RE: EXT :Re: ATK (2 of 3) TV permit renewal

2 messages

Foor, SueEllen [US] (DS) <sueellen.foor@ngc.com> Tue, Dec 17, 2024 at 7:39 AM
To: "Chertkovsky, Natalya V" <natalya.v.chertkovsky@wv.gov>

Thank you, Natalya. I apologize for taking so long to get back to you. I should never take 2 weeks off at a time.

I have no changes to the draft.

As for the autoclaves, they have been in for many years. They have no specific requirements, but they are propane fired and we do include those propane combustion emissions in the annual emissions inventory.

Sue Ellen

From: Chertkovsky, Natalya V <natalya.v.chertkovsky@wv.gov>
Sent: Wednesday, December 11, 2024 4:54 PM
To: Foor, SueEllen [US] (DS) <sueellen.foor@ngc.com>
Subject: EXT :Re: ATK (2 of 3) TV permit renewal

Sue Ellen,

Please, find attached draft TV permit renewal and a fact sheet for your review.

I didn't include the Auto Claves with the permit, but I'm still waiting for your feedback.

There are no changes to the permit except removal of unit A-7E and control device A-5C per your request.

Please, let me know if you have any comments or questions by December 17, 2024, if you can (I'll be on vacation starting on December 18, 2024 till the end of the year).

Thank you for your cooperation,

Sincerely,

Natalya Chertkovsky

On Wed, Dec 11, 2024 at 1:42 PM Chertkovsky, Natalya V <natalya.v.chertkovsky@wv.gov> wrote:

> Thank you!
>
> One more quick:
>
> These two items installed 2004 were included with the equipment Table of the renewal application (see below).
>
> Do we have to add them to the permit? Do they have any requirements?
>
> Thank you!

Wg-5S	Wg-1E	Auto Clave	2004	N/A	
Wg-6S	Wg-2E	Auto Clave	2004	N/A	

On Mon, Dec 9, 2024 at 8:36 AM Foor, SueEllen [US] (DS) <sueellen.foor@ngc.com> wrote:

> Yes.
>
> ---
>
> **From:** Chertkovsky, Natalya V <natalya.v.chertkovsky@wv.gov>
> **Sent:** Thursday, December 5, 2024 5:04 PM
> **To:** Foor, SueEllen [US] (DS) <sueellen.foor@ngc.com>
> **Subject:** EXT :ATK (2 of 3) TV permit renewal
>
> Hello Sue Ellen,
>
> I'm working on the part (2 of 3) permit renewal and have a quick question.
>
> In the application' equipment Table there is one deleted unit (see the line below). Was it removed from the facility? Was Dust Collector A-5C removed too?
>
> Thank you!
>
> Natalya

~~A-58S~~	~~A-7E~~	~~Large Abrasive Blast Systems Grit Blaster (Rm. 119) - 438~~	~~1996~~	~~30 lb/hr~~	~~A-5C~~

Chertkovsky, Natalya V <natalya.v.chertkovsky@wv.gov> Tue, Dec 17, 2024 at 8:45 AM
To: "Foor, SueEllen [US] (DS)" <sueellen.foor@ngc.com>

Thank you, Sue Ellen!
[Quoted text hidden]

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Alliant Techsystems Operations LLC
Allegany Ballistics Laboratory
R30-05700011-2025 (2 of 3)

Laura M. Crowder
Director, Division of Air Quality

Issued: [Date of issuance] • *Effective: [Equals issue date plus two weeks]*
Expiration: [5 years after issuance date] • *Renewal Application Due: [6 months prior to expiration]*

Permit Number: **R30-05700011-2025 (2 of 3)**
Permittee: **Alliant Techsystems Operations LLC**
Facility Name: **Allegany Ballistics Laboratory**
Permittee Mailing Address: **210 State Route 956, Rocket Center, WV 26726-3548**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Rocket Center, Mineral County, West Virginia
Facility Mailing Address:	210 State Route 956, Rocket Center, WV 26726-3548
Telephone Number:	(304) 726 - 5506
Type of Business Entity:	LLC
Facility Description:	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
SIC Codes:	Primary - 3764, Secondary – 3089
UTM Coordinates:	686.47 km Easting • 4381.25 km Northing • Zone 17

Permit Writer: Natalya V. Chertkovsky-Veselova

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Source ID	Emission Point ID	Equipment Description and ID	Year Installed / Modified	Design Capacity	Control Device Description and ID
Composite Case Manufacturing – Group 00B					
B-2S	B-3E	Laboratory Exhaust Hood (Bond Room)-368	1995	Variable	
B-3S	B-2E (151e)	Laboratory Exhaust Hood (Bond Room)- 368	1995	Variable	
B-4S	B-3E (149e)	Binks Spray Booth #1-368	1995	Variable	B-1C
B-5S	B-4E (150e)	Binks Spray Booth #2-368	1995	Variable	B-2C
B-49S	B-4E	Laboratory Exhaust Hood-368	1999	Variable	
B-11S	B-5E	Tafco Oven (Javelin Bond Room-Oven C) -368	1999	Variable	
B-14S	B-7E	Grieve Drying Oven-368	1993	550°F Max	
B-15S	B-7E	Penn Drying Oven-368	1993	Variable	
B-16S	B-7E	Laboratory Exhaust Hood-368	1993	Variable	
B-25S	B-7E	Tafco Large Electric Curing Oven (Javelin Bond Room, Walk-Through Oven A) -368	1993	Variable	
B-26S	B-8E	Tafco Oven (Javelin Bond Room, Oven B) -368	1993	Variable	
B-27S	B-9E	Gas Curing Oven-368	1993	0.8 Mkw	
B-28S	B-10E	Gas Curing Oven-368	1993	0.8 Mkw	
B-29S	B-11E	Gas Curing Oven-368	1993	0.8 Mkw	
B-30S	B-12E	Gas Curing Oven-368	1993	0.8 Mkw	
B-31S	B-13E	Large Autoclave-368	1993	600°F/300psi	
B-32S	B-14E	Small Autoclave-368	1993	400°F/250 psi	
B-36S	B-15E	Penn Storage Freezer-368-MS	1996	Variable	
B-37S	B-16E	Meuser Lathe-368-MS	1996	Variable	
B-38S	B-16E	LeBlond Lathe-368-MS	1996	Variable	B-5C
B-39S	B-16E	LeBlond/Makino Lathe-368-MS	1996	Variable	B-5C
B-40S	B-16E	Vacuum System-368-MS	1996	Variable	B-5C
B-41S	B-19E	Mori Seiki Lathe-368-MS	1996	Variable	B-6C

Source ID	Emission Point ID	Equipment Description and ID	Year Installed / Modified	Design Capacity	Control Device Description and ID
B-42S	B-19E	Dainichi F-35M Lathe-368-MS	1996	Variable	B-6C
B-44S	B-20E	Grieve-Hendry Small Electric Oven-368-MS	1997	10 kw	
B-53S	B-21E	Masco Gantry Mill-368-MS	2000	Variable	B-7C
B-55S	B-16E	Bridgeport Milling Machine-368-MS	2000	Variable	
B-56S	B-22E	Young & Bertke Electric Oven-368-MS	2000	550°F	
B-60S	B-16E	Small Table Grinder-368-MS	2000	Variable	
B-61S	B-16E	Small Table Grinder-368-MS	2000	Variable	
B-62S	B-16E	Small Table Sander-368-MS	2000	Variable	
B-48S	B-17E	Autoclave-256-FP	1997	Variable	
B-65S	B-23E	Grieve Electric Oven-167-F22	2000	Variable	
B-68S	B-24E	8-Ply Laminator-368ANN	1999	Variable	
B-70S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-71S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-72S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-96S	B-28E	Gruenberg Oven-368ANN	1999	500°F	
B-97S	B-29E	Grieve Walk-In Oven-368ANN	1999	80 kw	
B-98S	B-30E	Steelman Walk-In Oven-368ANN	1999	500°F	
B-99S	B-31E	TBI Booth-368ANN	1999	Variable	B-12C
B-100S	B-32E	CTA Robotic Spray Booth-368ANN	2000	Variable	B-13C
B-101S	B-33E	Sabot Cleaning Sprayer & Dryer-368ANN	2000	Variable	
Metal Fabrication – Group 00A					
A-1S	A-1E	Apex Broach Machine-167	1996	Variable	
A-109S	NDV	Lindberg/Blue Electric Oven-167	1999	Variable	
A-51S	A-5E	Vacuum Pumps for EB Welder-438	1996	Variable	
A-52S	A-5E	Vacuum Pumps for EB Welder-438	1996	Variable	
A-54S	A-2E or-6E	Hand Grinding/Buffing Station-438	1996	Variable	A-2C
A-62S	A-8E	Armil Propane Tempering Oven-438	1996	4 mmBTU/hr	
A-63S	A-9E	Modern Propane Tempering Oven-438	1996	3 mmBTU/hr	
A-68S	A-10E	Magnaflux Magnetic Particle Machine-438-R122	1996	Variable	

Source ID	Emission Point ID	Equipment Description and ID	Year Installed / Modified	Design Capacity	Control Device Description and ID
A-70S	A-12E	Work Table with Exhaust Hood-438-R122	2000	Variable	
A-73S	A-14E	Wisconsin Electric Through-Wall Oven-438-R121	1996	Variable	
A-74S	A-14E	Wisconsin Electric Oven-438-R121	1996	Variable	
A-75S	A-14E	Young & Bertke Electric Oven-438-R121	1996	Variable	
A-77S	A-15E	TIG Welding Machine-438-R121		Variable	
A-78S	A-15E	TIG Welding Machine-438-R121	1996	Variable	
A-79S	A-15E	TIG Welding Machine-438-R121	1996	Variable	
A-80S	A-15E	TIG Welding Machine-438-R121	1996	Variable	
Nozzle / Insulator Preparation – Group 00D					
D-1S	D-1E (183e)	Paint Spray Booth #1-421	1996	Variable	D-1C (183c)
D-2S	D-1E (183e)	Paint Spray Booth #2-421	1996	Variable	D-2C
D-3S	D-2E	Lab Exhaust Hood-421	1996	Variable	
D-6S	D-3E	Blu-Surf Propane-Fired Curing Oven-421	1996	1.5 mmBTU/hr	
D-7S	D-4E	Blu-Surf Propane-Fired Curing Oven-421	1996	0.5 mmBTU/hr	
D-8S	D-5E	Blu-Surf Propane-Fired Curing Oven-421	1996	0.5 mmBTU/h	
D-10S	D-7E	Despatch Electric Curing Oven-421	1996	Variable	
D-23S	D-8E	Rubber Mixing Machine-819	1996	2.5 gal	Vents inside building
D-24S	D-8E	Roll mill-819	1996	Variable	Vents inside building
D-29S	D-9E	Primer Station-421-CBA	2000	Variable	D-5C
D-31S	D-10E	Desma Rubber Molding Machine-421-CBA	2000	Variable	
D-32S	D-11E	Water Jet Trimmer-421-CBA	2000	Variable	
D-33S	D-12E	Water Jet Trimmer-421-CBA	2000	Variable	
D-35S	D-13E	Grieve Oven-421-SAB	2000	Variable	
D-36S	D-14E	Grieve Oven-421-SAB	2000	Variable	
D-37S	D-15E	Arburgh Injection Molding Machine-421-SAB	2000	Variable	

Source ID	Emission Point ID	Equipment Description and ID	Year Installed / Modified	Design Capacity	Control Device Description and ID
D-4S	OS	Lab Exhaust Hood-421-SAB	1996	Variable	
D-41S	D-16E	Sabot/Obturator Cleaning Hood	2003	Variable	
D-42S	D-17E	Sabot Priming Booth	2003	Variable	D-7C
D-46S	D-19E	J RTV Curing Oven	2003	Variable	
D-49S	D-20E	Grieve Electric Oven-421	1999	Variable	
Medium Caliber Ammunition Area - Group 00V					
V-1S	V-1E	502 GAU 8 Primer Coating Line - 376A	2004	Variable	V-1C
	V-2E	502 GAU 8 Topcoat Coating Line - 376A	2004	Variable	V-2C
	V-3E	502 GAU 8 Coating Line Oven - 376A	2004	Variable	
V-2S	V-4E	104 GAU 8 Coating Line - 376A	2004	Variable	V-3C
V-3S	V-5E	104 Rework Coating Line - 376A	2004	Variable	V-5C
V-6S	V-8E, V-9E	Fuze Line Assembly (FMU151/M758) - 376A	2004	Variable	
V-7S	V-8E, V-9E	Fuze Line Assembly (FMU154/M759) - 376A	2004	Variable	
Control Devices					
B-1C	B-3E	Fabric filter for spray booth	1995	90-95% (PM)	
B-2C	B-4E	Fabric filter for spray booth	1995	90-95% (PM)	
B-5C	B-16E	Cyclone dust collector for lathe vacuum	1996	99.9% (PM)	
B-6C	B-19E	Cyclone dust collector for lathes	1996	99.9% (PM)	
B-7C	B-21E	Cyclone dust collector for gantry mill	2000	99.9% (PM)	
B-8C	B-25E	Cyclone dust collector for Minster presses	1999	99.9% (PM)	
B-12C	B-31E	Fabric filter for spray booth	1999	90-95% (PM)	
B-13C	B-32E	Fabric filter for spray booth	2000	90-95% (PM)	
A-2C	A-2E or-6E	Cyclone Dust Collector	1996	Variable	
D-1C (183c)	D-1E	Fabric filter for paint booth	1996	90-95% (PM)	
D-2C	D-1E	Fabric filter for paint booth	1996	90-95% (PM)	

Source ID	Emission Point ID	Equipment Description and ID	Year Installed / Modified	Design Capacity	Control Device Description and ID
D-5C	D-9E	Fabric filter for primer station	2000	90-95% (PM)	
D-7C	D-17E	Fabric filter for primer booth	2003	90-95% (PM)	
V-1C	V-1E	Fabric Filter	2004	90% (PM)	
V-2C	V-2E	Fabric Filter	2004	90% (PM)	
V-3C	V-4E	Fabric Filter	2004	90% (PM)	
V-5C	V-5E	Fabric Filter	2004	90% (PM)	

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1797A	01/30/2002
R13-2037A	07/26/2001
R13-2579A	10/17/2005

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**PM_{10}**	Particulate Matter less than 10μm in diameter
CES	Certified Emission Statement	**pph**	Pounds per Hour
C.F.R. *or* CFR	Code of Federal Regulations	**ppm**	Parts per Million
CO	Carbon Monoxide	**PSD**	Prevention of Significant Deterioration
C.S.R. *or* CSR	Codes of State Rules	**psi**	Pounds per Square Inch
DAQ	Division of Air Quality	**SIC**	Standard Industrial Classification
DEP	Department of Environmental Protection	**SIP**	State Implementation Plan
FOIA	Freedom of Information Act	**SO_2**	Sulfur Dioxide
HAP	Hazardous Air Pollutant	**TAP**	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	**TPY**	Tons per Year
HP	Horsepower	**TRS**	Total Reduced Sulfur
lbs/hr *or* lb/hr	Pounds per Hour	**TSP**	Total Suspended Particulate
LDAR	Leak Detection and Repair	**USEPA**	United States Environmental Protection Agency
m	Thousand	**UTM**	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	**VEE**	Visual Emissions Evaluation
mm	Million	**VOC**	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour		
NA *or* N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.40]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B.]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(15)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. The permitted facility (Source ID B-4S, B-5S, D-1S, D-2S, D-42S) shall comply with all applicable standard provisions of 40CFR63 Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities, provided, however, that compliance with any more stringent limitations set forth under Requirements of Sections 4 and 5 of this Permit is demonstrated:

§ 63.744 Standards: Cleaning operations.

(a) Housekeeping measures. Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or meets the definition of "Non-HAP material" in 63.742. The requirements of this section do not apply to spent cleaning solvents, and solvent-laden applicators that are subject to and handled and stored in compliance with 40 CFR parts 262 through 268 (including the air emission control requirements in 40 CFR part 265, subpart CC).

(1) Place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(2) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

(3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

(b) Hand-wipe cleaning. Each owner or operator of a new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment performed in accordance with paragraph (c) of this section) subject to this subpart shall use cleaning solvents that meet one of the requirements specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section. Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in § 63.741(f) are exempt from the requirements in paragraphs (b)(1), (b)(2), and (b)(3) of this section.

(1) Meet one of the composition requirements in Table 1 of this section;

(2) Have a composite vapor pressure of 45 mm Hg (24.1 in. H_2O) or less at 20 °C (68 °F); or

(3) Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State. Demonstrate that the volume of hand-wipe cleaning solvents used in cleaning operations has been reduced by at least 60 percent from a baseline

adjusted for production. The baseline shall be calculated using data from 1996 and 1997, or as otherwise agreed upon by the Administrator or delegated State Authority. The baseline shall be approved by the Administrator or delegated State Authority and shall be included as part of the facility's title V or part 70 permit.

(c) Spray gun cleaning. Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalent, specified in paragraphs (c)(1) through (c)(4) of this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in § 63.741(f) are exempt from the requirements in paragraphs (c)(1) through (c)(4) of this section.

(1) (i) Enclosed system. Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun.

(ii) If leaks are found during the monthly inspection required in § 63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

(2) Nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

(3) Disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

(4) Atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

(5) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of paragraph (c) of this section.

(e) Exempt cleaning operations. The following cleaning operations are exempt from the requirements of paragraph (b) of this section:

(1) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;

(2) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, or hydrazine);

(3) Cleaning and surface activation prior to adhesive bonding;

(4) Cleaning of electronic parts and assemblies containing electronic parts;

(5) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;

(6) Cleaning of fuel cells, fuel tanks, and confined spaces;

(7) Surface cleaning of solar cells, coated optics, and thermal control surfaces;

(8) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;

(9) Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;

(10) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;

(11) Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing;

(12) Cleaning operations, using nonflamable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and

(13) Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4.

Table 1 Composition Requirements for Approved Cleaning Solvents

Cleaning solvent type	Composition requirements
Aqueous.....	Cleaning solvents in which water is the primary ingredient ($\geq$80 percent of must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives, such as organic solvents (e.g., high boiling point alcohols), builders, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93 °C (200° F) (as reported by the manufacturer), and the solution must be miscible with water.
Hydrocarbon-based.....	Cleaners that are composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20 °C (3.75 in. H_2O and 68 °F). These cleaners also contain no HAP.

§ 63.745 Standards: Primer, topcoat, and specialty coating application operations.

(a) Each owner or operator of a new or existing primer, topcoat, or specialty coating application operation subject to this subpart shall comply with the requirements specified in paragraph (c) of this section for those coatings that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation), and in paragraph (d) of this section for those coatings that are controlled (organic HAP emissions from the operation are reduced by the use of a control device). Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of this section.

(b) Each owner or operator shall conduct the handling and transfer of primers, topcoats, and specialty coatings to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

(c) *Uncontrolled coatings—organic HAP and VOC content levels*. Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (6) of §63.745 for those coatings that are uncontrolled.

(5) Organic HAP emissions from specialty coatings shall be limited to an organic HAP content level of no more than the HAP content limit specified in Table 1 of this section for each applicable specialty coating type.

(6) VOC emissions from specialty coatings shall be limited to a VOC content level of no more than the VOC content limit specified in Table 1 of §63.745 for each applicable specialty coating type.

Table 1—Specialty Coatings—HAP and VOC Content Limits

Coating Type	HAP Limit g/L (lb/gallon)[1]	VOC Limit g/L (lb/gallon)[1]
Adhesion Promoter	890 (7.4)	890 (7.4)
Chemical Agent-Resistant Coating	550 (4.6)	550 (4.6)
Optical Anti-Reflective Coating	750 (6.3)	750 (6.3)
Specialized Function Coating	890 (7.4)	890 (7.4)

[1] Coating limits for HAP are expressed in terms of mass (grams or pounds) of HAP per volume (liters or gallons) of coating less water. Coating limits for VOC are expressed in terms of mass (grams or pounds) of VOC per volume (liters or gallons) of coating less water and less exempt solvent.

(e) *Compliance methods*. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (6) of §63.745 shall be accomplished by using the methods specified in paragraphs (e)(1) and (2) of §63.745 either by themselves or in conjunction with one another.

(1) Use primers, topcoats (including self-priming topcoats), and specialty coatings with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (6) of §63.745; or

(2) Use the averaging provisions described in §63.743(d).

(f) *Application equipment*. Except as provided in paragraph (f)(3) of §63.745, each owner or operator of a new or existing primer, topcoat (including self-priming topcoat), or specialty coating application operation subject to this subpart in which any of the coatings contain organic HAP or VOC shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of §63.745.

(1) All spray applied primers, topcoats (including self-priming topcoats), and specialty coatings shall be applied using one or more of the spray application techniques specified in paragraphs (f)(1)(i) through (f)(1)(v) of §63.745.

(i) High volume low pressure (HVLP) spraying;

(ii) Electrostatic spray application;

(iii) Airless spray application;

(iv) Air-assisted airless spray application; or

(v) Any other coating spray application methods that achieve emission reductions or a transfer efficiency equivalent to or better than HVLP spray, electrostatic spray, airless spray, or air-assisted airless spray application methods as determined according to the requirements in §63.750(i).

(2) All coating spray application devices used to apply primers, topcoats (including self-priming topcoats), or specialty coatings shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Spray application equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP spray, electrostatic spray, airless spray, or air-assisted airless spray application techniques.

(3) The following situations are exempt from the requirements of paragraph (f)(1) of §63.745:

(i) Any situation that normally requires an extension on the spray gun to properly reach limited access spaces;

(ii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns;

(iii) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of §63.745;

(iv) The use of airbrush application methods for stenciling, lettering, and other identification markings, and the spray application of no more than 3.0 fluid ounces of coating in a single application (*i.e.*, the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component) from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters). Using multiple small paint cups or refilling a small paint cup to apply more than 3.0 fluid ounces under the requirements of this paragraph is prohibited. If a paint cup liner is used in a reusable holder or cup, then the holder or cup must be designed to hold a liner with a capacity of no more than 3.0 fluid ounces. For example, a 3.0 ounce liner cannot be used in a holder that can also be used with a 6.0 ounce liner under the requirements of this paragraph;

(v) The use of hand-held non-refillable aerosol containers;

(vi) Touch-up and repair operations;

(vii) Adhesives, sealants, maskants, caulking materials, and inks; and

(viii) The application of coatings that contain less than 20 grams of VOC per liter of coating.

(g) *Inorganic HAP emissions*. Except as provided in paragraph (g)(4) of §63.745, each owner or operator of a new or existing primer, topcoat, or specialty coating application operation subject to this subpart in which any of the coatings that are spray-applied (as defined in §63.742) and contain inorganic HAP, shall comply with the applicable requirements in paragraphs (g)(1) through (3) of §63.745.

(1) Apply these coatings in a booth, hangar, or portable enclosure in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

(2) Control the air stream from this operation as follows:

(ii) For new sources:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 4 and 5 of §63.745; or

TABLE 4—THREE-STAGE ARRESTOR; LIQUID PHASE CHALLENGE FOR NEW SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, µm
>95	>2.0
>80	>1.0
>65	>0.42

TABLE 5—THREE-STAGE ARRESTOR; SOLID PHASE CHALLENGE FOR NEW SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, µm
>95	>2.5
>85	>1.1
>75	>0.70

(iv) If a dry particulate filter system is used, the following requirements shall be met:

(A) Maintain the system in good working order;

(B) Install a differential pressure gauge across the filter banks;

(C) Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift, or install an interlock system that will automatically shut down the coating spray application system if the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s); and

(D) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).

(3) If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop is returned within the specified limit(s).

(4) The requirements of paragraphs (g)(1) through (g)(3) of §63.745 do not apply to the following:

(i) Touch-up of scratched surfaces or damaged paint;

(ii) Hole daubing for fasteners;

(iii) Touch-up of trimmed edges;

(iv) Coating prior to joining dissimilar metal components;

(v) Stencil operations performed by brush or air brush;

(vi) Section joining;

(vii) Touch-up of bushings and other similar parts;

(viii) Sealant detackifying;

(ix) Spray application of primers, topcoats, and specialty coatings in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to spray apply coatings to the parts in a booth;

(x) The use of hand-held non-refillable aerosol containers; and

(xi) The spray application of no more than 3.0 fluid ounces of coating in a single application (*i.e.*, the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component) from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters). Using multiple small paint cups or refilling a small paint cup to apply more than 3.0 fluid ounces under the requirements of this paragraph is prohibited. If a paint cup liner is used in a reusable holder or cup, then the holder or cup must be designed to hold a liner with a capacity of no more than 3.0 fluid ounces. For example, under the requirements of this paragraph, a 3.0 ounce liner cannot be used in a holder that can also be used with a 6.0 ounce liner.

§ 63.748 Standards: Handling and storage of waste.

(a) The owner or operator of each facility subject to this subpart that produces a waste that contains organic HAP from aerospace primer, topcoat, specialty coating, chemical milling maskant, or chemical depainting operations must be handled and stored as specified in paragraph (a)(1) or (a)(2) of this section. The requirements of paragraphs (a)(1) and (a)(2) of this section do not apply to spent wastes that contain organic HAP that are subject to and handled and stored in compliance with 40 CFR parts 262 through 268 (including the air emission control requirements in 40 CFR part 265, subpart CC).

(1) Conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

(2) Store all waste that contains organic HAP in closed containers.

[45CSR34, 40 C.F.R. §§63.744(a)(1) through (a)(3), (b), (c), (e), 63.745(a), (b), (c)(5), (c)(6), (e), (f), (g)(1), (g)(2)(ii)(A), (g)(2)(iv), (g)(3) and (g)(4), 63.748, Subpart GG and 45CSR13, R13-2037, B.7]

3.1.10. The pertinent sections of 45CSR7 applicable to this facility include, but are not limited to, the following:

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.
[45CSR§7-3.1]

The provisions of subsection 45CSR§7- 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2.]

No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7- 5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7]

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7.
[45CSR§7-4.1]

Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12]

No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1]

The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2]

At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.
[45CSR§7-8.1]

The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2]

[45CSR13, R13-2037, B.5 and R13-1797, B.6 and R13-2579, B.2]

3.1.11. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Director thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Director may specify shall be conducted to determine compliance.

[45CSR13, R13-2037, B.6 and R13-1797, B.7, and R13-2579, B.6]

3.2. Monitoring Requirements

3.2.1. Compliance with Section 3 of 45CSR7 (Requirement 3.1.10 of this Permit) shall be determined by conducting visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for all the Emission Points subject to 45CSR7 (B-16E, B-19E, B-21E, B-25E) and units emitting directly into the open air from points other than stack outlet (including visible fugitive dust emissions that leave the plant site boundaries).

Visual emission observations shall be conducted weekly for a minimum of 4 consecutive weeks during periods of facility operation to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If no sources of visible emissions are identified, then monthly Method 22 checks shall be conducted.

If sources of visible emissions are identified, the permittee shall conduct an Opacity Evaluation as outlined in 45CSR§7A-2.1.a, b within 24 hour period unless the permittee can demonstrate a valid reason that the time frame should be extended. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed.

Anytime when not in compliance with the opacity limit per 45CSR§7-3.1 for any emission point, reporting as per Requirement 3.5.11 shall be initiated, and for this emission point, Method 22 checks shall revert to a weekly frequency for a minimum of 4 consecutive weeks. If in compliance, then monthly Method 22 checks shall be conducted.

Compliance with this Requirement will assure compliance with requirement 3.3.4.f.

[45CSR§30-5.1.c]

3.2.2. Compliance with Section 3 of 45CSR7 (Requirement 3.1.10 of this Permit) for paint booths and related equipment (Emission Points B-3E, B-4E, B-32E, D-1E, D-9E, D-17E, V-1E, V-2E, V-4E, V-5E) shall be determined by conducting fabric filter checks prior to each use of the equipment. These checks shall include review to ensure filters are properly fitted to the unit, no holes exist, and the filters are not overloaded. Any changes made to filters during the checks or filter replacements shall be recorded.
[45CSR§30-5.1.c]

3.2.3. Compliance with Section 3 of 45CSR7 (Requirement 3.1.10 of this Permit) for Emission Points A-2E and A-6E shall be determined by conducting a pre-operation check of the filters prior to each use of the equipment, and conduct preventive maintenance on the units at least quarterly to ensure that filters are cleaned and working properly.
[45CSR§30-5.1.c]

3.2.4. The permitted facility (Source ID B-4S, B-5S, D-1S, D-2S, D-42S) shall comply with all the applicable standard provisions of the 40CFR63 Subpart GG National Emission Standards for Aerospace Manufacturing and Rework Facilities, provided, however, that compliance with any more stringent limitations set forth under Requirements of Sections 4.0 and 5.0 of this Permit, is demonstrated:

§ 63.751 Monitoring requirements.

(a) *Enclosed spray gun cleaners.* Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) (Section 3.1.9 of this Permit) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

(c) *Dry particulate filter, HEPA filter, and waterwash systems—primer, topcoat, and specialty coating application operations*.

(1) Each owner or operator using a dry particulate filter system to meet the requirements of §63.745(g)(2) shall, while primer, topcoat, and specialty coating application operations are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following the recordkeeping requirements of §63.752(d), or install an interlock system as specified in §63.745(g)(2)(iv)(C).

