



**STATE OF TENNESSEE**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**Division of Air Pollution Control**  
**William R. Snodgrass Tennessee Tower**  
**312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor**  
**Nashville, TN 37243**

June 17, 2020

Certified Mail

9414 7266 9904 2154 5120 90

C T Corporation System  
300 Montvue Road  
Knoxville, Tennessee 37919-5546

RE: BAE Systems Ordnance Systems Inc.  
File ID. 37-0028  
Case No. APC20-0047

Dear Sir or Madam:

Enclosed please find an Order issued by Michelle Walker Owenby, Technical Secretary of the Air Pollution Control Board, Tennessee Department of Environment and Conservation, in the above-referenced matter. Please read it carefully and pay special attention to the NOTICE OF RIGHTS section.

If you have any questions regarding this Order, please contact attorney Grant Ruhl at (615) 313-5682 or via e-mail at [Grant.Ruhl@tn.gov](mailto:Grant.Ruhl@tn.gov). For all other questions, please contact the Division at (615) 532-0554 or via e-mail to [air.pollution.control@tn.gov](mailto:air.pollution.control@tn.gov).

Sincerely,

A handwritten signature in blue ink that reads "Kevin McLain".

Kevin McLain  
Section Manager, Enforcement  
Division of Air Pollution Control

vom

Enclosure

## TENNESSEE AIR POLLUTION CONTROL BOARD

**IN THE MATTER OF:**

**BAE SYSTEMS ORDNANCE SYSTEMS INC.**

**RESPONDENT**

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**DIVISION OF AIR POLLUTION  
CONTROL**

**CASE NO. APC20-0047**

### **TECHNICAL SECRETARY’S ORDER AND ASSESSMENT OF CIVIL PENALTY**

Comes now, Michelle Walker Owenby, Technical Secretary of the Air Pollution Control Board, and states that:

#### **PARTIES**

##### **I.**

Michelle Walker Owenby is the Technical Secretary of the Air Pollution Control Board (“Board”) and Director of the Division of Air Pollution Control (“Division”), Tennessee Department of Environment and Conservation (“Department”).

##### **II.**

BAE Systems Ordnance Systems Inc. (“Respondent”) is a foreign corporation formed in Delaware and authorized to do business in the State of Tennessee. Respondent's facility address is 4509 West Stone Drive, Kingsport, Tennessee. Respondent’s registered agent for service of process is C T Corporation System, 300 Montvue Road, Knoxville, Tennessee 37919-5546.

#### **AUTHORITY**

##### **III.**

Pursuant to Tennessee Code Annotated (“Tenn. Code Ann.”) § 68-201-116, the Technical Secretary may assess a civil penalty of up to \$25,000 per day for each day of violation of the Tennessee Air Quality Act (“Act”) or any rules or regulations promulgated thereunder (“Division Rules”) against any person who violates said Act or Division Rules, and/or the Technical Secretary may issue an order for correction to the responsible person when provisions of the Act or Division

Rules are violated. In addition, such person may also be liable for any damages to the State resulting therefrom.

#### **IV.**

Respondent is a “person” within the meaning of Tenn. Code Ann. § 68-201-102 and has violated the Division Rules as hereinafter stated.

#### **V.**

“Air contaminant” means particulate matter, dust, fumes, gas, mist, smoke, vapor, or any combinations thereof, as stated in Tenn. Code Ann. § 68-201-102.

#### **VI.**

“Air contaminant source” means any and all sources of emission of air contaminants, whether privately or publicly owned or operated, as stated in Tenn. Code Ann. § 68-201-102.

#### **VII.**

Respondent operates an “air contaminant source” within the meaning of Tenn. Code Ann. § 68-201-102.

### **FACTS**

#### **VIII.**

On June 26, 2018, the Technical Secretary issued Title V operating permit number 568188 (“Permit 568188”), emission source reference number 37-0028, to Respondent for the manufacturing of explosives. On May 28, 2019, the Technical Secretary issued Significant Modification #1 to Permit 568188.

#### **IX.**

Condition D1 of Permit 568188 states, in pertinent part:

With the exception of air emission sources exempt from the requirements of Tenn. Comp. R. & Regs. Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission

from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period[.]

