

ORDNANCE SYSTEMS INC. 4509 West Stone Drive Kingsport, Tennessee 37660-9982 Telephone (423) 578-8010 Fax (423) 578-8054

In Reply Reference 6114RO

February 5, 2018

Ms. Michelle Walker Owenby, Technical Secretary Tennessee Department of Environment and Conservation Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243

RE: Comments on Draft Title V Permit 568188 for the Holston Army Ammunition Plant

Dear Ms. Owenby:

BAE Systems Ordnance Systems Inc. ("OSI"), the operating contractor for the Holston Army Ammunition Plant ("HSAAP") in Kingsport, and the United States Army ("Army"), the owner of HSAAP, respectfully submit their combined comments on the draft Title V permit (568188) proposed by the Tennessee Department of Environment and Conservation ("TDEC") on January 18, 2018. Given that OSI and the Army have had only a limited time to review and evaluate the impact of TDEC's proposed revisions, we request the opportunity to submit additional comments if necessary.

As you will see in the attached document, many of our comments seek clarification on certain proposed changes and point out apparent inconsistencies with existing state regulations. Other proposed changes are more problematic, however, and without removal or substantial revision would likely threaten Holston's ability to continue operations to provide a reliable source of mission-critical explosives to the United States military. As explained briefly below, but in more detail in the attached set of comments, three proposed changes are particularly unworkable. These changes relate to:

- 1. Proposed restrictions on emissions during open burns at HSAAP;
- 2. Proposed restrictions on the weight of material that HSAAP can process through its open burning facilities, as well as the means of calculating that weight limit; and
- 3. Proposed record-keeping requirements that would be unnecessarily burdensome and could compromise the security of Holston's operations.

Fugitive Emission Limits from Open Burning Ground

Proposed permit provision E5-12 seeks to regulate HSAAP's open burning by characterizing the resulting emissions as fugitive dust and imposing limits on the duration of fugitive emissions, including smoke and smoldering emissions that may appear offsite. This proposed limitation is neither sensible nor practicable.

The fugitive emission controls in Rule 1200-03-08-.01(1) relate to dust from materials "to be handled, transported, or stored". These controls may make sense for certain types of fugitive dust, but make little sense for the emissions that occur during an open burn of material. Similarly inappropriate are the requirements in Rule 1200-03-08-.01(1) that contemplate things such as an exhaust hood, water, chemicals, or tar to control the dust, all of which could substantially increase the dangers of any open burn. Although Rule 1200-03-08-.01(1) requires the implementation of reasonable precautions to prevent particulate matter from becoming airborne, open burning is, by definition, an uncontrolled means of thermal treatment that does not leave room for reasonable precautions to prevent such emissions, and we are unaware of any reasonable precautions that could be implemented to do so. Not surprisingly, most other federal and state programs that have considered this issue have determined that fugitive dust does not include emissions from open burning. See, e.g., California Air Resources Board, Fugitive Dust Control Self Inspection Handbook (2007) (noting that byproducts of burning are typically not considered "fugitive dust"); Michigan Dept. of Environmental Quality, Managing Fugitive Dust (Mar. 2016) (Byproducts of open burning activities not considered "fugitive dust"); 40 C.F.R. § 49.125(c) (Open burning on Indian reservations not required to comply with fugitive particulate matter restrictions).

So, too, would the temporal limits of five minutes per hour or twenty minutes per day prove unworkable, particularly when these limitations would include periods of "visible emission beyond the property" that typically occur in the beginning of, or after, a burn. *See* Rule 1200-03-08-.01(2). Due to the close proximity of the HSAAP boundary to the open burning activities subject to permit condition E5, coupled with the prevailing winds that blow in the direction of this boundary, and the inability to control or entirely predict weather events, such limitations would effectively prohibit most open burns, creating stockpiles of explosive materials and preventing Holston from producing RDX and other explosives that are needed to support the vital nationals security mission performed by HSAAP.

Moreover, there is essentially no rule citation in Condition E5-12 clarifying how the fugitive dust requirement addition is applicable. The promulgation of 1200-3-4-.04(1)(k) supports the position that open burning, as conducted at the Open Burning Ground (OBG), is a permissible activity when no other safe means of disposal exists. We are also unaware of any other circumstance in which TDEC is applying 1200-3-8-.01 to open burning activities otherwise allowable under TDEC's regulations. Such constraints would make little sense in other contexts, as they do here.

