

#### OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

Date Issued: October 18, 2016

Date Expires: April 1, 2026

Issued To: Milan Army Ammunition Plant

Installation Description:

I. Plant boilers: thirteen (13) boiler units

- II. LAP (Load, Assemble, and Pack Lines) `
- III. Surface Coating Operation: two spray booths, D-10 South & D10 West
- IV. Woodworking Operation: one (1) woodworking area
- V. Open burning and open detonation of munitions
- VI. Emergency Engines

Emission Source Reference No.

2280 Tennessee Highway104 West

Permit Number:

Installation Address:

467630

Suite 1 Milan

Conditional Major 27-0010 NSPS 40 CFR 60 Subpart IIII, NESHAP 40 CFR 63 Subpart JJJJJJ NESHAP 40 CFR 63 Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

1. The applications that were utilized in the preparation of this permit are dated **October 15, 2013** and signed by **Britton G. Locke**, Commander's Representative for the permitted facility with additional information provided May 4,2015. If this person terminates employment or is reassigned different duties such and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (**30**) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(Continued on the next page)

ichilke W. averter TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE CN-0827 (Rev. 9-92)

#### POST AT INSTALLATION ADDRESS

RDA-1298

#### **General Permit conditions**:

- 2. The Permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-03-09-.02(11)(a). The Permittee would be considered a major source because their potential to emit particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), and nitrogen oxides (NOx) are greater than 100 tons per year, each, at the time of application. The Permittee has agreed to be subject to limitation(s) in order to be below the major source applicability threshold for PM, SO<sub>2</sub> and NOx of 100 tons per year, each. Additionally, the permittee would be considered a major source because of the facility's potential to emit Hazardous Air Pollutants (HAPs) is greater than 10 tons per year (ton/yr) at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability threshold for any single HAP of 10 tons per year and for combined HAPs of 25 tons per year.
- **3.** Emissions of any hazardous air pollutant (HAP) listed in Section 112 of the Federal Clean Air Act shall not exceed 9.9 tons during all intervals of 12 consecutive months. Emissions of any combination of HAPs shall not exceed 24.9 tons during all intervals of 12 consecutive months.

Compliance shall be determined in accordance with the Logs contained in Conditions 11 and 12.

- 4. This emission limitation for condition #3 is established pursuant to Rule 1200-03-09-.02(11)(a) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated October 15, 2013 from the permittee.
- 5. Any noncompliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability threshold(s) of 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within fifteen (15) working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated, and details of the violation.
- 6. Volatile Organic Compounds (VOC) plantwide including all HAPs emitted from this source shall not exceed 50 tons during any interval of 12 consecutive months.

This limitation is established pursuant to the Tennessee Air Pollution Control Rule 1200-03-26-.02(6)(b) and the information contained in the agreement letter from the Permittee dated October 15, 2013.

Compliance shall be determined in accordance with the Logs contained in Condition 11.

7. Nitrogen Oxides (NOx) plantwide shall not exceed 77 tons during any interval of 12 consecutive months.

This limitation is established pursuant to the Tennessee Air Pollution Control Rule 1200-03-26-.02(6)(b) and the information contained in the agreement letter from the Permittee dated October 15, 2013.

Compliance shall be determined in accordance with the following Logs.

Plantwide NOx Monthly Emission Log

Month	Year	

Emission Source	NOx lbs/mon
Boilers	
Total	

Consecutive 12 month emissions of NOx Plantwide NOx Consecutive 12 Month Emission Log

				107050		
Month/Year	Boilers	Boilers	Boilers NOx	Open	Emergency	TOTAL
	NOx	NOx	EMISSIONS	burning	Engine	NOx
	lbs/mon	Tons/yr	For 12	/detonation	NOx	EMISSIONS
			consecutive	NOx	Tons/twelve	For 12
			months *	Tons/twelve	consecutive	consecutive
				consecutive	months	months *
				months		
Jan				1.33	13.78	
				1.33	13.78	
Dec				1.33	13.78	
Total				1.33	13.78	

- (\*) The Tons per 12 Month value is the sum of the NOx emissions for the boilers in the 11 months preceding the month just completed + the NOx emissions in the month just completed plus the open burning/detonation allowable emission plus the emergency engine allowable emissions. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.
- 8. Carbon Monoxide plantwide shall not exceed 22 tons during any interval of 12 consecutive months.

This limitation is established pursuant to the Tennessee Air Pollution Control Rule 1200-03-26-.02(6)(b) and the information contained in the agreement letter from the Permittee dated October 15, 2013. Compliance shall be determined in accordance with the following Logs.

#### Plantwide CO Monthly Emission Log

Month Year

Emission Source	NOx lbs/mon
Boilers	
Total	

#### Consecutive 12 month emissions of NOx Plantwide CO Consecutive 12 Month Emission Log

Fiantwide CO Consecutive 12 Month Emission Log								
Month/Year	Boilers	Boilers	Boilers CO	Open	Emergency	TOTAL CO		
	CO	CO	EMISSIONS	burning	Engines	EMISSIONS		
	lbs/mon	Tons/yr	For 12	/detonation	CO	For 12		
			consecutive	CO	Tons/twelve	consecutive		
			months	Tons/twelve	consecutive	months *		
				consecutive	month			
				month				
Jan				3.24	2.97			
				3.24	2.97			
Dec				3.24	2.97			
Total				3.24	2.97			

- (\*) The Tons per 12 Month value is the sum of the CO emissions in the 11 months preceding the month just completed + the CO emissions in the month just completed plus the open burning/detonation allowable emission plus the emergency engine allowable emissions. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.
- 9. Sulfur Dioxide (SO<sub>2</sub>) plantwide shall not exceed 98 tons during any interval of 12 consecutive months.

This limitation is established pursuant to the Tennessee Air Pollution Control Rule 1200-03-26-.02(6)(b) and the information contained in the agreement letter from the Permittee dated October 15, 2013. Compliance shall be determined in accordance with the following Logs.