[45CSR34, 40 C.F.R. §§63.751(a), (c)(1), Subpart GG and 45CSR13, R13-2037, B.7]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be

used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(15-16) and 45CSR13]

3.3.2. A test protocol (as per Requirement 3.3.1.c.) shall include detailing on the proposed test methods, the date and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information.

[45CSR13, R13-2037, B.9 and R13-1797, B.9]

3.3.3. Test results shall be submitted to the Secretary no more than sixty (60) days after the date the testing takes place. **[45CSR13, B.9; R13-2037, B.9; R13-1797, B.9]**

3.3.4. Tests that are required by the Director to determine compliance with the emission limitations set forth in this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.

a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 CFR 60, Appendix A.

b. Tests to determine compliance with SO_2 emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 CFR 60, Appendix A.

c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 CFR 60, Appendix A.

d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 CFR 60, Appendix A.

e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 CFR 60, Appendix A.

f. Tests to determine compliance with Opacity of emissions shall be conducted in accordance with Method 9 as set forth in 40 CFR 60, Appendix A.

[45CSR13, R13-2037, B.8 and R13-1797, B.8]

3.3.5. The permitted facility (as indicated in Requirement 3.1.9) shall comply with all the applicable testing provisions of the 40CFR63 Subpart GG National Emission Standards for Aerospace Manufacturing and Rework Facilities, provided, however, that compliance with any more stringent limitations set forth under Requirements of Sections 4.0. and 5.0. of this Permit, is demonstrated:

§63.750 Test methods and procedures.

(a) *Composition determination.* Compliance with the hand-wipe cleaning solvent approved composition list specified in §63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met.

(c) *Organic HAP content level determination—compliant primers, topcoats, and specialty coatings.* For those uncontrolled primers, topcoats, and specialty coatings complying with the primer, topcoat, or specialty coating organic HAP content limits specified in §63.745(c) without being averaged, the procedures in paragraphs (c)(1) through (3) of this section shall be used to determine the mass of organic HAP emitted per volume of coating (less water) as applied. As an alternative to the procedures in paragraphs (c)(1) through (3) of this section, an owner or operator may use the coating manufacturer's supplied data to demonstrate that organic HAP emitted per volume of coating (less water), as applied, is less than or equal to the applicable organic HAP limit specified in §63.745(c). Owners and operators that use the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating may add non-HAP solvent to those coatings provided that the owner or operator also maintains records of the non-HAP solvent added to the coating.

(1) For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(2) For each coating formulation as applied, determine the organic HAP weight fraction, water weight fraction (if applicable), and density from manufacturer's data. If the value for organic HAP weight fraction cannot be determined using the manufacturer's data, the owner or operator shall use Method 311 of 40 CFR part 63, appendix A, or submit an alternative procedure for determining the value for approval by the Administrator. If the values for water weight fraction (if applicable) and density cannot be determined using the manufacturer's data, the owner or operator shall submit an alternative procedure for determining their values for approval by the Administrator. Recalculation is required

only when a change occurs in the coating formulation. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 311 analysis, compliance shall be based on the results from the Method 311 analysis.

(3) For each coating as applied, calculate the mass of organic HAP emitted per volume of coating (lb/gal) less water as applied using equations 1, 2, and 3:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 1$$

where:

V_{wi} = volume (gal) of water in one gal of coating i.

D_{ci} = density (lb of coating per gal of coating) of coating i.

W_{wi} = weight fraction (expressed as a decimal) of water in coating i.

D_w = density of water, 8.33 lb/gal.

$$M_{Hi} = D_{ci} W_{Hi} \qquad Eq.\ 2$$

where:

M_{Hi} = mass (lb) of organic HAP in one gal of coating i.

D_{ci} = density (lb of coating per gal of coating) of coating i.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in coating i.

$$H_i = \frac{M_{Hi}}{(1 - V_{wi})} \qquad Eq.\ 3$$

where:

H_i = mass of organic HAP emitted per volume of coating i (lb/gal) less water as applied.

M_{Hi} = mass (lb) of organic HAP in one gal of coating i.

V_{wi} = volume (gal) of water in one gal of coating i.

(e) *VOC content level determination—compliant primers, topcoats, and specialty coatings.* For those uncontrolled primers, topcoats, and specialty coatings complying with the primer, topcoat, and specialty coating VOC content levels specified in §63.745(c) without being averaged, the procedures in paragraphs (e)(1) through (3) of this section shall be used to determine the mass of VOC emitted per volume of coating (less water and exempt solvents) as applied. As an alternative to the procedures in paragraphs (e)(1) through (3) of this section, an owner or operator may use coating manufacturer's supplied data to demonstrate that VOC emitted per volume of coating (less water and exempt solvents), as applied, is less than or equal to the applicable VOC limit specified in §63.745(c).

(1) Determine the VOC content of each formulation (less water and exempt solvents) as applied using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(2) For each coating applied, calculate the mass of VOC emitted per volume of coating (lb/gal) (less water and exempt solvents) as applied using equations 5, 6, and 7:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 5$$

where:

V_{wi} = volume (gal) of water in one gal of coating i.

D_{ci} = density (lb of coating per gal of coating) of coating i.

W_{wi} = weight fraction (expressed as a decimal) of water in coating i.

D_w = density of water, 8.33 lb/gal.

$$M_{Vi} = D_{ci} W_{Vi} \qquad Eq.\ 6$$

where:

M_{Vi} = mass (lb) of VOC in one gal of coating i.

D_{ci} = density (lb of coating per gal of coating) of coating i.

W_{Vi} = weight fraction (expressed as a decimal) of VOC in coating i.

$$G_i = \frac{M_{vi}}{(1 - V_{wi}) - V_{xi}} \qquad Eq.\ 7$$

where:

G_i = mass of VOC emitted per volume of coating i (lb/gal) (less water and exempt solvents) as applied.

M_{Vi} = mass (lb) of VOC in one gal of coating i.

V_{wi} = volume (gal) of water in one gal of coating i.

V_{Xi} = volume (gal) of exempt solvents in one gal of coating i.

(3) (i) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating G_a, compliance shall be based, except as provided in paragraph (e)(3)(ii) of this section, upon the VOC content obtained using EPA Method 24.

(ii) If the VOC content of a coating obtained using Method 24 would indicate noncompliance as determined under either §63.749 (d)(3)(i) or (d)(4)(i), an owner or operator may elect to average the coating with other uncontrolled coatings and (re)calculate G_i (using the procedure specified in paragraph (f) of this section), provided appropriate and sufficient records were maintained for all coatings included in the average (re)calculation. The (re)calculated value of G_i (G_a in paragraph (f)) for the averaged coatings shall then be used to determine compliance.

(o) *Inorganic HAP emissions—dry particulate filter certification requirements.* Dry particulate filters used to comply with §§63.745(g)(2) or 63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of this part, to meet or exceed the efficiency data points found in Tables 4 and 5 of §63.745 for new sources.

[45CSR34, 40 C.F.R §§63.750(a), (c), (e), (o), Subpart GG and 45CSR13, R13-2037, B.7]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. A record of each visible emission observation and opacity evaluation per Requirement 3.2.1., and also of monitoring required under conditions 3.2.2. and 3.2.3., shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. Said records shall include the date, time, name of emission unit, the applicable visible emission requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
[45CSR§30-5.1.c]

3.4.5. The permitted facility (as indicated in Requirement 3.1.9) shall comply with all the applicable recordkeeping provisions of the 40CFR63 Subpart GG National Emission Standards for Aerospace Manufacturing and Rework Facilities, provided, however, that compliance with any more stringent limitations set forth under Requirements of Sections 4.0. and 5.0. of this Permit, is demonstrated:

§ 63.752 Recordkeeping requirements.

(b) Cleaning operation. Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the information specified in paragraphs (b)(1) through (b)(5) of this section, as appropriate.

(1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.

(2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in § 63.744(b)(1) (Section 3.1.9 of this Permit) or for semi-aqueous cleaning solvents used for flush cleaning operations:

(i) The name of each cleaning solvent used;

(ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

(iii) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

(3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in § 63.744(b)(1) (Section 3.1.9 of this Permit**)**, but does comply with the vapor pressure requirement in § 63.744(b)(2) (Section 3.1.9 of this Permit):

(i) The name of each cleaning solvent used;

(ii) The composite vapor pressure of each cleaning solvent used;

(iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

(iv) The amount (in gallons) of each cleaning solvent used each month at each operation.

(4) For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in §63.744(e)(Section 3.1.9 of this Permit), that does not conform to the vapor pressure or composition requirements of § 63.744(b) (Section 3.1.9 of this Permit):

(i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

(ii) A list of the processes set forth in § 63.744(e) (Section 3.1.9 of this Permit), to which the cleaning operation applies.

(5) A record of all leaks from enclosed spray gun cleaners identified pursuant to § 63.751(a) (Section 3.2.4 of this Permit) that includes for each leak found:

(i) Source identification;

(ii) Date leak was discovered; and

(iii) Date leak was repaired.

(c) *Primer, topcoat, and specialty coating application operations—organic HAP and VOC*. Each owner or operator required to comply with the organic HAP and VOC content limits specified in §63.745(c) shall record the information specified in paragraphs (c)(1) through (6) of this section, as appropriate. Each owner and operator using coating manufacturer's supplied data to demonstrate compliance with the applicable organic HAP or VOC limit specified in §63.745(c) may retain the manufacturer's documentation and annual purchase records in place of the records specified in paragraphs (c)(2) and (3) of this section. Owners and operators using the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating, and adding non-HAP solvent to those coatings, must also maintain records of the non-HAP solvent added to the coating.

(1) The name and VOC content as received and as applied of each primer, topcoat, and specialty coating used at the facility.

(2) For uncontrolled primers, topcoats, and specialty coatings that meet the organic HAP and VOC content limits in §63.745(c)(1) through (c)(6) without averaging:

(i) The mass of organic HAP emitted per unit volume of coating as applied (less water) (H_i) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_i) for each coating formulation within each coating category used each month (as calculated using the procedures specified in §63.750(c) and (e));

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i; and

(iii) The volume (gal) of each coating formulation within each coating category used each month.

(3) For “low HAP content” uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied:

(i) Annual purchase records of the total volume of each primer purchased; and

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine H_i if not applied as received.

(d) Primer, topcoat, and specialty coating application operations—inorganic HAP emissions.

(1) Each owner or operator complying with §63.745(g) for the control of inorganic HAP emissions from primer, topcoat, and specialty coating application operations through the use of a dry particulate filter system or a HEPA filter system shall record the pressure drop across the operating system once each shift during which coating operations occur.

(3) This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures.

[45CSR34, 40 C.F.R. §§63.752(b), (c)(1) through (c)(3), (d)(1) and (d)(3), Subpart GG and 45CSR13, R13-2037, B.7]

3.4.6. To demonstrate compliance with the Requirement 3.1.10 (45CSR§7-5.1) the company shall keep records of maintenance and operations of fugitive dust control systems for the following Emission Points: B-3E, B-4E, B-16E, B-19E, B-21E, B-25E, B-32E, A-2E, A-6E, D-1E, D-9E, D-17E.

[45CSR§30-5.1.c]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:	**US EPA:**
DEPAirQualityReports@wv.gov	R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Reserved.**

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. **[45CSR§30-5.1.c.3.B.]**

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement. **[45CSR§30-4.3.h.1.B.]**

3.5.10. The permitted facility (Source ID B-4S, B-5S, D-1S, D-2S, D-42S) shall comply with all applicable reporting provisions of 40CFR63 Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities, provided, however, that compliance with any more stringent limitations set forth under Requirements of Sections 4 and 5 of this Permit, is demonstrated:

§ 63.753 Reporting requirements.

(b) Cleaning operation. Each owner or operator of a cleaning operation subject to this subpart shall submit the following information:

(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;

(ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in § 63.744(b)(1) (Section 3.1.9 of this Permit);

(iii) Any instance where a noncompliant spray gun cleaning method is used;

(iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and

(v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

(c) *Primer, topcoat, and specialty coating application operations.* Each owner or operator of a primer or topcoat application operation subject to this subpart shall submit the following information:

(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(i) For primers, topcoats, and specialty coatings where compliance is not being achieved through the use of averaging or a control device, the HAP or VOC content in manufacturer's supplied data as recorded under §63.752(c), or each value of H_i and G_i, as recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c);

(v) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;

(vi) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;

(vii) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,

(2) Annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

(f) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests following the procedure specified in either paragraph (f)(1) or (2) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/*)). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (f).

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

[45CSR34, 40 C.F.R. §§63.753(b), (c)(1)(i), (c)(1)(v) through (c)(1)(vii), (c)(2), (f), Subpart GG and 45CSR13, R13-2037, B.7]

3.5.11. Upon observing any visible emissions during an Opacity Evaluation as per Requirement 3.2.1 in excess of twenty percent (20%) opacity (but less than forty percent (40%) opacity) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, or upon observing any visible emissions in excess of forty percent (40%) opacity, the Company shall submit a written report (including day and time of the observation, observation results, and corrective actions taken (if any)), certified by a responsible official, to the Director of the Division of Air Quality within ten (10) days after taking said reading.
[45CSR§30-5.1.c]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

(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 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.

(c) 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.

(d) 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.

(e) 40CFR63, Subpart MMMM - Surface Coating of Miscellaneous Metal Parts and Products. The Medium Caliber Ammunition operations (Group 00V) performed at the ATK facility fall within the description of those sources subject to this subpart. However, per 40CFR§63.3881(c), this subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section. Of these cited paragraphs, (4) states the surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States or the National Aeronautics and Space Administration (NASA), or the surface coating of military munitions manufactured by or for the Armed Forces of the United States. Considering the Medium Caliber Ammunition Area's (Group 00V) primary purpose is manufacturing munitions for the U.S. Department of Defense, it shall qualify for the exemption and not be subject to the requirements within this subpart.

4.0. Composite Case Manufacturing Requirements (Plant 1, Group 00B)

4.1. Limitations and Standards

4.1.1. Emissions to the atmosphere from each paint spray booth (Sources 149 and 150) and the degreasing and cleaning exhaust hood (Source 151) shall not exceed the following:

AREA	Emission Point ID	VOC Emission Rates		Particulate Matter Emission Rates	
		lb/hr	TPY	lb/hr	TPY
Paint Spray Booth	B-3E (149e)	2	2.76	0.1	0.1
Paint Spray Booth	B-4E (150e)	2	2.76	0.1	0.1
Degreasing Exhaust	B-2E (151e)	2	7.89	-	-

For the purpose of this permit, VOCs shall have the meaning of "any organic compound which participates in atmospheric photochemical reactions", that is, any organic compound other than those the EPA Administration has designated as having negligible photochemical reactivity. Negligible photochemical reactive materials include: methane, ethane, methyl chloroform, methylene chloride, and some freons.
[45CSR13, R13-1797, A.1]

4.1.2. The minimum particulate collection efficiency of the filters used in the spray booth exhaust stack shall be 90%.
[45CSR13, R13-1797, A.2]

4.1.3. Coatings to be utilized shall comply with 45CSR27.

For the purpose of this permit, coatings shall be defined as stains, thinners, solvents, sealers, varnishes, paints, primers, catalysts, acrylics, lacquers, or any substance involved in spray booth operations, cleaning, or maintenance.
[45CSR13, R13-1797, A.3]

4.1.4. For the purpose of determining compliance with Requirement 4.1.3, the permittee will be subject to announced and unannounced compliance and enforcement inspection by the Director or his/her duly authorized representative. If at any time the permittee fails to comply with the limits as set forth in 45CSR27 - Table A, the permittee shall notify the Director of such exceedance and may be required at the Director's request to employ a BAT (Best Available Technology) plan to all chemical processing units emitting toxic air pollutants.
[45CSR13, R13-1797, B.4]

4.2. Monitoring Requirements

4.2.1. None.

4.3. Testing Requirements

4.3.1. To determine compliance with the emission limitations as set forth in Requirement 4.1.1 test(s) shall be conducted in accordance with Requirements 3.3.1 through 3.3.4.
[45CSR§30-5.1.c and 45CSR13, R13-1797, B.2]

4.4. Recordkeeping Requirements

4.4.1. For the purpose of determining compliance with VOC emission limitations set forth in Requirement 4.1.1, the company shall maintain daily, monthly, and yearly records. Compliance with the emission limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of VOCs emitted at any given time for the previous twelve (12) consecutive calendar months. Said records shall be maintained in a manner similar to Attachments A, B, and C of the Permit R13-1797A, and shall include: a) for Monthly Coating and VOC Report - month, coating usage in gal, VOC emissions in tons, year to date VOC emissions in tons; b) for Monthly Usage Report - coating used, total gallons used, lb/gallon, weight % VOC, Lbs VOC Usage, and Grand Totals for Total Gallons used and lbs VOC Usage; c) for Daily Usage Report - date, coating used, gallons used, lb/gal, weight % VOC, Lbs VOC Usage.
[45CSR13, R13-1797, B.1]

4.4.2. As per Requirement 4.4.1 above, VOC and/or HAP emission calculations shall be performed based on coating usage records and material safety data sheets information, assuming that 100 percent of all VOCs (both non-HAP and HAP) are emitted to the atmosphere.
[45CSR§30-5.1.c]

4.4.3. For the purpose of determining compliance with the minimum efficiency limit as set forth in Requirement 4.1.2, the permittee may be required by the Director or his/her duly authorized representative to provide any information deemed necessary to obtain the particulate collection efficiency of the filters used in the spray booth exhaust stack.
[45CSR13, R13-1797, B.3]

4.4.4. For the purpose of determining compliance with the PM_{10} limitations set forth in Requirement 4.1.1 (Emission Points B-3E and B-4E, Control Devices B-1C and B-2C) the company shall maintain a filter replacement logsheet for the filter bank. This logsheet shall be maintained on site. Certified copies of the logsheet shall be made available to the Director or his duly-authorized representative upon request.
[45CSR§30-5.1.c]

4.5. Reporting Requirements

4.5.1. None.

4.6. Compliance Plan

4.6.1. None.

5.0. Nozzle / Insulator Preparation Requirements (Plant 1, Group 00D)

5.1. Limitations and Standards

5.1.1. The emissions, from Emission Point D-1E, to the atmosphere shall not exceed the following emission rates:

Emission Point ID	Pollutant	Emission Rate	
		lb/hr	lb/yr
D-1E	Particulate Matter (PM)	0.5	354.3
	Volatile Organic Compound (VOC)	5.37	11699.6
	Hazardous Air Pollutant (HAP)	2.09	5728.24

[45CSR13, R13-2037, A.3]

5.1.2. Emissions to the air of trichloroethylene from the emission points or sources listed below shall not exceed the following limitations:

Emission Point ID	Pollutant	Emission Rate	
		lb/hr	lb/yr
D-1E	Trichloroethylene	2.09	250

[45CSR§30-12.7]

5.1.3. Control Device D-1C, to be utilized for the purpose of controlling particulate matter emissions from Emission Point D-1E, shall consist of a Research Products Corp. Series 3000 RP Paint Arrestors Filter, or other filter of comparable control efficiency.
[45CSR13, R13-2037, A.4]

5.1.4. For the purpose of determining compliance with Requirement 5.1.3, the permittee will be subject to announced and unannounced compliance and enforcement inspection by the Director or his/her duly authorized representative. If at any time the permittee fails to comply with the conditions as set forth in Requirement 5.1.3, the permittee shall notify the Director or his/her duly authorized representative of such non-compliance and may be subject to civil and/or criminal penalties for each violation.
[45CSR13, R13-2037, B.3]

5.2. Monitoring Requirements

5.2.1. None.

5.3. Testing Requirements

5.3.1. To determine compliance with the emission limitations as set forth in Requirement 5.1.1 above test(s) shall be conducted in accordance with Requirements 3.3.1 through 3.3.4.
[45CSR§30-5.1.c and 45CSR13, R13-2037, B.2]

5.3.2. Upon the Director's request, the Company shall submit to the Director a detailed plan and test protocol for approval of methods to demonstrate compliance with the emission limits set forth in Requirement 5.1.2. The Director reserves the right to require the application of any specific valid test or emissions monitoring methods for the determination of TAP emissions from any source.
[45CSR§30-5.1.c]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of determining compliance with Volatile Organic Compound (VOC), Particulate Matter (PM), and Hazardous Air Pollutant (HAP) emission limitations set forth in Requirement 5.1.1. and 5.1.2., the permittee shall maintain monthly and yearly records. Compliance with the emission limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of VOC, PM or HAP emitted at any given time for the previous twelve (12) consecutive calender months. Said records shall be maintained in a manner similar to Attachments B, D and F of the Permit R13-2037A, and shall include: a) for Monthly Usage/ VOC Emissions/ PM Emissions Report – for each month record Name of Coating, Amount Used (Gal), Hours of Operations, VOC Content (lbs VOC/Gal), VOC Emissions (lbs and lbs/hr), PM Content (lbs PM/Gal), PM Emissions (lbs and lbs/hr), and Total for VOC Emissions (lbs and lbs/hr) and for PM Emissions (lbs and lbs/hr); b) Annual VOC Emisions/ PM Emissions Report for each year record Month, VOC Emissions (lbs), PM Emissions (lbs), and Total for VOC Emissions (lbs) and PM Emissions (lbs); c) Annual HAP Emission Report record for each year Emissions of VOC HAPs and PM HAPs in lbs/yr and Total HAPs.
[45CSR13, R13-2037, B.1 and 45CSR§30-5.1.c]

5.4.2. As per Requirement 5.4.1, VOC and/or HAP emission calculations shall be performed based on coating usage records and material safety data sheets information, assuming that 100 percent of all VOCs (both non-HAP and HAP) are emitted to the atmosphere
[45CSR§30-5.1.c]

5.4.3. To demonstrate compliance with the Requirement 5.1.2 the permittee shall maintain records of the amounts of trichloroethylene sprayed in the booth D-1S. These records shall be used to determine losses of trichloroethylene. Records shall be maintained on site.
[45CSR§30-5.1.c]

5.4.4. For the purpose of determining compliance with the PM_{10} limitations set forth in Requirement 5.1.1 (Emission Point D-1E, Control Device D-1C) the company shall complete daily filter checks that include filter change out information each day spraying occurs including whether filters were overloaded, properly seated, and whether there are holes in filters, also a badge number, and date filters were changed.
[45CSR§30-5.1.c]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0. Medium Caliber Ammunition Requirements (Plant 1, Group 00V)

6.1. Limitations and Standards

6.1.1. The proposed facility shall be comprised of the emission sources, pollution control equipment, and associated emission points listed in the Emission Units Table 1.0 under "Medium Caliber Ammunition Area". **[45CSR13, R13-2579, A.1]**

6.1.2. Coating operations associated with Sources V-1S, V-2S, and V-3S shall be equipped with a fabric filter for the purpose of controlling particulate matter generated as over spray. All filters shall be inspected daily and maintained so to provide a minimum guaranteed control efficiency of 90% for particulate matter. **[45CSR13, R13-2579, A.2]**

6.1.3. The 502 GAU 8 Coating Line, V-1S, shall be limited to a maximum production rate of 500 projectiles per hour and 1,560,000 projectiles per year, and a maximum operating schedule of 3,120 hours per year. **[45CSR13, R13-2579, A.3]**

6.1.4. The 104 GAU 8 Coating Line, V-2S, shall be limited to a maximum production rate of 750 projectiles per hour and 4,680,000 projectiles per year, and a maximum operating schedule of 6,240 hours per year. **[45CSR13, R13-2579, A.4]**

6.1.5. The 104 Rework Coating Line, V-3S, shall be limited to a maximum throughput rate of 100 projectiles per hour and 624,000 projectiles per year, and a maximum operating schedule of 6,240 hours per year. **[45CSR13, R13-2579, A.5]**

6.1.6. The FMU151/M758 Fuze Line, V-6S, shall be limited to a maximum fuze assembly rate of 325 per hour and 2,028,000 per year, and a maximum operating schedule of 6,240 hours per year. **[45CSR13, R13-2579, A.6]**

6.1.7. The FMU154/M759 Fuze Line, V-7S, shall be limited to a maximum fuze assembly rate of 325 per hour and 2,028,000 per year, and a maximum operating schedule of 6,240 hours per year. **[45CSR13, R13-2579, A.7]**

6.1.8. The maximum emissions released from the emission sources [V-1S, V-2S, V-3S, V-6S and V-7S] shall not exceed the emission limits set forth in the following table:

Emission Point	Source	PM10		VOCs		HAPs	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
V-1E, V-2E, V-3E	V-1S	0.1	0.08	2.2	3.38	1.34	2.08
V-4E	V-2S	0.1	0.23	3.3	10.15	2.01	6.25
V-5E	V-3S	0.1	0.24	1.3	3.79	0.77	2.38
V-8E	V-6S	0	0.00	0.4	1.22	0.12	0.37
	V-7S	0	0.00	0.5	1.29	0.12	0.38
V-9E	V-6S	0	0.00	0.4	1.04	0.05	0.14
	V-7S	0	0.00	0.4	1.04	0.05	0.14

[45CSR13, R13-2579, A.8]

6.1.9. The emissions of HAPs from those sources covered by this permit shall consist of those pollutants listed in the following table:

HAP	CAS Number	HAP	CAS Number
Antimony Compounds	N/A	Chromium Compounds	N/A
Lead Compounds	N/A	Glycol Ethers	N/A
Dioctyl Phthalate	117817	Ethyl Benzene	100414
Formaldehyde	50000	Hexane	11543
Methanol	67561	Methyl Ethyl Ketone	78933
Methyl Isobutyl Ketone	108101	Phenol	108952
Toluene	108883	Xylene	1330207

Use of any surface coating and/or assembly material containing any constituent identified in Section 112(b) of the 1990 Clean Air Act Amendments as a HAP and not listed above shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the surface coating and/or assembly material to be used and the HAP(s) contained therein within thirty (30) days after the initial use of the surface coating. Additionally, an MSDS sheet for the surface coating or assembly material shall be supplied at this time to the Director.

b. The use of the surface coating and/or assembly material shall be incorporated into the record keeping requirements contained herein.

c. The emission rate of the HAP(s) contained within the surface coating and/or assembly material shall not equal or exceed the maximum permitted HAPs emission rate as established in Specific Requirements 6.1.10. of this permit.

For the purposes of this permit, surface coatings and assembly materials shall be defined as a material applied onto, or impregnated into, a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, cleaners, thinners, solvents, paints, primers, catalysts, acrylics, lacquers, adhesives, lubricants and temporary protective coatings, or combinations of the above materials as applied. **[45CSR13, R13-2579, A.9]**

6.1.10. The maximum aggregate emission rates of HAPs from the emission sources within the coatings and assembly lines covered by this permit shall not exceed the following:

Source ID	HAPs, lb/hr	HAPs, TPY
V-1S, V-2S, V-3S, V-6S and V-7S	4.46	11.74

Compliance with the annual emission limits shall be determined using rolling yearly totals. **[45CSR13, R13-2579, A.10]**

6.1.11. Compliance with all annual limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the amount of materials consumed, processed, and/or shipped at any given time during the previous twelve (12) consecutive calendar months. **[45CSR13, R13-2579, A.11]**

6.2. Monitoring Requirements

6.2.1. None.

6.3. Testing Requirements

6.3.1. None.

6.4. Recordkeeping Requirements

6.4.1. For the purpose of determining compliance with permit requirements set forth by Specific Requirement 6.1.2., and particulate emission limits based on Specific Requirement 6.1.8., the permittee shall maintain records of daily inspections performed on the fabric filter systems (V-1C, V-2C, V-3C, V-4C, and V-5C). All equipment inspections, filter changes, maintenance and repair shall be documented and maintained on-site and made available to the Director or his duly authorized representative upon request. At a time prior to being submitted to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the Certification of Data Accuracy statement.
[45CSR13, R13-2579, B.3]

6.4.2. For the purpose of determining compliance with production limits set forth by Requirements 6.1.3 through 6.1.7, the permittee shall maintain monthly production records identifying the total number of each projectile type processed on the coating lines, V-1S, V-2S, and V-3S, and the total number of fuzes processed on assembly lines V-6S and V-7S. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time prior to being submitted to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the Certification of Data Accuracy statement.
[45CSR13, R13-2579, B.4]

6.5. Reporting Requirements

6.5.1. For the purpose of determining compliance with permit limits based on Requirements 6.1.8 and 6.1.9, the permittee shall maintain the name, identification number, and volume of each surface coating and assembly material, as applied and the associated mass of VOCs, HAPs, and solids per volume of each surface coating. Additionally, a monthly summary report shall be completed certifying the average hourly and twelve (12) month rolling total of emission rates for VOCs and HAPs. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time prior to being submitted to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the Certification of Data Accuracy statement.
[45CSR13, R13-2579, B.5]

6.6. Compliance Plan

6.6.1. None.

West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

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

Permit Number: **R30-05700011-2025 (2 of 3)**
Application Received: **March 6, 2024**
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

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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 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 2 of the facility - Composites Manufacturing and Metal Fabrication.

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

PM_{10} 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
Dioctyl 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
Lead compounds*	1.98	0.27
Mercury*	< 0.01	< 0.01
Methanol	1.81	0.15

Hazardous Air Pollutants	Potential Emissions	2023 Actual Emissions
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	Preconstruction permits for sources
	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, Subpart M	Asbestos inspection and removal
	40 C.F.R. Part 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 *(if any)*
R13-1797A	01/30/2002	
R13-2037A	07/26/2001	
R13-2579A	10/17/2005	

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

There were no modifications which occurred to the previous Title V renewal permit since its issuance on September 16, 2019. The following changes will be incorporated during this Title V renewal:

1. Emission Units Table 1.1 - Large Abrasive Blast Systems Grit Blaster (Rm. 119) – 438 (Source ID A-58S) and Cyclone Dust Collector for Grit Blaster (Source ID A-5C) were removed from the table because they were removed from the facility.