Weight Limits for Open Burning Ground Materials

The other proposed Title V provision that stands to severely curtail or prohibit production is E5-8, which for the first time establishes limitations on the amount of combustible and noncombustible material that can be processed through HSAAP's open burning facilities. TDEC specifically proposes a 720 ton annual weight limit, but instead of applying this limit to only combustibles, TDEC proposes to also include the weight of heavy noncombustibles such as metal, concrete, and dirt. We do not believe any weight limits are necessary or appropriate for our open burning activities. Even if a weight limit were to be set for only combustible materials, HSAAP has requested twice this amount, or 1440 tons annually, to account for the total volume of combustible material that Holston would put through the sources subject to condition E5. This amount would be more consistent with HSAAP's past estimates, which it included in its Title V permit application, of up to 720 tons for the open burn pile and an additional 720 tons for the burn cage. As noted above, we are unaware of any TDEC finding to support such a limitation on open burning of combustibles or other types of open burning. Like the fugitive dust limits in E5-12, TDEC's proposed weight limit in E-8 would be inconsistent with current and future needs of ensuring a stable supply of explosives to the military.

Proposed Reporting and Recordkeeping Requirements

The new record-keeping requirements proposed in draft permit conditions E5-6, E5-8, E5-9, E5-11, E26-3, E26-6, E26-8 propose significant changes to HSAAP's monitoring and recordkeeping requirements that would be unnecessarily burdensome and, where additional materials handling might be required, unsafe as well. Like other significant changes proposed by TDEC to HSAAP's Title V permit, these recordkeeping requirements should have gone through proper notice and comment procedures, including review by the U.S. Environmental Protection Agency, as stipulated in TAPCR 1200-309-.02(11)(f)(5)(iv)(II).

Moreover, the records TDEC now seeks through permit condition E2(a)(1) could contain information considered critical or sensitive for operational security, such as building operating schedules, product mixture ratios, and information on transfer frequencies of certain products and storage locations. HSAAP needs to ensure that such information is not made publicly available, as doing so could compromise national security.

Although we share TDEC's desire for action on its long-pending Title V permit application, OSI and the Army do not believe it would be appropriate to now rush through a discussion of TDEC's substantial proposed changes, which we believe would impose impracticable compliance obligations and jeopardize military readiness. Given the relatively short window of time in which we have had to review and respond to these changes, we also request the ability to supplement this submittal with additional comments on these and other provisions of the draft permit.

We also respectfully request a face-to-face meeting with TDEC to discuss these three issues as well as the other comments submitted in the attached document. Please contact us at your earliest convenience to arrange a date and time that would be convenient for you and your colleagues at TDEC.

Sincerely,

Kelso C. Horne, III Colonel, CM Commanding

Holston Army Ammunition Plant

Date

Larry Barnett

Interim General Manager,

BAE Systems Ordnance Systems Inc, Holston Army Ammunition Plant

Date

Attachment: 20180205 Comments on Draft Title V renewal permit number 568188

cc (w/ attachment):

Jimmy Johnston, Deputy Director, TDEC Moe Baghernejad, Environmental Protection Specialist, TDEC Todd Hayes, Interim OSI VP Tracey Burton, Chief General Counsel

BAE Systems Ordnance Systems Inc. (OSI), operating contractor for Holston Army Ammunition Plant (HSAAP) in Kingsport, in conjunction with HSAAP and Army review, respectfully submits the following comments on the draft Title V renewal permit number 568188 received on January 18, 2018. OSI appreciates the opportunity to review and comment on these draft conditions.

OSI and HSAAP, performed a careful technical and legal review of the draft Title V permit 568188. The conditions were evaluated for accuracy, validity, and applicability. This document contains comments on the following draft Conditions: E2, E4-10, E4-11, E4-12, E4-13, E4-14, E4-15, E4-18, E4-19, E4-20, E5-5, E5-6, E5-8, E5-9, E5-11, E5-12, E7-2, E8-2, E9-2, E10-2, E12-2, E13-2, E14-2, E15-2, E22-2, E26-3, E26-5, E26-6, E26-8, E26-10, E30-2, E33-2, and E61-20. Several of these conditions relate and, as such, are grouped accordingly. To expedite your review, please reference the following table below identifying the sections of this comment paper where particular issues are discussed. The sections follow a hierarchy of highest adverse effects first followed by those with technical inaccuracies or incorrect applicability.