#### Plantwide SO2 Monthly Emission Log

Month Year

Emission Source	SO <sub>2</sub> lbs/mon
Boilers	
Total	

Consecutive 12 month emissions of  $SO_2$ 

#### Plantwide SO<sub>2</sub> Consecutive 12 Month Emission Log

1 million 100 2 001	Hantwhile 50% Consecutive 12 Month Emission Elog							
Month/Year	Bolier	Boilers	Boilers SO <sub>2</sub>	Open	Emergency	TOTAL SO <sub>2</sub>		
	$SO_2$	$SO_2$	EMISSIONS	burning	Engines	EMISSIONS		
	(lbs/mon)	Tons/yr	For 12	/detonation	$SO_2$	For 12		
			consecutive	$SO_2$	Tons/twelve	consecutive		
			months	Tons/twelve	consecutive	months *		
				consecutive	month			
				month				
Jan				0.4	0.91			
				0.4	0.91			
Dec				.0.4	0.91			
Total				0.4	0.91			

- (\*) The Tons per 12 Month value is the sum of the  $SO_2$  emissions in the 11 months preceding the month just completed + the  $SO_2$  emissions in the month just completed plus the open burning/detonation allowable emission plus the emergency engine allowable emissions. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.
- **10.** Particulate Matter (PM) plantwide shall not exceed 98 tons during any interval of 12 consecutive months.

This limitation is established pursuant to the Tennessee Air Pollution Control Rule 1200-03-26-.02(6)(b) and the information contained in the agreement letter from the Permittee dated October 15, 2013. Compliance shall be determined in accordance with the following Logs.

#### Plantwide PM Monthly Emission Log

Month Year

Emission Source	PM lbs/mon
Boilers	
LAP	
Surface coating	
Woodworking	
Total	

Consecutive 12 month emissions of PM

Plantwide PM Consecutive 12 Month Emission Log

Month/Year	PM(lbs/mon)	PM	PM	Open	Emergency	TOTAL PM	
		Tons/yr	EMISSIONS	burning	Engines	EMISSIONS	
			For 12	/detonation	PM	For 12	
			consecutive	PM	Tons/twelve	consecutive	
			months	Tons/twelve	consecutive	months *	
				consecutive	month		

		month		
Jan		85	0.98	
		85	0.98	
Dec		85	0.98	
Total		85	0.98	

- (\*) The Tons per 12 Month value is the sum of the PM emissions in the 11 months preceding the month just completed + the PM emissions in the month just completed plus the open burning/detonation allowable emission plus the emergency engine allowable emissions. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.
- 11. For surface coating VOC emitting sources recordkeeping of material usage, VOC/HAP content, and the quantification of VOC and HAP emissions for compliance with the emission limits shall be prepared in accordance with the following log.

**Compliance Method:** Compliance with this emissions limitation shall be demonstrated through recordkeeping of material usage rates and respective VOC/HAP content of the material from surface coating. Volatile organic compounds and HAP emissions from this facility (27-0010-00) shall be calculated and maintained by keeping the following logs.

MONTHLY VOC/HAP EMISSIONS LOG FOR Facility SOURCE 27-0010-\_\_\_\_\_

MONTH:

	YEAR							
MATE RIAL NAME	USAGE (gallons per month (gpm))	VOC CONTENT (pounds VOC per gallon)	VOC EMISSIONS (tons VOC per month)	HAP <sub>1</sub> CONTENT (pounds HAP <sub>1</sub> per gallon)	HAP <sub>1</sub> EMISSIONS (tons HAP <sub>1</sub> per month)	HAP <sub>p</sub> CONTENT (pounds HAP <sub>p</sub> per gallon)	HAP <sub>p</sub> EMISSIONS (tons HAP <sub>p</sub> per month)	TOTAL HAP EMISSIONS (tons HAP <sub>1</sub> through HAP <sub>p</sub> per month)
Mater ial <sub>1</sub>								
Mater ial <sub>2</sub>								
Mater ial <sub>i</sub>								
TOT AL			VOCE		THAP <sub>1</sub>		THAP <sub>p</sub>	THAP

Note:  $i = 1, 2, 3, \dots, n =$  the number of different materials, and  $p = 1, 2, 3, \dots, n =$  the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

#### EQUATIONS FOR THE VOC/HAP EMISSIONS LOG CALCULATIONS FOR SOURCE 27-010:

(1) Material<sub>i</sub> VOC Emissions (tons VOC per month) = (Material<sub>i</sub> Usage (gpm))(Material<sub>i</sub> VOC Content (pounds VOC per gallon)) (2000 pounds/ton)

(2) Material<sub>i</sub> HAP<sub>p</sub> Emissions (tons HAP<sub>p</sub> per month) = (Material<sub>i</sub> Usage (gpm))(Material<sub>i</sub> HAP<sub>p</sub> Content (pounds HAP<sub>p</sub> per gallon)) (2000 pounds/ton)

Where:  $THAP_1 = total HAP_1$  emissions (tons HAP\_1 per month), THAPp = total HAPp emissions (tons HAPp per month) and THAP = total HAP Emissions (tons HAP per month), VOCE = total VOC Emissions (tons VOC per month).

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#### YEARLY VOC/HAP EMISSIONS LOG FOR SOURCE 27-0010 from surface coating

MONTH/YEAR	VOC EMISSIONS (tons VOC per month)	(*)VOC EMISSIONS (tons VOC per 12 months)	TOTAL HAP EMISSIONS (tons HAP <sub>1</sub> through HAP <sub>p</sub> per month)	(*)TOTAL HAP EMISSIONS (tons HAP <sub>1</sub> through HAP <sub>p</sub> per 12 months)
Jan /year	VOCE		THAP	1 /
Mon /year etc	VOCE		THAP	
Dec/year	VOCE		THAP	

(\*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.

#### TAPCR 1200-03-09-.02(11)(e)1.(iii)

For plant wide HAP emissions, both single and combined HAP emissions, a plant wide log from all HAP emitting sources shall be compiled as follows:

Compliance with plant wide HAP limits shall be determined in accordance with the following Logs.

