COMMONWEALTH of VIRGINIA

Secretary of Natural Resources
Molly Joseph Ward

DEPARTMENT OF ENVIRONMENTAL QUALITY
Blue Ridge Regional Office
www.deq.virginia.gov

David K. Paylor
Director

Robert J. Weld
Regional Director

Lynchburg Office
7705 Timberlake Road
Lynchburg, Virginia 24502
(434) 582-5120
Fax (434) 582-5125

Roanoke Office
3019 Peters Creek Road
Roanoke, Virginia 24019
(540) 562-6700
Fax (540) 562-6725

STATE AIR POLLUTION CONTROL BOARD
ENFORCEMENT ACTION - ORDER BY CONSENT
UNITED STATES ARMY (OWNER)
AND
BAE SYSTEMS ORDNANCE SYSTEMS, INC.
FOR
RADFORD ARMY AMMUNITION PLANT
Registration No. 20656

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code §§ 10.1-1309 and -1316, between the State Air Pollution Control Board and the United States Army (Owner) and BAE Systems Ordnance Systems, Inc., regarding the Radford Army Ammunition Plant, for the purpose of resolving certain violations of the Virginia Air Pollution Control Law and the applicable permit and regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Army" means the United States Army. The Army is a "person" within the meaning of Va. Code § 10.1-1300.

2. "BAE" means BAE Systems Ordnance Systems, Inc., a corporation authorized to do business in Virginia and its affiliates, partners, and subsidiaries. BAE is a "person" within the meaning of Va. Code § 10.1-1300.

3. "Board" means the State Air Pollution Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and -1301.

4. "BRRO-R" means the Blue Ridge Regional Office of DEQ, located in Roanoke, Virginia.

5. "CFR" means the Code of Federal Regulations, as incorporated into the Regulations.

6. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.

7. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

8. "Facility" or "Plant" or "RFAAP" means the Radford Army Ammunition Plant, located at State Route 114 in Montgomery and Pulaski Counties, Virginia.

9. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1309.

10. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the Virginia Air Pollution Control Law.

11. "The Parties" means the United States Army (Owner) and BAE Systems Ordnance Systems, Inc. (Operator).

12. "PCE" means a partial compliance evaluation by DEQ staff.

13. "Permit" means the Title V Federal Air Operating Permit No. VA-20656 to operate the Facility, which was issued under the Virginia Air Pollution Control Law and the Regulations to the Army (as owner) and Alliant Ammunition & Powder Co., LLC ("Alliant")(as operator) effective January 15, 2004. On June 18, 2012, BAE submitted a Form 7 (Facility/Owner/Operator Information Update Form) application to DEQ notifying the agency that the operator for the Plant would be changing to BAE as of July 1, 2012. On August 2, 2012, BAE submitted a revised Form 7 correcting certain errors that were contained in the original submittal.

14. "Regulations" or "Regulations for the Control and Abatement of Air Pollution" mean 9 VAC 5 chapters 10 through 80.

15. "Va. Code" means the Code of Virginia (1950), as amended.

16. "VAC" means the Virginia Administrative Code.

17. "Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 *et seq.*) of Title 10.1 of the Va. Code.

SECTION C: Findings of Fact and Conclusions of Law

1. The Army owns the Facility and BAE operates the Facility. The Facility manufactures specialty munitions, propellants and chemicals for the Army and other users. The Facility is the subject of the Permit which allows operation and emissions in accordance with its terms.

2. The Permit includes conditions for the operation of boilers at a powerhouse used for generating steam and electricity for use at the Facility. Five boilers, designated PH1 through PH5, are listed in the Permit. The Permit states that the fuels for these boilers are coal and distillate oil.

3. On March 15, 2015, Department staff conducted a PCE of the Facility record for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Records reviewed included a Fourth Quarter 2014 Excess Emission Report for the Powerhouse Stack Continuous Opacity Monitoring System submitted by BAE on January 27, 2015. Based on the evaluation and follow-up information, Department staff made the following observations:

   a. During the period from October 1, 2014 through December 31, 2014, a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded visible emissions that exceeded 20% opacity for more than one six minute period in an hour, including opacity exceeding 60% during multiple six minute periods.

   b. On December 26, 2014, a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded a maximum six-minute opacity of 96.2%.