#### **X.**

Condition E2(d) of Permit 568188 states, in pertinent part:

112(r) Certification[.] In addition, the facility shall submit to the Technical Secretary by January 31 of each year the compliance certification required by Tenn. Comp. R. & Regs. 1200-03-32-.03(3) (adherence to the submitted accidental release plan for facilities subject to Section 112(r) of the federal Clean Air Act).

#### **XI.**

Condition E3-2 of Permit 568188 states:

Emissions control equipment shall be operating when the sources are operating, except in accordance with Tenn. Comp. R. & Regs. 1200-03-20 (see condition B8).

#### **XII.**

Condition E4-4 of Permit 568188 requires Respondent to comply with the applicable provisions of 40 C.F.R. Part 63 Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters). Subpart DDDDD establishes the following requirements:

- Sections 63.7520(c), 63.7530(b), and Table 7 to Subpart DDDDD require owners or operators complying with a mercury emission limit using activated carbon injection to establish a site-specific minimum activated carbon injection rate operating limit using data from the activated carbon rate monitors and mercury performance test. Owners or operators must determine the lowest hourly average established during the performance test as the operating limit. When an affected unit operates at lower loads, owners or operators must determine the required injection rate by multiplying the activated carbon injection rate by the load fraction. Section 63.7575 defines the load fraction as the actual heat input of a boiler or

process heater divided by heat input during the performance test that established the minimum activated carbon injection rate.

- Section 63.7540(a) and Table 8 to Subpart DDDDD require owners or operators using carbon injection to demonstrate continuous compliance by collecting the carbon injection rate monitoring system data; reducing the data to 30-day rolling averages; and maintaining the 30-day rolling average carbon injection rate at or above the minimum carbon injection rate.

Respondent uses brominated powdered activated carbon (BPAC) sorbent injection to control mercury emissions from the coal-fired boilers, which is an acceptable method of control under 40 C.F.R. Part 63 Subpart DDDDD.

### **XIII.**

Condition E61-16 of Permit 568188 requires Respondent to comply with the applicable provisions of 40 C.F.R. Part 60 Subpart VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006). Specifically, section 60.482-5a(a) requires each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in section 60.482-1a(c) and paragraph (c) of this section. Section 60.482-5a(b)(4) requires each closed-purge, closed-loop, or closed-vent system to be designed and operated to return the purged process fluid directly to the process line; collect and recycle the purged process fluid to a process; or capture and transport all the purged process fluid to a control device, waste management unit, or treatment, storage, and disposal facility.

### **XIV.**

On February 28, 2020, the Division received via e-mail Respondent's 40 C.F.R. Part 63 Subpart DDDDD semiannual report ("MACT SAR") for the reporting period of July 1 through December 31, 2019. The MACT SAR indicated the following violations of condition E4-4 of Permit 568188 where the BPAC sorbent injection rate continuous monitoring system (CMS) indicated BPAC injection rates below the required minimum values on the dates shown in Tables 1 and 2.

<b>Table 1: Sorbent Injection Rate Deviations, Unit 2</b>		
<b>Date</b>	<b>Measured 30-Day Average Sorbent Injection Rate (lb/hr)</b>	<b>Required 30-Day Average Sorbent Injection Rate (lb/hr)</b>
12/25/2019	14.49	15.47
12/26/2019	13.94	15.49
12/27/2019	13.45	15.50
12/28/2019	12.98	15.54
12/29/2019	12.48	15.50
12/30/2019	11.85	15.45
12/31/2019	11.29	15.49
Total number of 30-day averages: 72		
Number of deviations: 7		
Deviation percentage: 9.7%		

<b>Table 2: Sorbent Injection Rate Deviations, Unit 4</b>		
<b>Date</b>	<b>Measured 30-Day Average Sorbent Injection Rate (lb/hr)</b>	<b>Required 30-Day Average Sorbent Injection Rate (lb/hr)</b>
11/24/2019	22.73	23.14
11/25/2019	22.32	23.14
11/26/2019	21.74	23.19
11/27/2019	20.85	23.21
11/28/2019	19.97	23.23
11/29/2019	19.15	23.31
11/30/2019	18.40	23.38
12/1/2019	17.84	23.36
12/2/2019	17.32	23.47
12/3/2019	16.82	23.43
12/4/2019	16.36	23.46
12/5/2019	16.00	23.46
12/6/2019	15.56	23.42
12/7/2019	15.08	23.40
12/8/2019	14.56	23.34
12/9/2019	14.06	23.27
12/10/2019	13.51	23.25
12/11/2019	12.92	23.28
12/12/2019	12.50	23.33
12/13/2019	12.46	23.38
12/14/2019	13.13	23.39
12/15/2019	14.45	23.39
12/16/2019	15.25	23.39
12/17/2019	15.62	23.42
12/18/2019	16.13	23.48