2. Boilerplate - revised in conditions 2.1.3, 2.11.4, 2.17, 2.22.1, 3.1.6, 3.3.1, 3.3.1.b, 3.5.3, 3.5.4, 3.5.7, 3.5.8.a.1, and 3.5.8.a.2.

3. Conditions 3.2.1 and 3.4.6 – removed “A-7E” from the list of emission points subject to 45CSR7. Emission point A-7E was for the Large Abrasive Blast Systems Grit Blaster (Rm. 119) – 438 (Source ID A-58S) and Cyclone Dust Collector for Grit Blaster (Source ID A-5C) which were removed from the facility.

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 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.

(c) 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.

(d) 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.

(e) 40CFR63, Subpart MMMM - Surface Coating of Miscellaneous Metal Parts and Products.
The Medium Caliber Ammunition operations (Group 00V) performed at the ATK facility fall within the description of those sources subject to this subpart. However, per 40CFR§63.3881(c), this subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section. Of these cited paragraphs, (4) states the surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States or the National Aeronautics and Space Administration (NASA), or the surface coating of military munitions manufactured by or for the Armed Forces of the United States. Considering the Medium Caliber Ammunition Area's (Group 00V) primary purpose is manufacturing munitions for the U.S. Department of Defense, it shall qualify for the exemption and not be subject to the requirements within this subpart.

(f) CAM Rule - the Alliant Techsystems Operations LLC, Allegany Ballistics Laboratory Motor Manufacturing Facility (Part 2 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 this renewal.

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: (Date of Notice Publication)
Ending Date: (Publication Date PLUS 30 Days)

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
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)

(**Choose**) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.

Completeness Determination, Northrop Grumman (Alliant Techsystems Operations - ABL Operations), Application No. R30-05700011-2024 (Part 2 of 3)

1 message

Chertkovsky, Natalya V <natalya.v.chertkovsky@wv.gov> Mon, Apr 22, 2024 at 10:37 AM
To: bill.hixon@ngc.com, "Foor, SueEllen [US] (DS)" <sueellen.foor@ngc.com>

Your Title V renewal application for a permit to operate the above referenced facility was received by this Division on March 6, 2024. After review of said application, it has been determined that the application is administratively complete as submitted. Therefore, the above referenced facility qualifies for an Application Shield.

The applicant has the duty to supplement or correct the application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

The submittal of a complete application shall not affect the requirement that any source have all **preconstruction permits** required under the rules of the Division.

If during the processing of this application it is determined that additional information is necessary to evaluate or take final action on this application, a request for such information will be made in writing with a reasonable deadline for a response. Until which time as your renewal permit is issued or denied, please continue to operate this facility in accordance with 45CSR30, section 6.3.c. which states: *If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.* This protection shall cease to apply if, subsequent to the completeness determination made pursuant to paragraph 6.1.d. of 45CSR30 and as required by paragraph 4.1.b., the applicant fails to submit by the deadline specified in writing any additional information identified as being needed to process the application.

Please remember, **failure of the applicant to timely submit information required or requested to process the application may cause the Application Shield to be revoked.** Should you have any questions regarding this determination, please contact me.

Sincerely,

Natalya V. Chertkovsky-Veselova,
WV DEP DAQ
TV Permit Engineer
304 926 0499 x 41250

Received
March 6, 2024
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for : Northrop Grumman (Alliant Techsystems Operations - ABL Operations)
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only): 057-00011
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only): R30-05700011-2019 Part 2

- Type of NSR Application (check all that apply):
  - ☐ Construction
  - ☐ Modification
  - ☐ Class I Administrative Update
  - ☐ Class II Administrative Update
  - ☐ Relocation
  - ☐ Temporary
  - ☐ Permit Determination

- Type of 45CSR30 (TITLE V) Application:
  - ☐ Title V Initial
  - ☑ Title V Renewal
  - ☐ Administrative Amendment**
  - ☐ Minor Modification**
  - ☐ Significant Modification**
  - ☐ Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

- Payment Type:
  - ☑ Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
  - ☐ Check (Make checks payable to: WVDEP – Division of Air Quality)
    Mail checks to:
    WVDEP – DAQ – Permitting
    Attn: NSR Permitting Secretary
    601 57th Street, SE
    Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):
  - ☐ Responsible Official/Authorized Representative
    - Name:
    - Email:
    - Phone Number:
  - ☑ Company Contact
    - Name: Sue Ellen Foor
    - Email: sueellen.foor@ngc.com
    - Phone Number: 304-726-5506 (office); 240-727-5581 (cell)
  - ☐ Consultant
    - Name:
    - Email:
    - Phone Number:

Table of Contents

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  - ☐ Consultant
    - Name:
    - Email:
    - Phone Number:

TITLE V PERMIT APPLICATION CHECKLIST
FOR ADMINISTRATIVE COMPLETENESS

A complete application is demonstrated when all the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a Title V permit application. Any submittal will be considered incomplete if the required information is not included.	
☒	Application signed by a Responsible Official as defined in 45CSR§30-2.38 ("*Section 6: Certification of Information*" page signed and dated)
☒	Table of Contents (should be included, but not required for administrative completeness)
☒	Facility information
☒	Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios
☒	Area map showing plant location
☒	Plot plan showing buildings and process areas
☒	Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships
☐	Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance
☒	Listing of all active permits and consent orders (if applicable)
☒	Facility-wide emissions summary
☒	Identification of Insignificant Activities
☒	ATTACHMENT D - Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities
☒	ATTACHMENT E - Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance
☒	ATTACHMENT G - Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D)
☒	ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each control device for which the "Is the device subject to CAM?" question is answered "Yes" on the Air Pollution Control Device Form (ATTACHMENT G)
☐	Confidential Information submitted in accordance with 45CSR31

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** Alliant Techsystems Operations LLC	**2. Facility Name or Location:** Allegany Ballistics Laboratory
3. DAQ Plant ID No.: 0 5 7 — 0 0 0 1 1	**4. Federal Employer ID No. (FEIN):** 2 7 4 0 2 6 9 0 8

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? MM/DD/1946
☒ Permit Renewal — What is the expiration date of the existing permit? 09/16/2024
☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☒ Corporation ☐ Governmental Agency ☐ LLC
☐ Partnership ☐ Limited Partnership

8. Number of onsite employees:

~1,650

7. Is the Applicant the:

☐ Owner ☐ Operator ☒ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.
Naval Sea Systems Command (NAVSEA)
1333 Isaac Hull Ave. SE – Washington Naval Yard
Washington, DC 20376

9. Governmental Code: Facility is owned by the Navy and operated by Alliant Techsystems.

☐ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: 210 State Route 956		
City: Rocket Center	**State:** WV	**Zip: 26726-3548**
Telephone Number: (304) 726-5506	**Fax Number:** (304) 726-5562	

12. Facility Location		
Street: 210 State Route 956	**City:** Rocket Center	**County:** Mineral
UTM Easting: 686.47 km	**UTM Northing:** 4,381.25 km	**Zone:** ☒ 17 or ☐ 18
Directions: Turn left off of WV State Route 956 onto plant access road just after crossing bridge into West Virginia from Maryland.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** MD, PA, VA
Is facility located within 100 km of a Class I Area[1]? ☒ Yes ☐ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☐ No		**If yes, name the area(s).** Dolly Sods, Otter Creek, Shenandoah National Park

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Bill Hixon		**Title:** Director – Operations Support - ABL Operations
Street or P.O. Box: 210 State Route 956		
City: Rocket Center	**State:** WV	**Zip: 26726-3548**
Telephone Number: (304) 726-5558	**Fax Number:** (304) 726-5183	
E-mail address: bill.hixon@ngc.com		
Environmental Contact: Sue Ellen Foor, Jill Clayton, or Geoff Frech		**Title:** Environmental Engineer
Street or P.O. Box: 210 State Route 956		
City: Rocket Center	**State:** WV	**Zip: 26726-3548**
Telephone Number: (304) 726-5506 Or (304) 726-7984	**Fax Number:** (304) 726-5562	
E-mail address: sueellen.foor@ngc.com , jill.clayton@ngc.com , geoff.frech@ngc.com		
Application Preparer: Sue Ellen Foor / Jill Clayton / Geoff Frech		**Title:** Environmental Engineer
Company: Alliant Techsystems Operations LLC Allegany Ballistics Laboratory (ABL)		
Street or P.O. Box: 210 State Route 956		
City: Rocket Center	**State:** WV	**Zip: 26726-3548**
Telephone Number: (304) 726-5506, (304) 726-7984, (304) 726-7611	**Fax Number:** (304) 726-5562	
E-mail address: sueellen.foor@ngc.com , jill.clayton@ngc.com , geoff.frech@ngc.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Rocket Motor Manufacture	Rocket motors, metal rocket cases, composite rocket cases	336415	3764
F-22 Composites Manufacturing	Pivot shafts and obturator plates for F-22	336413	3728
Electronic Fuzing and Ammunition	Medium caliber ammunition (not loaded), proximity switches, and multiple fuze products for DoD	332995	3489

NOTE: Part 2 of this permit covers only the composites and metal fabrication areas.

Provide a general description of operations.

Naval Industrial Reserve Ordnance Plant (NIROP)/Allegany Ballistics Laboratory (ABL) is a facility which is operated by Alliant Techsystems Operations LLC (Northrup Grumman Systems Corporation-NGSC) (headquarters in Falls Church, VA) under the NGSC Missile Products Group. The majority of the facility is owned by the U.S. Navy and is operated by NGIS under a facilities use contract (~1530 acres designated as Plant 1). 57 acres is owned and operated by NGSC and is designated as Plant 2. Approximately 500 acres of Plant 1 are developed. Plant 3 is a 41acre area designated as Plant 3 dedicated to production of GMLRS rocket motors. Construction is ongoing on 29 acres designated as Plant 4 to be used as a LAP facility to build all-up rounds. The remaining acreage is currently undeveloped. All property is contiguous with internal roads to reach each separate area.

Operations at the plant include:

- metal fabrication of rocket motor and warhead cases;
- metal fabrication of tank ammunition training rounds;
- manufacture of composite material rocket motor and warhead cases;
- manufacture of composite material aircraft components;
- preparation of cases for addition of explosives;
- mixing, casting, curing, and associated operations with propellants and explosives;
- static firing of rocket motors;
- open burning of waste propellants and explosives;
- development and production of laser firing devices;
- analytical and research & development laboratories;
- explosive loading and packing operations for tank ammunition;
- x-ray testing; and
- maintenance and utility operations.

In addition, to these operations, the site is also home to the Robert C. Byrd Institute for Machining and office space for IBM.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☒ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☒ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☒ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ Compliance Assurance Monitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

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 one site under remediation for groundwater contamination. This site is a Superfund site and is thus exempt from the MACT requirements. The facility also has a second site, which will begin remediation as part of a RCRA corrective action program within the next year. This second site would also be exempted since it is being conducted under a RCRA corrective action permit. In addition, neither site would generate emissions of more than 1 megagram per year of HAPs.

40CFR63, Subpart PPPPP – National Emission Standards for Hazardous Air Pollutants from Engine Test Sells/Stands (05/27/03)- This rule applies to the X-Range Static Rocket Motor Firing facility (Group 00Q). However, per 40CFR63.9290(b) & (d)(2) it is exempt from the requirements of this Subpart due to facility was existing source on May 14, 2002 (partially modified in summer of 2002, Source Q-3S) and also, it is used exclusively for rocket motors testing.

40CFR63, Subpart WWWWW – 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.

☒ Permit Shield

19. Non Applicability Determinations *(Continued)* *- Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

See above.

☒ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

45CSR6-3.1. & 3.2. Open burning & open burning exemptions.

40CFR61 Subpart M - 61.145, 61.148, and 61.150 Asbestos.

45CSR4-3.1. [State-Enforceable only.] Odors.

45CSR11-5.2. Standby plan for reducing emissions.

WV Code § 22-5-4(a)(14) Emission inventory.

40 CFR Part 82, Subpart F Ozone-depleting substances.

40 CFR Part 68 Risk Management Plan.

40CFR63, Subpart GG – National Emission Standards for Aerospace Manufacturing Operations.

45CSR7-3.7. Visible emissions from any storage structures.

45CSR7-5.1. & 5.2. Fugitive particulate matter.

45CSR7-4.12. Stack flow straightening devices or a sufficient vertical run.

45CSR§30-5.1.c. Monthly visible emissions checks.

WV Code § 22-5-4(a)(15) and 45CSR13 Stack testing.

45CSR§30-5.1.c.2.A. Monitoring information.

45CSR§30-5.1.c.2.B. Retention of records.

45CSR§§30-4.4. and 5.1.c.3.D. Responsible official.

45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information.

45CSR§30-8. Certified emissions statement.

45CSR§30-5.3.e. Compliance certification.

45CSR§30-5.1.c.3.A. Semi-annual monitoring reports.

45CSR§30-5.7. Emergencies.

45CSR§30-5.1.c.3. Deviations.

45CSR§30-4.3.h.1.B. New applicable requirement.

45CSR§42-3.1. Reporting of greenhouse gas emissions above the *de minimis* threshold

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45CSR6-3.1. & 3.2. Open burning & open burning exemptions – Compliance is demonstrated by Condition#s 3.1.1 & 3.1.2.

40CFR61 Subpart M - 61.145, 61.148, and 61.150 Asbestos – Compliance is demonstrated by Condition# 3.1.3.

45CSR4-3.1.; 45CSR§30-5.1.c. Odors – Compliance is demonstrated by Condition#s 3.1.4 & 3.4.3.

45CSR11-5.2. Standby plan for reducing emissions – Compliance is demonstrated by Condition# 3.1.5.

WV Code § 22-5-4(a)(14) Emission inventory – Compliance is demonstrated by Condition# 3.1.6.

40 CFR Part 82, Subpart F Ozone-depleting substances – Compliance is demonstrated by Condition# 3.1.7.

40 CFR Part 68 Risk Management Plan – Compliance is demonstrated by Condition# 3.1.8.

40CFR63, Subpart GG – National Emission Standards for Aerospace Manufacturing Operations – Compliance is demonstrated by Condition#s 3.1.9; 3.2.4; 3.4.5-3.4.6; 3.5.10.

45CSR7-3.7; 45CSR7-5.1. & 5.2.; 45CSR§30-5.1.c. Visible emissions from any storage structures and Fugitive particulate matter– Compliance is demonstrated by Condition#s 3.1.10; 3.1.11; 3.2.1; 3.2.2; 3.2.3; 3.4.7

45CSR§30-5.1.c. Visible emissions checks – Compliance is demonstrated by Condition# 3.2.1; 3.4.4; 3.5.11

45CSR7-4.12. Stack flow straightening devices or a sufficient vertical run – Compliance is demonstrated by Condition#s 3.1.10.

WV Code § 22-5-4(a)(15) and 45CSR13 Stack testing – Compliance is demonstrated by Condition#s 3.1.11; 3.3.1-3.3.4.

45CSR§30-5.1.c.2.A. Monitoring information – Compliance is demonstrated by Condition# 3.4.1.

45CSR§30-5.1.c.2.B. Retention of records – Compliance is demonstrated by Condition# 3.4.2.

45CSR§§30-4.4 and 5.1.c.3.D. Responsible official – Compliance is demonstrated by Condition# 3.5.1.

45CSR31, 45CSR§30-5.1.c.3.E. Confidential business information– Compliance is demonstrated by Condition# 3.5.2.

45CSR§30-8. Certified emissions statement – Compliance is demonstrated by Condition# 3.5.4.

45CSR§30-5.3.e. Compliance certification – Compliance is demonstrated by Condition# 3.5.5.

45CSR§30-5.1.c.3.A. Semi-annual monitoring reports – Compliance is demonstrated by Condition# 3.5.6.

45CSR§30-5.7. Emergencies – Compliance is demonstrated by Condition# 3.5.7.

45CSR§30-5.1.c.3. Deviations – Compliance is demonstrated by Condition# 3.5.8.

45CSR30-4.3.h.1.B. New applicable requirement – Compliance is demonstrated by Condition# 3.5.9.

45CSR§42-3.1. Reporting of greenhouse gas emissions above the *de minimis* threshold - Compliance is demonstrated by Conditions# 3.1.12; 3.5.12.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*
List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.
☒ Permit Shield
For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/ reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R13-1797A	01/30/2002	
R13-2037A	07/26/2001	
R13-2579A	10/17/2005	
	/ /	
	/ /	

22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
	MM/DD/YYYY	
	/ /	

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	81.44
Nitrogen Oxides (NO_X)	59.51
Lead (Pb)	1.98
Particulate Matter ($PM_{2.5}$)[1]	6.42
Particulate Matter (PM_{10})[1]	17.97
Total Particulate Matter (TSP)	30.62
Sulfur Dioxide (SO_2)	29.95
Volatile Organic Compounds (VOC)	181.25
Hazardous Air Pollutants[2]	Potential Emissions
Acetonitrile	0.27
Benzene	0.37
Cadmium compounds*	9.9E-04
Chloroform	0.096
Chromium*	1.2E-03
Chromium compounds (not identified)*	0.136
Cobalt*	5.8E-03
Dioctyl phthalate	0.85
Ethyl benzene	0.62
Formaldehyde	0.029
Glycol ether compounds	0.06
Hexane	0.80
Hydrochloric Acid	6.44
Lead *	1.98
Lead compounds*	9.8E-04
Mercury*	2.0E-04
Methanol	1.81

Methyl isobutyl ketone	3.73
Methylene chloride	1.995
Nickel*	1.7E-03
Phenol	0.16
Strontium chromate*	0.0029
Toluene	30.89
Trichloroethylene	0.125
Xylene	5.29
Zinc chromate*	4.7E-04
Other (not specified)	0.1
Total HAPs	**55.76**
Regulated Pollutants other than Criteria and HAP	Potential Emissions

[1] $PM_{2.5}$ and PM_{10} are components of TSP.
[2] For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☐	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☒	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☐	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☒	14.	Demineralized water tanks and demineralizer vents.
☒	15.	Drop hammers or hydraulic presses for forging or metalworking.
☒	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☒	18.	Emergency road flares.
☒	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: Gasoline and diesel small storage tanks – VOC < 1.0 lb/hr & <0.1 tpy Gasoline and diesel fuel dispensing pumps – VOC < 1.0 lb/hr & <0.1 tpy _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
☒	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☒	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☒	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☒	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☒	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☒	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☒	32.	Humidity chambers.
☒	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☒	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☒	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☒	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☒	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☒	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☒	50.	Space heaters operating by direct heat transfer.
☒	51.	Steam cleaning operations.
☒	52.	Steam leaks.
☒	53.	Steam sterilizers.
☒	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☒	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.
26. Emission Units
For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.
For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.
27. Control Devices
For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Bill Hixon	Title: Director – Operations Support – ABL Operations

Responsible official's signature:

Signature: _____ Signature Date: 3/5/2024

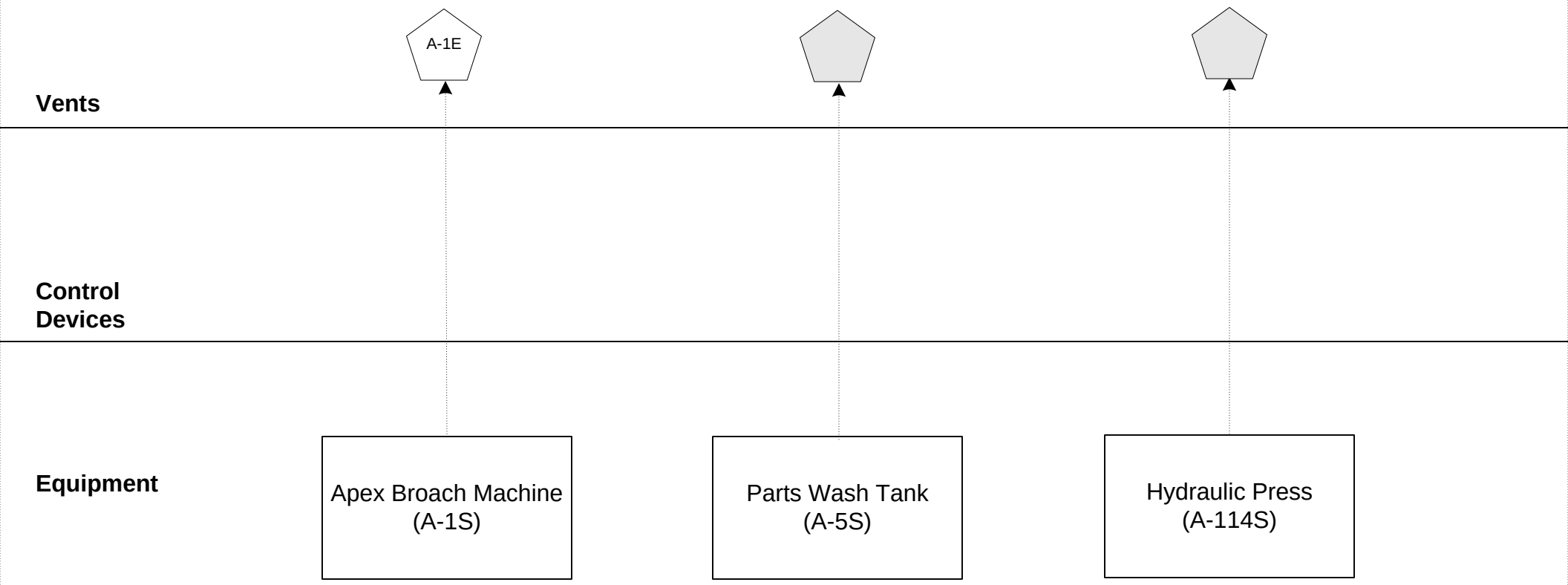
(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☒	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

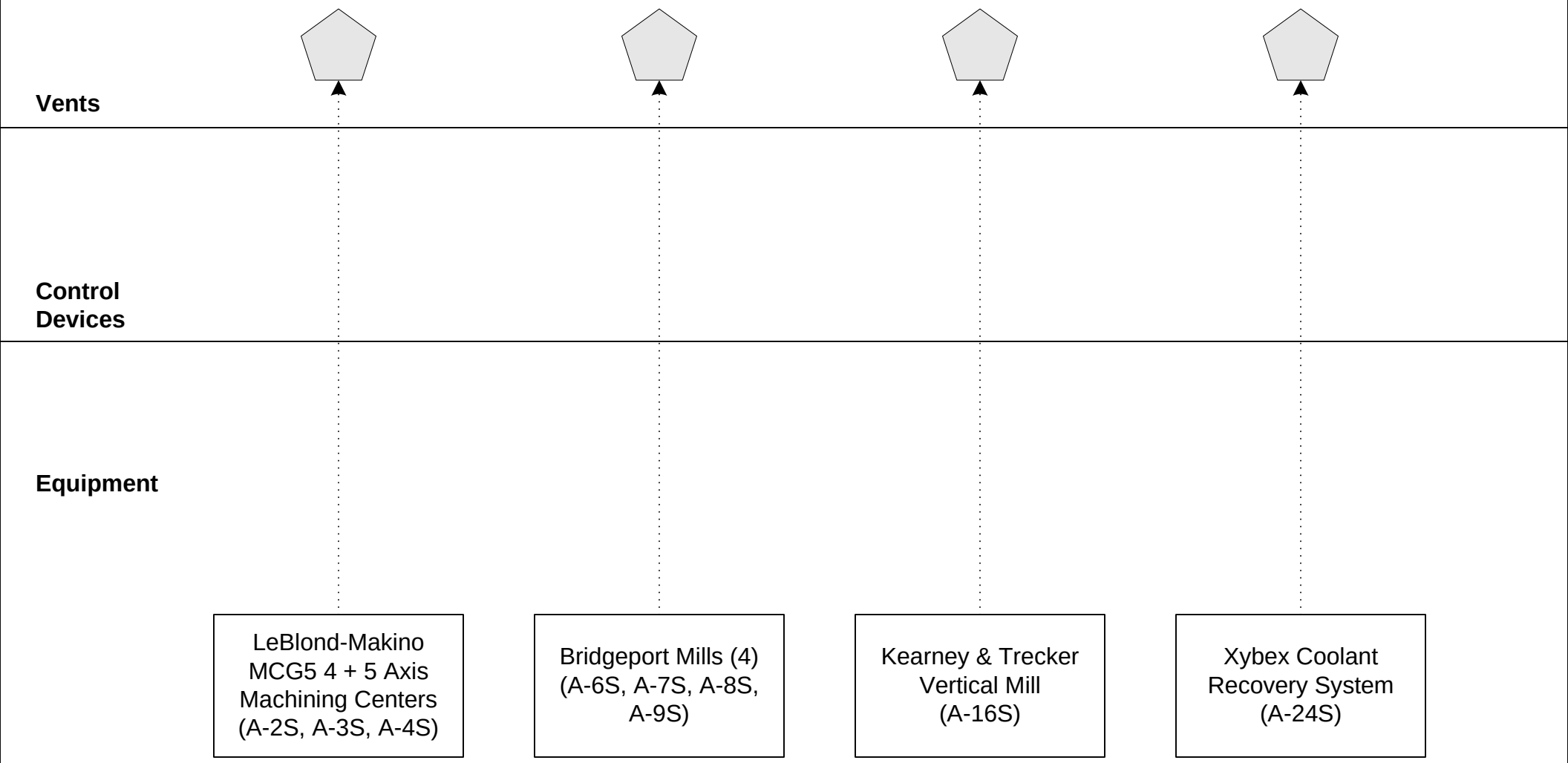
Building 167 Process Flow
(Metal Fabrication)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

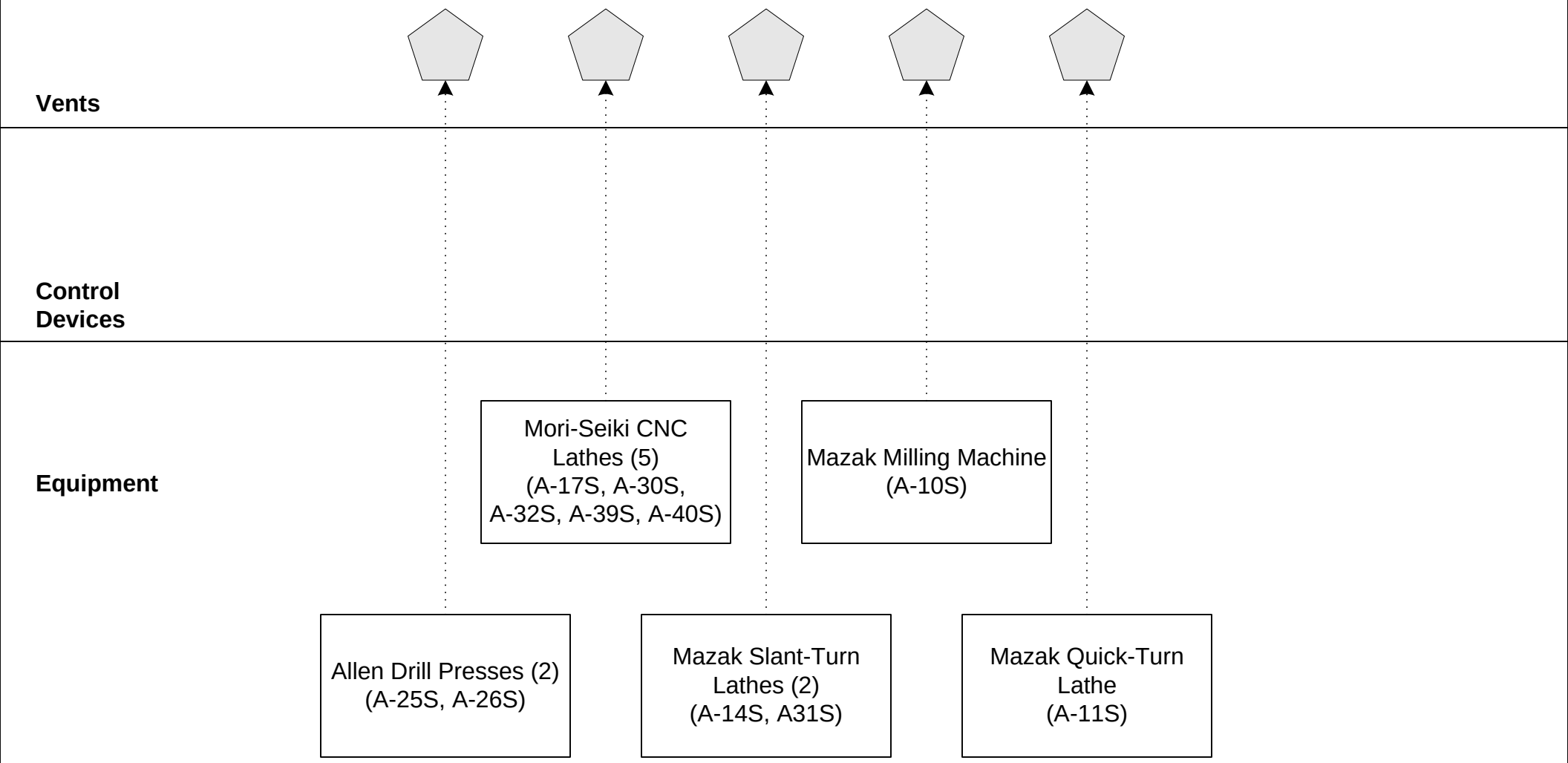
Building 376-N Process Flow
(Metal Fabrication - Aerospace Area)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 376-N Process Flow
(Metal Fabrication - Aerospace Area)



