

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

PERMIT BOOK

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **03 2015 - 020**

Project Number: 2014-09-040
Installation Number: 095-0046

Parent Company: Department of Defense - ARMY

Parent Company Address: P.O. Box 1000, Independence, MO 64051

Installation Name: Aliant Techsystems Operations LLC – Lake City Army Ammunition Plant

Installation Address: 25201 E 78 Highway, Independence, MO 64051

Location Information: Jackson County, S31/32, T50N, R30W

Application for Authority to Construct was made for:

Install a quench bath and replace existing furnaces associated with the installation's existing machine gun belt links operations. This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAR 25 2015

EFFECTIVE DATE

Handwritten signature of Kyna L Moore in black ink, written over a horizontal line.
DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. The permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' Kansas City Regional Office within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2014-09-040

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060(12)(A)10. "Conditions required by permitting authority."

Lake City Army Ammunition Plant
Jackson County, S31/32, T50N, R30W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in construction permits 042001-003 previously issued to Galion, Inc., 082001-016 previously issued to Valentec Wells, LLC, and 102001-006, 112001-009 and 112001-009A previously issued to Lake City Army Ammunition Plant by the Air Pollution Control Program.
2. **Use of Alternative Lubricants in the Production of Links**
 - A. When considering the use of an alternative lubricant that is different than Lamstamp, Lake City Army Ammunition Plant shall calculate the potential emissions that would occur by switching to the alternative lubricant.
 - B. Lake City Army Ammunition Plant shall seek approval from the Air Pollution Control Program if potential emissions from the alternative lubricant exceed:
 - 1) 6.94 tpy PM,
 - 2) 6.94 tpy PM₁₀,
 - 3) 6.94 tpy PM_{2.5}, or
 - 4) Contains VOC or HAP.
 - C. Lake City Army Ammunition Plant shall retain SDS of all alternative lubricants that are used.
 - D. Lake City Army Ammunition Plant shall maintain potential to emit calculations for the alternative lubricant to demonstrate compliance. The potential to emit shall be based on the maximum hourly link production rate and the average amount of lubricant used to produce one link.
3. **Use of Alternative Lubricants in the Production of Ammunition Can Seals**
 - A. When considering the use of an alternative lubricant that is different than Vanish 6833, Lake City Army Ammunition Plant shall calculate the

Page No.	4
Permit No.	
Project No.	2014-09-040

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- potential emissions that would occur by switching to the alternative lubricant.
 - B. Lake City Army Ammunition Plant shall seek approval from the Air Pollution Control Program if potential emissions from the alternative lubricant exceed:
 - 1) 2.19 tpy VOC or
 - 2) Contain HAP or particulates (solids).
 - C. Lake City Army Ammunition Plant shall retain SDS of all alternative lubricants that are used.
 - D. Lake City Army Ammunition Plant shall maintain potential to emit calculations for the alternative lubricant to demonstrate compliance. The potential to emit shall be based on the maximum hourly ammunition can seal production rate and the average amount of lubricant used to produce one ammunition can seal.
4. Control Device Requirement – Fabric Filter
- A. Lake City Army Ammunition Plant shall control emissions from the (2) Tie Bar Machines (EP46) using fabric filters as specified in permit application 2001-02-079.
 - B. Lake City Army Ammunition Plant shall conduct visible emissions monitoring of the fabric filter at least once every 24 hours of operation. Visible emissions monitoring shall be conducted using EPA Test Method 22-like procedures. If visible emissions are present, Lake City Army Ammunition Plant shall perform maintenance on the fabric filter. Maintenance shall be conducted no later than eight hours of operation after the visible emissions are observed. Maintenance shall include, but is not limited to:
 - 1) Inspection of the structural components including the fabric filter ductwork and hood for leaks, plugging, and/or component failure.
 - 2) Inspection of the fabric filter for leaks, holes, and/or tears.
 - C. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Page No.	5
Permit No.	
Project No.	2014-09-040

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- D. Lake City Army Ammunition Plant shall maintain an operating and maintenance log for the fabric filter which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - 2) Visible emission observations; and
 - 3) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 5. Control Device Requirement – Electrostatic Precipitators (ESPs)
 - A. Lake City Army Ammunition Plant shall control emissions from the (3) Resistance Welders (EP47) and (4) 30-ton presses using ESPs as specified in permit application 2001-02-079.