#### Monthly Plantwide HAP emissions for a single HAP

Month Year

Emission Source	Single lbs/mon	HAP	Total HAP Lbs/mon
Boilers			
LAP/Surface coating			
Total			

#### **Consecutive 12 month emissions of HAP emissions**

Month/Year	Single HAP (lbs/mon)	Total HAP emissions lbs/mon	TOTAL HAP EMISSIONS For 12 consecutive months *
Jan			
Dec			
Total			

- (\*) The Tons per 12 Month value is the sum of the HAP emissions in the 11 months preceding the month just completed + the HAPx emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.
- 12. The Permittee is placed on notice that **Conditions 3, 7, 9,** and **10** of this operating permit for this source contains limitations that allows the Permittee to opt-out of the major source operating permit program requirements specified in Division Rule 1200-03-09-.02(11). Failure to abide by these limits will not only subject the Permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a conditional major source.

**13.** Should proof of compliance for the pollutant(s) with emission limitation(s) placed on this permit be required, the emissions measuring test method(s) and procedure(s) are the following:

Pollutant or Parameter	Testing Methodology		
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A		
Sulfur Dioxide	EPA Method 6 as published in the current 40 CFR 60, Appendix A		
Nitrogen Oxides	EPA Method 7 as published in the current 40 CFR 60, Appendix A		
Carbon Monoxide	EPA Method 10 as published in the current 40 CFR 60, Appendix A		
Sulfur content of fuels	EPA Method 19 as published in the current 40 CFR 60, Appendix A		
Volatile Organic Compounds	EPA Method 25A as published in the current 40 CFR 60, Append		

#### TAPCR 1200-03-10-.01

14. This permit is valid only at this location.

TAPCR 1200-03-09-.03(6)

- **15.** The issuance of this permit does not exempt the Permittee from any requirements of the Environmental Protection Agency pertaining to emissions from the operation of this facility.
- **16.** This permit supersedes any previous permit(s) for this source.

TAPCR 1200-03-09-.01(d)

- 17. Excess emissions shall be addressed as specified in Chapter 1200-03-20 of the Tennessee Air Pollution Control Regulations. The control devices shall operate at all times when the processing and handling equipment operates.
- **18.** Regarding recordkeeping of logs, the following is applicable:
  - a. For sources required to maintain monthly logs:
    All data, including all required calculations, must be entered in the log no later than 30 days from the end of the month for which the data is required.
  - b. For sources required to maintain weekly logs: All data, including all required calculations, must be entered in the log no later than 7 days from the end of the week for which the data is required.
  - c. For sources required to maintain daily logs: All data, including all required calculations, must be entered in the log no later than 7 days from the end of the day for which the data is required.

Logs and records specified in this permit shall be made available upon request by the Technical Secretary or his representative shall be retained for a period of not less than five years unless otherwise noted. Logs and records contained in this permit may be based on a recommend format. Any logs that have an alternative format may be utilized provided such logs contain the same information that is required. Computer generated logs are also acceptable.

- **19.** The Permittee shall apply for renewal of this permit not less than sixty (**60**) days prior to this permit's expiration date pursuant to the Division Rule 1200-03-09-.02(3).
- 20. A written report stating the compliance status of the facility with **Conditions 3, 7, 9, and 10** shall be submitted by **March 31** of every year beginning in **2017**. The first report shall cover the calendar year 2016. This report shall cover the preceding calendar year and shall include the records required by **Condition 7, 9, 10, 11 and 30**. This report shall be submitted to the Environmental Field Office Manager at the following address:

Jackson Environmental Field Office Air Pollution Control Division 1625 Hollywood Drive Jackson, TN 38305 Email: <u>APC.JackEFO@TN.gov</u>

TAPCR 1200-03-10-.02(2)(a)

#### Specific conditions:

#### I. Plant boilers –

Source Identification:	Thirteen plant boilers as listed below Subject to Subpart JJJJJJ

21. Maximum heat input for each boiler shall not exceed the heat-input capacities listed in table below.

Source Number	Source ID	Heat Input Capacity	Fuel Used	Use
27-0010-05	A15L-1	10.461	No. 2 Fuel Oil	Steam generation
	A15L-2	10.461	No. 2 Fuel Oil	Steam generation
27-0010-12	I3A-1	2.511	No. 2 Fuel Oil	Steam generation
	14-A1	2.09	No. 2 Fuel Oil	Steam generation
	15A-1	2.09	No. 2 Fuel Oil	Steam generation
	V1L-1	2.56	No. 2 Fuel Oil	Steam generation
27-0010-28	B21L-1	8.375	No. 2 Fuel Oil	Steam generation
	B21L-2	8.375	No. 2 Fuel Oil	Steam generation
27-0010-31	J107A-1	8.375	No. 2 Fuel Oil	Steam generation
	J107A-2	8.375	No. 2 Fuel Oil	Steam generation
27-0010-84	T116A-1	1.55	No. 2 Fuel Oil	Hot water boiler
27-0010-86	D88L-1	14.65	No. 2 Fuel Oil	Steam generation
	D88L-2	14.65	No. 2 Fuel Oil	Steam generation

22. No. 2 oil, with maximum of 0.5 % by weight of sulfur content, only shall be used by all boilers listed.

**Compliance Method:** A log of the fuel usage and the proof of the sulfur content in a form that readily shows compliance with this condition must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

- 23. Visible emissions from the boiler units shall not exceed twenty (20) percent opacity. The opacity shall be determined by EPA Method 9, as published in the current CFR. (6 minute average)
- 24. Particulate matter  $(PM_{10})$  emitted from these fuel- burning units shall not exceed the limits specified in the following table and no more than 6.0 tons combined during all intervals of 12 consecutive months.

Source Number	Source ID	Emission Limit Lb/hr
27-0010-05	A15L-1	0.15
	A15L-2	
27-0010-12	I3A-1	0.04
27-0010-12	I3A-1 I4A-1	0.04
	I5A-1	0.03
	V1L-1	0.04
27-0010-28	B21-1	0.12
	B21-2	
27-0010-31	J107-1	0.12
	J107-2	
27-0010-84	T116A-1	0.02
27-0010-86	D88L-1	0.21
	D88L-2	

TAPCR 1200-03-09-.02(11)(a)

**Compliance Method:** Compliance with the particulate matter allowable limits for these sources are based upon quantity of fuel oil consumption and EPA AP-42 emission factors of 3.3 lb/1000gallons. This emission factor is provided by table 1.3-1 for filterable PM and Table 1.3-2 for condensable PM in the Fifth edition of AP-42. as well as the record keeping requirements of conditions **10 and 22**.