Document Guide

| Related Discussion Topic | Comment | Proposed Conditions | Page |
|-----------------------------------|---------|--|---------|
| | Numbers | | Numbers |
| Open Burning Ground (OBG) | 1-3 | E5-12 and E26-10 | 2-3 |
| Fugitive Dust | | | |
| OBG Throughput Limit | 4-5 | E5-8 | 4 |
| OBG Significant Change to Record- | 6-15 | E5-5, E5-6, E5-8, E5-9, E5-11, E26-3, | 4-6 |
| keeping | | E26-5, E26-6, and E26-8 | |
| OBG Critical or Sensitive records | 16 | E2, E5-5, E5-6, E5-7, E5-8, E5-9, E5- | 7 |
| | | 11, E26-3, E26-5, E26-6, and E26-8. | |
| Boiler Conditions | 17-28 | E4-10, E4-11, E4-12, E4-13, E4-14, E4- | 7-9 |
| | | 15, E4-18, E4-19, and E4-20 | |
| Increased Monitoring for Various | 29-31 | E7-2, E8-2, E9-2, E10-2, E12-2, E13-2, | 9-10 |
| Scrubber Sources | | E14-2, E15-2, E22-2, E30-2, and E33-2 | |
| Acetic Anhydride Manufacturing | 32 | E61-20 | 10 |
| Monitoring | | | |

Comments 1 through 3 are specific to new Conditions E5-12 and E26-10. These proposed conditions assert fugitive dust and fugitive emissions requirements are applicable to the facility's contaminated material open burning area (source 37-0028-10) and the facility's open burning area for explosive waste (source 37-0028-53).

1. It is unclear whether the Tennessee Department of Environment and Conservation (TDEC) Division of Air Pollution Control (DAPC) intends with the reference to fugitive dust and fugitive emissions requirements in Condition E5-12 and E26-10 to apply these requirements only to materials handling and subsequent ash from the burning process and not to the open burning activities. If this is the case, the proposed conditions as written needs clarification. OSI and HSAAP suggest that DAPC removes this condition since there is already a fugitive dust condition in the general section with Condition D7. OSI further suggest that, if Condition E5-12 remains the requirement apply only to materials handling and the resultant combustion residuals (ash and debris remaining after the burn is complete) as listed in Tennessee Air Pollution Control Rule (TAPCR) 1200-03-08-.01(1) and not to any open burning area activities. The compliance method should specifically exclude all emissions generated by and during all open burning activities including combustion related byproducts, smoke, and other emissions associated with active open burning.

The interpretation that fugitive dust does not include open burning activities is supported by the fact that Condition D7 related to fugitive emissions in the general Title V permit conditions has been present in all previous versions of HSAAP's Title V permits dating back to 1999. TDEC has never regulated open burning activities using this condition. Therefore, this supports the interpretation that Condition E5-12 and E26-10 only applies to materials handling or the subsequent ash after such open burning activities is complete. Furthermore, general Title V permit Condition D8 states that all open burning activities shall be regulated by 1200-03-04. It doesn't mention the fugitive dust provisions – because open burning combustion is not considered a fugitive dust source.

2. Since the Title V permit general section already appears to cover fugitive dust, it could be interpreted, with the addition of proposed Conditions E5-12 and E26-10, to regulate emissions from HSAAP's open burning grounds by characterizing the resulting emissions as fugitive dust and imposing fugitive emission limitations at the property line. TDEC DAPC should specify these conditions only apply to materials handling. By not stating this in the permit, TDEC, it seems, proposes to control such emissions broadly under TAPCR 1200-03-08-.01 and specifically lists the requirement under TAPCR 1200-03-08-.01(2). The fugitive dust restriction and the fugitive dust control measures should at most only apply to the materials handling, stored materials and the ash, but TDEC's specific inclusion of the language from TAPCR 1200-03-08-.01(2) suggests combustion should be compliant with this rule as determined by Tennessee Visible Emissions Evaluation Method 4. Neither proposed limitation is sensible or practicable.