 - B. Lake City Army Ammunition Plant shall conduct visible emissions monitoring of the ESPs at least once every 24 hours of operation. Visible emissions monitoring shall be conducted using EPA Test Method 22-like procedures. If visible emissions are present from an ESP, Lake City Army Ammunition Plant shall perform maintenance on the ESP. Maintenance shall be conducted no later than eight hours of operation after the visible emissions are observed. Maintenance shall include, but is not limited to:
 - 1) Inspection of the structural components including the ESP ductwork and hood for leaks, plugging, and/or component failure.
 - 2) Check the operation of the rapper. Check the rapper rod connections for loose, broken, or bent connections.
 - 3) Check the alignment of the wires and plates. Any bowing or skewing of the alignment shall be corrected.
 - 4) If a short circuit is detected, check for a broken wire. Replace broken wires.

 - C. Lake City Army Ammunition Plant shall maintain an operating and maintenance log for the fabric filter which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - 2) Visible emission observations; and
 - 3) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 6. Operational Requirement – Volatile Lubricants
Lake City Army Ammunition Plant shall keep all volatile lubricants in sealed containers whenever the materials are not in use. Lake City Army Ammunition

Page No.	6
Permit No.	
Project No.	2014-09-040

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- Plant shall provide and maintain suitable, easily read, permanent markings on all lubricant containers used with this equipment.
7. **Operational Requirement – MACT DDDDD Applicability**
Lake City Army Ammunition Plant shall submit documentation with their Part 70 amendment application to support their MACT DDDDD applicability determination. Documentation shall include e-mail correspondence from EPA.
 8. **Record Keeping and Reporting Requirements**
Lake City Army Ammunition Plant shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all lubricants used.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2014-09-040
Installation ID Number: 095-0046
Permit Number:

Aliant Techsystems Operations LLC – Lake City Army Ammunition Plant
25201 E 78 Highway
Independence, MO 64051
Complete: September 30, 2014

Parent Company:
Department of Defense - ARMY
P.O. Box 1000
Independence, MO 64051

Jackson County, S31/32, T50N, R30W

REVIEW SUMMARY

- Aliant Techsystems Operations LLC has applied for authority to install a quench bath and replace existing furnaces associated with the installation's existing machine gun belt links operations at Lake City Army Ammunition Plant.
- HAP emissions are expected from the proposed equipment. HAP will be emitted from the combustion of natural gas.
- 40 CFR Part 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* may apply to the furnaces associated with this project. The permittee shall submit a write-up of applicability with their Part 70 operating permit amendment.
- Fabric filters are being used to control particulate emissions from (2) Tie Bar Machines (EP46). ESPs are being used to control particulate emissions from (3) Resistance Welders (EP47) and (4) 30-ton presses.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels. A permit was required as potential emissions of PM₁₀ exceed the insignificance level in 10 CSR 10-6.061(3)(A)3.A.
- This installation is located in Jackson County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels and potential emission of hexane are below the SMAL.
- Emissions testing is not required for the equipment.
- A Part 70 Operating Permit amendment application is required for this installation within one year of commencement of operations.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Aliant Techsystems Operations LLC operates a small arms ammunition manufacturing facility (Lake City Ammunition Plant) in Independence, MO. The installation is an existing major source under construction permits for SO_x, NO_x, VOC, and HAP. The installation is currently operating under Part 70 operating permit OP2014-009 which expires July 10, 2019.

The following New Source Review permits have been issued to Aliant Techsystems Operations LLC - Lake City Ammunition Plant from the Air Pollution Control Program:

Table 1: Permit History

Permit Number	Description
1088-009A	Install three new painting/sealing systems and two air strippers
0690-009	Install a trinitroresorcinol (TNR) manufacturing building
0690-003	Install an explosive wastewater treatment plant to remove metals
0191-004	Install four air strippers that will strip VOC from drinking water
0492-002	Install emergency diesel pump for boiler feed and 20 emergency generators
1192-018	Install a natural gas fired generator unit
0694-021	Install a primer popping operation
0395-027	Install nine standby emergency diesel generators
1095-022	Install three video-jet printers for 20-mm case marking. This equipment replaced the ink-pad and rubber-stamping method
0496-018	Install three ink jet equipment for 5.56 mm packing cartons. This equipment replaced the existing rubber-stamp operation
1097-018	Modify existing process to manufacture I-136N igniter mix by eliminating calcium resinate and replacing it with a polyurethane formula
0199-021	Install emergency diesel booster pump and fuel storage tank
012000-017	Install three ammunition loading machines and one ammunition priming machine. Replaced four WWII machines
092000-002	Install calcium resinate system for manufacturing
112000-008	Install two 16.8 MMBtu/hr steam generating boilers
042001-003	Install machine gun belt link manufacturing equipment. Permit has been relinquished to Lake City Ammo by Galion, Inc
052001-012	Install two 12.1 MMBtu/hr natural gas fired steam generating boilers
082001-016	Install one 45-ton press, one 75-ton press and one resistance welding station to an existing machine gun belt link manufacturing operation. Permit has been relinquished to Lake City Ammo by Valentec Wells, LLC (formerly Galion, Inc.)
102001-006	Install two 150-ton presses and one 100-ton press to an existing machine gun belt link manufacturing operation

112001-009A	Install two 30-ton presses and one 60 ton press to an existing machine gun belt link manufacturing operation
012003-008	Two Manurhin loaders for the combat cartridge tip identification and cartridge sealing operation (EP-14 and EP-15, respectively)
032005-012	Installation of one 33.5 MMBtu/hr boiler
112008-012	Installation of eight new priming machines and five new loading machines, including one Manurhin loading machine. (Phase I)
122008-007	Installation of six new draw presses, three new wash and dry lines, two new pickle/wash/lube lines, and eight new back end case cells. (Phase II)
062009-004	Installation of five ammunition can printing lines and four new crate printing lines. (Phase III)
022010-008	Installation of three first draw presses, two natural gas fueled anneal ovens, two pickle trains, three second draw presses, three final wash lines, and five back end case cells. (Phase IV) Also includes amendment to Phase II by installing equipment for manufacturing 7.62 mm shell casings.
042010-005	Temporary concrete crusher.
042010-005A	Correcting responsible party.
112008-012A	Transfer efficiency.
112008-012B	Change the formulation for the mouth water proofing compound.
022011-010	Temporary permit for a Thermal Convection System (TCS).
022011-010A	Amendment to the temporary permit to allow the treatment of additional equipment by the TCS.
012013-009	Use of new lube, wash additives, and brass brighteners for five high speed case manufacturing lines.
062013-007	Increasing the usage and changing the formulation of the mouth water proofing compound
102013-006	Installation of natural gas burners on existing Boilers #5 and #6

PROJECT DESCRIPTION

The installation is proposing to install a quench bath and replace all existing furnaces associated with the installation's existing machine gun belt links operations. Table 2 contains a list of emission sources associated with this project. No furnaces beyond those listed in Table 2 are associated with the links operation.

Table 2: Project Equipment List

Emission Unit	Description	Project Status	MHDR
EP53	Links Anneal Oven Charge End	New	0.37 MMBtu/hr natural gas
EP53A	Links Anneal Oven Burner Exhaust West	New	1 MMBtu/hr natural gas
EP53B	Links Anneal Oven Burner Exhaust East	New	1.2 MMBtu/hr natural gas
EP53C	Links Quench Bath Heater	New	1 MMBtu/hr natural gas
EP53D	Links Endothermic Gas Generator	New	0.6 MMBtu/hr natural gas
EP46	(2) Tie Bar Machines	Modified	6,900 links/hr
EP47	(3) Resistance Welders	Modified	42,609 links/hr
-	Lamstamp, lubricant used by link presses	Modified	320,400 links/hr ~ 0.305 gal/hr
-	Vanish 6833, lubricant used by ammunition can seal presses	Modified	5,400 ammunition can seals/hr ~ 0.084 gal/hr

The installation's existing machine gun belt links operations were permitted under construction permits 112001-009 and 112001-009A. Since the issuance of 112001-009 and 112001-009A the installation has switched to a low VOC lubricant, Lamstamp, which contains solids in their production of links. The installation continues to use the high VOC lubricant, Vanish 6833, in their production of ammunition can seals. This switch in lubricant allows for the removal of the 40.0 tpy VOC emission limitation contained within construction permits 042001-003, 082001-016, 102001-006, 112001-009 and 112001-009A.

Project emissions emissions were calculated as the potential to emit of all new and modified sources.