**25.** Sulfur dioxide (SO<sub>2</sub>) emitted from the boiler units shall not exceed the hourly limits specified in the following table and no more than 96.6 tons combined during all intervals of 12 consecutive months.

TAPCR 1200-03-09-.02(11)(a

Source Number	Source ID	S0 <sub>2</sub> Emission Limit (lb/hr)
27-0010-05	A15L-1	5.31
	A15L-2	
27-0010-12	I3A-1	1.27
	14A-1	
	15A1	1.06
	V1L-1	1.30
27-0010-28	B21L-1	4.25
	B21L-2	

		467630
27-0010-31	J107A-1	4.25
	J107A-2	4.25
27-0010-84	T116A-1	0.79
<u>27-0010-86</u>	<u>D88L-1</u> <u>D88L-2</u>	7.43

**Compliance Method:** Compliance with the SO<sub>2</sub> allowable limits for these sources are based upon quantity of fuel oil consumption and EPA AP-42 emission factors of fuel oil, as well as the record keeping requirements of conditions **9 and 22.** These emission factors are provided by Table 1.3-1 for fuel oil combustion in the Fifth edition of AP-42. A log for each boiler in the format similar to the log provided below shall be kept for each boiler.

## Log for Sulfur dioxide emission tonnage during 12-consecutive month periods from Boilers Source 27-0010-\_\_\_\_

Month/year	Number 2 Fuel oil usage (gallons	Sulfur content	SO <sub>2</sub> emitted from Boiler fired by fuel oil (lb/hr)	SO <sub>2</sub> emitted from Boiler fired by fuel oil (ton)	Tons of Emissions during 12- consecutive month periods *
Jan/year					
Feb/year					
••					
Dec/year					

\* The Tons per 12 Month value is the sum of the emissions in the 11 months preceding the month just completed plus the emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate, in parentheses, the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

26. Nitrogen Oxides  $(NO_x)$  emitted from the boiler units shall not exceed the limits specified in the following table and no more than 60 tons combined during all intervals of 12 consecutive months.

TAPCR 1200-03-09-.02(11)(a)

Source Number	Source ID	NOx Emission Limit (lb/hr)
27-0010-05	A15L-1	1.49
	A15L-2	1.49
27-0010-12	I3A-1	0.36
	15A1	0.30
	V1L-1	0.37
27-0010-28	B21L-1	1.20
	B21L-2	1.20
27-0010-31	J107A-1	1.20
	J107A-2	1.20
27-0010-84	T116A-1	0.22
<u>27-0010-86</u>	<u>D88L-1</u> <u>D88L-2</u>	2.09

# **Compliance Method:** Compliance with the NOx allowable limit for this source is based upon quantity of fuel oil consumption and EPA AP-42 emission factors of 24 lb/1000 gal of fuel oil. These emission factors are provided by Table 1.3-1 for fuel oil combustion in the Fifth edition of AP-42. as well as the record keeping requirements of conditions 7 **and 22**.

27. Volatile Organic Chemicals (VOCs) emitted from the boiler units shall not exceed the limits specified in the following table and no more than 0.76 tons combined during all intervals of 12 consecutive months.

TAPCR 1200-03-09-.02(11)(a

II.

Source	Source ID	VOC Emission Limit
Number		(lb/hr)
27-0010-05	A15L-1	0.019
	A15L-2	0.019
27-0010-12	I3A-1	0.0045
	15A1	0.00376
	V1L-1	0.0046
27-0010-28	B21L-1	0.0151
	B21L-2	0.0151
27-0010-31	J107A-1	0.0151
	J107A-2	0.0151
27-0010-84	T116A-1	0.00279
<u>27-0010-86</u>	D88L-1 D88L-2	0.0264

- **Compliance Method:** Compliance with the VOCs allowable limits for these sources are based upon quantity of fuel oil consumption and EPA AP-42 emission factors of fuel oil. These emission factors are provided by Table 1.3-1 for fuel oil combustion in the Fifth edition of AP-42 as well as the record keeping requirements of conditions **11 and 22**.
- **28.** All of the boilers are subject to the provisions of 40 CFR 63 Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. This includes, but is not limited to, those conditions found at Attachment #1. These boilers are existing boilers per Subpart JJJJJJ (built or constructed before June 4, 2010 pursuant to the rule).

27-0010	Emission source		F, H, I, O, and X The LAP line complete final assembly of milita	oad, assemble & pack (LAP) lines A, B, C, D, , s manufacture ammunition components and ary ammunition. Manufacturing involves oller application of paint onto ammunition
Emission Point	LAP Line	Stack ID	Description	Exhaust flowrate at existing cfm
27-0010- 35	Line A Disassembly of 155 Artillery	N/A	N/A	N/A
27-0010- 33	Line B Ammunition assembly of 40 mm cartridges	N/A	N/A	N/A

#### LOAD, ASSEMBLE & PACK (LAP) LINES EMISSION SOURCES

		467630	
Line D	D10 West	Spray booth with exhaust filters,	1150
Assembly of	Paint	90% PM control	
mortars	booth		
grenades,			
propelling			
charges, 2			
paint booths			
melt/pour			
with wet			
scrubber			

27-0010-37

III Sullace cou	ung operations	
27-0010-33, 35, 37	Source Identification:	Paint Spray Booths are used for product coating.
		Due to the safety requirement, spray booth may be
		required to move around according to the safety
		requirement.

Spray booth with exhaust filters,

90% PM control

29.	Visible emissions and the method of test are listed in the following table.

D10 South

Missile

Warhead Paint booth

Source	Source	Limit	Determined by	Rules applied
Number	ID	(% opacity)		
27-0010-35	Line A	20	TN VEE Method 2 (aggregate count)	TAPCR 1200-03-0501
27-0010-33	Line B	20	EPA Method 9 (6 minute average)	TAPCR 1200-03-0501
27-0010-37	Line D	20	TN VEE Method 2 (aggregate count)	TAPCR 1200-03-0501

**30.** Particulate matter (PM) emitted from each of the following LAP lines shall not exceed the limit listed in the following table and no more than 5.9 tons combined during all intervals of 12 consecutive months. Particulate matter (PM) emitted from the two paint booths shall not exceed 0.02 grains per dry standard cubic foot.

TAPCR 1200-03-07-.04(1)

Source Number	Source ID	Method of application	<b>PM Limit at</b> 0.02 grain per dry standard cubic foot in lbs/hr at design flow rate	PM Allowable tons /yr
27-0010-37	<b>Line D</b> D10 West Paint booth	Via roller	0.20 lbs/hr	0.88
27-0010-37	Line D D10 South Missile Warhead Paint booth,	Via roller	1.27 lbs/hr	5.56

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**Compliance Method:** For these sources annual certification of the application method (rolling), by the permittee shall be considered to meet the monitoring and related recordkeeping and reporting requirements of TAPCR 1200-3-9-.02(11) (e)1.(iii) and 1200-3-10-.04(2)(b)1 and the compliance requirements of TAPCR 1200-3-9-.02(11)(e)3.(i). The permittee shall submit compliance certification for this source annually.

#### IV. Woodworking operation

27-0010-48 Source Identification: Woodworking operation at building J-5 with cyclone control. Woodworking operation for support of loading, assembly & packaging and out shipment of military ammunition building.

Emission Point	Bldg	Stack ID	Description	Exhaust flowrate at existing cfm
27-0010- 48	Bldg . J5	J5-1 cyclone	Woodworking support for LAP in Bldg J	2400

**31.** For 27-0010-48, equipment consists of: table saw, band saw, sander, drill, radial arm saw, planer, shaper, multiple drill and joiner.

**32.** Visible emissions and the method of test are listed in the following table.

Source Number	Source ID	Limit (% opacity)	Determined by	Rules applied
27-0010-48	Bldg. J5	20	EPA Method 9 (6 minute average)	TAPCR 1200-03-0501

**33.** Particulate matter (PM) emitted from the woodworking cyclone shall not exceed the limit listed in the following table and no more than 0.03 tons combined during all intervals of 12 consecutive months. Particulate matter (PM) emitted from the paint booth shall not exceed 0.02 grains per dry standard cubic foot.

TAPCR 1200-03-07-.04(1)

Source Number	Source ID	PM Limit at 0.02 grain per dry standard cubic foot in lbs/hr at design flow rate	PM Allowable tons /yr
27-0010-48	Building J	0.007 lbs/hr	0.03

**Compliance Method:** Compliance shall be assured by not operating the source without the cyclone in place and operating properly. The cyclone shall be inspected weekly to see if there are any abrasion holes, leaks, or plugging. If these conditions occur they shall be promptly repaired. In the event the process is not operating during the weekly inspection, this shall be noted and explained in the log as a comment. The following inspection log listing the results of the

weekly inspection and any repair/maintenance conducted shall be kept on site. Records shall be retained for a period of not less than five (5) years.

#### WEEKLY INSPECTION LOG OF WOODWORKING CYCLONE

Year \_\_\_\_\_

Date	Comments: weekly inspection findings, Repair/maintenance done denoting cyclone ID.	Person making log entry

#### V. Open Burning and open detonation

Source Identification	Open burning of waste pyrotechnic compositions in a #2 fuel oil base. and open
27-0010-01	detonation

**34**. Materials to be open burned shall be limited only to explosive and explosive-contaminated and/or potentially explosive-contaminated combustibles that cannot safely be disposed of by other methods, including the following:

TAPCR 1200-03-04-.04(1) (k)

- a. Wood products, packaging materials and other explosive and explosive-contaminated and/or potentially explosive- contaminated combustibles which include but are not limited to styrofoam, various types of plastics, rubber, electrical wire coatings, tar paper, polyvinyl chloride, polyester, polyurethane, polystyrene and metals (200,000 pounds per day, maximum),
- b. Petroleum wastes (1250 pounds per day),
- c. Bulk explosives/propellants/baseburner (above ground burn pans) (Total explosive/propellant weight only) (24,000 pounds per day, maximum),
- d. Complete round munitions/explosive components (Total explosive weight only) (10,000 pounds per day, maximum),

TAPCR 1200-3-04-.04(1)(k)

**Compliance Method:** A daily log containing the source of the materials combusted shall be maintained in a format that contains the information specified below in Table 1. Records shall be retained for a period of not less than five years.

#### **OPEN BURNING TABLE 1:**

	MONTH:	ILAF	۱.	
Day	Operating Time of site Begin/end (x:xx am/pm)	Type of Material Combusted,	Number of Charges per day	Quantity of Material Combusted (lb/day)
1				
2				
31				

#### DAILY OPEN BURNING LOG MONTH: YEAR:

#### 35. Materials to be burned shall not exceed 182 Tons per day.

**Compliance Method:** A daily log containing the quantity of material combusted shall be shall be maintained in a format that contains the information specified in Condition 34, Table 1. Records shall be retained for a period of not less than five years.

- **36.** The open burning of materials, handling and disposal of ash and other waste generated from this burning process must be conducted in accordance with all applicable Tennessee Division of Solid Waste Management regulations.
- **37.** Only those materials approved in this permit can be burned at this location. No burning of materials may be conducted if contaminated with any of the 188 hazardous substances as listed in the Federal Clean Air Act revisions of November 15, 1990 unless in accordance with requirements under Chapter 1200-3-31 (HAPS Control Requirements) and all other applicable portions of the Tennessee Air Pollution Control Regulations.
- **38.** Open burning may be conducted seven (7) days per week on an as needed basis. Starting and refueling of all fires will only be conducted between the hours of 6:00 AM and 7:30 PM. If, in an emergency situation, open burning must be conducted outside these hours, verbal notification must be made to Air Pollution Control staff in the Jackson Field Office on the next work day.
- **39.** The open burning site must be located at least one-half mile from any airport, hospital, nursing home, school, Interstate, US or State highway(s), national reservation, national or state park, wildlife area, national or state forest, and/or residence not on the same property as the open burning site, and shall be operated in such fashion as to assure no impairment of highway visibility. In addition, the site must be at least five hundred (500) feet from any registered sanitary landfill or other land disposal sites for combustible solid waste or other similar facility.
- **40.** No burning shall be conducted on days when the wind velocity is above twenty (20) miles per hour, described as "Fresh" on the Beaumont Wind Scale. (Attachment #2)
- **41.** All materials to be burned must be in a state to sustain good combustion. Burning must be conducted when ambient conditions are such that good dispersion of combustion products will result. No open burning will be conducted on a day when the Tennessee Division of Air Pollution Control has declared an Air Pollution Emergency Episode.
- **42.** Fugitive dust from this site shall not produce visible emissions beyond the property line for more than five (5) minutes per hour or twenty (20) minutes per day as determined by Tennessee Visible Emissions Evaluation Method 4.

- **43.** If valid complaints are received by Division staff because of dust generated from roadways and parking areas, visible emissions from roads and parking lots associated with operation of this open burning site shall meet ten percent (10%) opacity as determined by Tennessee Visible Emissions Evaluation Method 1
- 44. The facility shall review all available research related to alternatives to open burning of explosive and explosivecontaminated and or potentially explosive contaminated combustibles annually, and a report of the facility's findings shall be submitted by **March 31** of every year beginning in March of 2017. In the event a safe alternative is discovered, the report shall include a plan to implement the new method of disposal or a technical explanation of why such method is not technically feasible at this facility.

TAPCR 1200-03-04-.04(1)(k), TAPCR 1200-03-10-.02(1)(a)

#### VI. Emergency engines serving generators

CompressionIgnitionThis source consists of one (1) 67 horsepower (hp) diesel-fired emergencyEmergencyStationaryIternal combustion engine (i.e., Motor-Generator Set for Stand-ByICE (67 hp)Generator) in the A-15 Boiler Room. The engine is subject to MACT 40 CFR<br/>Part 63, Subpart ZZZZ

- **45.** This source consists of one (1) 67 horsepower (hp) diesel-fired existing (built prior to June 12, 2006) emergency stationary internal combustion engine (i.e., Motor-Generator Set for Stand-By Generator). The engine is subject to MACT 40 CFR Part 63, Subpart ZZZZ. Also, the unit is subject to TAPCR 1200-03-09-.03(8).
- **46.** For each emergency stationary compression ignition RICE, the permittee shall:
  - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first; however, the permittee has the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement.
  - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
  - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency engine is operating during an emergency and it is not possible to shut it down in order to perform the management practice requirements as described in (a), (b), and (c) of this condition, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

40 CFR §63.6603(a)

**47.** The permittee must be in compliance with the applicable emission limitations, operating limitations, and other requirements in subpart ZZZZ at all times. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Technical Secretary which may include, but is not limited to,

monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

40 CFR §63.6605

**48.** The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions, or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR §63.6625(e)(3)

**49.** The permittee must install a non-resettable hour meter to each emergency engine if one is not already installed.

40 CFR §63.6625(f)

**50.** The permittee must minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.

40 CFR §63.6625(h)

- **51.** The permittee must operate each emergency stationary RICE according to the requirements in (a) through (c) of this condition in order for the engines to be considered emergency stationary RICE under subpart ZZZZ. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in (a) through (c) of this condition, is prohibited. If any engine is not operated according to the requirements in (a) through (c) of this condition, the engine will not be considered an emergency engine under subpart ZZZZ and must meet all requirements for non-emergency engines.
  - (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
  - (b) The permittee may operate each emergency stationary RICE for any combination of the purposes specified in (i) through (iii) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by (3) below counts as part of the 100 hours per calendar year.
    - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
    - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
    - (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
  - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part

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of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in (2) above. Except as provided below, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (i) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
  - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
  - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
  - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
  - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
  - E. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

40 CFR §63.6640(f)

**52.** The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the maintenance plan.

40 CFR §63.6655(e)

**53.** If the emergency stationary RICE does not meet the standards that are applicable to non-emergency engines, the permittee must keep records of the hours of operation of the emergency engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in **Condition 51(b)(ii) or (iii)**, or **Condition 51(c)(i)**, the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of the engine operated for these purposes.

40 CFR §63.6655(f)

54. The rated power output capacity for this internal combustion engine is 67 horsepower. Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated October 15, 2013

- **55.** Particulate matter emitted from the engine at this source shall not exceed 0.6 pounds per million British Thermal Units heat input 0.102lb/hr (0.005 tpy). Compliance with this emission limit shall be assured by compliance with **Conditions 45 and 47** of this permit.
- 56. Sulfur dioxide  $(SO_2)$  emitted from this source shall not exceed 0.05 pounds per hour (0.0025 tpy). Compliance with this emission limit shall be assured by compliance with **Conditions 45, 47 and 57** of this permit.

57. Only diesel fuel shall be used as fuel for the emergency engine(s). The sulfur content of the diesel fuel shall not exceed 0.5 percent by weight.

TAPCR 1200-03-14-.03(5)

**Compliance Method:** The permittee shall either obtain certification from the fuel oil supplier of the sulfur content (by weight) for each shipment of fuel oil, OR alternatively, obtain an annual statement from each fuel vendor that guarantees in advance that all fuel oil shipments will contain no more than 0.5 percent sulfur by weight. This record shall be kept available for inspection by the Technical Secretary or his representative and be retained for a period of not less than five (5) years.

<b>Compression Ignition</b>	This source's eight (8) existing (built prior to June 12, 2006) emergency stationary CI
<b>Emergency Stationary</b>	RICE are subject to 40 CFR Part 63, Subpart ZZZZ, NATIONAL EMISSION
ICE (>100 HP)	STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY
	RECIPROCATING INTERNAL COMBUSTION ENGINES rated >100 HP

- **58.** This source consists of eight (8) diesel-fired existing (built prior to June 12, 2006) emergency stationary internal combustion engines (i.e., Motor-Generator Set for Stand-By Generator) >100 horsepower (hp) listed in Table 1. The engines are subject to MACT 40 CFR Part 63, Subpart ZZZZ. Also, the unit is subject to TAPCR 1200-03-09-.03(8).
- **59.** For each emergency stationary compression ignition RICE, the permittee shall:
  - (d) Change oil and filter every 500 hours of operation or annually, whichever comes first; however, the permittee has the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement.
  - (e) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
  - (f) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency engine is operating during an emergency and it is not possible to shut it down in order to perform the management practice requirements as described in (a), (b), and (c) of this condition, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee q must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

40 CFR §63.6603(a)

**60.** Beginning January 1, 2015, if the permittee's emergency CI stationary RICE has a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates to supply power as part of a financial arrangement as specified in **Condition 65(c)**, the permittee must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

40 CFR §63.6604(b)

61. The permittee must be in compliance with the applicable emission limitations, operating limitations, and other requirements in subpart ZZZZ at all times. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

#### 40 CFR §63.6605

**62.** The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions, or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

#### 40 CFR §63.6625(e)(3)

63. The permittee must install a non-resettable hour meter to each emergency engine if one is not already installed.

#### 40 CFR §63.6625(f)

**64.** The permittee must minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.

#### 40 CFR §63.6625(h)

- **65.** The permittee must operate each emergency stationary RICE according to the requirements in (a) through (c) of this condition in order for the engines to be considered emergency stationary RICE under subpart ZZZZ. Any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as described in (a) through (c) of this condition, is prohibited. If any engine is not operated according to the requirements in (a) through (c) of this condition, the engine will not be considered an emergency engine under subpart ZZZZ and must meet all requirements for non-emergency engines.
  - (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
  - (b) The permittee may operate each emergency stationary RICE for any combination of the purposes specified in (i) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by (c) below counts as part of the 100 hours per calendar year.
    - (iv) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in

(2) above. Except as provided below, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(ii) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

F.The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

- G. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- H. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- I. The power is provided only to the facility itself or to support the local transmission and distribution system.
- J. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

#### 40 CFR §63.6640(f)

- 66. If the permittee's emergency stationary RICE has a site rating of more than 100 brake HP and operates to supply power as part of a financial arrangement as specified in **Condition 65(c)**, the permittee shall prepare and submit an annual report under 40 CFR 63, Subpart ZZZZ. The first report would cover the calendar year 2015. Subsequent reports would cover each 12-month period following the first report. Reports must be postmarked or delivered no later than 60 days after the report period ends to: The Technical Secretary, TN Department of Environment & Conservation, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243 or by email at <u>Air.Pollution.Control@tn.gov</u>. The reports must contain the information required in (a) through (g) below:
  - (a) Company name and address where the engine is located.
  - (b) Date of the report and beginning and ending dates of the reporting period.
  - (c) Engine site rating and model year.
  - (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
  - (e) Hours spent in operation to supply power as part of a financial arrangement as specified in Condition 65(c)(i), including the date, start time, and end time for engine operation for the purposes specified in Condition 65(c)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
  - (f) If there were no deviations from the fuel requirements in **Condition 60** that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
  - (g) If there were deviations from the fuel requirements in **Condition 60** that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

#### 40 CFR §63.6650(h)

**67.** The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the maintenance plan.

40 CFR §63.6655(e)

**68.** If the emergency stationary RICE does not meet the standards that are applicable to non-emergency engines, the permittee must keep records of the hours of operation of the emergency engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in **Condition 65(c)(i)**, the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of the engine operated for this purposes.

#### 40 CFR §63.6655(f)

**69**. The rated power output capacity for the internal combustion engines are listed below in Table 1 in horsepower. Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated October 15, 2013

70. Particulate matter emitted from each engine at this source shall not exceed 0.6 pounds per million British Thermal Units heat input. Compliance with the emission limits below shall be assured by compliance with **Conditions 58** and 61 of this permit.

Source Number	Source ID	Diesel engine size	Diesel engine	PM <sub>10</sub> Emission	Emission
		(HP)	size	Limit	Limit
			MMBTU/hr	Lb/hr	Tons/year
27-0010-28	B21	101	0.257	0.22	0.06
27-0010-86	D88L-1	134	0.341	0.3	0.07
	D89	364	0.926	0.8	0.2
	Lift station	168	0.427	0.37	0.09
	Μ				
	S99	335	0.852	0.74	0.18
	Т99	337	0.857	0.74	0.19
	F50	107	0.272	0.24	0.06
	T-116	168	0.427	0.37	0.09

Table 1

TAPCR 1200-03-06-.02(2)(b).

**71**. Sulfur dioxide  $(SO_2)$  emitted from the sources listed in Table 2 shall not exceed the pounds per hour limitation listed. Compliance with this emission limit shall be assured by compliance with **Conditions 58 and 61** of this permit.

Table 2

Source Number	Source ID	Diesel engine size (HP)	Diesel engine size MMBTU/hr	SO2 Emission Limit Lb/hr	Emission Limit Tons/year
27-0010-28	B21	101	0.257	0.21	0.05
<u>27-0010-86</u>	D88L-1	134	0.341	0.27	0.07
	D41	364	0.926	0.74	0.19
	Lift station M	168	0.427	0.34	0.09
	S99	335	0.852	0.69	0.17
	T99	337	0.857	0.69	0.17
	F50	107	0.272	0.22	0.05

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T-116	168	0.427	0.34	0.09	

TAPCR 1200-03-14-.03(5)

72. Only diesel fuel shall be used as fuel for the emergency engine(s). Otherwise if **Condition 60** does not apply, the sulfur content of the diesel fuel shall not exceed 0.5 percent by weight.

TAPCR 1200-03-14-.03(5)

**Compliance Method:** The permittee shall either obtain certification from the fuel oil supplier of the sulfur content (by weight) for each shipment of fuel oil, OR alternatively, obtain an annual statement from each fuel vendor that guarantees in advance that all fuel oil shipments will contain no more than 0.5 percent sulfur by weight. This record shall be kept available for inspection by the Technical Secretary or his representative and be retained for a period of not less than five (5) years.