<b>Table 2: Sorbent Injection Rate Deviations, Unit 4</b>		
<b>Date</b>	<b>Measured 30-Day Average Sorbent Injection Rate (lb/hr)</b>	<b>Required 30-Day Average Sorbent Injection Rate (lb/hr)</b>
12/19/2019	16.49	23.47
12/20/2019	16.59	23.51
12/21/2019	16.72	23.50
12/22/2019	16.83	23.50
12/23/2019	17.06	23.50
12/24/2019	17.22	23.48
12/25/2019	17.45	23.47
12/26/2019	17.68	23.48
12/27/2019	17.94	23.52
12/28/2019	18.18	23.59
12/29/2019	18.46	23.56
12/30/2019	18.71	23.49
12/31/2019	18.97	23.58
Total number of 30-day averages: 72		
Number of deviations: 38		
Deviation percentage: 52.8%		

## **XV.**

On February 28, 2020, the Division received via e-mail Respondent's 40 C.F.R. Part 60 Subpart VVa semiannual report ("NSPS SAR") for the reporting period of July 1 through December 31, 2019. The NSPS SAR indicated that operations had been following section 60.482-5a(b)(4)(ii) for sample purge material (collect and recycle the purged process fluid to a process). The NSPS SAR indicated Respondent discovered during an audit on November 6, 2019, that this practice was no longer being followed and sample purge material was being drained to an industrial wastewater sump. The NSPS SAR indicated that this practice was corrected by November 18, 2019, with the sample purge material again being recycled to a process. Therefore, Respondent violated condition E61-16 of Permit 568188.

## **XVI.**

On March 20, 2020, the Division issued a Notice of Violation (NOV) to Respondent for the violations discussed in paragraphs **XIV and XV**.

## **XVII.**

On February 28, 2020, the Division received via e-mail Respondent's Title V semiannual report ("Title V SAR") for the reporting period of July 1 through December 31, 2019.

## **XVIII.**

During the review of Respondent's Title V SAR, the Division discovered the following violations of conditions D1, E2(d), and E3-2 of Permit 568188:

- The Title V SAR contained two visible emissions evaluations (VEE) that indicated an exceedance of the above standard. These readings were taken at the silo containing the BPAC that is used to control mercury emissions. The first reading was taken using TVEE Method 2 on November 5, 2019. This VEE contained 194 individual readings above the opacity limit including reader error which exceeds the Method 2 limit of 20 such readings. The second reading was taken using TVEE Method 2 on December 19, 2019. This VEE contained 22 individual readings above the opacity limit including reader error which exceeds the Method 2 limit of 20 such readings.
- The Title V SAR indicated that there was no water flow to Scrubber S-030 while source 112 was venting to the control equipment from October 15 to December 4, 2019. The process and water flow to the scrubber was shut down on October 15, 2019, due to scheduled maintenance, but the flow to the scrubber was not turned back on when the maintenance was completed. An e-mail received by the Division on March 16, 2020, confirmed that the source 112 process resumed on October 19, 2019.

## **XIX.**

On April 1, 2020, the Division issued a NOV to Respondent for the violations discussed in paragraph **XVIII**.



## **VIOLATIONS**

### **XX.**

By failing to comply with conditions of the operating permit, as discussed herein, Respondent violated Division Rule 1200-03-09-.02(6), which states, in pertinent part:

Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operating permit, all provisions of these regulations, and all provisions of the Tennessee Air Quality Act.

## **RELIEF**

### **XXI.**

WHEREFORE, PREMISES CONSIDERED, I, Michelle Walker Owenby, Technical Secretary, under the authority vested in me, hereby order as follows:

1. Respondent is assessed a Civil Penalty in the amount of **\$27,000** for the violation of Division Rules, as discussed herein.
2. Respondent shall pay the assessed Civil Penalty in full as follows: Payments of the civil penalty and/or damages shall be made payable to the “Treasurer, State of Tennessee” and sent to the Division of Fiscal Services - Consolidated Fees Section, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 10th Floor, Nashville, Tennessee 37243. The case number, **APC20-0047**, should be clearly shown on the check or money order to ensure that the payment is properly credited. Payment shall be made on or before the 31st day after receipt of this Order and Assessment.