Allegany Ballistics Laboratory
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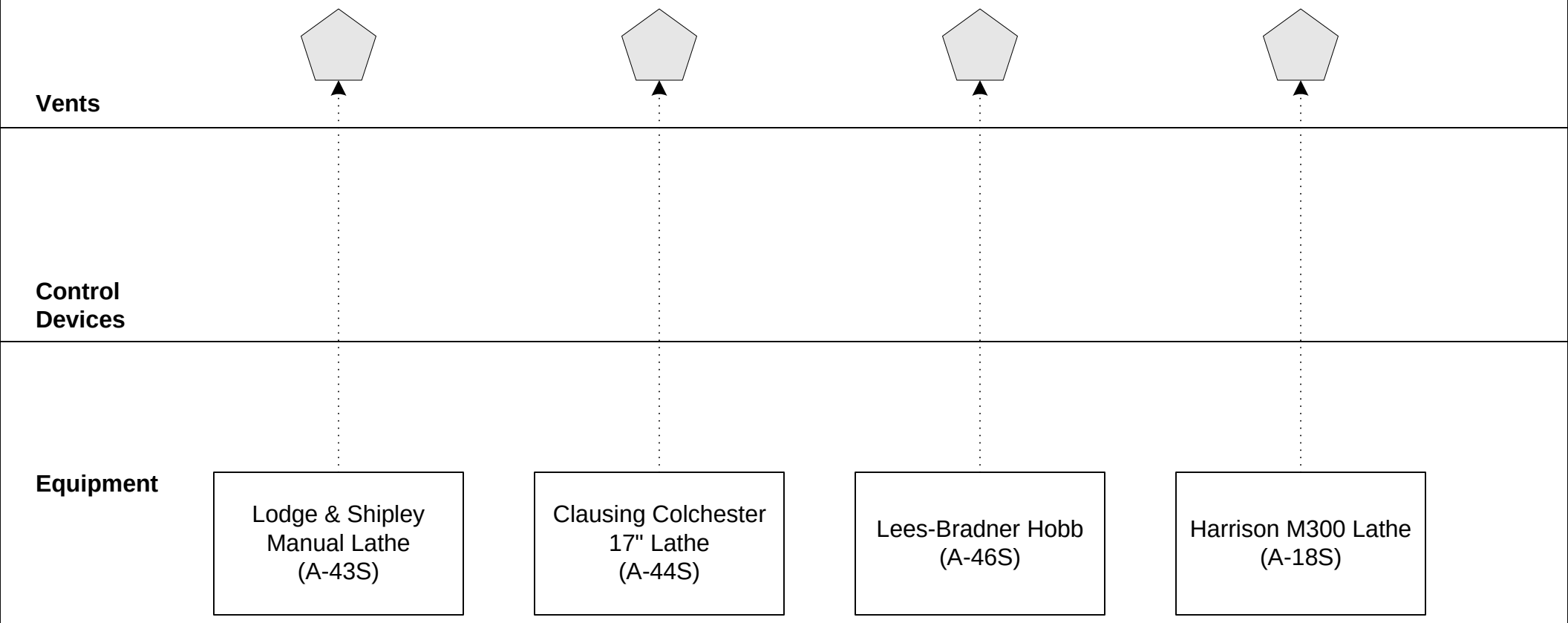
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 376-N Process Flow
(Metal Fabrication - Aerospace Area)



Allegany Ballistics Laboratory
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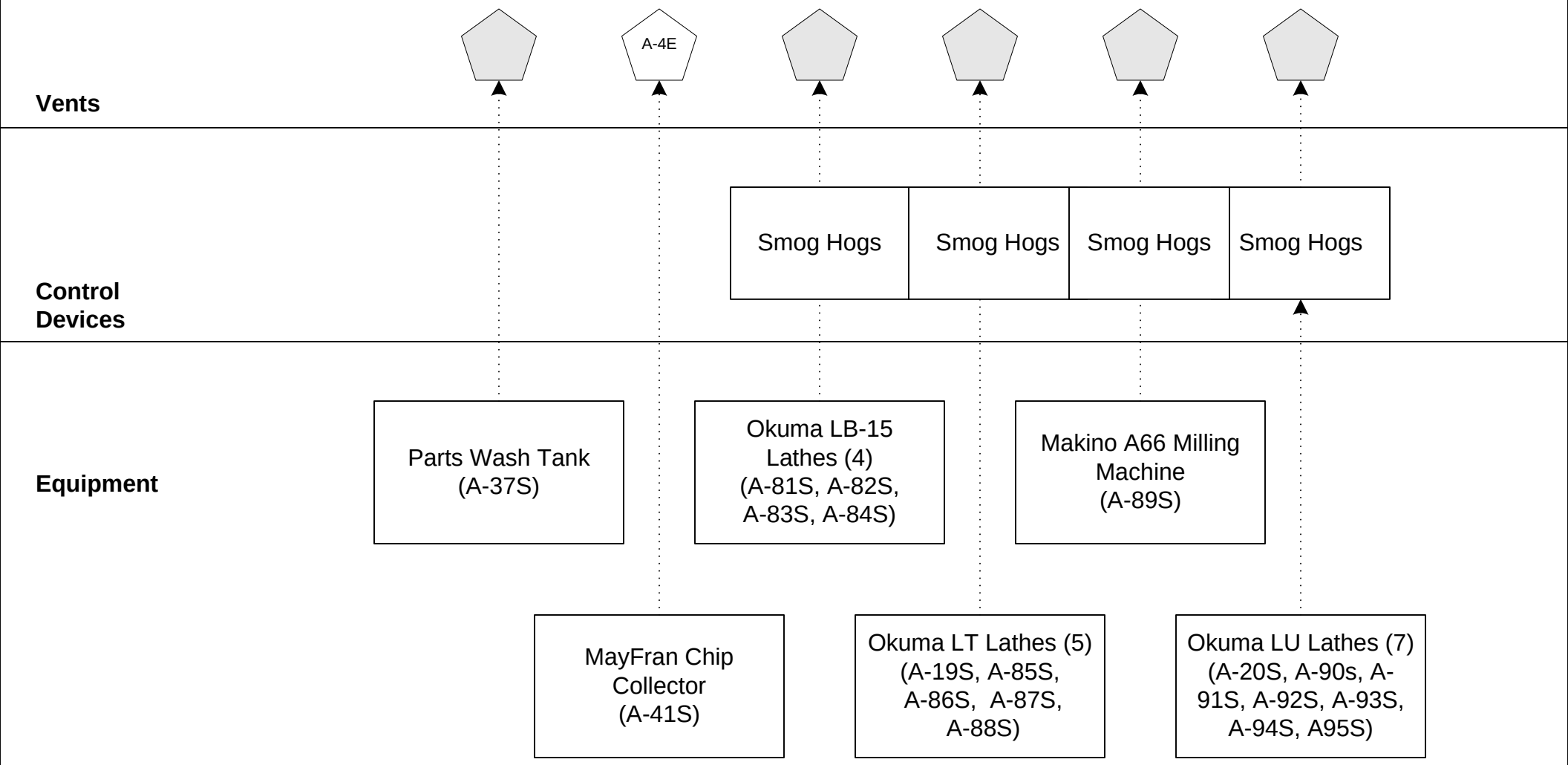
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

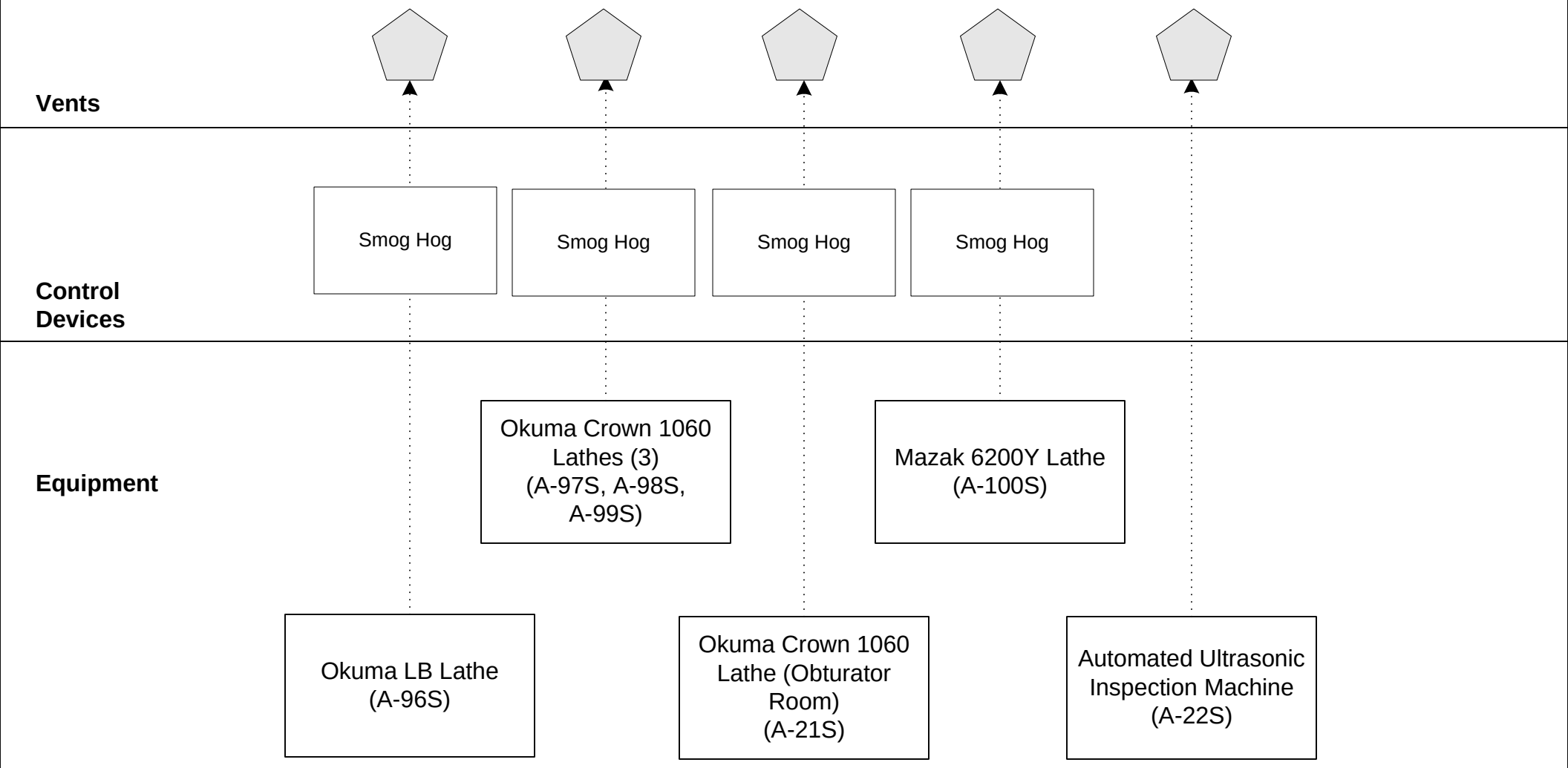
Building 376-S Process Flow
(Metal Fabrication - Tank Ammo High Rate)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 376-S Process Flow
(Metal Fabrication - Tank Ammo High Rate)



Allegany Ballistics Laboratory
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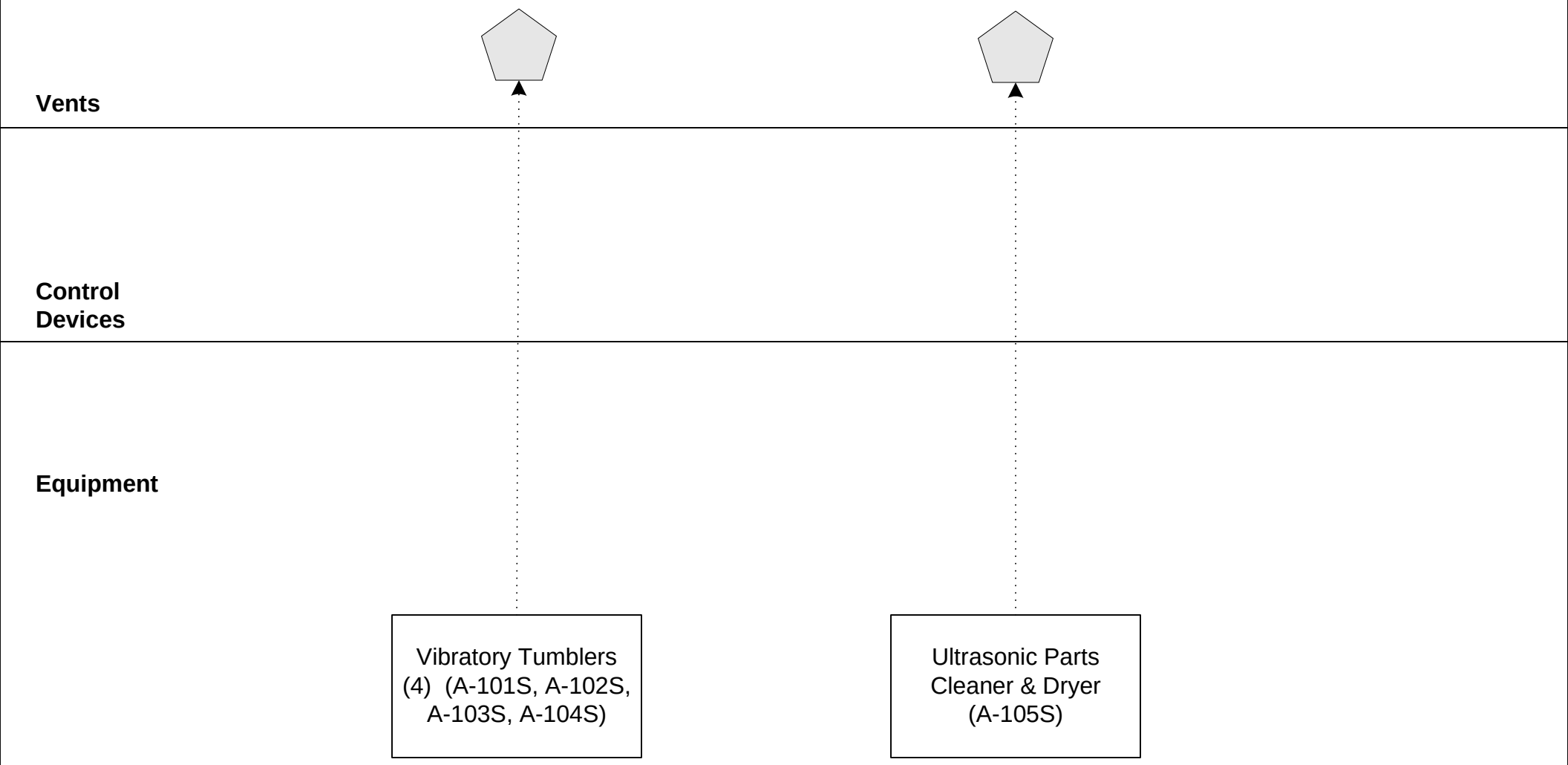
Rocket Center, WV 26726

Vents Inside Building

Process Flow

Emissions Stream

Building 376-S Process Flow
(Metal Fabrication - Tank Ammo High Rate)



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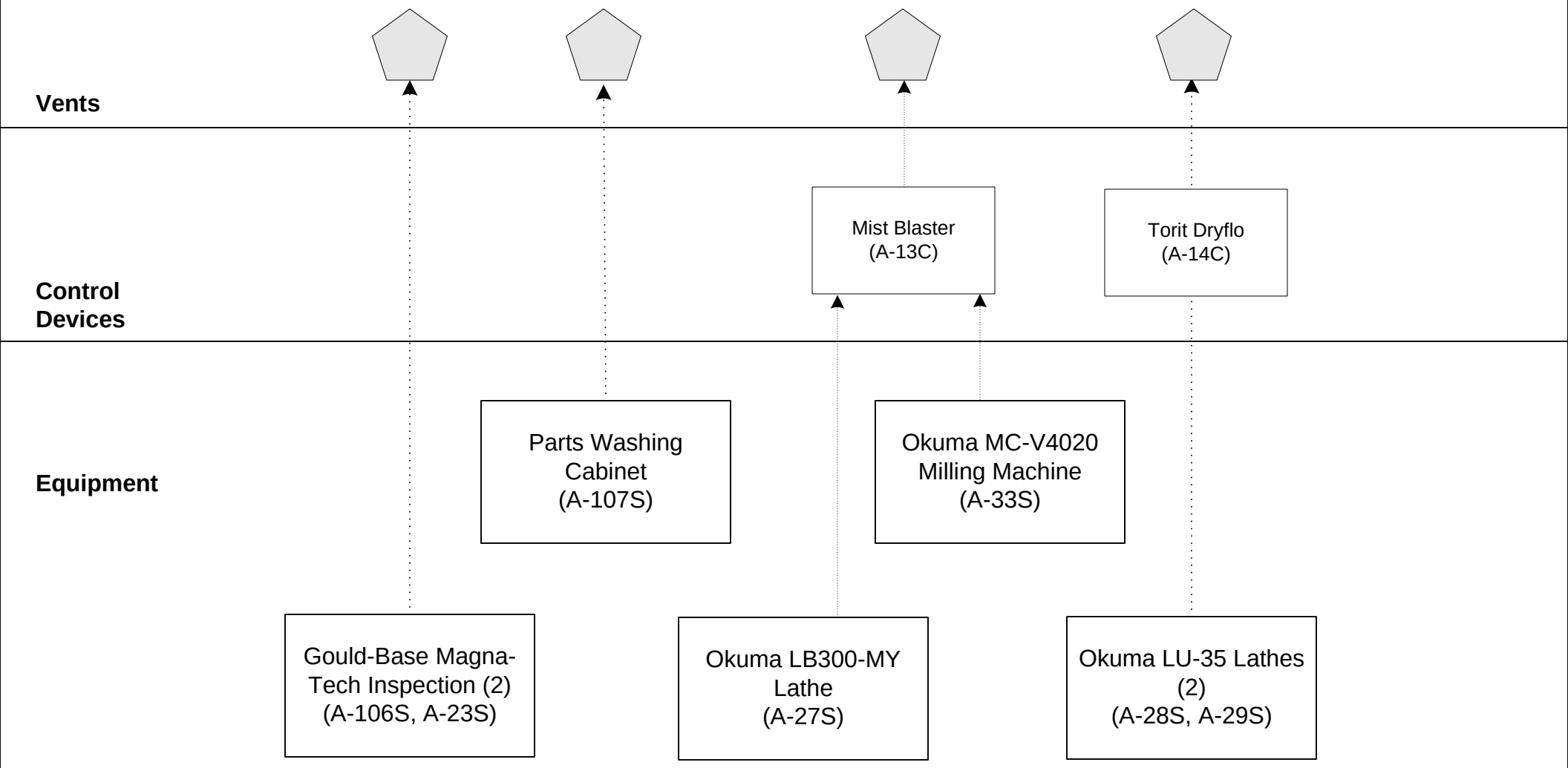
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 376-A Process Flow
(Metal Fabrication - Case Base Manufacture)



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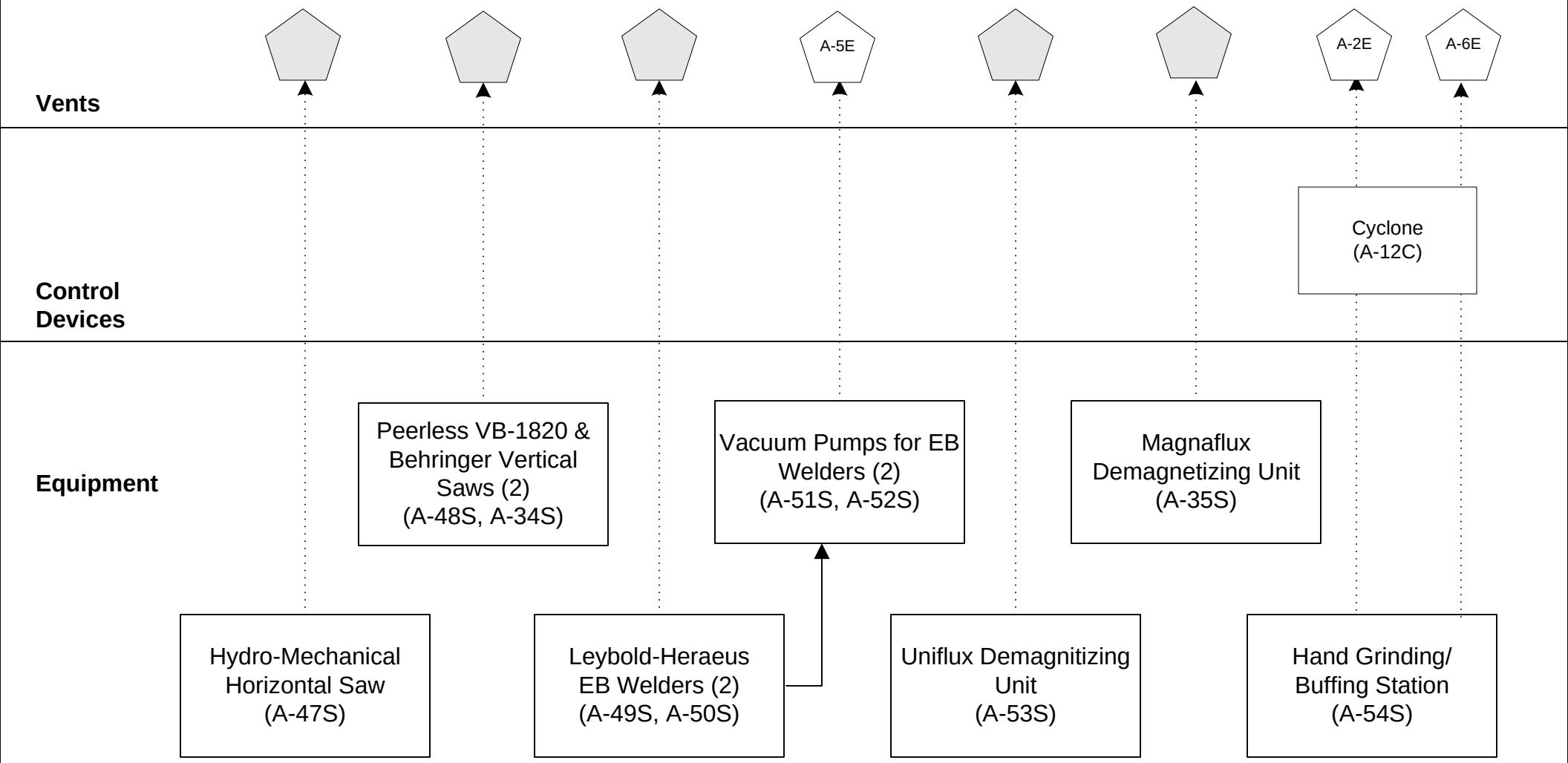
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 438 Process Flow (Metal Fabrication)



Allegany Ballistics Laboratory
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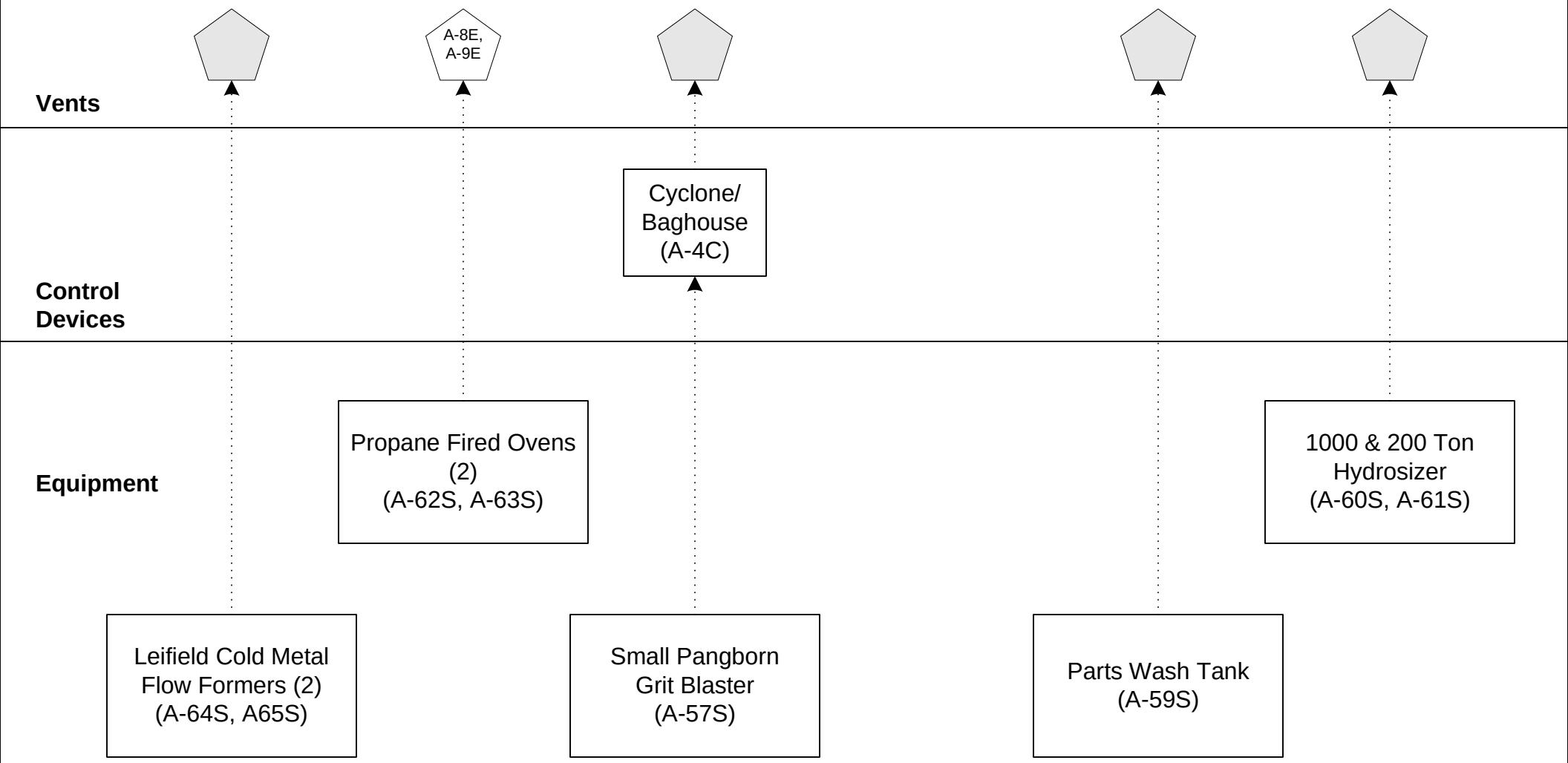
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 438 Process Flow (Metal Fabrication)



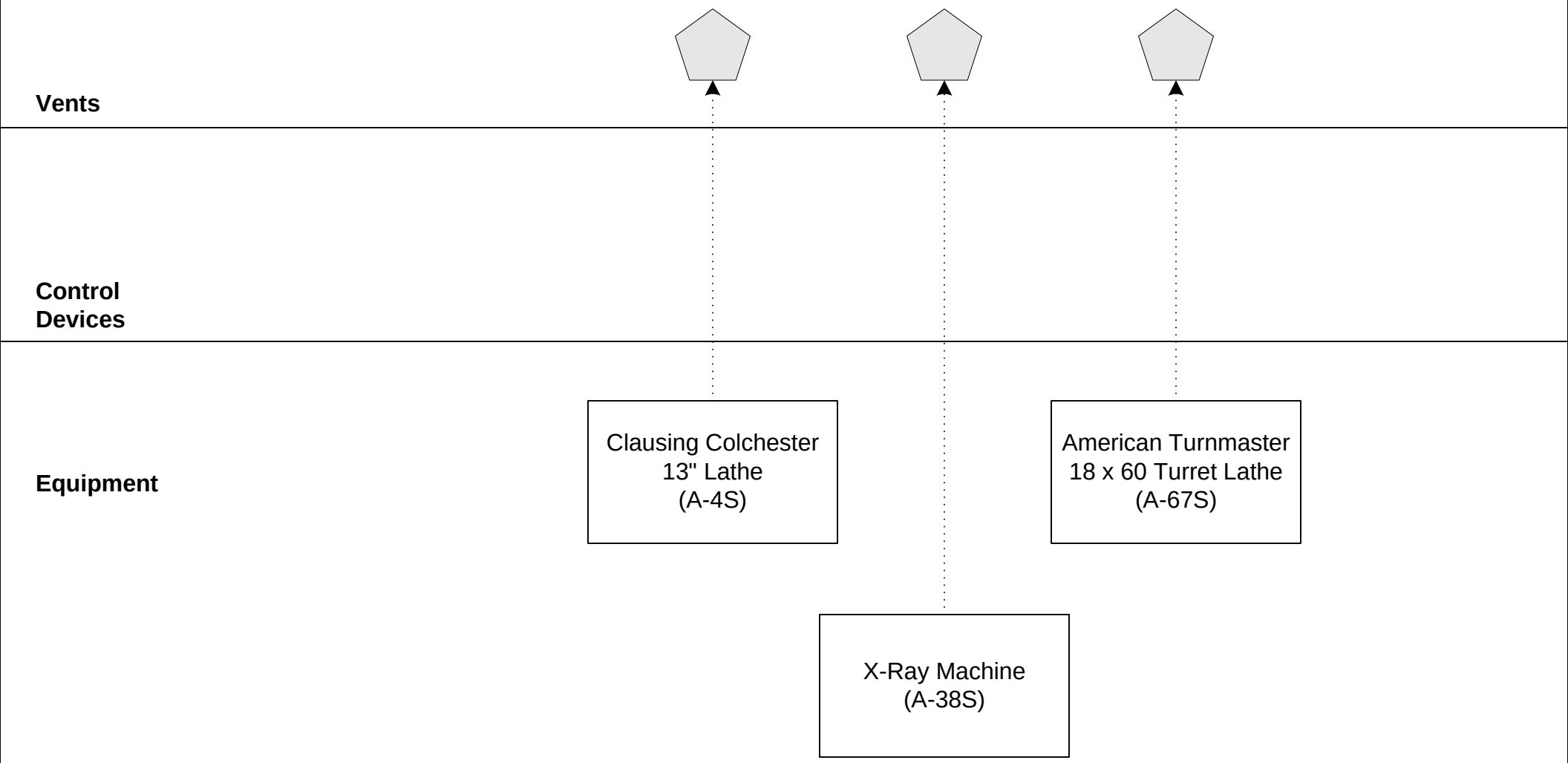
Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building