4. On March 23, 2015, based on the evaluation and follow-up information, the Department issued Notice of Violation No. ABRRO000107 to the Army and BAE for the violations described in paragraph C(3), above.

5. On April 16, 2015, BAE submitted a written response to the NOV. In that response, BAE stated that the long-term solution to the Powerhouse opacity problem is construction of a new powerhouse. BAE and the Army applied for a permit for a new powerhouse in May 2014 and DEQ issued the permit on October 8, 2014. The projected completion date for the new powerhouse is the summer of 2018. BAE's April 2015 letter indicates that it is evaluating the following proposed interim measures to improve opacity performance: "operational improvements to the current powerhouse, installation of temporary package boilers, and reducing outlying production areas or modifying production sequencing." BAE has also retained a consultant to evaluate the opacity problem and make recommendations.

6. On May 15, 2015, Department staff conducted a PCE of the Facility record for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Records reviewed included a First Quarter 2015 Excess Emission Report for the Powerhouse Stack Continuous Opacity Monitoring System submitted by BAE on April 29, 2015. Based on the evaluation and follow-up information, Department staff made the following observations:

   a. During the period from January 1, 2015 through March 31, 2015, a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded visible emissions that exceeded 20% opacity for more than one six minute period in an hour, including opacity exceeding 60% during multiple six minute periods.

   b. On January 28, 2015 a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded a maximum six-minute opacity of 71.8%.

7. On July 2, 2015, Department staff conducted a PCE of the Facility record for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Records reviewed included a Comprehensive Performance Test that was performed from April 7 through 9, 2015 on Incinerator Unit #440 to demonstrate compliance with a variety of emissions standards specified under 40 CFR Part 63 Subpart EEE – National Emission Standards for Hazardous Air Pollutants: Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II) submitted by BAE on June 25, 2015. Based on the evaluation and follow-up information, Department staff made the following observations: During the period from April 7 through 9 2015, Low-Volatile Metals ("LVM") emissions from Incinerator Unit #440 were measured at 606 ug/dscm. The emission standard for LVM emissions is 92 ug/dscm.

8. On July 15, 2015, based on the evaluation and follow-up information, the Department issued Notice of Violation No. ABRRO000233 to the Army and BAE for the violations described in paragraph C(7), above.

9. On August 19, 2015, Department staff met with BAE and Army staff to discuss ongoing opacity problems at the Facility, including violations identified in the Second Quarter 2015 Excess Emission Report for the Powerhouse Stack Continuous Opacity Monitoring System submitted by BAE on June 30, 2015.

10. On August 20, 2015, Department staff conducted a PCE of the Facility record for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Records reviewed included a Second Quarter 2015 Excess Emission Report for the Powerhouse Stack Continuous Opacity Monitoring System submitted by BAE on June 30, 2015. Based on the evaluation and follow-up information, Department staff made the following observations:

a. During the period from April 1, 2015 through June 30, 2015, a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded visible emissions that exceeded 20% opacity for more than one six minute period in an hour, including opacity exceeding 60% during multiple six minute periods.

b. On April 23, 2015 a continuous opacity monitor for emissions from powerhouse boilers PH1 through PH5 at the Plant recorded a maximum six-minute opacity of 74.8%.

11. 9 VAC 5-40-940(B) requires that no owner or other person shall cause or permit to be discharged into the atmosphere from any fuel burning equipment unit any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.

12. Condition III.A.5 of the Permit requires that visible emissions from each of the boiler stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.

13. Condition VIII.A of the Permit requires that Low-Volatile Metals emissions from the incinerator units not exceed 92 ug/dscm.

14. Based on the results of the March 15, 2015, May 15, 2015, July 2, 2015, and August 20, 2015 evaluations and the documentation submitted by BAE on April 16, 2015, the Board concludes that the Parties have violated Permit conditions III.A.5 and VIII.A and 9 VAC 5-40-940(B), as described in paragraphs C(3) and C(6) through C(9), above.

