of a new rocket motor processing operation *The Guided Multiple Launch Rocket System (GMLRS)* covered by permit R13-3408.

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

1. Emission Units Table 1.1 – a second methylene chloride emission control system “Nitrate Ester Sparge-352 (secondary)” (emission unit 1-4S, emission point 1-13E, control device 1-10C) added to the facility in 2016 was separated in the Emission Units Table from the original methylene chloride emission control system (emission unit ID 1-4S, emission point ID 1-4E, control device ID 1-2C). Also, Plasma Etch Machine 369 (emission unit ID 6-15S, emission point ID 6-12E) and its control device NaOH Neutralization Tank for plasma arc cutter (6-7C) were removed from the facility, and from the table.
2. Emission Units Table 1.1 and throughout the permit – per company’s request the following sections’ names were revised for clarity to add more description: “Rocket Motor Chamber Preparation Process” to “00Z GMLRS Rocket Motor Chamber Preparation – Plant 1”; Building 3040, Building 3030 and Building 3030A to “00Z GMLRS Rocket Motor Manufacture – Plant 3, Building 3040”, “00Z GMLRS Rocket Motor Manufacture – Plant 3, Building 3030”, and “00Z GMLRS Rocket Motor Manufacture – Plant 3, Building 3030A”.
3. Requirement 3.1.9 (40 C.F.R. 63 Subpart GG) – language was revised since the 40 C.F.R. 63 Subpart GG was revised after the previous permit renewal was issued.
4. Permit Shield Condition 3.7.2. (c) (40 C.F.R. 63, Subpart GGGGG) – the description was revised to reflect the current situation with Plant 2 investigation under the RCRA corrective action program.

Non-Applicability Determinations

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 - 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).

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: May 31, 2019
Ending Date: June 30, 2019

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 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478
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.