Process Flow

Emissions Stream

Building 438 Process Flow
(Metal Fabrication)



Allegany Ballistics Laboratory
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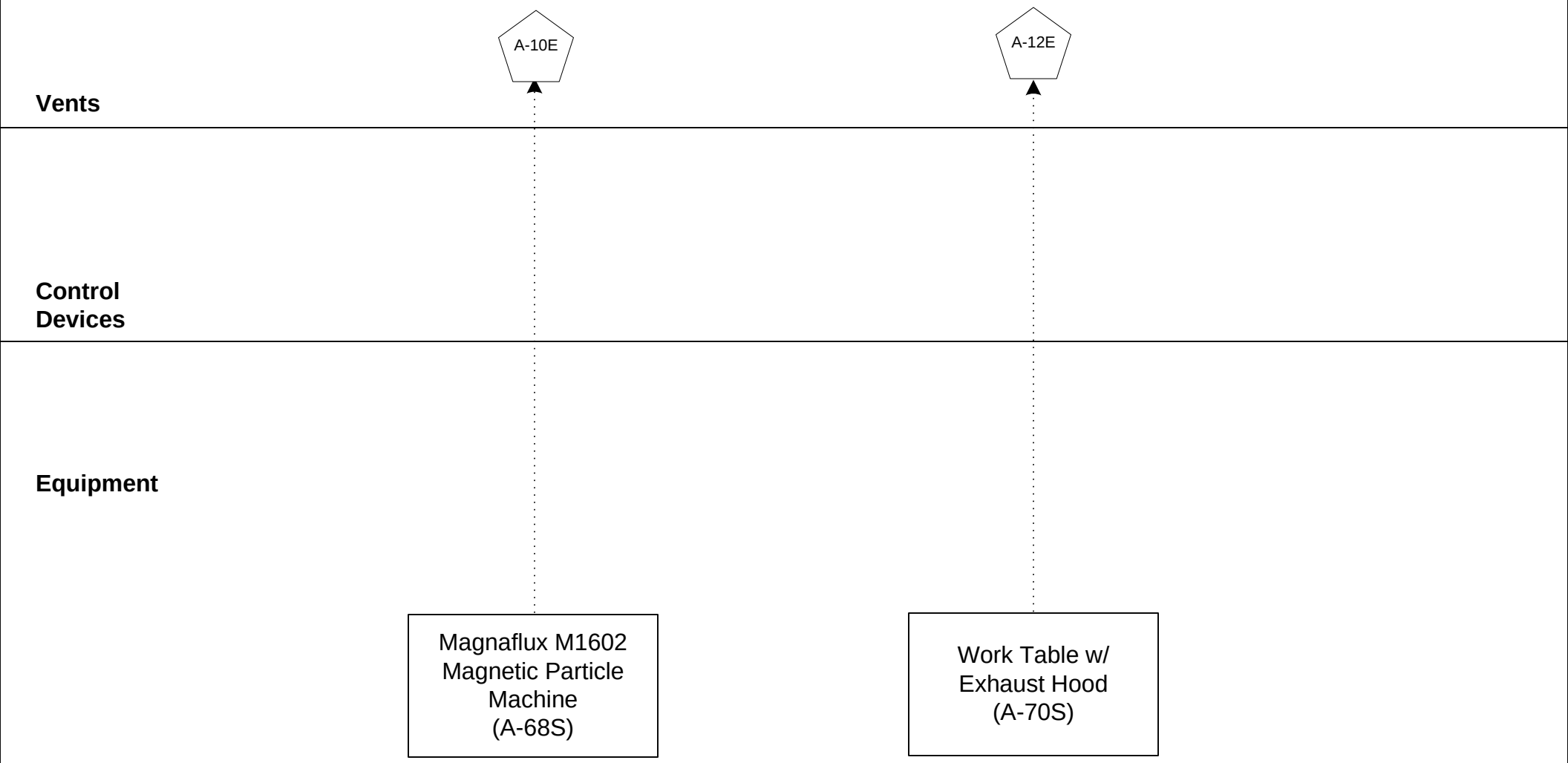
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 438 Process Flow (Inspection Area)



Allegany Ballistics Laboratory
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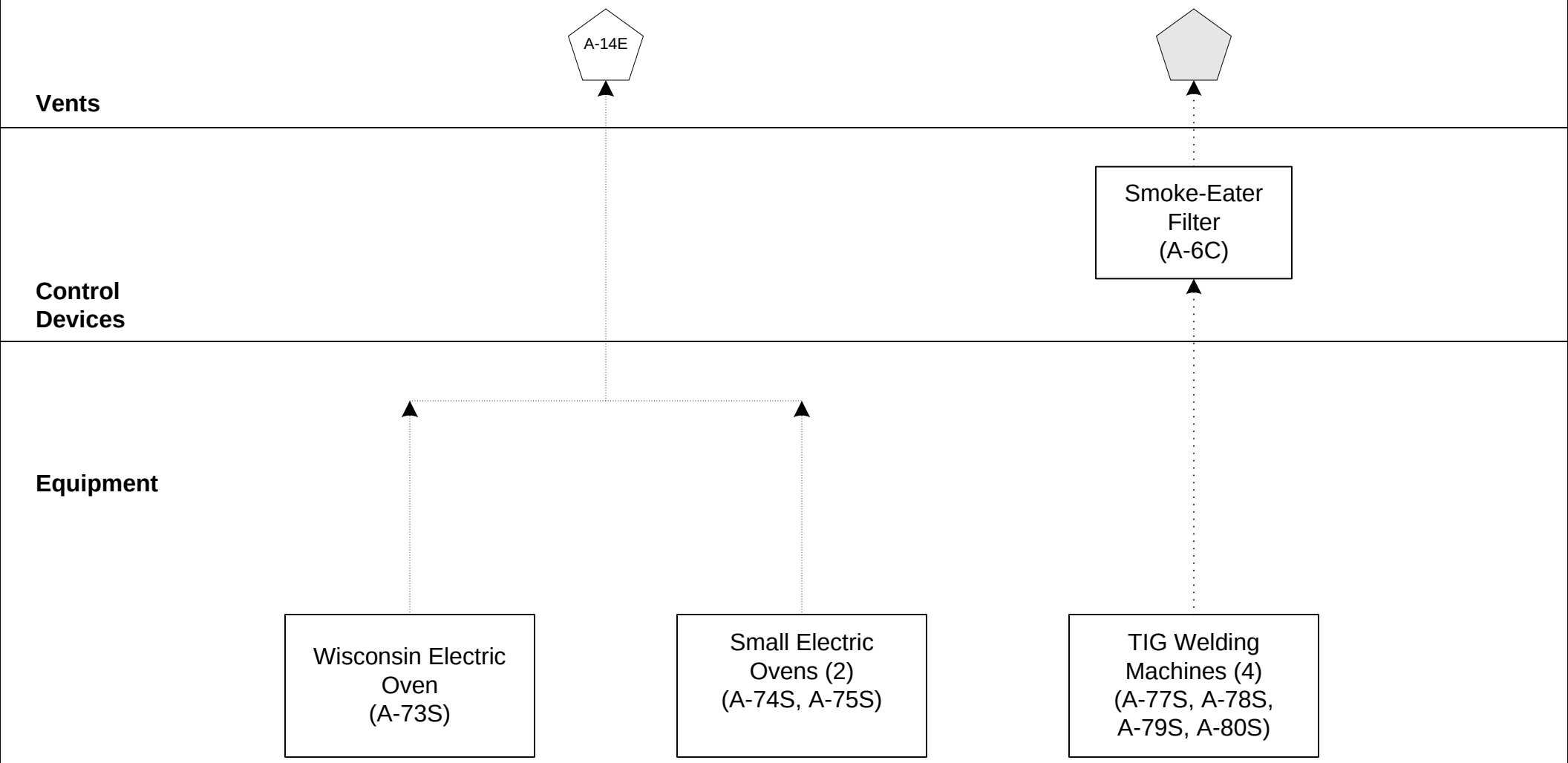
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

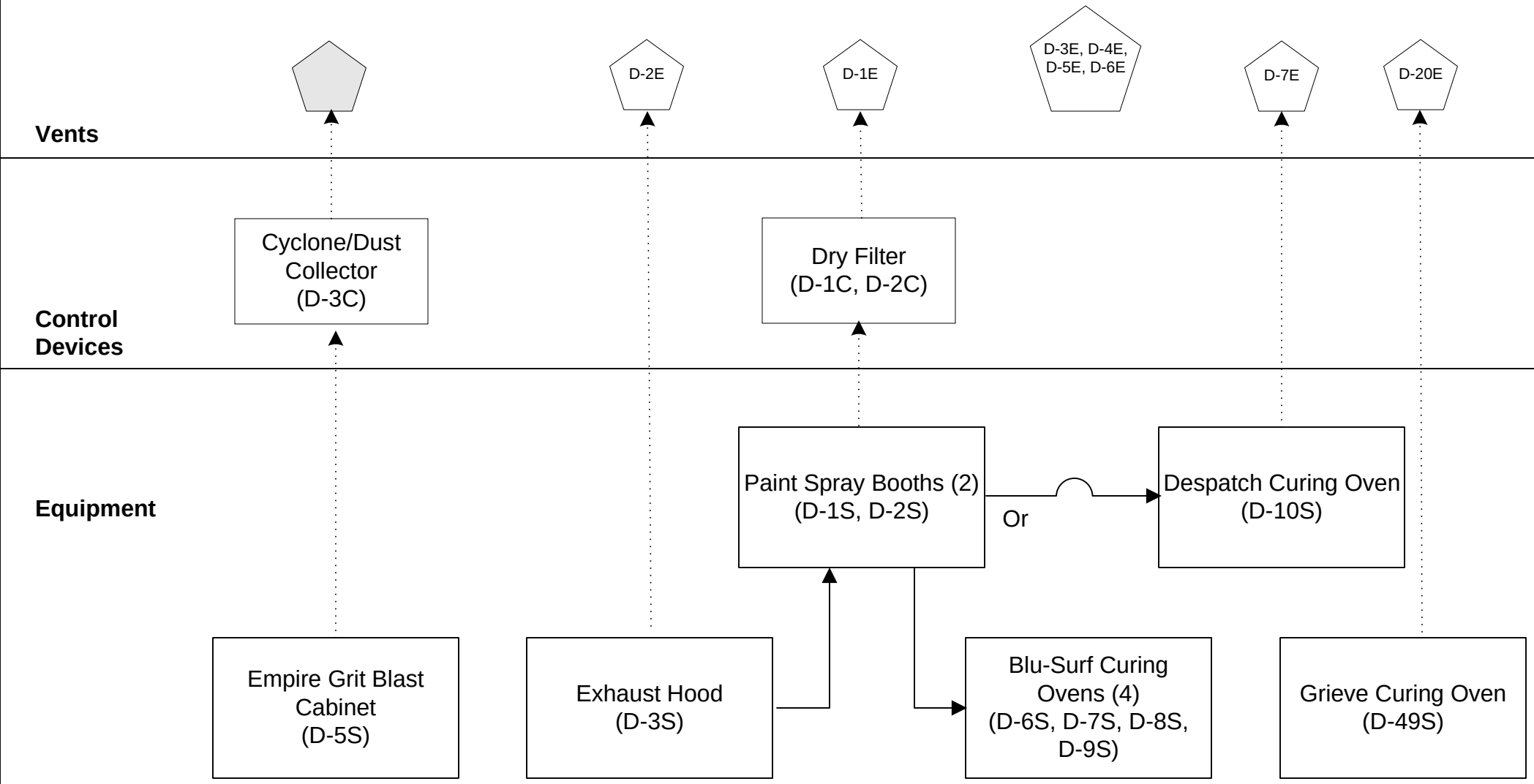
Building 438 Process Flow (Weld Shop Area)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

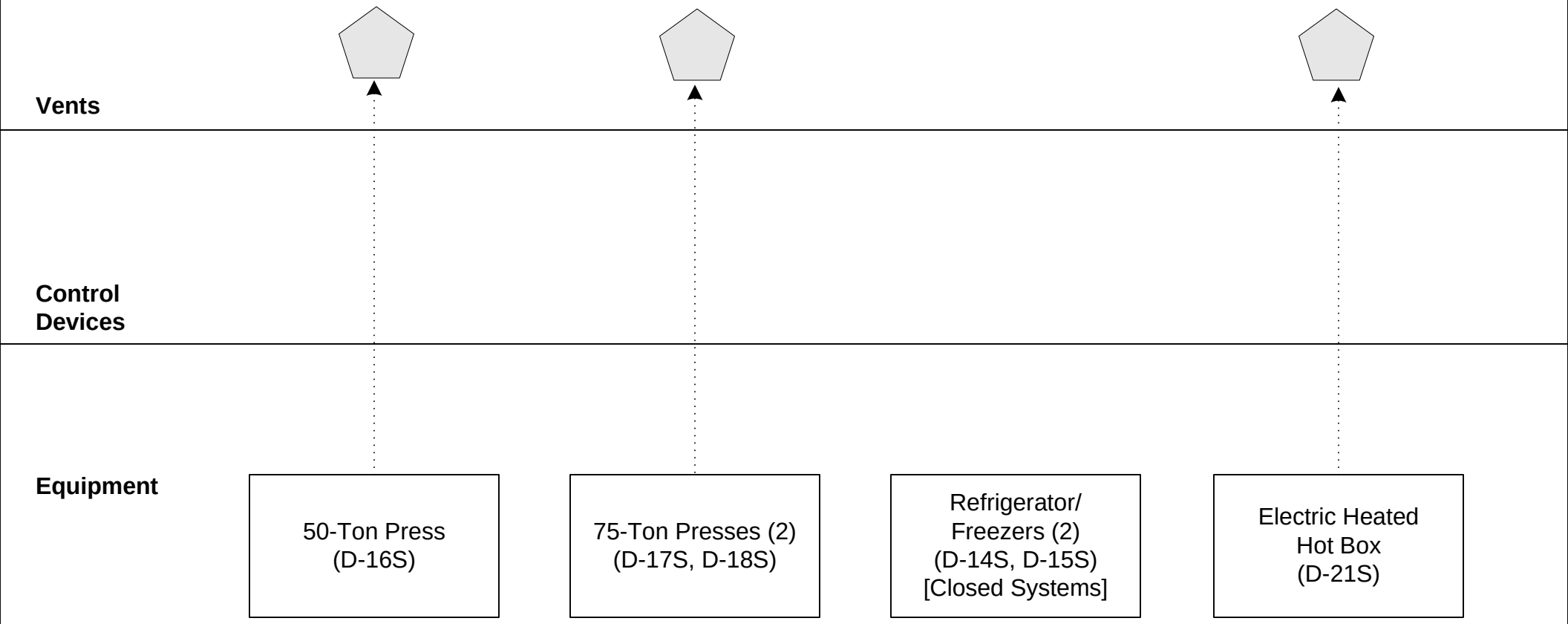
Building 421/819 Process Flow (Nozzle Preparation)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

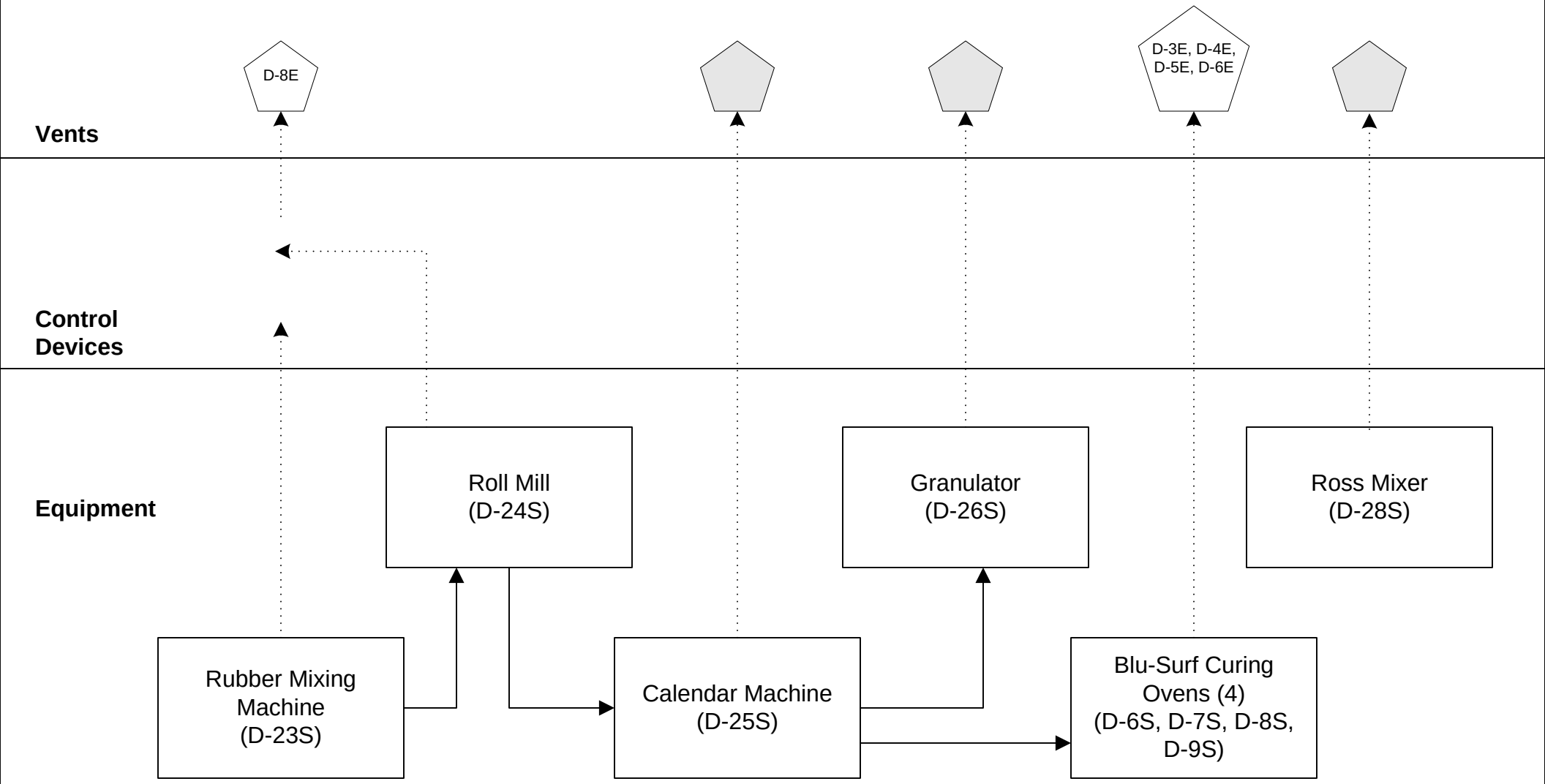
Building 421/819 Process Flow (Nozzle Preparation)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

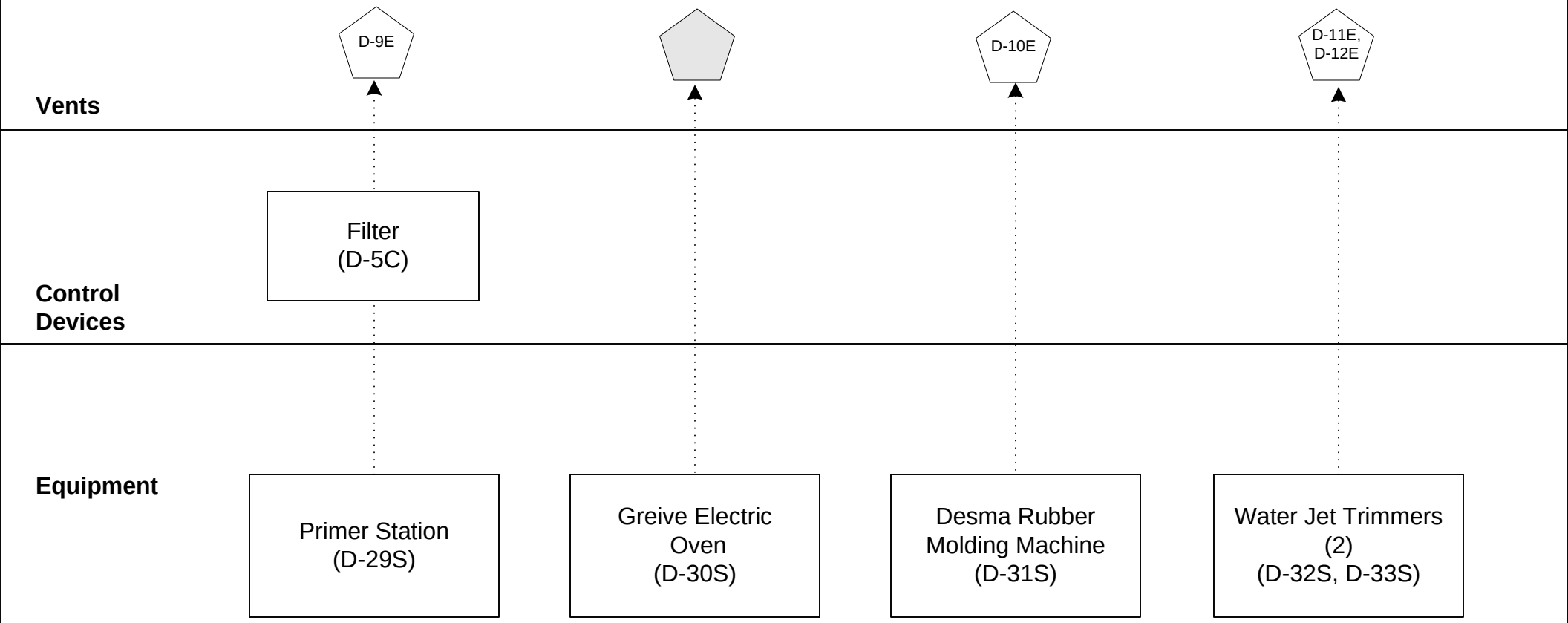
Building 421/819 Process Flow (Insulator Preparation)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

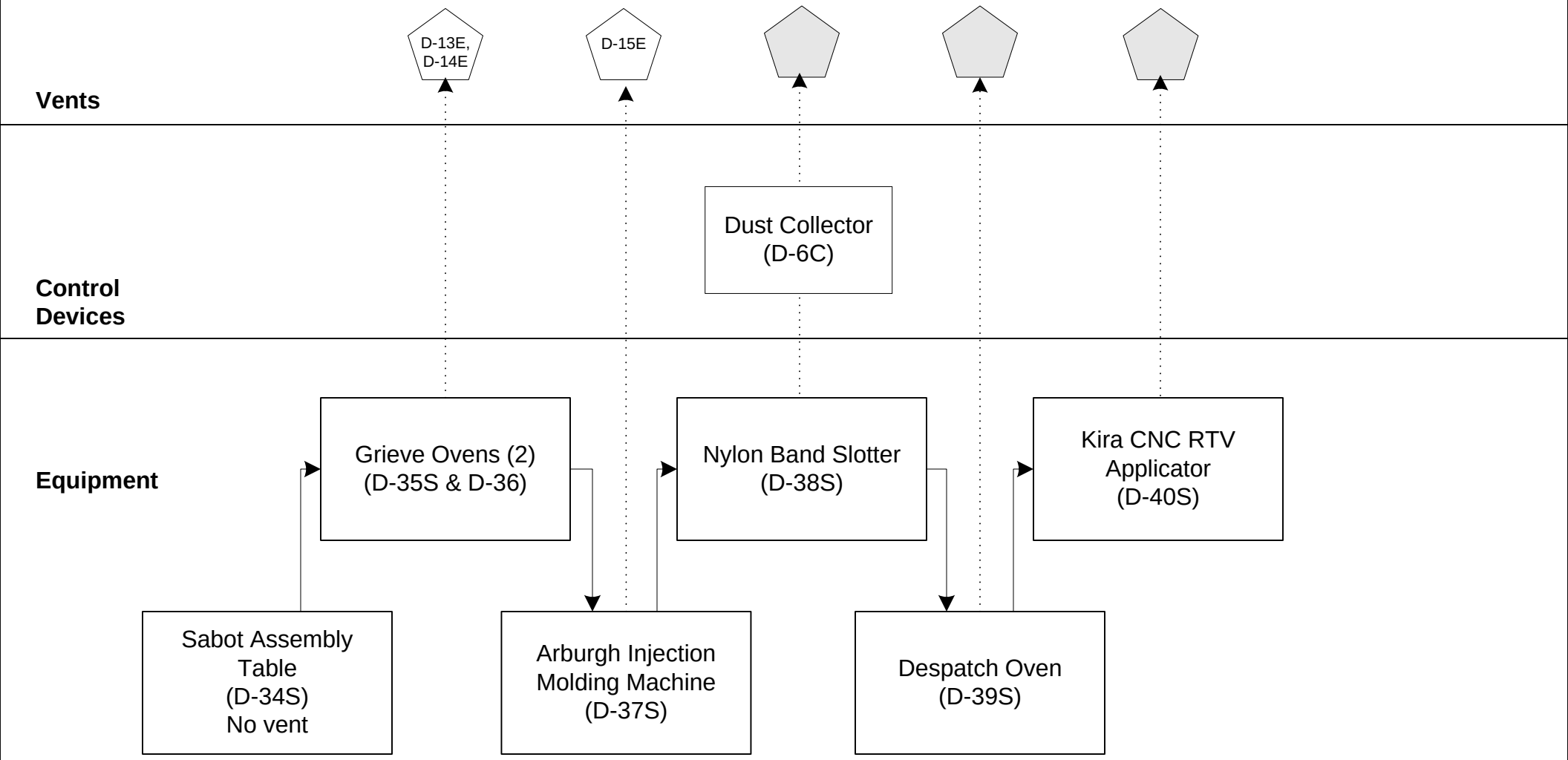
Building 421/819 Process Flow
(Case Base Area)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