15. The Parties have submitted documentation that verifies that the violations described in paragraphs C(3) and C(6) through C(9), above, have been corrected or are being addressed. The Army and BAE anticipate implementing permanent solutions to the ongoing opacity issues in the near future.

16. As it relates to the Army, settlement of this matter shall not constitute an admission of liability, nor shall evidence of this Order be admissible in any administrative or judicial proceeding to establish such liability. Settlement of this matter, to include the payment of any penalties, shall not constitute a waiver of federal sovereign immunity, or an admission of such a waiver, or an admission that the United States is liable to pay administrative or civil penalties or fines assessed by DEQ.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1309 and -1316, the Board orders BAE, and BAE agrees to pay a civil charge of $204,329.00 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

BAE shall include its Federal Employer Identification Number (FEIN) (54-189-2491) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF). If the Department has to refer collection of moneys due under this Order to the Department of Law, BAE shall be liable for attorneys' fees of 30% of the amount outstanding.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of the Parties for good cause shown by the Parties, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.

2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.

3. For purposes of this Order and subsequent actions with respect to this Order only, the Parties admit the jurisdictional allegations, and agree not to contest, but neither admit nor deny the findings of fact, and conclusions of law in this Order.

4. BAE consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

5. The Parties declare they have received fair and due process under the Administrative Process Act and the Virginia Air Pollution Control Law and they waive the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.

6. Failure by the Parties to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the

Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.

8. The Parties shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond their control and not due to a lack of good faith or diligence on their part. The Parties shall demonstrate that such circumstances were beyond their control and not due to a lack of good faith or diligence on their part. The Parties shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

   a. the reasons for the delay or noncompliance;

   b. the projected duration of any such delay or noncompliance;

   c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and

   d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

   Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the Parties intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto and any successors in interest, designees and assigns, jointly and severally.

10. This Order shall become effective upon execution by both the Director or his designee and the Parties.

11. This Order shall continue in effect until:

    a. The Director or his designee terminates the Order after the Parties have completed all of the requirements of the Order;

    b. The Parties petition the Director or his designee to terminate the Order after they have completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or

c. The Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to the Parties.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Parties from their obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Nothing herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341. Any requirement for payment or obligation of funds by a particular date established by the terms of this agreement shall be subject to the availability of funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted. If sufficient appropriations are not available and cannot be obtained, the Army will promptly inform the DEQ Regional Director.

13. Any plans, reports, schedules or specifications attached hereto or submitted by the Parties and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.

14. The undersigned representative of the Parties certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the Parties to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the Parties.

15. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.

16. By their signatures below, the Parties voluntarily agree to the issuance of this Order.

And it is so ORDERED this 4th day of March, 2016.

Robert J. Weld, Regional Director
Department of Environmental Quality

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The United States Army, RFAAP, voluntarily agrees to the issuance of this Order.

Date: 3 MAR 2016 By: _____, COMMANDER
LTC A M. MASSON (Person) (Title)

Commonwealth of Virginia
City/County of Pulaski

The foregoing document was signed and acknowledged before me this 3rd day of March, 2016, by Alicia M Masson who is Commander of the Radford Army Ammunition Plant, on behalf of the Army.

Rhonda L. Presley
Notary Public

7641532
Registration No.

My commission expires: 10/31/2019

Notary seal:

RHONDA L. PRESLEY
COMMONWEALTH
REGISTRATION NO.
7641532
MY COMM. EXPIRES
10/31/2019
OF VIRGINIA
NOTARY PUBLIC

BAE Systems Ordnance Systems, Inc, voluntarily agrees to the issuance of this Order.

Date: 3 MAR 16 By: _____, GENERAL MANAGER
(Person) (Title)

Commonwealth/State of Virginia

City/County of Pulaski

The foregoing document was signed and acknowledged before me this 3rd day of March, 2016, by William Barnett IV who is General Manager, on behalf of the corporation.

Rhonda L. Presley
Notary Public

7641 532
Registration No.

My commission expires: 10/31/2019

Notary seal:

RHONDA L. PRESLEY
COMMONWEALTH
REGISTRATION NO.
7641532
MY COMM. EXPIRES
10/31/2019
OF VIRGINIA
NOTARY PUBLIC