The fugitive emission controls in Rule 1200-03-08-.01 relate to dust from materials "to be handled, transported, or stored". These controls may make sense for certain types of fugitive dust, but make little sense for the emissions that occur during an open burn of material. Similarly inappropriate are the requirements in Rule 1200-03-08-.01 that contemplate things such as an exhaust hood, water, chemicals, or tar to control the dust, all of which could substantially increase the dangers of any open burn. Rule 1200-03-08-.01 requires the implementation of reasonable precautions to prevent particulate matter from becoming airborne, yet open burning is by definition an uncontrolled means of thermal treatment that is not amenable to the implementation of reasonable means to prevent particulate matter from becoming airborne, and we are unaware of any reasonable precautions that

Attachment 1 - February 5, 2018

Comments of BAE Systems Ordnance Systems Inc. (OSI) and Holston Army Ammunition Plant (HSAAP) on Draft Title V renewal permit number 568188

could be implemented to accomplish this. Not surprisingly, most other federal and state programs that have considered this issue have determined that fugitive dust does not include emissions from open burning. See, e.g., California Air Resources Board, Fugitive Dust Control Self Inspection Handbook (2007) (noting that byproducts of burning are typically not considered "fugitive dust"); Michigan Dept. of Environmental Quality, Managing Fugitive Dust (Mar. 2016) (Byproducts of open burning activities not considered "fugitive dust"); 40 C.F.R. § 49.125(c) (Open burning on Indian reservations not required to comply with fugitive particulate matter restrictions).

3. The fugitive dust rule, if interpreted to include open burning activities, essentially nullifies the exclusion to the prohibition of open burning found in TAPCR 1200-3-04-.04(1)(k). There is essentially no rule citation in Condition E5-12 clarifying how the fugitive dust requirement addition is applicable and the TAPCR 1200-03-08-.01 cited in Condition E26-10 does not appear to be valid. While not every burn event will violate permit condition E5-12, as written, the inability to predict with any degree of certainty when OBG operations can be conducted in compliance with this permit condition makes it imperative that this condition be removed from the permit. If not removed, then it must be modified in such a manner as to provide the permittees reasonable assurance that OBG operations can be conducted in compliance with the permit. Failure to make this correction essentially prevents OSI and HSAAP from operating the facility's contaminated material open burning area (source 37-0028-10) due to the uncertainty of the ability of the facility to comply with this regulation. The facility's contaminated material open burning area (source 37-0028-10) is essential to continued operations at HSAAP.

Shutting down this operation could result in the cessation of HSAAP operations, whose primary mission is the production of high-explosives needed to support various entities within the United States Department of Defense (DoD) and is considered a cornerstone asset to National Security. It is unlikely this is TDEC's intention. The TAPCR acknowledges this balancing of priorities and specifically states in 1200-3-1-.01(4) that,

"Ambient air quality standards are further intended to promote the maximum use of property. When the problems involved are aesthetic in nature, an equitable economic balance must be achieved. When a health hazard is involved, there can be no compromise.

The promulgation of 1200-3-4-.04(1)(k) supports the position that open burning, as conducted at the Open Burning Ground (OBG), is a permissible activity when no other safe means of disposal exists, and by implication supports the argument that such an activity does not present a health hazard so significant as to negate the consideration of an equitable economic balance when regulating such an activity.

We are also unaware of any other circumstance in which TDEC is applying 1200-3-8-.01 to open burning activities otherwise allowable under TDEC's regulations. Such constraints would make little sense in other contexts as they do here.

Technical and legal review comments 4 through 5 are specific to new Condition E5-8. This proposed condition establishes for the first time a throughput limit on the facility's contaminated material open burning area (source 37-0028-10). This would be a significant change to OSI's permit provisions on open burning, and a significant change to the permitted monitoring method both of which would be added without an underlying applicable requirement.

- 4. Proposed Title V provision, Condition E5-8, as written stands to severely curtail production at HSAAP by limiting throughput to the contaminated material open burning area (source 37-0028-10). Proposed Condition E5-8 for the first time establishes limitations on the amount of combustible and noncombustible material that can be processed through the HSAAP's open burning facilities. TDEC specifically proposes a 720 tons annual weight limit. The rule cited as the applicable standard is TAPCR 1200-3-04-.04(1)(k). This specific rule does not establish a throughput limit and appears to be the incorrect applicable standard for a throughput limit.
- 5. Additionally, instead of applying this limit to only combustibles, TDEC proposes to include the weight of heavy non-combustibles such as metal, concrete, and dirt. We do not believe any weight limits are necessary or appropriate. Even if a weight limit were set for only combustible materials, the renewal application submitted in December 2013 provides estimation of weighted volume of combustibles through the pile and cage as two individual units at 720 tons each, or roughly 1,440 tons annually. Like the fugitive dust limits in E5-12, TDEC's proposed weight limit in E5-8 would be inconsistent with current and future needs of ensuring a stable supply of explosives needed to support the United States Department of Defense (DoD) and is considered a cornerstone asset to National Security. From a logical perspective, if the limitation is based on concerns about emissions generated at the OBG, it would be illogical to include the non-combustible material, as such materials will not generate air emissions when subjected to open burning, or whatever emissions such material might generate would at most be insignificant.