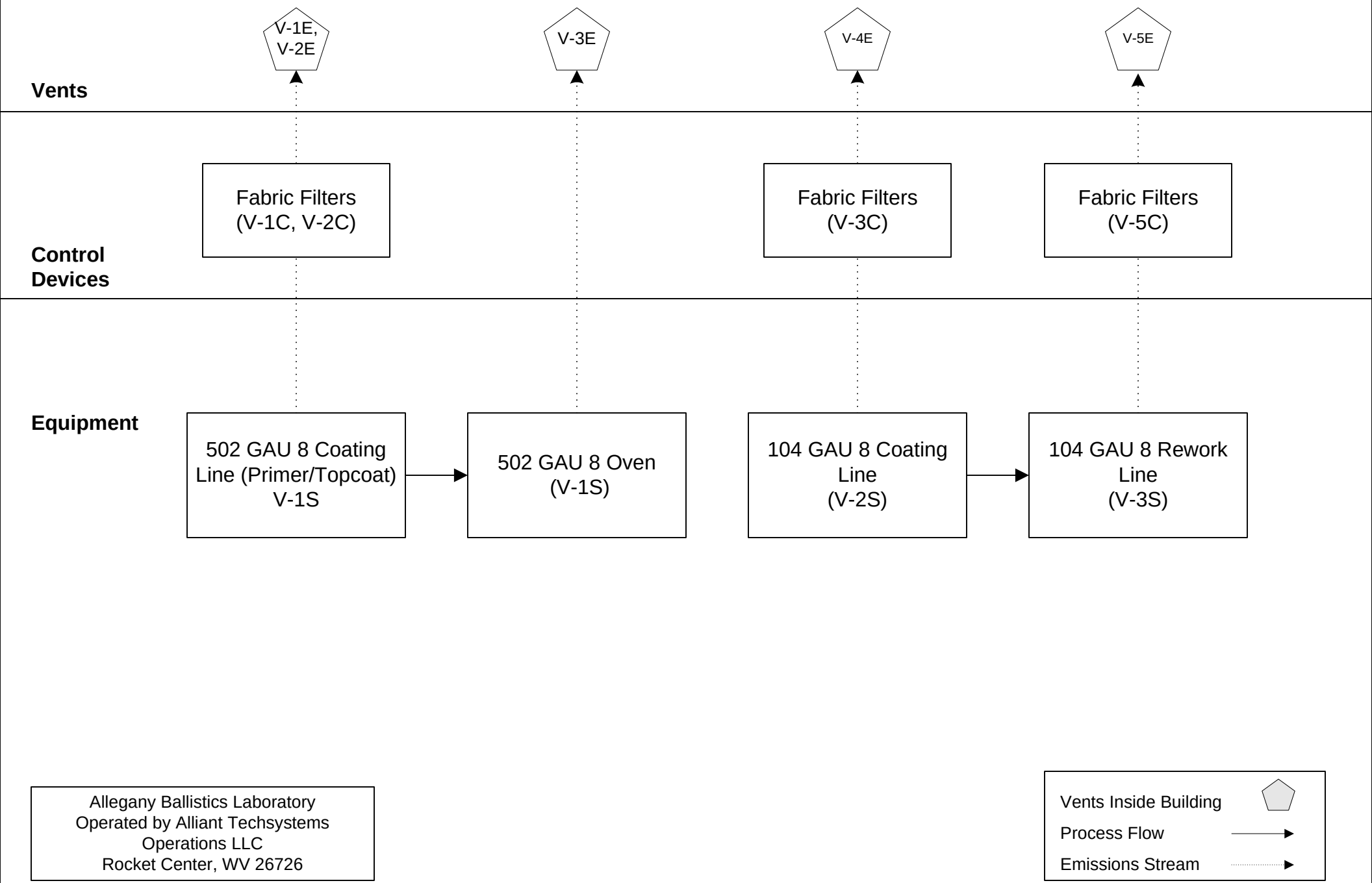
Building 421/819 Process Flow
(M-865 Sabot Assembly)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

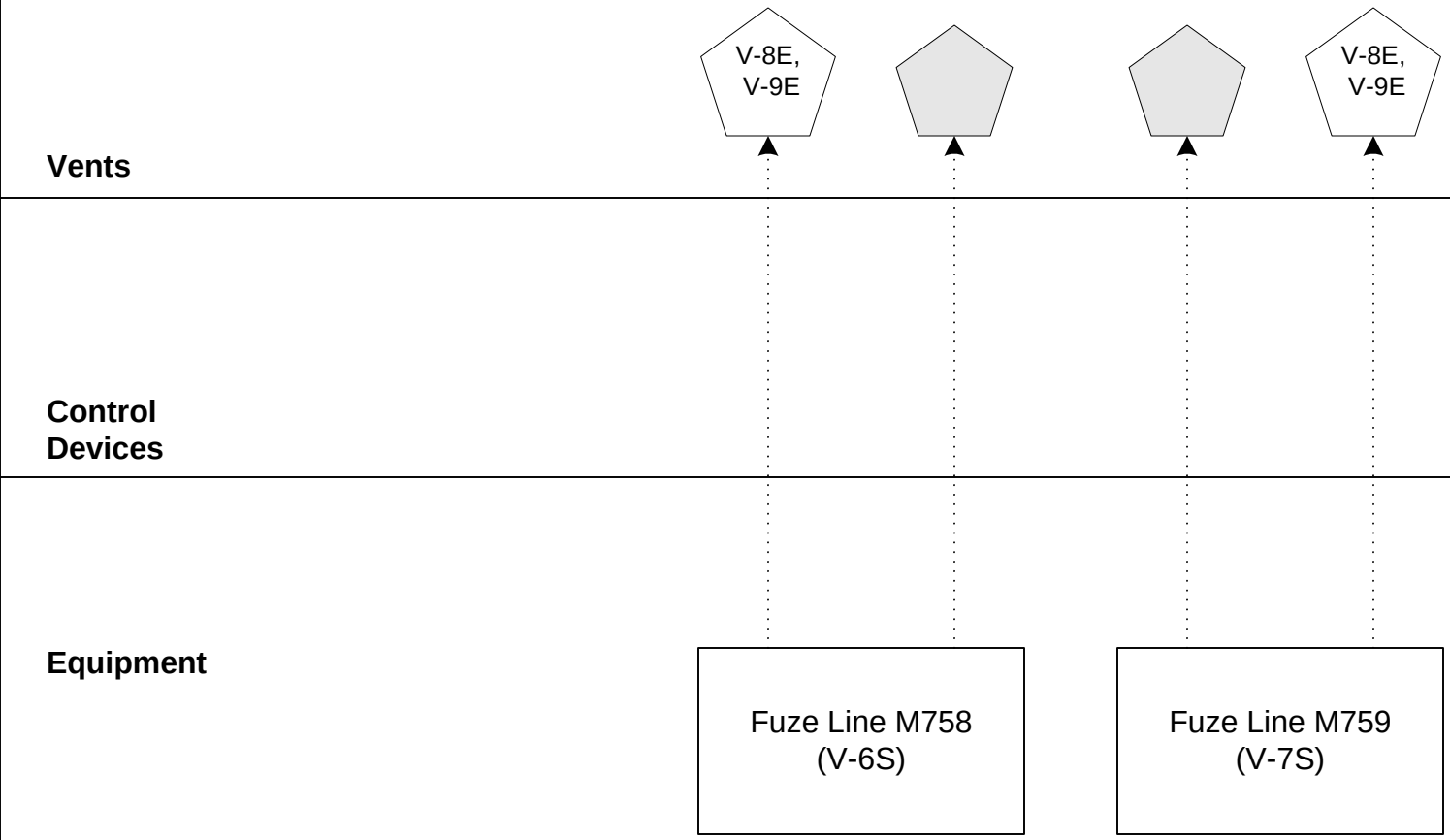
Building 376 Medium Cal Process Flow (Projectile Process)



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

Building 376 Medium Cal Process Flow (Fuze Process)



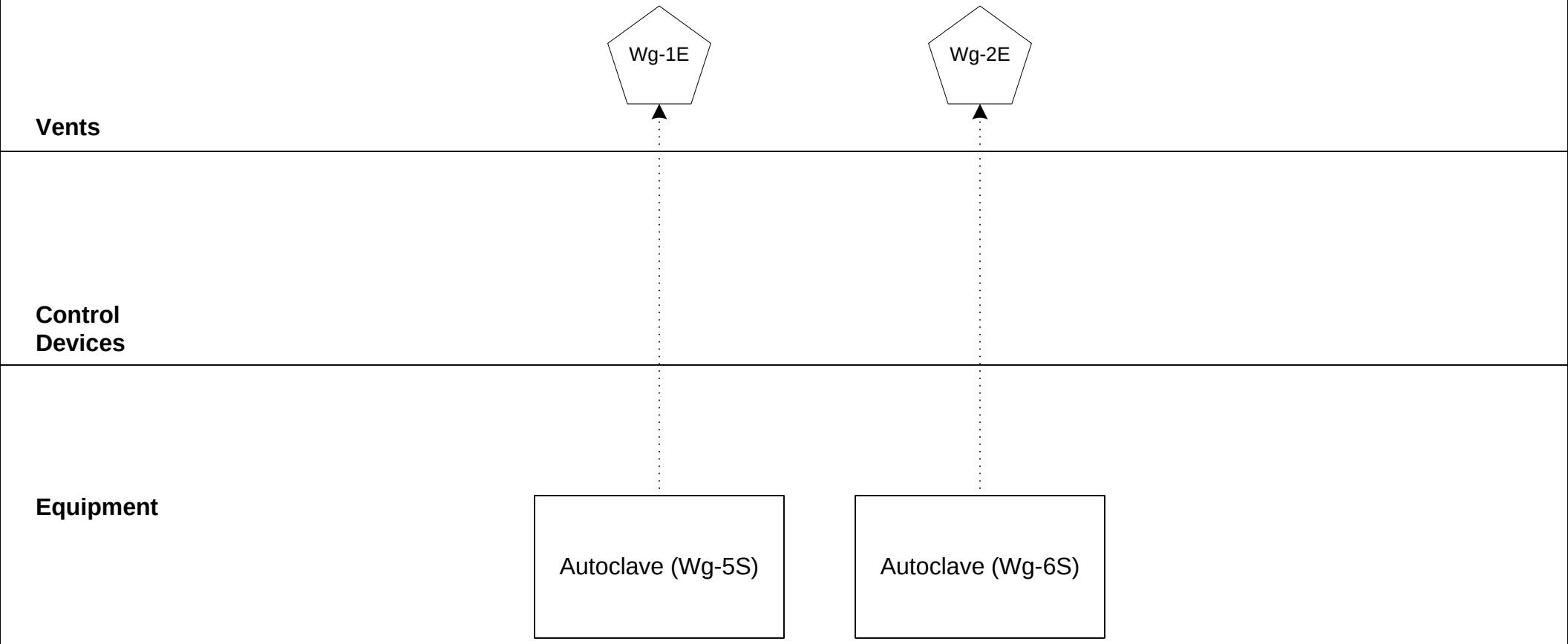
Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building

Process Flow

Emissions Stream

Building 385 Autoclaves



Allegany Ballistics Laboratory
Operated by Alliant Techsystems Operations LLC
Rocket Center, WV 26726

Vents Inside Building
Process Flow
Emissions Stream

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Composite Case Manufacturing – Group 00B					
B-2S	B-3E	Laboratory Exhaust Hood (Bond Room)-368	1995	Variable	
B-3S	B-2E (151e)	Laboratory Exhaust Hood (Bond Room)- 368	1995	Variable	
B-4S	B-3E	Binks Spray Booth #1-368	1995	Variable	B-1C
B-5S	B-4E	Binks Spray Booth #2-368	1995	Variable	B-2C
B-49S	B-4E	Laboratory Exhaust Hood-368	1999	Variable	
B-11S	B-5E	Tafco Oven (Javelin Bond Room-Oven C) -368	1999	Variable	
B-14S	B-7E	Grieve Drying Oven-368	1993	550°F Max	
B-15S	B-7E	Penn Drying Oven-368	1993	Variable	
B-16S	B-7E	Laboratory Exhaust Hood-368	1993	Variable	
B-25S	B-7E	Tafco Large Electric Curing Oven (Javelin Bond Room, Walk-Through Oven A) -368	1993	Variable	
B-26S	B-8E	Tafco Oven (Javelin Bond Room, Oven B) -368	1993	Variable	
B-27S	B-9E	Gas Curing Oven-368	1993	0.8 Mkw	
B-28S	B-10E	Gas Curing Oven-368	1993	0.8 Mkw	
B-29S	B-11E	Gas Curing Oven-368	1993	0.8 Mkw	
B-30S	B-12E	Gas Curing Oven-368	1993	0.8 Mkw	
B-31S	B-13E	Large Autoclave-368	1993	600°F/300psi	
B-32S	B-14E	Small Autoclave-368	1993	400°F/250 psi	
B-36S	B-15E	Penn Storage Freezer-368-MS	1996	Variable	
B-37S	B-16E	Meuser Lathe-368-MS	1996	Variable	
B-38S	B-16E	LeBlond Lathe-368-MS	1996	Variable	B-5C
B-39S	B-16E	LeBlond/Makino Lathe-368-MS	1996	Variable	B-5C
B-40S	B-16E	Vacuum System-368-MS	1996	Variable	B-5C
B-41S	B-19E	Mori Seiki Lathe-368-MS	1996	Variable	B-6C
B-42S	B-19E	Dainichi F-35M Lathe-368-MS	1996	Variable	B-6C
B-44S	B-20E	Grieve-Hendry Small Electric Oven-368-MS	1997	10 kw	
B-53S	B-21E	Masco Gantry Mill-368-MS	2000	Variable	B-7C

B-55S	B-21E	Bridgeport Milling Machine-368-MS	2000	Variable	B-7C
B-56S	B-22E	Young & Bertke Electric Oven-368-MS	2000	550°F	
B-60S	B-16E	Small Table Grinder-368-MS	2000	Variable	B-5C
B-61S	B-16E	Small Table Grinder-368-MS	2000	Variable	B-5C
B-62S	B-16E	Small Table Sander-368-MS	2000	Variable	B-5C
B-48S	B-17E	Autoclave-256-FP	1997	Variable	
B-65S	B-23E	Grieve Electric Oven-167-F22	2000	Variable	
B-68S	B-24E	8-Ply Laminator-368ANN	1999	Variable	
B-70S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-71S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-72S	B-25E	Minster Robotic Press-368ANN	1999	Variable	B-8C
B-96S	B-28E	Gruenberg Oven-368ANN	1999	500°F	
B-97S	B-29E	Grieve Walk-In Oven-368ANN	1999	80 kw	
B-98S	B-30E	Steelman Walk-In Oven-368ANN	1999	500°F	
B-99S	B-31E	TBI Booth-368ANN	1999	Variable	B-12C
B-100S	B-32E	CTA Robotic Spray Booth-368ANN	2000	Variable	B-13C
B-101S	B-33E	Sabot Cleaning Sprayer & Dryer-368ANN	2000	Variable	
Metal Fabrication – Group 00A					
A-1S	A-lE	Apex Broach Machine-167	1996	Variable	
A-109S	NDV	Lindberg/Blue Electric Oven-421	1999	Variable	
A-111S	A-18E	Grieve Electric Oven-421	1999	Variable	
A-51S	A-5E	Vacuum Pumps for EB Welder-438	1996	Variable	
A-52S	A-5E	Vacuum Pumps for EB Welder-438	1996	Variable	
A-54S	A-2E or-	Hand Grinding/Buffing Station-438	1996	Variable	A-12C
A-62S	A-8E	Armil Propane Tempering Oven-438		4 mmBTU/hr	
A-63S	A-9E	Modern Propane Tempering Oven-438		3 mmBTU/hr	
~~A-58S~~	~~A-7E~~	~~Large Abrasive Blast Systems Grit Blaster (Rm. 119) 438~~	~~1996~~	~~30 lb/hr~~	~~A-5C~~
A-68S	A-10E	Magnaflux Magnetic Particle Machine-438-R122	1996	Variable	
A-70S	A-12E	Work Table with Exhaust Hood-438-R122	2000	Variable	
A-73S	A-14E	Wisconsin Electric Through-Wall Oven-438-	1996	Variable	
A-74S	A-14E	Wisconsin Electric Oven-438-R121	1996	Variable	

A-75S	A-14E	Young & Bertke Electric Oven-438-R121	1996	Variable	
A-77S	A-15E	TIG Welding Machine-438-R121		Variable	A-6C
A-78S	A-15E	TIG Welding Machine-438-R121	1996	Variable	A-6C
A-79S	A-15E	TIG Welding Machine-438-R121	1996	Variable	A-6C
A-80S	A-15E	TIG Welding Machine-438-R121	1996	Variable	A-6C
Nozzle / Insulator Preparation – Group 00D					
D-1S	D-1E (183e)	Paint Spray Booth #1-421	1996	Variable	D-1C
D-2S	D-1E	Paint Spray Booth #2-421	1996	Variable	D-2C
D-3S	D-2E	Lab Exhaust Hood-421	1996	Variable	
D-6S	D-3E	Blu-Surf Propane-Fired Curing Oven-421	1996	1.5 mmBTU/hr	
D-7S	D-4E	Blu-Surf Propane-Fired Curing Oven-421	1996	0.5 mmBTU/hr	
D-8S	D-5E	Blu-Surf Propane-Fired Curing Oven-421	1996	0.5 mmBTU/hr	
D-10S	D-7E	Despatch Electric Curing Oven-421	1996	Variable	
D-23S	D-8E	Rubber Mixing Machine-819	1996	2.5 gal	
D-24S	D-8E	Roll mill-819	1996	Variable	
D-29S	D-9E	Primer Station-421-CBA	2000	Variable	D-5C
D-31S	D-10E	Desma Rubber Molding Machine-421-CBA	2000	Variable	
D-32S	D-11E	Water Jet Trimmer-421-CBA	2000	Variable	
D-33S	D-12E	Water Jet Trimmer-421-CBA	2000	Variable	
D-35S	D-13E	Grieve Oven-421-SAB	2000	Variable	
D-36S	D-14E	Grieve Oven-421-SAB	2000	Variable	
D-37S	D-15E	Arburgh Injection Molding Machine-421-SAB	2000	Variable	
D-4S	OS	Lab Exhaust Hood-421-SAB	1996	Variable	
D-41S	D-16E	Sabot/Obturator Cleaning Hood	2003	Variable	
D-42S	D-17E	Sabot/Obturator Priming Booth	2003	Variable	D-7C
D-46S	D-19E	J RTV Curing Oven	2003	Variable	
D-49S	D-20E	Grieve Electric Oven-421	1999	Variable	
Medium Caliber Ammunition Area - Group 00V (R13-2579)					
V-1S	V-1E	502 GAU 8 Primer Coating Line - 376A	2004	Variable	V-1C
V-1S	V-2E	502 GAU 8 Topcoat Coating Line - 376A	2004	Variable	V-2C

V-1S	V-3E	502 GAU 8 Coating Line Oven - 376A	2004	Variable	
V-2S	V-4E	104 GAU 8 Coating Line - 376A	2004	Variable	V-3C
V-3S	V-5E	104 Rework Coating Line - 376A	2004	Variable	V-5C
V-6S	V-8E, V-9E	Fuze Line Assembly (FMU151/M758) - 376A	2004	Variable	
V-7S	V-8E, V-9E	Fuze Line Assembly (FMU154/M759) - 376A	2004	Variable	
Wg-5S	Wg-1E	Auto Clave	2004	N/A	
Wg-6S	Wg-2E	Auto Clave	2004	N/A	

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Laboratory Exhaust Hoods (Bond Room)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-2E	B-2E	N/A

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Laboratory Exhaust Hood (Bond Room) (ID# B-2S) - used to mix small quantities of adhesives for the Javelin program. Vents to atmosphere through vent ID# B-2E.

Manufacturer:	**Model number:**	**Serial number:**
LabConco	Unknown	Unknown

Construction date:	**Installation date:**	**Modification date(s):**
1994	1995	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	2	7.89
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	2	0.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-1797A.

HAPs may include ethyl benzene, formaldehyde, glycol ethers, hexane, isocyanates, MEK, methanol, MIBK, phenol, styrene, TCE, toluene, xylene, and zinc, lead, or chromium compounds found in paints, adhesives, primers, and thinners.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2014: 4.1.1-4.1.4; 45CSR13, R13-1797A, A.1-A.4.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Record Keeping – R30-05700011-2019: 3.4.1., 3.4.2., 4.2.1., 4.4.1., 4.4.2.; 45CSR13, R13-1797A, B.1., B.9.
2. Testing - R30-05700011-2019: 3.3.1- 3.3.4., 4.3.1.; 45CSR13, R13-1797A, B.2., B.8., B.9.; 45CSR30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Binks Spray Booths and Weigh Out Hood**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-3E, B-4E	Binks Spray Booths and Weigh-out Hood (B-4S, B-5S, B-49S) Bldg 368	B-1C, B-2C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
Binks Spray Booth #1 (ID# B-4S) - used to spray paint composite cases. Vents to atmosphere through vent ID# B-3E.
Binks Spray Booth #2 (ID# B-5S) - used to spray paint composite cases. Vents to atmosphere through vent ID# B-4E.
Laboratory Exhaust Hood (ID# B-49S) – used to weigh out and mix paint for composite case spray painting operations. Vents to atmosphere through vent ID# B-4E. Hood was added in 2000 to eliminate solvent odor in room.

Manufacturer:	**Model number:**	**Serial number:**
Binks	83-2448	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1994	1995	

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.1	0.1
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	2	2.76
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various	2	2.76
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions for paint booths are based on limits provided in R13-1797A. Any emissions associated with weigh-out would be counted in booth emissions because it is tied to the same stack.

HAPs may include ethyl benzene, formaldehyde, glycol ethers, hexane, isocyanates, MEK, methanol, MIBK, phenol, styrene, TCE, toluene, xylene, and zinc, lead, or chromium compounds found in paints, adhesives, primers, and thinners.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 4.1.1-4.1.4; 45CSR13, R13-1797A, A.1-A.3.; 45CSR§30-5.1.c.
2. Visible Emissions – R30-05700011-2019: 3.1.10., 3.1.11; 45CSR§7-3.1. – 7-8.2.; 45CSR13, R13-1797A, B.6., B.7.
3. Aerospace NESHAP – R30-05700011-2019: 3.1.9.; 45CSR34, 40CFR63, Subpart GG;

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.1. - 3.2.4., 3.4.1.-3.4.7., 3.5., 4.2.1; 4.4.1.-4.4.4. 4.5. 45CSR34, 40CFR63, Subpart GG; 45CSR30-5.1.c.; 45CSR13, R13-1797A, B.1., B.2., B.5.;
2. Testing - R30-05700011-2019: 3.3., 4.3.1.; 45CSR30-5.1.c.; 45CSR13, R13-1797A, B.2., B.8., B.9.;
3. Maintenance – R30-05700011-2019: 3.4.7.; 45CSR30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Tafco Drying Ovens – Javelin Bond Room**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-5E, B-7E, B-8E	Tafco Drying Ovens (B-11S, 25S, and 26S) Javelin Bond Room – Bldg 368	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
Tafco Electric Oven (Javelin Bond Room-Oven C) (ID# B-11S) - used to cure adhesives and as a drying oven for components. Vents to the atmosphere through vent ID# B-5E

Tafco Large Electric Curing Oven (Javelin Bond Room, Walk-Through Oven A) (ID# B-25S) - used to heat cure composite wound components. Vents to atmosphere through vent ID# B-7E.

--Tafco Electric Oven (Javelin Bond Room, Oven B) (ID# B-26S) - used to cure adhesives and as drying oven. Vents to the atmosphere through vent ID# B-8E.

Manufacturer:	**Model number:**	**Serial number:**
Tafco	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1994	1995	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components and curing non-HAP, non-VOC resin systems. Products cured are not regulated pollutants and there are minimal emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Grieve Drying Oven, Penn Drying Oven, Lab Exhaust Hood**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-7E	Drying Ovens (B-14S - 16S) and Exhaust Hood – Bldg 368	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
Grieve Electric Drying Oven (ID# B-14S) - used to set adhesive and keep components dry. Vents to atmosphere through vent ID# B-7E.

--Penn Electric Drying Oven (ID# B-15S) - used to store resin. Vents to atmosphere through vent ID# B-7E.

--Laboratory Exhaust Hood (ID# B-16S) - used for mixing resin for winding machine use. Vents to atmosphere through vent ID# B-7E.

Manufacturer:	**Model number:**	**Serial number:**
Grieve/Penn/Labconco	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1995	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components and curing non-HAP, non-VOC adhesive systems. Products weighed out are not regulated pollutants and there are minimal emissions.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Gas Curing Ovens, Large and Small Autoclaves (all propane fired)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-9E – B-14E, B-17E	Gas Curing Ovens & Autoclaves (B-27S - 32S, B-48S) – Bldg 368	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)
Gas Curing Ovens (4) (ID# B-27S, B-28S, B-29S, & B-30S) – ovens 3,4,5, and 6 are used to cure composite wound cases. Vent to atmosphere through vent ID# B-9E, B-10E, B-11E, & B-12E.

Large Autoclave (ID# B-31S) - used to cure composite wound cases. Cure may be conducted under pressure. Vents to atmosphere through vent ID# B-13E.

--Small Autoclave (ID# B-32S) - used to cure composite wound cases. Cure may be conducted under pressure. Vents to atmosphere through vent ID# B-14E.

Autoclave (ID# B-48S) - used to cure composite components manufactured using the fiber placement machines. Vents to atmosphere through vent ID# B-17E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1993 / 1997 (B-48S only)	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 0.8 Mkw / 600 F / 300 F / Variable	**Type and Btu/hr rating of burners:** Unknown

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
All ovens listed use LPG. A maximum of 300,000 gallons for the composites areas ovens was used to determine PTE for the group.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Liquified Propane Gas	0.16 lbs / 100 cf	Unknown	Unknown

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		0.465
Nitrogen Oxides (NO_X)		1.86
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		0.066
Sulfur Dioxide (SO_2)		0.0135
Volatile Organic Compounds (VOC)		0.078
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components and curing non-HAP, non-VOC resin systems. There are negligible emissions associated with these units. Emissions provided in the above table are for combustion products of the propane used to fire the units. A maximum of 300,000 gallons of propane per year for the total group of ovens was used to determine PTE.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Lathes, Vacuum system, Milling Machines, and Grinder/Sander**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-16E, B-19E	Lathes, Vacuum & Mills (see in description below)	B-5C, B-6C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Installed 1996
Lathes (3) (ID# B-37S, B-38S, & B-39S) – Meuser, LeBlond, and LeBlond/Makino lathes used for machining composite components. Vent to atmosphere through vacuum system (vent ID# B-16E).

--Vacuum System (ID# B-40S) - used to collect dust and material from lathes B-37S through B-39S. Two cycle system with cyclone for large pieces and dust collector following. Vents to the atmosphere through vent ID# B-16E.

--Lathes (2) (ID# B-41S & B-42S) – Mori Seiki and Dainichi F-35M lathes used for machining composite components. Units have self contained collection systems. Vent to atmosphere through Torit DownFlo particle collection system, vent ID# B-19E.

Installed 2000
Masco Gantry Mill (ID# B-53S) – used for machining composite components. Vents to atmosphere through Torit DownFlo particle collection system, vent ID# B-21E.

Bridgeport Milling Machine (ID# B-55S) – used for machining composite components. Vents to atmosphere through vacuum collection system, vent ID# B-21E.

Small Table Grinders (2) (ID# B-60S & B-61S) – used to sand composite parts. Vents to atmosphere through vacuum collection system, vent ID# B-16E.

Small Table Sander (ID# B-62S) – used to sand composite parts. Vents to atmosphere through vacuum collection system, vent ID# B-16E.

Manufacturer:	**Model number:**	**Serial number:**
See above descriptions	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1996 / 2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		0.025
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on engineering estimates.
Maximum weight machined x 5% dust generation
100,000 lbs of parts x 5% = 5,000 lbs of dust
Use 99% efficient cyclone dust collectors = 5,000 x 0.01 = 50 lbs PM emitted

100,000 lbs of parts per year is an estimate based on maximum production levels in composites area. 5% dust generation is an overly conservative estimate of dust generated during machining.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10; 45CSR§7-5.1 & 7-5.2

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.1. 3.4.4., 3.4.7., 3.5.;45CSR§7-3.1.; 45CSR30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Electric Ovens**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-20E, B-22E	Electric Ovens – B-44S, B-56S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Grieve-Hendry Small Electric Oven (ID# B-44S) - used for drying moisture from E-3 and other parts after water cleaning. Vents to atmosphere through vent ID# B-20E.

Young & Bertke Electric Oven (ID# B-56S) – used to heat expand composite parts prior to machining. Vents to atmosphere through vent ID# B-22E.

Manufacturer:	**Model number:**	**Serial number:**
See above description	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1997 / 2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used to heat treat or dry moisture from cured composite parts. No emissions are expected from these units.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Electric Oven – Bldg 167**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-23E	Electric Oven – B-65S (Bldg 167)	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Grieve Electric Oven (ID# B-65S) – used for post-curing urethane or silicone molds. Vents to atmosphere through vent ID# B-23E.

Manufacturer:	**Model number:**	**Serial number:**
Grieve	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Oven is used to post cure mold parts. No emissions are expected from the unit.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **8 Ply Laminator – 368 Annex**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-24E	8 Ply Laminator B-68S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

8-Ply Laminator (Room 1) (ID# B-68S) - used to laminate four 2 ply pieces together into an 8 ply sheet. Vents heat to atmosphere through vent ID# B-24E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1999	1999	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Laminator is used to heat fuse thermoplastic sheets of material together to form thicker pieces. There are no VOCs in the thermoplastic. The only thing vented from the process is heat. No emissions are expected from the unit.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Minster Robotic Presses – Bldg 368 Annex**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-25E	Minster Presses – B-70S, 71S, 72S	B-8C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Minster Robotic Presses (3) (Room 2) (ID# B-70S, B-71S, & ID# B-72S) - used to stamp specific shapes from thermoplastic composite laminate sheets. Vent to atmosphere through vent ID# B-25E.

Manufacturer:	**Model number:**	**Serial number:**
Minste	Unknown	P2-200-29730, -31, -32
Construction date:	**Installation date:**	**Modification date(s):**
1999	1999	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		0.025
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on engineering estimates.
Maximum weight parts cut x 5% dust generation
100,000 lbs of parts x 5% = 5,000 lbs of dust
Use 99% efficient cyclone dust collectors = 5,000 x 0.01 = 50 lbs PM emitted

100,000 lbs of parts per year is an estimate based on maximum production levels in composites area. 5% dust generation is an overly conservative estimate of dust generated during cutting.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10.; 45CSR§7-5.1 & 7-5.2

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.1. 3.4.4., 3.4.7., 3.5.; 45CSR§7-3.1.; 45CSR30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **368 Annex Ovens (Gruenberg, Grieve, Steelman)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-28E, 29E, 30E	Electric Ovens – B-96S, 97S, 98S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Gruenberg Electric Oven (Room 8) (ID# B-96S) – used to heat nylon to be molded onto projectile assemblies. Vents to atmosphere through vent ID# B-28E.

--Grieve Walk-In Electric Oven (Room 8) (ID# B-97S) – used to dry parts prior to use and cure adhesives and sealants applied to parts. Vents to atmosphere through vent ID# B-29E.

--Steelman Walk-In Electric Oven (Room 9) (ID# B-98S) – used to dry coated assemblies. Vents to atmosphere through vent ID# B-30E.

Manufacturer:	**Model number:**	**Serial number:**
See above description	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1999	1999	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

First 2 ovens are used to dry moisture parts or cure silicones (no VOCs). Negligible emissions are expected from these units. The Steelman unit is used to dry Humiseal coated units. All emissions from Humiseal coating process are accounted for from the spray operations. (There has been no calculated breakdown of spray losses vs. oven losses.)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description TBI Booth-368ANN

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-31E	TBI Booth-368ANN B-99S	B-12C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

TBI Booth (Room 9) (ID# B-99S) – used to mix and brush apply adhesive to projectile assemblies. Vents to atmosphere through vent ID# B-31E.

Manufacturer:	**Model number:**	**Serial number:**
TBI	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1999	1999	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,080 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	2	1.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	2	1.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description CTA Robotic Spray Booth-368ANN

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-32E	CTA Booth-368ANN B-100S	B-13C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

CTA Robotic Spray Booth (Room 9) (ID# B-100S) – used to spray apply Humiseal sealant to sabots. Vents to atmosphere through vent ID# B-32E.

Manufacturer:	**Model number:**	**Serial number:**
CTA	Unknown	25852
Construction date:	**Installation date:**	**Modification date(s):**
2000	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,080 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	2	1.9
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	2	1.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10; 45CSR§7-3.1. – 7-8.2.; 45CSR§30-5.1.c

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping - R30-05700011-2019; 3.2.2., 3.4.4., 3.4.7., 3.5.; 45CSR§30-5.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description Sabot Cleaning Sprayer & Dryer-368ANN

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
B-33E	Sabot Cleaning Sprayer & Dryer-368ANN B-101S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Sabot Cleaning Sprayer & Dryer (Room 9) (ID# B-101S) – used to water clean coated sabots. Vents to atmosphere through vent ID# B-33E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2000	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

System uses water to clean parts. Only emissions from system would be water vapor.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Apex Broach Machine – Bldg 167**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-1E	A-1S	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Apex Broach Machine (ID# A-1S) - used to cut grooves into the interior of metal chambers providing for fragmentation. Vents to atmosphere through vent ID# A-lE.

Manufacturer:	**Model number:**	**Serial number:**
Apex	50T-90S	MD-4186
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,080 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are negligible. Broaching is completed wet and turnings are large.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Vacuum pumps for EB welders – Bldg 438**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-5E	Vacuum Pumps (A-51S, A-52S) Bldg 438	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Vacuum Pumps for EB Welders (2) (ID# A-51S & A-52S) - used to pull vacuum on the welding machines. Vent to atmosphere through vent ID# A-5E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		0.0125
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Manganese		0.008
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions for welding operations based on escalated historical numbers (5 times 2001 rates).

Other HAPs in welding electrodes include lead, chromium, cobalt, and nickel compounds. Emissions of these constituents were all negligible (<0.05 pounds / year).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Hand Grinding/Buffing Station – Bldg 438**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-2E, A-6E	Hand Grinding/Buffing Station (A-54S)	A-1C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Hand Grinding/Buffing Station (ID# A-54S) - used to grind or buff metal parts using small, hand-held grinding or buffing wheels. Vents to atmosphere through vent ID# A-2E (filtered) or vent ID# A-6E (louver vent).

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.0005	0.0011
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on engineering estimates.
Maximum weight of parts per hour = 100 lbs
Maximum loss of part through dusting = 0.5 lbs
Use 99.9% efficient cyclone dust collectors = 0.5 x 0.001 = 0.0005 lbs PM emitted per hour

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10; 45CSR§7-5.1 & 7-5.2.; 45CSR§30-5.1.c

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.3., 3.4.4., 3.4.7., 3.5.; 45CSR§7-3.1.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Gas Curing Ovens, Large and Small Autoclaves (all propane fired)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-8E, A-9E	Propane Tempering Ovens (A-62S, A-63S) – Bldg 438	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Propane Fired Tempering Oven (ID# A-62S) - used to temper metal components. Vents to atmosphere through vent ID# A-8E.

--Propane Fired Normalizing Oven (ID# A-63S) - used to temper metal components. Vents to atmosphere through vent ID# A-9E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	Variable	4,380 hrs/yr

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 0.8 Mkw / 660 F / 300 F / Variable	**Type and Btu/hr rating of burners:** Unknown

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
All ovens listed use LPG. A maximum of 234,000 gallons for the two ovens was used to determine PTE for the ovens.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Liquified Propane Gas	0.16 lbs / 100 cf	Unknown	Unknown

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.08	0.363
Nitrogen Oxides (NO_X)	0.33	1.45
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.012	0.052
Sulfur Dioxide (SO_2)	0.002	0.0105
Volatile Organic Compounds (VOC)	0.014	0.061

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for tempering metal parts. There are no emissions associated with these units other than propane combustion emissions. Emissions provided in the above table are for combustion products of the propane used to fire the units. A maximum of 234,000 gallons of propane per year for both ovens combined was used to determine PTE.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Magnetic Particle Machine - Inspection**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-10E	Mag Particle Machine – A-68S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Magnaflux Magnetic Particle Machine (ID# A-68S) – used to magnetize steel components for inspection using a mineral oil based carrier agent. Components are demagnetized prior to processing. Vents to atmosphere through vent ID A-10E.

Manufacturer:	**Model number:**	**Serial number:**
Magnaflux	Unknown	201235
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

No emissions are expected from this unit.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Work Table with Exhaust Hood (Inspection Area)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-12E	Exhaust Hood – A-70S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Work Table with Exhaust Hood (ID# A-70S) – used to remove fumes during dye penetrant inspection operations. Vents to atmosphere through vent ID# A-12E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2000	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,160 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.25	0.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential to emit based on maximum amount of dye penetrant materials to be used in a year (~1,000 pounds). Product ingredients include mineral oils, naphtha (different grades), Isopropanol, and acetone. Use over conservative estimate of 100% loss.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **438 Welding Area Ovens (Wisconsin (2), Young & Bertke)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-14E	Electric Ovens – A-73S, 74S, 75S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Weld Shop Area (Room 121)

--Wisconsin Electric Through-Wall Oven (ID# A-73S) – used for tempering steel prior to welding operations. Vents to atmosphere through vent ID# A-14E.

--Wisconsin Electric Oven (ID# A-74S) – used for tempering steel prior to welding. Vents to atmosphere through vent ID# A-14E.

--Young & Bertke Electric Oven (ID# A-75S) – used for tempering steel prior to welding. Vents to atmosphere through vent ID# A-14E.

Manufacturer:	**Model number:**	**Serial number:**
See above descriptions	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are electric powered and are used only to heat temper metal parts prior to welding. No emissions are expected from these ovens.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **TIG Welding Machines**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
A-15E	TIG Welders – A-77S – A-80S	A-6C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

TIG Welding Machines (4) (ID# A-77S, A78S, A-79S, & A-80S) – used to weld metal components and chambers. Vent to atmosphere through vent ID# A-15E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,160 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		0.0125
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Manganese		0.008
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions for welding operations based on escalated historical numbers (5 times 2001 rates).

Other HAPs in welding electrodes include lead, chromium, cobalt, and nickel compounds. Emissions of these constituents were all negligible (<0.05 pounds / year).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Paint Spray Booths 1 & 2 – Bldg 421**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-1E	Paint Spray Booths (D-1S, D-2S) Bldg 421	D-1C, D-2C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Paint Spray Booth #1 (ID# D-1S) - used to apply either Chemlok materials to the interior of the nozzles or paint products to the exterior of them. Vents to atmosphere through vent ID# D-1E.

--Paint Spray Booth #2 (ID# D-2S) - used to apply either Chemlok materials to the interior of the nozzles or paint products to the exterior of them. Vents to atmosphere through vent ID# D-1E.

Manufacturer:	**Model number:**	**Serial number:**
Binks	83-2448	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,080 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.5	0.1772
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	5.37	5.85
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	2.09	2.864
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions for paint booths are based on limits provided in R13-2037A.

HAPs may include ethyl benzene, formaldehyde, glycol ethers, hexane, isocyanates, MEK, methanol, MIBK, phenol, styrene, toluene, xylene, and zinc, lead, or chromium compounds found in paints, adhesives, primers, and thinners.
TCE based adhesive has been removed from use on all programs.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 5.1.1.-5.1.4; 45CSR13, R13-2037A, A.3., A.4., B-3.; 45CSR§30-12.7.
2. Visible Emissions – R30-05700011-2019: 3.1.10; 45CSR§7-3.1. – 7-8.2; 45CSR13, R13-2037A, B.5., B.6.
3. Aerospace NESHAP – R30-05700011-2019: 3.1.9.; 45CSR34, 40CFR63, Subpart GG; 45CSR§30-5.1.c.; 45CSR13, R13-2037A, B.7.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.1.-3.2.4., 3.4.1.-3.4.7., 3.5., 5.2.1; 5.4.1..-5.4.4.; 45CSR13, R13-2037A, B.1., B.7.; 45CSR30-5.1.c.; 45CSR34, 40CFR63, Subpart GG; 45CSR 30-5.1.c.
2. Testing - R30-05700011-2019: 3.1.11., 3.3.1.-3.3.4., 5.3.1.; 45CSR13, R13-2037A, B.9.; 45CSR30-5.1.c.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Laboratory Exhaust Hood – Bldg 421**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-2E	D-3S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Lab Exhaust Hoods (1) (ID# D-3S) - used for mixing small quantities of adhesives and coatings. Vent to atmosphere through vent ID# D-2E.

Manufacturer:	**Model number:**	**Serial number:**
LabConco	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,080 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	1	0.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	1	0.1
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

HAPs may include ethyl benzene, formaldehyde, glycol ethers, hexane, isocyanates, MEK, methanol, MIBK, phenol, styrene, toluene, xylene, and zinc, lead, or chromium compounds found in paints, adhesives, primers, and thinners.
TCE based adhesive has been removed from use on all programs.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Blu-Surf Propane-Fired Curing Ovens-421 (3 units)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-3E – D-5E	Gas Curing Ovens (D-6S - 8S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Blu-Surf Propane-Fired Curing Ovens (3) (ID# D-6S, D-7S, D-8S, & D-9S) - used to cure rubber materials or cure adhesives on larger bonded parts. Vent to atmosphere through vent ID# D-3E, D-4E, D-5E, & D-6E.

One oven was not being utilized and was removed from the building and placed in storage.

Manufacturer:	**Model number:**	**Serial number:**
Blu-Surf	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
MM/DD/	MM/DD/	MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/hr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: Unknown	**Type and Btu/hr rating of burners:** Unknown

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
The 3 ovens listed use LPG. A maximum of 30 gallons/hr total for the units was used to determine PTE for the group.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Liquified Propane Gas	0.16 lbs / 100 cf	Unknown	Unknown

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		0.203
Nitrogen Oxides (NO_X)		0.812
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		0.029
Sulfur Dioxide (SO_2)		0.006
Volatile Organic Compounds (VOC)		0.034
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components and curing rubber and adhesive systems. There are negligible emissions associated with these units. Emissions provided in the above table are for combustion products of the propane used to fire the units. A maximum of 131,000 gallons of propane per year (~30 gal/hr) for the total group of ovens was used to determine PTE.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Despatch Electric Curing Oven-421**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-7E	Despatch Electric Curing Oven (D-10S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Despatch Electric Curing Oven (ID# D-10S) - used to cure adhesives on small bonded parts. Vents to atmosphere through vent ID# D-7E.

Manufacturer:	**Model number:**	**Serial number:**
Despatch	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components and curing adhesive systems on small parts. The emissions associated with this unit are negligible.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Despatch Electric Curing Oven-421**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-20E	Grieve Electric Curing Oven (D-49S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Grieve Electric Oven (ID# D-49S) – used for curing phenolic resin for blast tubes. Vents to atmosphere through vent ID#D-20E. Moved from 167 to 421.

Manufacturer:	**Model number:**	**Serial number:**
Grieve	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1999	1999	Moved to 421 in 2007

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Oven is used for curing phenolic parts. The emissions associated with this unit are negligible.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

here are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Rubber Mixing Machine & Roll Mill**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-8E	Rubber Mixing Machine & Roll Mill (D-23S, D-24S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Rubber Mixing Machine (ID# D-23S) - used to mix rubber insulation in batches. A vacuum system connects to the system which vents to the atmosphere through ID# D-8E.

--Roll mill (ID# D-24S) - used to mill and mix rubber from the mixing machine. A vacuum system connects to the system which vents to the atmosphere through ID# D-8E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
1996	1996	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Mixer is 2.5 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Dust collector (D-4C) was installed originally due to unknowns in the mixing process. Upon startup, it was determined there are no particulate losses from the unit (very little dusting during mixing). Therefore, the dust collector is not in use.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Primer Station-421-CBA**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-9E	Primer Station (D-29S) Bldg 421	D-5C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Primer Station (ID# D-29S) – exhaust booth where an adhesive mixture is spray applied to the end of each base case to prepare for the addition of a molded rubber piece. Vents through a dry filter (D-5C) to atmosphere through vent D-9E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2000	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,920 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.004	0.005
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	1.64	2.39
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	1.31	1.916
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

HAPs include methanol and toluene found in primer and thinner.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10; 45CSR§7-3.1. – 7-8.2.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping - R30-05700011-2019; 3.2.2., 3.4.4., 3.5.; 45CSR§30-5.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Desma Rubber Molding Machine**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-10E	Desma Rubber Molding Machine (D-31S) Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Desma Rubber Molding Machine (ID# D-31S) – open station where molds are attached to base case units and injection filled with rubber compound. Vents to atmosphere through vent ID# D-10E.

This unit originally was used with a spray mold release compound. The process was updated in 2003 to eliminate the use of the mold release. Tooling was sent off-site for a non-stick coating process, eliminating the need for mold release.

Manufacturer:	**Model number:**	**Serial number:**
Desma	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,920 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions were eliminated by the use of new tooling that prevents nylon from sticking to the molds.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Water Jet Trimmers (2)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-11E, D-12E	Water Jet Trimmers (D-32S, D-33S) Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Water Jet Trimmers (2) (ID# D-32S & D-33S) – cutting system which uses a pressurized water jet to trim rubber molding to specification. Water vapor emissions only. Vent to atmosphere through vent ID# D-11E & D-12E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,920 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions from units consist of water vapor only.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Grieve Electric Ovens (2) - 421**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-13E, D-14E	Grieve Electric Ovens (D-35S, D-36S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Grieve Ovens (2) (ID# D-35S & D-36S) – electric oven used to preheat the sabot units before installing the insert adapter. Vent to atmosphere through vent ID# D-13E & D-14E.

Manufacturer:	**Model number:**	**Serial number:**
Grieve	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for drying components. There are no known emissions associated with this unit.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Arburgh Injection Molding Machine**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-15E	Arburgh Injection Molding Machine (D-37S) – Bldg 421	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Arburgh Injection Molding Machine (ID# D-37S) – injection molding system which is used to mold nylon around the exterior end of the sabot unit. Vents to atmosphere through vent ID# D-15E.

Manufacturer:	**Model number:**	**Serial number:**
Arburgh	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2000	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Due to the temperature of the nylon being processed, emissions associated with this unit would be negligible.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Sabot/Obturator Cleaning Hood – Bldg 167**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-16E	D-41S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Sabot/Obturator Cleaning Hood (ID# D-41S) – exhaust booth where the aft end of the sabots and ID portion of the obturators are degreased using Acetone followed by Isopropanol alcohol to prepare the components for adhesive primer application. Vents to atmosphere through vent ID# D-16E.

Manufacturer:	**Model number:**	**Serial number:**
LabConco	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2009	2009	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	1,560 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.2	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Sabot/Obturator Primer Station-167**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-17E	Primer Station (D-42S) Bldg 167	D-7C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Sabot /Obturator priming booth (ID# D-42S) – spray booth where an adhesive primer is spray applied to the aft end of the sabot assembly prior to rubber potting process. Vents through a dry filter (D-7C) through vent ID# D-17E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2003	2003	2008

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	2,920 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)	0.004	0.005
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.16	0.17

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on historical data, maximum production rates, and permit triggers.

Process uses no HAPs.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Visible Emissions – R30-05700011-2019: 3.1.10.; 45CSR§7-3.1. – 7-8.2; 45CSR13.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring & Recordkeeping – R30-05700011-2019: 3.2.1.-3.2.4., 3.4.1.-3.4.7., 3.5., 5.2.1; 5.4.1..-5.4.4.; 45CSR13, R13-2037A, B.1., B.7.; 45CSR30-5.1.c.; 45CSR34, 40CFR63, Subpart GG; 45CSR 30-5.1.c

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **J RTV Curing Oven - 167**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
D-19E	J RTV Curing Oven (D-46S) – Bldg 167	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

J RTV Curing Oven (ID# D-46S) – Batch electric oven used to cure silicone potting compound after filling. Vents to atmosphere through vent ID# D-19E.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2003	2003	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	4,380 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Ovens are used for curing silicone. There are no emissions of criteria pollutants from this unit.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **502 GAU-8 Coating Line (M788)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
V-1E, V-2E, V-3E	V-1S	V-1C, V-2C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

502 GAU 8 Primer Coating Line, Topcoat Coating Line and Oven – Used to prime, topcoat, and dry coatings on medium caliber ammunition shells (M788). The three units are co-located in one equipment housing with three exhaust points.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
500 projectiles	1.56 million projectiles	3,120 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	0.1	0.08
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	2.2	3.38
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	1.34	2.08
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-2579A.

HAPs may include antimony compounds, chromium compounds, lead compounds, glycol ethers, dioctyl phthalate, ethyl benzene, formaldehyde, hexane, methanol, MEK, MIBK, phenol, toluene, and xylene.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 3.1.10., 6.1.1., 6.1.2., 6.1.8.-6.1.11; 45CSR13, R13-2579A, A.1., A.2., A.8.-A.11., B.2.; 45CSR§7-3.1.;
2. Production Limits - R30-05700011-2019: 6.1.3.; 45CSR13, R13-2579A, A.3.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.2., 3.4.1., 3.4.2., 3.5., 6.2.1., 6.4.1., 6.4.2., 6.5.1.; 45CSR13, R13-2579A, B.2., B.3., B.4., B.5.; 45CSR§7-3.1.; 45CSR30-5.1.c.
2. Testing - R30-05700011-2019: 3.1.11., 3.3.1., 6.3.1.; 45CSR13, R13-2579A, B.4., B.6.;

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **104 GAU-8 Coating Line (PGU-15)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
V-4E	V-2S	V-3C, V-4C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

104 GAU-8 Coating Line – Used to prime, topcoat, and dry coatings on medium caliber ammunition shells (PGU-15). The 2 spray units are co-located in one equipment housing with a single exhaust point.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
750 projectiles	4.68 million projectiles	6,240 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	0.1	0.23
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	3.3	10.15
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	2.01	6.25
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-2579A.

HAPs may include antimony compounds, chromium compounds, lead compounds, glycol ethers, dioctyl phthalate, ethyl benzene, formaldehyde, hexane, methanol, MEK, MIBK, phenol, toluene, and xylene.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 3.1.10., 6.1.1., 6.1.2., 6.1.8.-6.1.11; 45CSR13, R13-2579A, A.1., A.2., A.8.-A.11., B.2. ; 45CSR§7-3.1.;
2. Production Limits - R30-05700011-2019: 6.1.4.; 45CSR13, R13-2579A, A.4.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2014: 3.2.2., 3.4.1., 3.4.2., 3.5., 6.2.1., 6.4.1., 6.4.2., 6.5.1.; 45CSR13, R13-2579A, B.2., B.3., B.4., B.5.; 45CSR§7-3.1.; 45CSR30-5.1.c.
2. Testing - R30-05700011-3014: 3.1.11., 3.3.1., 6.3.1.; 45CSR13, R13-2579A, B.4., B.6.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **104 Rework Coating Line**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
V-5E	V-3S	V-5C

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

104 GAU-8 Rework Coating Line – Used for touchup of painted units.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
100 projectiles	624,000 projectiles	6,240 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	0.1	0.24
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	1.3	3.79
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	0.77	2.38
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-2579A.

HAPs may include antimony compounds, chromium compounds, lead compounds, glycol ethers, dioctyl phthalate, ethyl benzene, formaldehyde, hexane, methanol, MEK, MIBK, phenol, toluene, and xylene.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 3.1.10., 6.1.1., 6.1.2., 6.1.8.-6.1.11; 45CSR13, R13-2579A, A.1., A.2., A.8.-A.11., B.2. ; 45CSR§7-3.1.;
2. Production Limits - R30-05700011-2019: 6.1.5.; 45CSR13, R13-2579A, A.5.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.2.2., 3.4.1., 3.4.2., 3.5., 6.2.1., 6.4.1., 6.4.2., 6.5.1.; 45CSR13, R13-2579A, B.2., B.3., B.4., B.5.; 45CSR§7-3.1.; 45CSR30-5.1.c.
2. Testing - R30-05700011-2019: 3.1.11., 3.3.1., 6.3.1.; 45CSR13, R13-2579A, B.4., B.6.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **FMU151/M758 Fuze Line**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
V-8E	Fuze Line V-6S, V-7S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Fuze Line Assembly (FMU151/M758) – Used for the assembly of small fuze components. Processing includes the use of mold releases, solvents, and adhesives.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
325 fuzes	2.028 million fuzes	6,240 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.9	2.51
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	0.24	0.75
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-2579A.

HAPs may include antimony compounds, chromium compounds, lead compounds, glycol ethers, dioctyl phthalate, ethyl benzene, formaldehyde, hexane, methanol, MEK, MIBK, phenol, toluene, and xylene.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 6.1.1., 6.1.2., 6.1.8.-6.1.11; 45CSR13, R13-2579A, A.1., A.2., A.8.-A.11., B.2.
2. Production Limits - R30-05700011-2019: 6.1.6., 6.1.7.; 45CSR13, R13-2579A A.6., A.7.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.4.1., 3.4.2., 3.5., 6.2.1., 6.4.1., 6.4.2., 6.5.1.; 45CSR13, R13-2579A, B.2., B.3., B.4., B.5.; 45CSR30-5.1.c.
2. Testing - R30-05700011-2019: 3.1.11., 3.3.1., 6.3.1.; 45CSR13, R13-2579A, B.4., B.6.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **FMU154/M759 Fuze Line**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
V-9E	Fuze Line V-6S, V-7S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Fuze Line Assembly (FMU154/M759) – Used for the assembly of small fuze components. Processing includes the use of mold releases, solvents, and adhesives.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
Unknown	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
325 fuzes	2.028 million fuzes	6,240 hrs/yr

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.08	2.08
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Various*	0.1	0.28
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions are based on limits provided in R13-2579A.

HAPs may include antimony compounds, chromium compounds, lead compounds, glycol ethers, dioctyl phthalate, ethyl benzene, formaldehyde, hexane, methanol, MEK, MIBK, phenol, toluene, and xylene.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission Limits – R30-05700011-2019: 6.1.1., 6.1.2., 6.1.8.-6.1.11; 45CSR13, R13-2579A, A.1., A.2., A.8.-A.11., B.2.
2. Production Limits - R30-05700011-2019: 6.1.6.; 45CSR13, R13-2579A A.6.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. Monitoring & Recordkeeping – R30-05700011-2019: 3.4.1., 3.4.2., 3.5., 6.2.1., 6.4.1., 6.4.2., 6.5.1.; 45CSR13, R13-2579A, B.2., B.3., B.4., B.5.; 45CSR30-5.1.c.
2. Testing - R30-05700011-2019: 3.1.11., 3.3.1., 6.3.1.; 45CSR13, R13-2579A, B.4., B.6.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description **Autoclaves (Bldg 385)**

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
Wg-1E, Wg-2E	Wg-1S, Wg-2S	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.; for engines, please indicate compression or spark ignition, lean or rich, four or two stroke, non-emergency or emergency, certified or not certified, as applicable)

Autoclaves (Wg-1S, Wg-2S) – Autoclaves remaining in building after Global Hawk program shut down. Would be used to cure resin systems at elevated pressure and temperature. Electric powered. Vent to atmosphere through Wg-1E, and Wg-2E.

THESE UNITS ARE NOT CURRENTLY BEING USED.

Manufacturer:	**Model number:**	**Serial number:**
Unknown	Unknown	Unknown
Construction date:	**Installation date:**	**Modification date(s):**
2004	2004	None

Design Capacity (examples: furnaces - tons/hr, tanks – gallons, boilers – MMBtu/hr, engines - hp):
Variable

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
Variable	Variable	Currently not in use

Fuel Usage Data **(fill out all applicable fields) NA**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
NA		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
NA		

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

No regulated pollutants are expected from curing process.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

There are no underlying applicable requirements associated with this equipment.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

There are no specified monitoring/testing/recordkeeping/ reporting requirements for this equipment.

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

_X___ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
A-12C	A-2E	
Manufacturer:	**Model number:**	**Installation date:**
Unknown	Unknown	1996

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber _X_ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	97.5	97.5

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Single cyclone. Unit runs at ambient pressure and temperature.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Pressure drop is monitored to determine cleaning cycles. Units undergo preventive maintenance annually.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
B-1C, B-2C	B-3E, B-4E (Javelin Paint booths in Bldg 368)	
Manufacturer:	**Model number:**	**Installation date:**
Various	Unknown	1995

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booths have a minimum face velocity of 100 fpm at ambient pressure and temperature.
Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
B-5C, B-6C, B-7C	B-16E, B-19E, B-21E	
Manufacturer:	**Model number:**	**Installation date:**
Torit	Unknown	1996

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	97.5	97.5

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Single compartment filter with 16 Dacron fiber bags using timed pulses of compressed air backflowing through filters to clean. Unit runs at ambient pressure and temperature.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Pressure drop is monitored to determine cleaning cycles. Units undergo preventive maintenance annually and collectors are replaced if needed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
B-12C	B-31E (TBI booth in Bldg 368)	
Manufacturer:	**Model number:**	**Installation date:**
TBI	Unknown	2000

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booth has a minimum face velocity of 100 fpm at ambient pressure and temperature.
Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: B-13C	**List all emission units associated with this control device.** B-32E (CTI spray booth in Bldg 368)	
Manufacturer: CTI	**Model number:** Unknown	**Installation date:** 2000

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booth has a minimum face velocity of 100 fpm at ambient pressure and temperature.
Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
D-1C, D-2C	D-1E (Paint booths in Bldg 421 Bond Room)	
Manufacturer:	**Model number:**	**Installation date:**
Labconco	Unknown	1996

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booths have a minimum face velocity of 100 fpm at ambient pressure and temperature. Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
D-5C	D-9E (CBA Primer booth in Bldg 421)	
Manufacturer:	**Model number:**	**Installation date:**
Labconco	Unknown	2000

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booth has a minimum face velocity of 100 fpm at ambient pressure and temperature.
Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
D-7C	D-17E (Sabot/Obturator Primer booth in Bldg 167)	
Manufacturer:	**Model number:**	**Installation date:**
Labconco	Unknown	2003

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Booth has a minimum face velocity of 100 fpm at ambient pressure and temperature.
Manometers indicate pressure drop to indicate when filters need changed.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Manometers indicate pressure drop to indicate when filters need changed.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:	**List all emission units associated with this control device.**	
V-1C, V-2C, V-3C, V-5C	V-1E, V-2E, V-4E, V-5E (502 GAU 8 Coating Line, 104 Coating Line, & 104 Rework Line)	
Manufacturer:	**Model number:**	**Installation date:**
Unknown	Unknown	2004

Type of Air Pollution Control Device:

_X__ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate matter	90	90

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Booths have a minimum face velocity of 100 fpm at ambient pressure and temperature.
Filters are checked before each run to ensure they are seated correctly and not overloaded.

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Potential pre-control device annual emissions of applicable regulated air pollutants are less than major source levels, and thus are exempt per 40 C.F.R. §64.2(a)(3).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Filters are checked before each run to ensure they are seated correctly and not overloaded.

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at http://www.epa.gov/ttn/emc/cam.html

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): ☐ YES ☒ NO**

a. The PSEU is located at a major source that is required to obtain a Title V permit;

b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is NOT exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
- Stratospheric Ozone Protection Requirements.
- Acid Rain Program Requirements.
- Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
- An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).

c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;

d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND

e. The PSEU is NOT an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit: Not Applicable

☐ RENEWAL APPLICATION. **ALL** PSEUs for which a CAM plan has NOT yet been approved need to be addressed in this CAM plan submittal.

☐ INITIAL APPLICATION (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

☐ SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

** **Rationale for CAM Exemption:** The ATK Missile Subsystems & Components Division/Allegany Ballistics Laboratory manufacturing facility does not own or operate a subject pollutant-specific emissions unit as defined at 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 levels, 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 §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)(i).