(End of Conditions)

#### ATTACHMENT 1 40 CFR 63 SUBPART JJJJJJ

## Title 40 CFR 63 Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

#### §63.11196 What are my compliance dates?

(a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.

(1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management practice standard no later than March 21, 2014.

(3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

#### **General Compliance Requirements**

### §63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

#### **Initial Compliance Requirements**

#### §63.11210 What are my initial compliance requirements and by what date must I conduct them?

(a) You must demonstrate initial compliance with each emission limit specified in Table 1 to this subpart that applies to you by either conducting performance (stack) tests, as applicable, according to §63.11212 and Table 4 to this subpart or, for mercury, conducting fuel analyses, as applicable,

#### according to §63.11213 and Table 5 to this subpart.

(c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.

#### §63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility.

#### §63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

(b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.

(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

(c) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

#### §63.11225 What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.

(1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.

(2) An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.

(4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in 63.11196 unless you must conduct a performance stack test. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official.

(i) You must submit the information required in 63.9(h)(2), except the information listed in 63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in 63.13.

(ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

(iii) "This facility has had an energy assessment performed according to §63.11214(c)."

(iv) For units that install bag leak detection systems: "This facility complies with the requirements in §63.11224(f)."

(v) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(vi) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13.

(b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to a requirement to conduct a biennial or 5-year

tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(iii) "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(4) The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by you or EPA through a petition process to be a non-waste under \$241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of \$241.3, and the total fuel usage amount with units of measure.

(c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 63.11214 and 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.

(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(6) You must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.

(i) The date, place, and time of the monitoring event.

(ii) Person conducting the monitoring.

(iii) Technique or method used.

(iv) Operating conditions during the activity.

(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.

(vi) Maintenance or corrective action taken (if applicable).

(d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

#### **Other Requirements and Information**

§63.11235 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

#### Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards, Emission Reduction Measures, and Management Practices

As stated in §63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

If your boiler is in this subcategory	You must meet the following
4. Existing oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	
14. Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air- to-fuel ratio that would otherwise be subject to a biennial tune-up	
(units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program

compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:
(1) A visual inspection of the boiler system,
(2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
(3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
(5) A list of major energy conservation measures that are within the facility's control,
(6) A list of the energy savings potential of the energy conservation measures identified, and
(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

[78 FR 7518, Feb. 1, 2013]

8. CO emissions		
9. Boiler operating load		
[78 FR 7521, Feb. 1, 2013]		

**Table 8 to Subpart JJJJJJ of Part 63—Applicability of General Provisions to Subpart JJJJJJ**As stated in §63.11235, you must comply with the applicable General Provisions according to the following:

General provisions cite	Subject	Does it apply?
§63.1	Applicability	Yes.
§63.2	Definitions	Yes. Additional terms defined in §63.11237.
§63.3	Units and Abbreviations	Yes.
§63.4	Prohibited Activities and Circumvention	Yes.
§63.5	Preconstruction Review and Notification Requirements	No
§63.6(a), (b)(1)-(b)(5), (b)(7), (c), (f)(2)-(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes.
§63.6(e)(1)(i)		No. <i>See</i> §63.11205 for general duty requirement.
§63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	No.
§63.6(e)(3)	SSM Plan	No.
§63.6(f)(1)	SSM exemption	No.
§63.6(h)(1)	SSM exemption	No.
§63.6(h)(2) to (9)	Determining compliance with opacity emission standards	Yes.
§63.7(a), (b), (c), (d), (e)(2)-(e)(9), (f), (g), and (h)	Performance Testing Requirements	Yes.
§63.7(e)(1)	Performance testing	No. See §63.11210.
63.8(a), (b), (c)(1), (c)(1)(ii), (c)(2) to (c)(9), (d)(1) and (d)(2), (e),(f), and (g)	Monitoring Requirements	Yes.
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No.

§63.8(c)(1)(iii)	Requirement to develop SSM Plan for CMS	rNo.
§63.8(d)(3)	Written procedures for CMS	Yes, except for the last sentence, which refers to an SSM plan. SSM plans are not required.
§63.9	Notification Requirements	Yes, excluding the information required in §63.9(h)(2)(i)(B), (D), (E) and (F). See §63.11225.
§63.10(a) and (b)(1)	Recordkeeping and Reportin Requirements	gYes.
§63.10(b)(2)(i)	Recordkeeping of occurrence an duration of startups or shutdowns	dNo.
§63.10(b)(2)(ii)	Recordkeeping of malfunctions	No. <i>See</i> §63.11225 for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunctions.
§63.10(b)(2)(iii)	Maintenance records	Yes.
§63.10(b)(2)(iv) and (v)	Actions taken to minimize emission during SSM	sNo.
§63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes.
§63.10(b)(2)(vii) to (xiv)	Other CMS requirements	Yes.
§63.10(b)(3)	Recordkeeping requirements for applicability determinations	rNo.
§63.10(c)(1) to (9)	Recordkeeping for sources with CMS	Yes.
§63.10(c)(10)	Recording nature and cause of malfunctions	of No. <i>See</i> §63.11225 for malfunction recordkeeping requirements.
§63.10(c)(11)	Recording corrective actions	No. <i>See</i> §63.11225 for malfunction recordkeeping requirements.
§63.10(c)(12) and (13)	Recordkeeping for sources with CMS	Yes.
§63.10(c)(15)	Allows use of SSM plan	No.

§63.10(d)(1) and (2)	General reporting requirements	Yes.
§63.10(d)(3)	Reporting opacity or visible emission observation results	No.
§63.10(d)(4)	Progress reports under an extension of compliance	Yes.
§63.10(d)(5)	SSM reports	No. <i>See</i> §63.11225 for malfunction reporting requirements.
§63.10(e)	Additional reporting requirements for sources with CMS	Yes.
§63.10(f)	Waiver of recordkeeping or reporting requirements	Yes.
§63.11	Control Device Requirements	No.
§63.12	State Authority and Delegation	Yes.
§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	
$\{63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9)$		No.