Technical and legal review comments 6 through 15 concern the significant record-keeping requirement changes proposed in draft Conditions E5-5, E5-6, E5-8, E5-9, E5-11, E26-3, E26-5, E26-6, and E26-8

6. Significant record-keeping requirement changes proposed in draft Conditions E5-6, E5-8, E5-9, E5-11, E26-3, E26-6, and E26-8 could potentially result in initial non-compliance, if the proposed condition is not corrected. Currently information is tracked by building and not always by material type. If the record-keeping requirements remain, OSI would need clarity to ensure information as DAPC specifies is being tracked. However, OSI and HSAAP will not sort through materials increasing handling frequencies resulting in a less safe work environment for the workforce unless these records are necessary to comply with the DAPC rules and regulations. Current on-site records are sufficient to demonstrate compliance with TAPC 1200-3-04-.04(1)(k), however, DAPC appears to be requesting details which do not correlate directly to any applicable standard. The rule cited by TDEC in support of the details that must be included in the log for E5-6 and other similar conditions, specifically 1200-3-10-.02(2)(a), is extremely broad and essentially states that records and reports as the Technical Secretary shall prescribe on air contaminant emissions shall be recorded, compiled, and submitted in a format prescribed by the Technical Secretary. However, the remainder of the section

pertains to excess emissions and records for monitors demonstrating excess emissions. This does not seem to apply to these type of records.

- 7. In TAPCR 1200-03-09-02(11) all of these requirements would be viewed as significant changes potentially requiring a significant modification application be submitted. These rules state the Technical Secretary shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions). The referenced regulatory provision for the new conditions does not clearly indicate or reference a related applicable requirement. Furthermore, under TAPCR 1200-309-.02(11)(f)(5) Permit Modifications a modification is defined as any revision to a permit issued pursuant to paragraph 1200-03-09-.02(11) that cannot be accomplished as an administrative permit amendment. It further states that Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify the permit exists, and not the entire permit. These changes would be considered significant because they do not meet the definition as a minor modification under TAPCR 1200-309-.02(11)(f)(5)(ii) because they involve a significant change to existing monitoring, reporting or recordkeeping requirements in the permit.
- 8. Condition E5-5 restricts open burning of barium chloride explosive contaminated materials. Barium Chloride is no longer used at the site. OSI suspects it was last used in the 1980's based on information in the archives and the lab. OSI recommends requiring certification that Barium Chloride is not used and if use is required the Technical Secretary may require proof of compliance with this limit.
- 9. Condition E5-6 limits the open burning of triamino-trinitro-benzene (TATB) contaminated materials. Record-keeping requirements were added in this draft. Current records do not specify explosive product type of contamination associated with the various contaminated materials. Given the low level of TATB production, OSI is confident the restriction on burning TATB contaminated drums and liners is being met. However, to modify tracking of this material and present this information in the record stipulated double handling of explosives contaminated material. Frequent handling of already potentially explosive hazard materials would increase exposure and decrease the safety of the workforce.
- 10. Condition E5-8 adds a throughput restriction to the open burning of total explosive-contaminated and/or potentially explosive contaminated combustibles, but this has already been covered by comments 4 and 5. Current records maintained do not provide the detail stipulated in the compliance method. This information is currently tracked by building and not by type. Current collection by building allows for mixing of liners, PPE, filters, etc. This would involve major sorting efforts and weighing at each building and possibly create a safety issue with pre-processing/handling. Frequent handling of already potentially explosive hazard materials would increase exposure and decrease the safety of the workforce.
- 11. Condition E5-9 states that there shall be no asbestos-containing materials or lead -containing materials during open burning of any explosive-contaminated and/or potentially explosive-contaminated material such as concrete, construction material, piping and soil as pile waste. It further requires a log of materials surveyed by the permittee for possible asbestos-containing materials (ACM), or lead-containing materials in a form, which shows compliance with this condition. OSI utilizes a third-party certified asbestos company to survey building materials for potential ACM and test anything considered potential ACM. If the material tests positive, then it is sent to the permitted disposal area of the onsite landfill. If not, the material can go to the OBG assuming it does not contain