## **DEPARTMENT’S RESERVATION OF RIGHTS**

In issuing this Order and Assessment, the Department does not implicitly or expressly waive any provision of the Act or the regulations promulgated thereunder or the authority to assess costs, civil penalties, and/or damages incurred by the State against the Respondent. The Department expressly reserves all rights it has at law and in equity to order further corrective action, assess civil penalties and/or damages, and to pursue further enforcement action including,

but not limited to, monetary and injunctive relief. Compliance with this order will be considered as a mitigating factor in determining the need for future enforcement action(s).

### **NOTICE OF RIGHTS**

Tenn. Code Ann. §§ 68-201-108(a) and 68-201-116(b), allow Respondent to appeal this Order and Assessment. To do so, a written petition setting forth the grounds (reasons) for requesting a hearing must be RECEIVED by the Technical Secretary within 30 DAYS of the date Respondent received this Order and Assessment or this Order and Assessment becomes final (not subject to review).

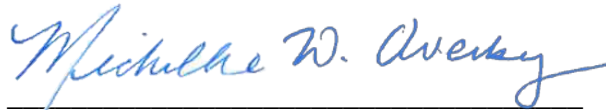
If an appeal is filed, an initial hearing of this appeal will be conducted by an Administrative Law Judge (“ALJ”) as a contested case hearing pursuant to the provisions of Tenn. Code Ann. § 68-201-108(a), Tenn. Code Ann. § 4-5-301 *et seq.* (the Uniform Administrative Procedures Act), and Tenn. Comp. R. & Regs. 1360-04-01 *et seq.* (the Department of State’s Uniform Rules of Procedure for Hearing Contested Cases Before State Administrative Agencies). Such hearings are legal proceedings in the nature of a trial. Individual respondents may represent themselves or be represented by an attorney licensed to practice law in Tennessee. **Artificial respondents (corporations, limited partnerships, limited liability companies, etc.) cannot engage in the practice of law and therefore may only pursue an appeal through an attorney licensed to practice law in Tennessee.** Low-income individuals may be eligible for representation at reduced or no cost through a local bar association or legal aid organization.

At the conclusion of any initial hearing, the ALJ has the authority to affirm, modify, or deny this Order and Assessment. This includes the authority to modify (decrease or increase) the penalty within the statutory confines of Tenn. Code Ann. § 68-201-116 (up to \$25,000 per day per violation). Furthermore, the ALJ on behalf of the Board has the authority to assess additional damages incurred by the Department including, but not limited to, all docketing expenses associated with the setting of the matter for a hearing and the hourly fees incurred due to the presence of the ALJ and a court reporter.

Any petition for review (appeal) must be directed to the Technical Secretary, Tennessee Division of Air Pollution Control, c/o Jenny L. Howard, General Counsel, Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243. An appeal may also be filed by sending the

petition to the following email address: [TDEC.Appeals@tn.gov](mailto:TDEC.Appeals@tn.gov). Payments of the civil penalty and/or damages shall be made payable to the “Treasurer, State of Tennessee” and sent to the Division of Fiscal Services - Consolidated Fees Section, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 10th Floor, Nashville, Tennessee 37243. Technical questions and other correspondence involving compliance issues should be sent to Attn: Tammy Gambill, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243 or via e-mail to [air.pollution.control@tn.gov](mailto:air.pollution.control@tn.gov). Attorneys should contact the undersigned counsel of record. **The case number, APC20-0047, should be written on all correspondence regarding this matter.**

Issued by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation, on this 17th day of June, 2020.



Michelle Walker Owenby  
Technical Secretary  
Tennessee Air Pollution Control Board

Reviewed by:



Grant LeMaster Ruhl  
BPR # 036182  
Assistant General Counsel  
Department of Environment & Conservation  
312 Rosa L. Parks Avenue, 2nd Floor  
Nashville, Tennessee 37243  
(615) 313-5682  
[Grant.Ruhl@tn.gov](mailto:Grant.Ruhl@tn.gov)