The MHDR of the lubricants in gal/hr were determined based on actual lubricant usage, actual link production, and actual ammunition can seal production in 2013.

Due to a complex permitting history, it was unclear if the control device requirements for (2) Tie Bar Machines (EP46) and (3) Resistance Welders (EP47) were federally enforceable. Control device requirements were included in this permit to remove all ambiguity.

EMISSIONS/CONTROLS EVALUATION

Emissions from the combustion of natural gas were determined using emission factors obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4 "Natural Gas Combustion" (July 1998).

Emission factors for (2) Tie Bar Machines (EP46) and (3) Resistance Welders (EP47) were obtained the project file for construction permit 112001-009A. Emissions from these sources are captured by hoods and then routed to the control devices. Overall control efficiency for EP46 was assumed to be 99.5%. Overall control efficiency for EP47 was assumed to 90%.

Emissions from the lubricants were determined by mass balance. Lamstamp has a specific gravity of 1.04 and contains 60% solids, no VOC, and no HAP. Potential to emit calculations assume all lamstamp is spray applied. Vanish 6833 has a VOC content of 5.95 lb/gal and contains no solids or HAPs.

The following table provides an emissions summary for this project. Existing potential emissions were taken from construction permit 102013-006. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the potential of all new and modified equipment, assuming continuous operation (8,760 hours per year).

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application
PM	25.0	N/D	N/A	7.52
PM ₁₀	15.0	76.20	7.25	7.62
PM _{2.5}	10.0	N/D	7.18	7.62
SO _x	40.0	1,780.65	1.36	0.01
NO _x	40.0	368.95	47.05	1.78
VOC	40.0	1,460.25	113.07	2.28
CO	100.0	167.45	26.11	1.49
GHG (CO ₂ e)	100,000	N/D	N/A	2,137.12
HAPs	25.0	272.24	11.18	0.03
Hexane	10.0	N/D	0.50	0.03

N/A = Not Applicable; N/D = Not Determined

The SMAL for hexane is 10.0 tpy.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels. A permit was required as potential emissions of PM₁₀ exceed the insignificance level in 10 CSR 10-6.061(3)(A)3.A.

APPLICABLE REQUIREMENTS

Lake City Army Ammunition Plant shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- 10 CSR 10-6.065 *Operating Permits*
- 10 CSR 10-6.110 *Submission of Emission Data, Emission Fees and Process Information*
- 10 CSR 10-6.165 *Restriction of Emission of Odors*
- 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*
- 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*

SPECIFIC REQUIREMENTS

- 10 CSR 10-2.230 *Control of Emissions From Industrial Surface Coating Operations* does not apply to the lubricant usage as the uncontrolled VOC PTE is below 2.7 tpy.
- 10 CSR 10-6.075 *Maximum Achievable Control Technology Regulations*
 - 40 CFR Part 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* may apply to the furnaces associated with this project. Compliance is required upon startup. The installation is currently consulting with EPA to determine if the furnaces under this permit meet the definition of *process heater* in §63.7575.
- 10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is not applicable to the new furnaces as 10 CSR 10-6.260(1)(A)2 exempts sources fueled by pipeline grade natural gas.
- 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* does not apply to EP46 or EP47. EP46 and EP47 are exempt from this regulation per 10 CSR 10-6.400(1)(B)15 as they operate control system achieving 90% or greater control efficiencies.
- 10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating* is applicable to the new furnaces; however, the furnaces are deemed in compliance with this regulation per 10 CSR 10-6.405(1)(c) as they are fueled by natural gas.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060 *Construction Permits Required*, I recommend this permit be granted with special conditions.

Alana L. Hess, P.E.
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 17, 2014, received September 22, 2014, designating Department of Defense – ARMY as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compounds
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

Mr. Kent Holiday
Vice President and General Manager
Aliant Techsystems Operations LLC
Lake City Army Ammunition Plant
P.O. Box 1000
Independence, MO 64051

RE: New Source Review Permit - Project Number: 2014-09-040

Dear Mr. Holiday:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application, and submittal of an operating permit amendment are necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission. The contact information for the Administrative Hearing Commission is as follows: Administrative Hearing Commission, Truman State Office Building, Room 640, 301 West High Street, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

Mr. Kent Holiday
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Alana Hess at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by phone at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:ahl

Enclosures

c: Kansas City Regional Office
PAMS File: 2014-09-040
Permit Number: