West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on November 19, 2019.

Permit Number: **R30-05700011-2019** (3 of 3)
Application Received: **May 18, 2022**Plant Identification Number: **03-54-05700011**Permittee: **Alliant Techsystems Operations LLC**

Facility Name: Allegany Ballistics Laboratory

Mailing Address: 210 State Route 956, Rocket Center, WV 26726-3548

Permit Action Number: MM03 Revised: October 16, 2023

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 three plants - Plant 1, Plant 2 and Plant 3. 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.

This minor modification is based on the changes issued under permit R13-3186D. According to R13-3186D, an existing emergency generator EG-8 was going to be replaced with the new emergency generator EG-17, however, requirements for EG-8 are included in General Permit G60-C020. Therefore, the emergency generator EG-8 will remain in the Title V permit until such time that the General Permit G60-C020 is modified to remove those requirements. In addition to EG-17, another new emergency generator EG-18 was added to the facility under permit R13-3186D.

Emissions Summary

This modification resulted in the following emission changes:

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Pollutant	Increase in PTE before	Increase in PTE after
	EG-8 removal, TPY	EG-8 removal, TPY
NOx	2.46	2.32
CO	0.36	0.33
\mathbf{SO}_2	< 0.01	< 0.01
$PM/PM_{10}/PM_{2.5}$	0.03	0.02
VOC	0.05	0.04
HAPs	< 0.01	< 0.01

Title V Program Applicability Basis

With the proposed changes associated with this modification and after removal of emergency generator EG-8, this facility maintains the potential to emit 145.41 TPY of VOC, 30.89 TPY of Toluene and 53.38 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Preconstruction permits for sources			
	45CSR16	Standards of Performance for New			
		Stationary Sources 40CFR60			
	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			

State Only: None.

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

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of	Permit Determinations or Amendments That		
Consent Order Number	Issuance	Affect the Permit (if any)		
R13-3186D	July 19, 2022			

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 will be incorporated during this Title V minor modification:

- 1. Emission Units Table 1.1 new emergency generators EG-17 (design capacity 755 bhp) and EG-18 (design capacity 463 bhp) were added. Emergency generator EG-8 will remain in this Table until such time that the General Permit G60-C020 is modified to remove it.
- 2. Active R13, R14, and R19 Permits Table 1.2 permit R13-3186C was replaced with the current permit R13-3186D. Also, references to this permit were updated throughout.
- 3. Boilerplate revised conditions 2.1.3, 2.11.4, 2.17, 2.22.1, 3.5.3, 3.5.4, 3.5.7, and 3.5.8.
- 4. Section 7.0 (EG-8) emergency generator EG-8 requirements will remain in this section until such time that the General Permit G60-C020 is modified to remove those requirements.
- 5. Section 7.0 (EG-17 and EG-18) applicable requirements of 40 C.F.R. 63 Subpart ZZZZ and 40 C.F.R. 60 Subpart IIII for new generators EG-17 and EG-18 were added.

Below is the 40 C.F.R. 63 Subpart ZZZZ applicability table for the new generators EG-17 and EG-18:

Engines EG-17 and EG-18 Applicability Table for 40 C.F.R. 63 Subpart ZZZZ

Emission Unit ID / Emission Point ID	Description	Туре	Installed / Manufactured - New / Existing	Design Capacity / Subpart ZZZZ applicability	Control Device	Source of HAPs
EG-17 / EG-17E	Emergency Diesel Generator	CI, no diesel particulate filter, displacement 13.5 l/cyl.	2022 - new (constr. after 12/19/2002)	755 bhp (> 500 bhp), Subpart ZZZZ applies	None	Major

Emission Unit ID / Emission Point ID	Description	Туре	Installed / Manufactured - New / Existing	Design Capacity / Subpart ZZZZ applicability	Control Device	Source of HAPs
EG-18 / EG-18E	Emergency Diesel Generator	CI, no diesel particulate filter, displacement 9.0 l/cyl.	2022 - new (constr. after 6/12/2006)	463 bhp (≤ 500 bhp), Subpart ZZZZ applies through IIII only	None	Major

Based on the applicability determination above, since generator EG-17 is new and has a design capacity above 500 hp, it is subject to the following applicable requirements of 40 C.F.R. 63 Subpart ZZZZ: 40 C.F.R. §63.6605, §63.6640(f), and §63.6645(f). These requirements are already included in permit conditions 7.1.7, 7.1.8(f), and 7.5.1. Also, condition 40 C.F.R. §63.6600(c) (existing requirement 7.1.5) is applicable to engine EG-17.

Since generator EG-18 is new and has a design capacity below 500 hp, the only applicable requirement of 40 C.F.R. 63 Subpart ZZZZ is 40 C.F.R. §63.6590(c) (condition 7.1.5) which states that meeting the requirements of 40 C.F.R. 60 Subpart IIII will meet the requirements of 40 C.F.R. 63 Subpart ZZZZ.

Below is the 40 C.F.R. 60 Subpart IIII applicability table for the new generators EG-17 and EG-18:

Emission Unit ID / Emission Point ID	Description	Туре	Installed (Constructed, Manufactured) / Subpart IIII applicability	Design Capacity	Control Device	Source of HAPs
EG-17 / EG-17E	Emergency Diesel Generator	CI, no diesel particulate filter, displacement 13.5 l/cyl.	2022 (constr. after 7/11/2005, manuf. after 4/1/2006) / Subpart IIII applies	755 bhp (> 500 bhp)	None	Major
EG-18 / EG-18E	Emergency Diesel Generator	CI, no diesel particulate filter, displacement 9.0 l/cvl.	2022 (constr. after 7/11/2005, manuf. after 4/1/2006) / Subpart IIII applies	463 bhp (≤ 500 bhp)	None	Major

Engines EG-17 and EG-18 Applicability Table for 40 C.F.R. 60 Subpart IIII

Since both generators were constructed after 7/11/2005 and manufactured after 4/1/2006, 40 C.F.R. 60 Subpart IIII applies (per 40 C.F.R.§60.4200(a)(2)(i)). The engines are certified. All applicable 40 C.F.R. 60 Subpart IIII requirements for the engines EG-17 and EG-18, as well as other R13-3186D requirements for these engines are included in Section 7.0 of this permit under conditions 7.1.9, 7.1.10, 7.1.11, 7.2.2, 7.3.1, 7.4.2, 7.4.6 and 7.4.7.

In summary, all of Part 3 of 3 facility's emergency generators can be grouped as follows per 40 C.F.R. 63 Subpart ZZZZ and 40 C.F.R. 60 Subpart IIII applicability:

- Both subparts applicable (new engines > 500 hp): EG-7, 9, 11, 12, 13, 14, 17;
- Both subparts applicable, but shows compliance with Subpart ZZZZ via Subpart IIII (new engines ≤ 500 hp): EG-10, 15, 16, 18.
- Subpart ZZZZ applicable only (existing engines): EG-1, 2, 3, 4, 5, 6 (new > 500 hp, but constructed in 2004, so not subject to Subpart IIII), 8 (new > 500 hp, but constructed in 2004, so not subject to Subpart IIII).
- Section 7 (conditions 7.1.8, 7.1.9, 7.1.11, 7.4.1, 7.4.2) updated in accordance with revised regulations 40 C.F.R. §63.6640(f), 40 C.F.R. §60.4207(b), 40 C.F.R. §60.4211(a), (b) and (f), 40 C.F.R. §60.4202(a), 40 C.F.R. §60.4205(a), 40 C.F.R. §60.4207(b), 40 C.F.R. §63.6655(f), and 40 C.F.R. §60.4214(d).

Non-Applicability Determinations

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

- 1. Condition 7.1.6(a) removed because 40 C.F.R. 63 Subpart ZZZZ was revised, and 40 C.F.R. \$63.6604(b) now only applies to area sources of HAPs under 40 C.F.R. \$63.6640(f)(4)(ii) and this facility is a major source of HAPs.
- 2. Condition 7.1.6(b) removed because 40 C.F.R. §63.6604(c) was removed and marked as "Reserved" in 40 C.F.R. 63 Subpart ZZZZ.
- 3. Condition 7.5.2 removed because 40 C.F.R. 63 Subpart ZZZZ was revised, and 40 C.F.R. §63.6650(h) only applies to emergency stationary RICE at an area source of HAPs and this facility is a major source of HAPs.

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: Not Applicable for minor modifications.

Ending Date: N/A

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. 41250 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.