Attachment 1 - February 5, 2018

Comments of BAE Systems Ordnance Systems Inc. (OSI) and Holston Army Ammunition Plant (HSAAP) on Draft Title V renewal permit number 568188

lead-based paint or PCBs. Condition E5-11 states that "The permittee shall not open burn demolition debris or any other materials that contain PCBs (e.g., pumps, motors, painted piping, painted masonry or wood, caulking, waste oil, etc.) without the approval of the United States Environmental Protection Agency (EPA)." This condition has a similarly proposed record keeping requirement. Materials suspected of containing lead or PCBs (paint, caulk, etc.) are tested. However, the difficulty lies in traceability. Only suspect materials are tested and solid waste rules are used along with generator knowledge (such as date of installation) to rule out asbestos, lead, and PCBs. This new requirement is a significant modification to the monitoring of this source. There is no regulatory reference to the Toxic Substance Control Act (TSCA), or the solid waste regulations as defined under Resource Conservation and Recovery Act (RCRA) that define PCB and lead containing materials. Therefore, there is no expectation or reference as to how sample results and other data to determine applicability of this condition should be used to make a determination.

- 12. Condition E26-3 provides the exclusion from the prohibition on open burning. As mentioned in the legal evaluation the referenced rule attempting to provide applicability of the additional monitoring method is not valid. Ignoring this, the requirement is redundant as it is identical to the record-keeping requirement found in E26-8. Furthermore, although OSI does currently track the types of explosives burned in the pans including the weight of the materials, there is no current tracking of cellulosic ignition materials, plastic burn pan liners, or any contaminants present in the explosive waste. OSI would need detailed clarification on the validity and the proposed TDEC methods of determining the contaminants present in the explosive waste. These changes would be a significant change in the monitoring method of the source.
- 13. Condition E26-5 again restricts open burning of barium chloride explosive waste. As already mentioned, Barium Chloride is not used at HSAAP. The compliance method portion appears to be copied from E5-5. The E5-5 compliance method applies to explosives-contaminated waste, not explosives waste burned on the Subpart X pans. OSI recommends requiring certification that Barium Chloride is not used and if use is required the Technical Secretary may require proof of compliance with this limit.
- 14. Condition E26-6 restricts open burning of triamino-trinitro-benzene (TATB) contaminated waste rather than TATB explosive waste. The compliance method appears to have been copied from E5-6 at least partially. The E5-6 compliance method applies to explosives-contaminated waste, not explosives waste burned on the Subpart X pans. TDEC should clarify the types of materials to be recorded. TDEC should also clarify that this is for explosives containing TATB not contaminated with TATB, which would be unattainable.
- 15. Condition E26-8 actually adds a throughput restriction to the open burning of total materials to be burned such as explosive waste, cellulosic igniters, plastic liners and explosive waste contaminants. As mentioned in the section above the referenced rule attempting to provide applicability of the additional monitoring method is not valid. Ignoring this OSI does currently track the types and quantities of explosives burned in the pans however there is no current tracking of cellulosic ignition materials, plastic burn pan liners, and any contaminants present in the explosive waste. OSI would need detailed clarification on the validity and the proposed TDEC methods of determining the last item requested to be tracked.

<u>Technical</u> and <u>legal</u> review comment 16 concern the requirement to include records viewed as critical or sensitive for operational security in the SAR.

16. Condition E2(a)(1) requires submission of several records, that if determined applicable, would contain critical or sensitive for operational security. Condition E2(a)(1) includes the following condition numbers for the open burning ground sources: Conditions E5-5, E5-6, E5-7, E5-8, E5-9, E5-11, E26-3, E26-5, E26-6, and E26-8. The compliance monitoring methods stipulated in each of these conditions states it is acceptable for the records to be available on-site for inspection. Inclusion in this condition would require sending the records or a summary of the records in with the semiannual report. As stated in the response to the October 3, 2017 EPA comments when this was first suggested, due to operational security concerns, this information cannot be made available to the public. The following statement, excerpted from the October 30, 2017 response to the EPA comments is still valid.

"Records indicating the type, amount, dates, and generation location of waste processed at the burning grounds are available on site for review. For security purposes, OSI and the Army require this information be available on site only. These records could be used to obtain building operating schedules, product mixture ratios, information on transfer frequencies of certain products and storage locations, and other details that are viewed as critical or sensitive information for operational security. This information must be protected and prevented from becoming available to adversaries."

Remaining Technical and Applicability Comments

<u>Technical comments 17 through 28 all apply to the facility's stoker coal fired boilers (sources 37-0028-01-04), specifically, Conditions .</u>

- 17. Condition E4-10 limits particulate matter. Particulate matter in this condition includes the abbreviation TSP. TSP specifically references total suspended particulates. The boiler MACT, which is where the 0.04 lb/MMBtu/hr limit is from, is not applicable to TSP and is only relevant to particulate matter particle sizes specifically detectable by EPA method 5. OSI suggests referencing the boiler MACT or condition E4-4, which references the boiler MACT, and not including any abbreviation.
- 18. Condition E4-10 also has specific compliance method requirements for stack testing. Testing should be performed in accordance with the Boiler MACT (40 CFR 63 Subpart DDDDD), not every year as stipulated in this condition. This change in frequency based on the results of consecutive stack tests is even referenced in condition E4-4. OSI suggests the compliance method references the boiler MACT requirements.
- 19. Condition E4-10 also references specific opacity requirements. The Boiler MACT (40 CFR 63 Subpart DDDD) regulations include specific requirements for fabric filter systems that operate continuous opacity monitors (COMs). It specifically requires daily block averages as the compliance method frequency. OSI recommends referencing the Boiler MACT and correcting or removing the listed requirements. This condition includes a compliance requirement for the COMs to comply with 40 CFR 64, known as compliance assurance monitoring. This source is subject to the boiler MACT

Attachment 1 - February 5, 2018

Comments of BAE Systems Ordnance Systems Inc. (OSI) and Holston Army Ammunition Plant (HSAAP) on Draft Title V renewal permit number 568188

- and not CAM therefore all references to 40 CFR 64 should be removed and replaced with a reference to the boiler MACT or 40 CFR 63 Subpart DDDDD.
- 20. The rules referenced as the applicable standards for Condition E4-10 are not correct and include Tennessee Air Pollution Control Rule (TAPCR) 1200-03-06-.02(1), 1200-03-09-.02(11)(e)1.(iii), 40 CFR 64 and 40 CFR §63.7500. The reference should only be to 1200-03-09-.02(11)(e)1.(iii) and 40 CFR 63 Subpart DDDDD (rather than one specific section). TAPCR 1200-03-06-.02(1) and 40 CFR 64 are not applicable
- 21. Condition E4-11 limits Nitrogen Oxides from the facility's stoker coal fired boilers (sources 37-0028-01-04). This condition references a section of the Boiler MACT. Nitrogen Oxides were only added as a reference to AP-42 emissions factors during the permitting process for the Boiler MACT project. Nitrogen Oxides are not a surrogate of the Boiler MACT so therefore compliance method 40 CFR §63.7500 does not apply. There is not a NOx pollution control device for this source and there is no applicable standard requiring control. The COMs do not indicate any direct correlation with the numeric NOx limit. Therefore, Conditions E4-18 and E4-19 is not relevant and the rule cited is not applicable. OSI suggest returning this condition to the verbiage used in Title V Permit 558406.
- 22. Condition E4-12 has the requirements for carbon monoxide (CO). The limit listed is incorrect. It states CO emitted from each boiler shall not exceed 0.14 lb per MMBtu of steam output or 1.7 lb per MWh; 3-run average and 34.7 pounds per hour. This requirement comes from Table 2 to subpart 40 CFR 63 Subpart DDDDD but is listed as an alternative output-based limits which is not applicable and has not been elected as a preferred or requested compliance method. As stated in the extension request dated July 27, 2015 and in the compliance summary report dated February 28, 2017 a Continuous Emission Monitoring System (CEMS) has been installed and the compliance method is based on column three in table 2 under the alternative for 340 ppm by volume on a dry basis corrected to 3 percent oxygen 30 day rolling average. OSI suggests changing the limit to the 340 ppm referenced requirement and including reference to the installed CEMs. There also needs to be a Boiler MACT (40 CFR 63 Subpart DDDDD) reference for this numeric limit in lieu of calculations using the maximum amount of annual coal combustion and AP-42, Chapter 1, Section 1, emission factors and TAPCR 1200-03-06-.03(2).
- 23. Condition E4-12 references in the Compliance Method section the use of the continuous opacity monitor and conditions E4-18 and E4-19 for compliance. As stated, there is a CO CEMS and the COMs has no relation to compliance with this specific pollutant, as it is a colorless gas. There is no control device. CO is maintained by combustion not a control device however there are several requirements for the CEMs that should be referenced. A relative accuracy test assurance is required CEMs but not performance test as referenced. This is associated with the incorrect limit used in the condition.
- 24. Condition E4-12 references rules TAPCR 1200-03-06-.02(1) and 40 CFR 64 as applicable. These are not applicable and OSI suggest replacing these with a reference to 40 CFR 63 Subpart DDDDD.
- 25. Condition E4-13 limits VOCs and lists TAPCR 1200-3-6-.03(2) as an applicable standard. This should not be applicable. Similarly in the compliance method 40 CFR §63.7500 table 2 is listed as a requirement. VOCs are not a surrogate under subpart DDDDD and the COMs associated with condition E4-18 and E4-19 are not applicable to this pollutant.

- 26. Conditions E4-14 and E4-15 contains numeric limits for Hydrogen Chloride and Mercury that are from the Boiler MACT (40 CFR 63 Subpart DDDDD). However, there is no reference to the Boiler MACT or requirements associated with these pollutants. This condition references conditions E4-18 and E4-19 which are associated with the COMs. The COMs are not relevant to these pollutants. Stack testing requirements are listed but are not accurate and should be performed in accordance with the Boiler MACT. As stated in condition E4-4 this frequency can change based on the results of the testing. Neither TAPCR 1200-03-06-.02(1) or 40 CFR 64 is applicable and OSI suggests these references be replaced with a reference to the Boiler MACT.
- 27. Conditions E4-18 and E4-19 both list requirements for the COMs systems and should also include references to the CO CEMS.
- 28. Condition E4-20 requires stack testing for particulate matter. Hydrogen Chloride and Mercury should be included and OSI suggests adding a reference to the Boiler MACT (40 CFR 63 Subpart DDDDD) as the applicable standard.

Technical comments 29 through 31 pertain to processes with scrubbers either as controls for pollutants or recover of materials. Each scrubber design is different with the majority designed for volatile organic compounds and remainder designed for nitrogen oxide reduction. All of these would be significant changes to the monitoring method especially without an underlying applicable limit.

- 29. Condition E7-2 and E14-2 are identical conditions requiring parametric monitoring for scrubbers. These conditions are identical to the parametric monitoring found in Condition E58-2. The sources are not in operation. If any of the sources are returned to operation and 40 CFR 64 (CAM) is determined to be applicable at part of the restart of these sources, the parametric monitoring for the source's scrubber would have to be established. The current interpretation is that there is no applicable standard requiring parametric monitoring. This is supported by the draft permit not including a regulatory reference. Copying the E58-2 compliance monitoring method is not appropriate because the relevant rule establishing that condition is not applicable to these sources and the parameters being monitored are not valid for the scrubber designs associated with these sources.
- 30. Conditions E8-2, E9-2, E10-2, E13-2, E15-2, and E22-2 are also identical to each other and are based on the Condition E58-2 as well. The sources are also not in operation. If any of the sources are returned to operation and 40 CFR 64 (CAM) is determined to be applicable at part of the restart of these sources, the parametric monitoring for the source's scrubber would have to be established. The current interpretation is that there is no applicable standard requiring parametric monitoring. The recording and reporting regulatory reference cited (TAPCR 1200-03-10-.02 (1)) in the compliance method section of these conditions is not supportive of this requirement and does not appear to be applicable. Copying the E58-2 compliance monitoring method is not appropriate because the relevant rule establishing that condition is not applicable to these sources and the parameters being monitored are not valid for the scrubber designs associated with these sources.
- 31. Conditions E12-2, E30-2, and E33-2 are identical to conditions found in comment 29 and Condition E58-2 detailing parametric monitoring requirements. The only difference is the sources associated with these conditions are operational. However, the current interpretation is still that there is no applicable standard requiring parametric monitoring. The recording and reporting regulatory

reference cited (TAPCR 1200-03-10-.02 (1)) in the compliance method section of these conditions is not supportive of this requirement and does not appear to be applicable. Copying the E58-2 compliance monitoring method is not appropriate because the relevant rule establishing that condition is not applicable to these sources and the parameters being monitored are not valid for the scrubber designs associated with these sources.

<u>Technical comment 32 applies to the Area B acetic anhydride manufacturing facility (source 37-0028-113).</u>

32. Condition E61-20 establishes that the flare shall be monitored to ensure it is operated and maintained in conformance to the design. The compliance method says compliance is assured by the performance test in E61-10. That language was removed from the E61-10 compliance method in accordance with the alternative monitoring plan approved by EPA. The testing has already occurred in accordance with NSPS requirements. The temperature is monitored per 40 CFR 60 Subpart A. Additionally, we use the alternative monitoring method approved by EPA on December 7, 2012 as stated in Condition E61-10 to ensure the off-gas is controlled and is not bypassing the furnaces and flare.