3) [a] BACKGROUND DATA AND INFORMATION					
Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.					
PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	[b] EMISSION LIMITATION or STANDARD	[c] MONITORING REQUIREMENT
Not Applicable					
EXAMPLE Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

[a] If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

[b] Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

[c] Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. if more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation: Not Applicable	**4b) Pollutant:**	**4c) [a] Indicator No. 1:**	**4d) [a] Indicator No. 2:**
5a) GENERAL CRITERIA Describe the MONITORING APPROACH used to measure the indicators:			
[b] Establish the appropriate INDICATOR RANGE or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
5b) PERFORMANCE CRITERIA Provide the SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, such as detector location, installation specifications, and minimum acceptable accuracy:			
[c] For new or modified monitoring equipment, provide VERIFICATION PROCEDURES, including manufacturer's recommendations, TO CONFIRM THE OPERATIONAL STATUS of the monitoring:			
Provide QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
[d] Provide the MONITORING FREQUENCY:			
Provide the DATA COLLECTION PROCEDURES that will be used:			
Provide the DATA AVERAGING PERIOD for the purpose of determining whether an excursion or exceedance has occurred:			

[a] Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

[b] Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

[c] The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

[d] Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:	6b) Regulated Air Pollutant:
Not Applicable	

7) **INDICATORS AND THE MONITORING APPROACH**: Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES**: Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how **EACH** indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.

- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.

- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION:

CAM Assessment for NGSC- Alliant Techsystems Operations LLC / Allegany Ballistics Lab

2024 Renewal Application – Title V Operating Permit R30-05700011-2019, Part 2 of 3

Not CAM - already subject to Title V permit continuous compliance determination method as defined in §64.1.

Not CAM - potential pre-control device annual emissions of applicable regulated air pollutants less than major source levels.

Not CAM - not subject to pollutant emission limit or standard.

1.0 Emission Units

Control Devices					
Control Device ID	**Emission Point ID**	**Control Device Description**	**Year Installed / Modified**	**Design Capacity**	**Comments**
B-1C	B-3E	Fabric filter for spray booth	1995	90-95% (PM)	
B-2C	B-4E	Fabric filter for spray booth	1995	90-95% (PM)	
B-5C	B-16E	Cyclone dust collector for lathe vacuum	1996	99.9% (PM)	
B-6C	B-19E	Cyclone dust collector for lathes	1996	99.9% (PM)	
B-7C	B-21E	Cyclone dust collector for gantry mill	2000	99.9% (PM)	
B-8C	B-25E	Cyclone dust collector for Minster presses	1999	99.9% (PM)	
B-9C	B-26E	Fabric filter for DownFlo Exhaust Table	1999	90-95% (PM)	
B-12C	B-31E	Fabric filter for spray booth	1999	90-95% (PM)	
B-13C	B-32E	Fabric filter for spray booth	2000	90-95% (PM)	
A-2E or-6E	A-2E or-6E	Cyclone Dust Collector	1996	Variable	
D-1E	D-1E	Fabric filter for paint booth	1996	90-95% (PM)	
D-1E	D-1E	Fabric filter for paint booth	1996	90-95% (PM)	
D-8E	D-8E	Dust collector for mixing machine and roll mill	1996	99.9% (PM)	
D-9E	D-9E	Fabric filter for primer station	2000	90-95% (PM)	
D-10E	D-10E	Dust collector from nylon band slotter	2000	99.9% (PM)	
D-17E	D-17E	Fabric filter for primer booth	2003	90-95% (PM)	
A-15C	D-18E	Fabric filter for primer booth	2003	90-95% (PM)	
V-1C	V-1E	Fabric Filter	2004	90% (PM)	
V-2C	V-2E	Fabric Filter	2004	90% (PM)	
V-3C	V-4E	Fabric Filter	2004	90% (PM)	
V-4C	V-4E	Fabric Filter	2004	90% (PM)	
V-5C	V-5E	Fabric Filter	2004	90% (PM)	

Facility Information and Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Rocket Motor Manufacture	Rocket motors, metal rocket cases, composite rocket cases	336415	3764
F-22 Composites Manufacturing	Pivot shafts and obturator plates for F-22	336413	3728
Electronic Fuzing and Ammunition	Medium caliber ammunition (not loaded), proximity switches, and multiple fuze products for DoD	332995	3489

NOTE: Part 2 of this permit covers only the case manufacture in composites and metal fabrication areas.

Provide a general description of operations.

Naval Industrial Reserve Ordnance Plant (NIROP)/Allegany Ballistics Laboratory (ABL) is a facility which is operated by Alliant Techsystems Operations LLC (Northrup Grumman Systems Corporation-NGSC) (headquarters in Falls Church, VA) under the NGSC Missile Products Group. The majority of the facility is owned by the U.S. Navy and is operated by NGIS under a facilities use contract (~1530 acres designated as Plant 1). 57 acres is owned and operated by NGSC and is designated as Plant 2. Approximately 500 acres of Plant 1 are developed. Plant 3 is a 41acre area designated as Plant 3 dedicated to production of GMLRS rocket motors. Construction is ongoing on 29 acres designated as Plant 4 to be used as a LAP facility to build all-up rounds. The remaining acreage is currently undeveloped. All property is contiguous with internal roads to reach each separate area.

Operations at the plant include:

- metal fabrication of rocket motor and warhead cases;
- metal fabrication of tank ammunition training rounds;
- manufacture of composite material rocket motor and warhead cases;
- manufacture of composite material aircraft components;
- preparation of cases for addition of explosives;
- mixing, casting, curing, and associated operations with propellants and explosives;
- static firing of rocket motors;
- open burning of waste propellants and explosives;
- development and production of laser firing devices;
- analytical and research & development laboratories;
- explosive loading and packing operations for tank ammunition;
- x-ray testing; and
- maintenance and utility operations.

In addition, to these operations, the site is also home to the Robert C. Byrd Institute for Machining and office space for IBM.

Active Permits/Consent Orders (Part 2 of 3 only)		
Permit or Consent Order Number	**Date of Issuance MM/DD/YYYY**	**List any Permit Determinations that Affect the Permit *(if any)***
R13-1797A	01/30/2002	
R13-2037A	07/26/2001	
R13-2579A	10/17/2005	

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	**Potential Emissions**	**2023 Actual Emissions**
Carbon Monoxide (CO)	81.44	20.63
Nitrogen Oxides (NO_X)	59.51	23.76
Particulate Matter ($PM_{2.5}$)[1]	6.42	4
Particulate Matter uncontrolled (PM_{10})	17.97	7.86
Total Particulate Matter **controlled** or uncontrolled? (TSP)	30.62	7.93
Sulfur Dioxide (SO_2)	29.95	0.22
Volatile Organic Compounds (VOC)	181.25	29.57

$PM_{2.5}$ and PM_{10} are components of TSP.

[2]For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Hazardous Air Pollutants	**Potential Emissions**	**2023 Actual Emissions**
Acetonitrile	0.27	0.008
Benzene	0.37	0.148
Cadmium compounds*	9.9E-04	0
Chloroform	0.096	0.024
Chromium*	1.2E-03	0.006
Chromium compounds (not identified)*	0.136	Included in chromium
Cobalt*	5.8E-05	0
Dioctyl phthalate	0.85	0.018
Ethyl benzene	0.62	0.25
Formaldehyde	0.029	0.0027
Glycol ether compounds	0.06	0.006
Hexane	0.80	0.062

Hydrochloric Acid	6.44	3.646
Lead *	9.8E-04	0.2684
Lead compounds*	1.98	Included in lead
Mercury*	2.0E-04	0
Methanol	1.81	0.10
Methyl isobutyl ketone	3.73	0.47
Methylene chloride	1.995	1.08
Nickel*	1.7E-03	0
Phenol	0.16	0.003
Strontium chromate*	0.0029	Included in chromium
Toluene	30.89	1.556
Trichloroethylene	0.125	0
Xylene	5.29	1.278
Zinc chromate*	4.7E-04	Included in chromium
Other (not specified)	0.1	0.02
Total	**55.76**	**8.96**
* Component of TSP emissions in Plantwide Emission Summary table above		

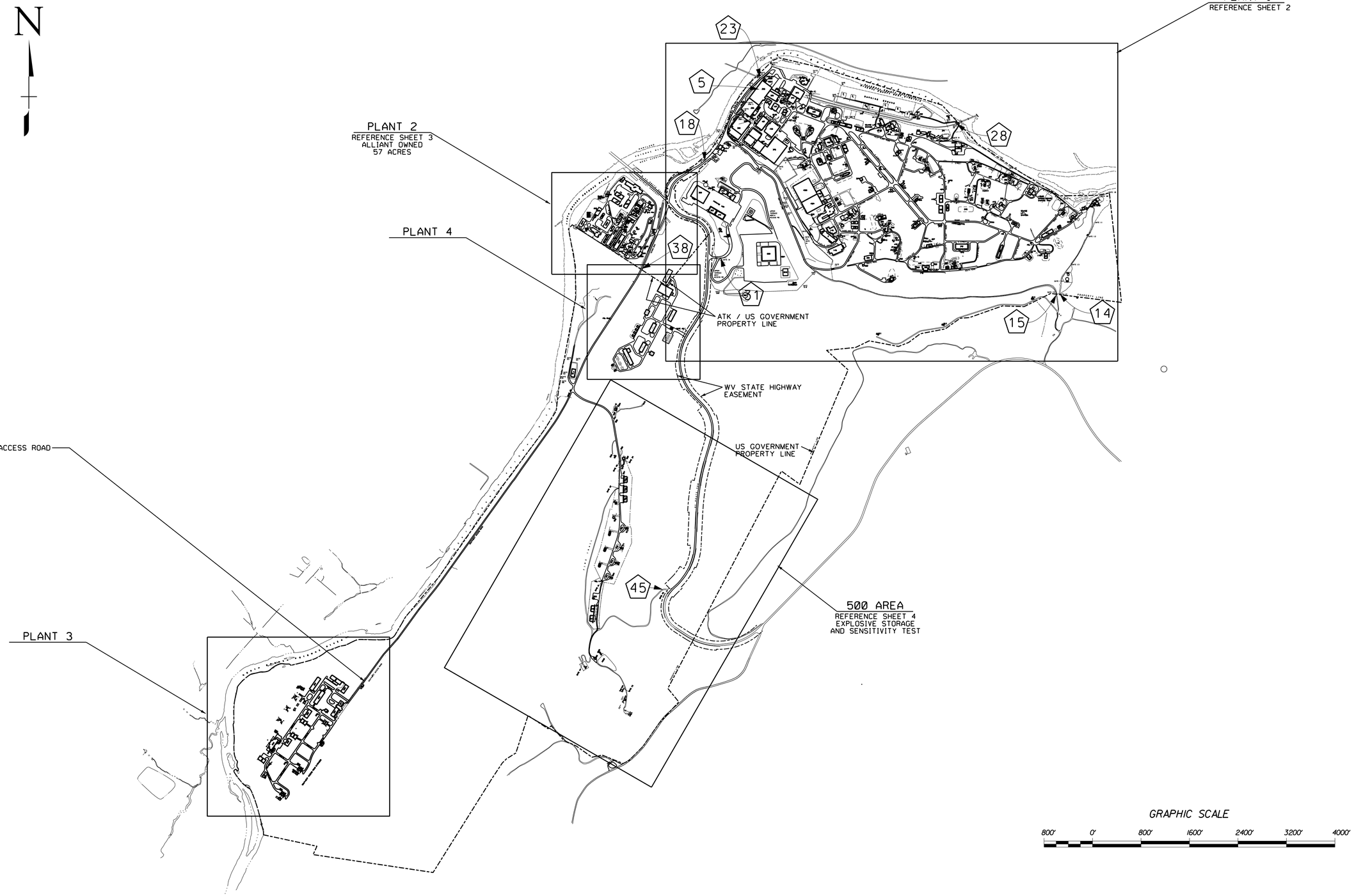
Some of the above HAPs may be counted as PM or VOCs.

Changes to PTE table
Criteria pollutants updated to reflect updates of permit limits from R13-3334B and R13-3186D and addition of R13-3534A and R13-3561.
Updated Actuals to 2023 actuals (based on AEI and CES)
Metal species updated with boiler changes in R13-3186D.

Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☐	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☒	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☐	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☒	14.	Demineralized water tanks and demineralizer vents.
☒	15.	Drop hammers or hydraulic presses for forging or metalworking.
☒	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☒	18.	Emergency road flares.
☒	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
☒	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☒	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☒	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☒	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☒	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☒	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☒	32.	Humidity chambers.
☒	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☒	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☒	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☒	39.	Oxygen scavenging (de-aeration) of water.

Insignificant Activities (Check all that apply)		
☐	40.	Ozone generators.
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☒	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☒	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☒	50.	Space heaters operating by direct heat transfer.
☒	51.	Steam cleaning operations.
☒	52.	Steam leaks.
☒	53.	Steam sterilizers.
☒	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☒	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.



GRAPHIC SCALE

800' 0' 800' 1600' 2400' 3200' 4000'

REVISIONS				
SYM	DESCRIPTION	BY	DATE	CHK
				APPD
				APPD

ALLEGANY BALLISTICS LABORATORY
210 STATE ROUTE 956
ROCKET CENTER, WV 26726

DRAFTER: JK 12/11/2023
CHECKER:
ENGR:
DES SUPV:
AREA SUPV:
SAFETY:

RESERVATION
PLANT LOCATIONS
PLAN

SCALE: 1" = 800'-0"
PROJ. NO. -
BUILDING NO. RSVN
DRAWING PKG
BASE
DRAWING NO.
SIZE: D
T-112-AB-R1

INTERPRET THIS DRAWING IN ACCORDANCE WITH DOD-STD-100

$$time$$ $$dgn$$

PLANT 1
GENERAL MAP
PLAN AND BUILDING LIST

N

NORTH BRANCH POTOMAC RIVER

ALLEGANY COUNTY MARYLAND
MINERAL COUNTY WEST VIRGINIA

BURNING GROUND

PLANT ONE ACCESS ROAD

A STREET

B STREET

C STREET

D STREET

E STREET

E STREET EXTENSION

F STREET

FIRST AVE

SECOND AVE

THIRD AVE

FOURTH AVE

FIFTH STREET

SIXTH STREET

PILOT PLANT ROAD

PILOT PLANT ROAD EXTENSION

G STREET

H STREET

I STREET

RANGE ROAD

PLANT ROAD

RIVER ROAD

BAY ROAD

SOUTH ROAD

RESEARCH LOOP

CIRCLE DRIVE

HOFFMAN LANE

MAIN DRIVE

PARKING LOT

W V ROUTE 956

UPPER TERRACE NORTH ACCESS RD

UPPER TERRACE WEST ACCESS RD

GATE 1 GATE 1A GATE 1B GATE 1C GATE 1D GATE 2 GATE 3 GATE 5 GATE 7 GATE 7A GATE 8 GATE 10 GATE 11 GATE 12 GATE 13 GATE 14 GATE 15 GATE 15A GATE 16 GATE 17 GATE 18 GATE 18A GATE 19 GATE 19A GATE 20 GATE 20A GATE 20B GATE 21 GATE 22 GATE 23 GATE 24 GATE 25 GATE 26 GATE 27 GATE 28 GATE 29 GATE 30 GATE 31 GATE 35 GATE 47 GATE 256-3 GATE 600 GATE 610

SEWAGE LIFT STATION

SEWAGE LIFT STATION

LIQUID CARBON DIOXIDE STORAGE TANK

UGND FUEL TANKS

ABL-1 ABL-2 ABL-3 ABL-4 ABL-5 ABL-6 ABL-7 ABL-8 ABL-10

GRAPHIC SCALE

250′ 0 250′ 500′ 750′ 1000′

1"= 250′-0"

REVISIONS						
SYM	DESCRIPTION	BY	DATE	CHK	APPD	APPD

Orbital ATK
210 STATE ROUTE 956
ROCKET CENTER, WV 26726

DRAFTER: DRB
CHECKER:
ENGR:
DES. SUPV:
AREA SUPV:
SAFETY:

SCALE: 1" = 250.0′
PROJ. NO.
BUILDING NO. | DRAWING PKG
BASE | PLT1
CONTRACTOR DRAWING NO. | SIZE: D
1-112-AB

INTERPRET THIS DRAWING IN ACCORDANCE WITH DOD-STD-100

$$time$$ $$dgn$$

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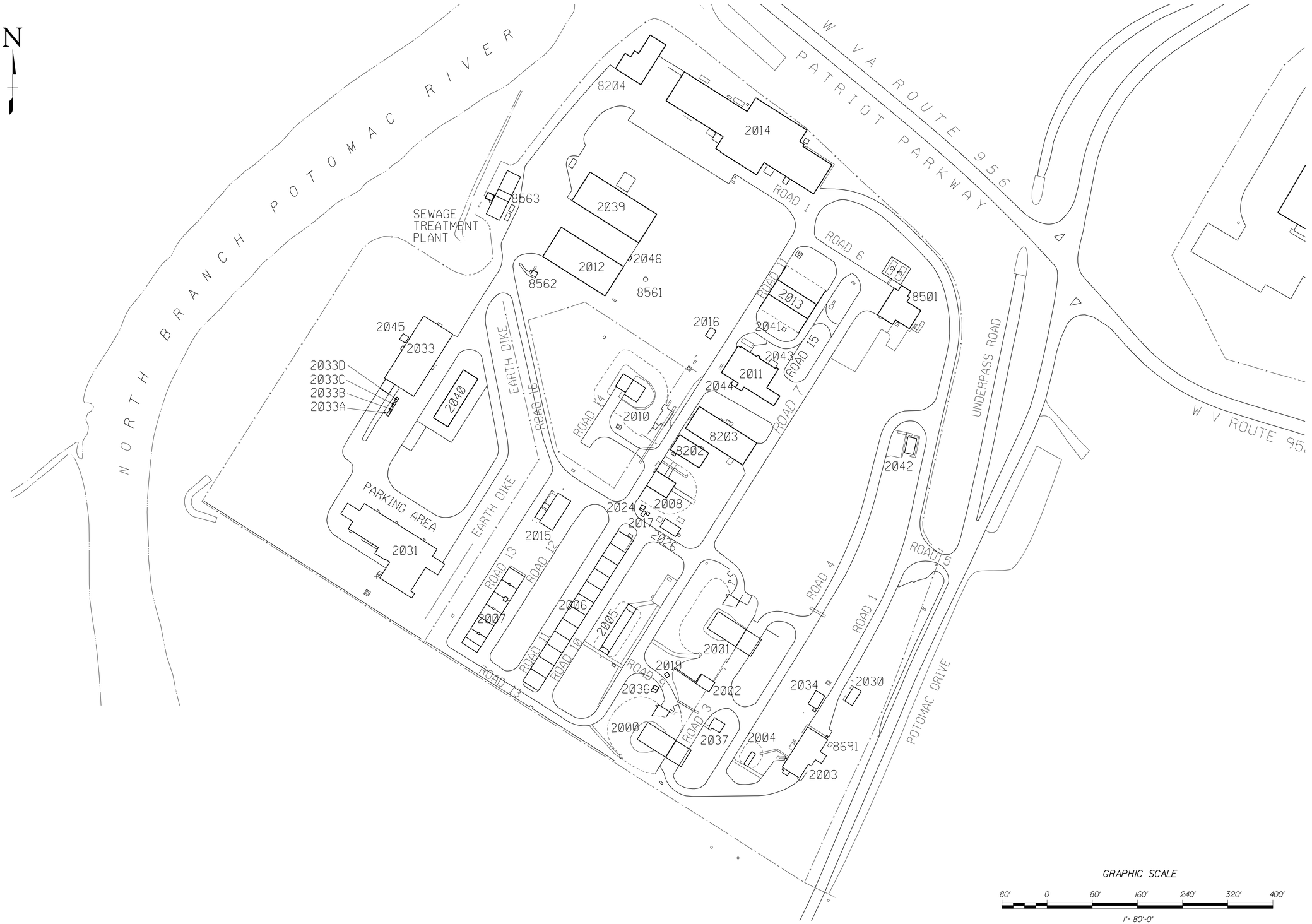

GRAPHIC SCALE

80′ 0 80′ 160′ 240′ 320′ 400′

1"= 80'-0"

REVISIONS					
SYM	DESCRIPTION	BY	DATE	CHK	APPD

Orbital ATK
210 STATE ROUTE 956
ROCKET CENTER, WV 26726

DRAFTER: DRB
CHECKER:
ENGR:
DES SUPV:
AREA SUPV:
SAFETY:

PLANT 2 BUILDINGS AND ROADS GENERAL MAP

SCALE: 1"=80'-0"
PROJ. NO.

BUILDING NO.	DRAWING PKG
BASE	PLT2
CONTRACTOR DRAWING NO.	SIZE: D

2-112-01

INTERPRET THIS DRAWING IN ACCORDANCE WITH DOD-STD-100

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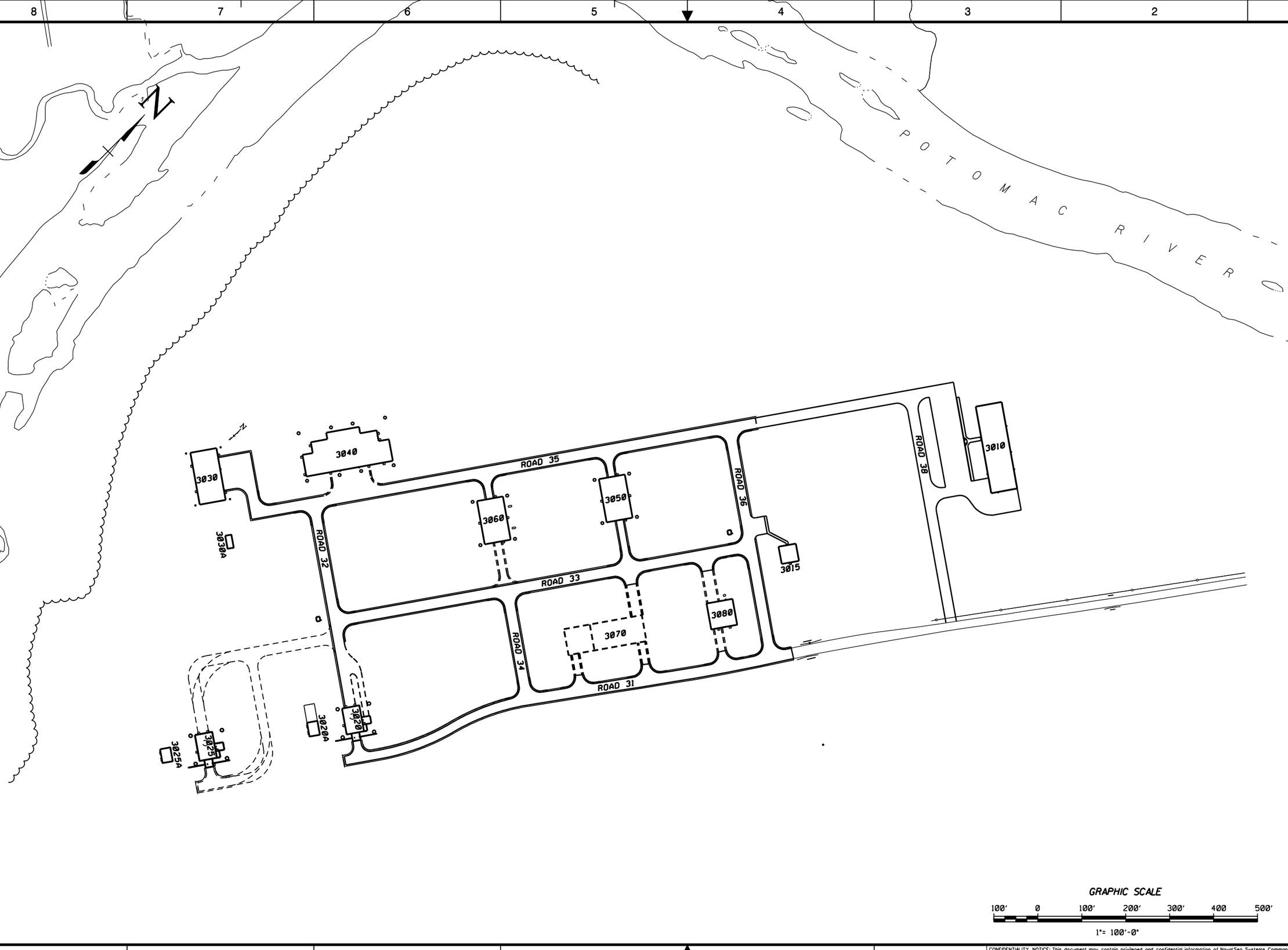


REVISIONS			
SYM	DESCRIPTION	BY	MO/DAY/YR

Orbital ATK
270 STATE ROUTE 956
ROCKET CENTER, WV 26726

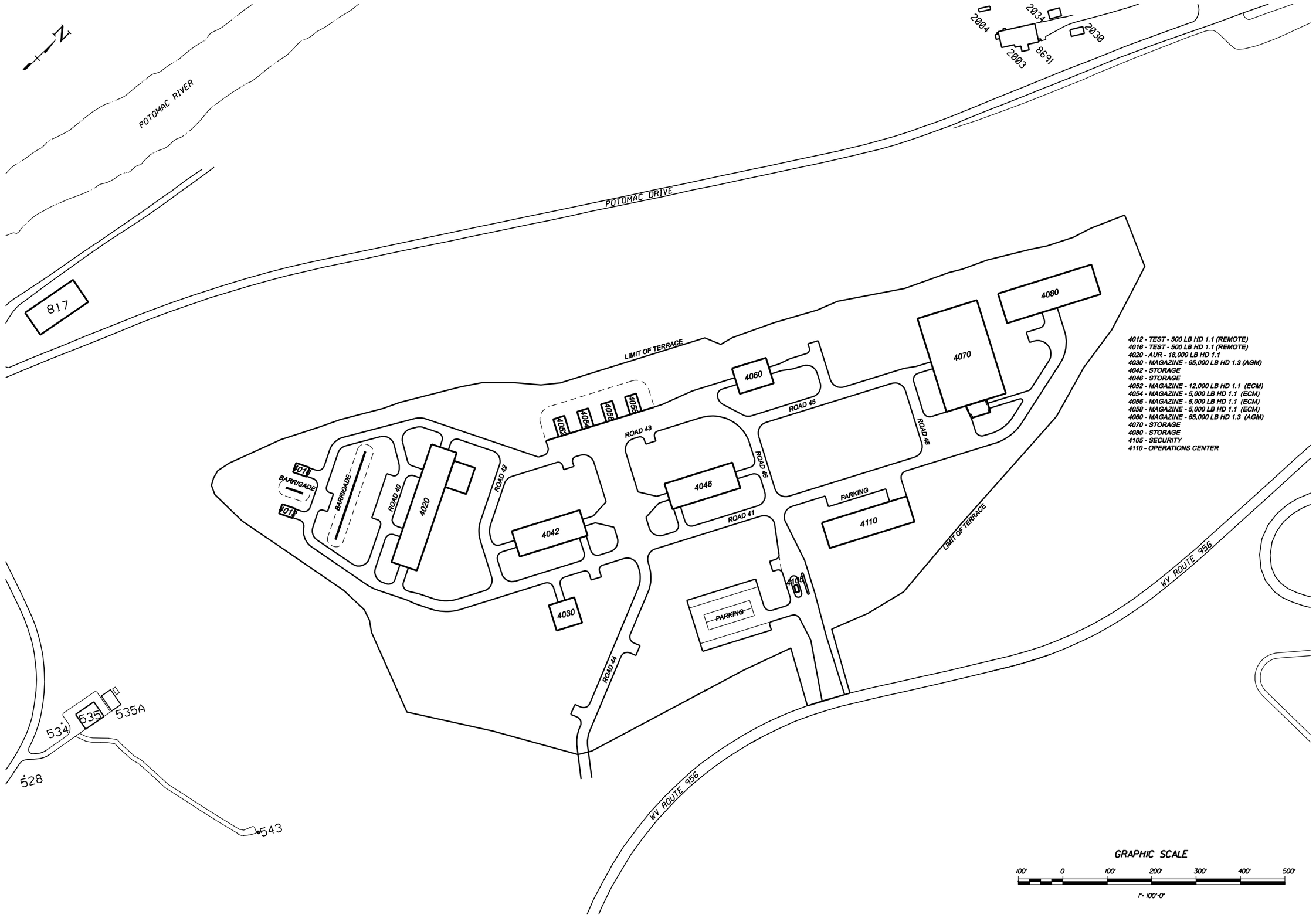
DRAFTER:
CHECKER:
ENGR:
DES SUPV:
AREA SUPV:
SAFETY:

PLANT 3
SITING

SCALE: X
PROJ. NO. X
BUILDING NO. 0001C
DRAWING PKG
SITING
CONTRACTOR DRAWING NO.
SIZE: D
X

INTERPRET THIS DRAWING IN ACCORDANCE WITH DOD-STD-100

$$dgn$$
$$time$$



REVISIONS	BY	MOD #	ECN #	DESCRIPTION	DATE
0-SKHBRIANCE					

ALLEGANY BALLISTICS LABORATORY
210 STATE ROUTE 956
ROCKET CENTER, WV 26726

DRAFTER:
CHECKER:
ENGR:
DES SUPV:
AREA SUPV:
SAFETY:

PLANT 4
SITING PLAN

INTERPRET THIS DRAWING IN ACCORDANCE WITH DOD-STD-100

SCALE: 1" = 100'
PROJ. NO. X
BUILDING NO. PL 4
DRAWING NO. XS101
DRAWING PKG X
SIZE: D

$$dgn$$
$$time$$