ANNISTON ARMY DEPOT

Anniston, Calhoun County, Alabama Facility No.: 301-0023

MAJOR SOURCE OPERATING PERMIT THIRD TITLE V RENEWAL DRAFT: DATE, 2019



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ANNISTON ARMY DEPOT

CALHOUN COUNTY, ALABAMA FACILITY No.: 301-0023

STATEMENT OF BASIS

The proposed Title V Major Source Operating permit (MSOP) third renewal is issued under the provisions of ADEM Admin. Code R 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Per ADEM Rule 335-3-16.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the current MSOP. The renewal application was due on June 14, 2018. The application was received at the Department on November 8, 2017. The proposed MSOP will expire on ????, 2024.

NOTABLE CHANGES

This Title V MSOP renewal will incorporate equipment covered by Air Permit into the MSOP that have been issued to Anniston Army Depot since the last issuance. The Air Permits that are being incorporated into the Title V are the following:

| PERMIT No. | DESCRIPTION |
|------------|---------------------------------------------------------------------------------------------|
| X090 | Diesel Fired Emergency Fire Water Pump 90 kW (121 HP) Building 27C |
| | Diesel Fired Emergency Fire Water Pump 131 kW (175 HP) Building 127 |
| | Diesel Fired Emergency Generator 597 kW (800 HP) Building 801 |
| | Diesel Fired Emergency Generator 597 kW (800 HP) Building 813 |
| X091 | Two (2) 20.1 MMBtu/hr Building 401 Natural Gas Boilers (401-1 & 401-2) |
| X092 | One (1) 20.1 MMBtu/hr Building 401 Natural Gas Boiler |
| X093 | Building 143 Paint Booth w/ Particulate Filter and 2.00 MMBtu/hr Natural Gas |
| | Fired Oven |

The boilers is Air Permit Nos. X091 and X092 replaced larger boilers already present in the Building. The paint booth in Air Permit X093 is also replacing an existing unit in Building 143.

ABRASIVE BLASTING REQUIREMENTS

Anniston Army Depot operates multiple blasting units. These units are used to depaint or prepare the surface of metal components for cleaning and coating. All exhausts associated with these blasting units are routed to particulate control devices. Blasting operations in this section are as follows:

Building 409 Walk-In Abrasive Blast Unit (L7029)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Building 409 Walk-In Abrasive Blast Unit (L7030)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Building 409 Walk-In Abrasive Blast Unit (09427)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Building 409 Walk-In Abrasive Blast Unit (L7031) – X058

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Spinner Hanger B/C L4463

This operation utilizes stainless steel shot to blast large military tanks and other combat vehicle components. This operation is equipped with a dust collector for particulate control.

Building 431Spinner Hanger Abrasive Blast Cabinet (J4744)

This operation utilizes various abrasive charge to blast large tank components. This operation is equipped with a cartridge filter system for particulate control. This unit is subject to the requirements of 40 CFR 64, "Compliance Assurance Monitoring (CAM"; the CAM Plan for this unit is listed at the end of this document.

Building 433 Walk-In Abrasive Blast Unit (L5056)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Building 433 Walk-In Abrasive Blast Unit (L5057)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Building 433 Walk-In Abrasive Blast Unit (L5058)

This operation may utilize olivine, sand, steel shot, glass beads, or coal slag as a blast media. This unit is used to depaint, derust, or surface prep combat vehicle components and small arms components. This unit is equipped with a baghouse for particulate control.

Power Train Facility Walk-In Abrasive Blast Unit (L6009)

This operation may utilize olivine, sand, steel shot, glass beads, or coal as a blast media. This operation is used to depaint, derust, or surface prep combat vehicle components. This operation is equipped with a baghouse for particulate control.

Power Train Facility Blast Room (L7734)

This operation utilizes blast media for the abrasive cleaning of transmission parts and components. This operation is equipped with a baghouse for particulate control.

Power Train Facility Slurry Blast Room (L7735)

This operation utilizes blast media for the abrasive cleaning of transmission parts and components. This operation is equipped with a baghouse for particulate control.

Power Train Facility Blast Booth (L7733)

This operation utilizes blast media for the abrasive cleaning of transmission parts and components. This operation is equipped with a baghouse for particulate control.

Power Train Facility Glovebox Blast Unit (L6359)

This operation utilizes blast media for the abrasive cleaning of transmission parts and components. This operation is equipped with a baghouse for particulate control.

Power Train Facility Glovebox Blast Unit (L7588)

This operation utilizes blast media for the abrasive cleaning of transmission parts and components. This operation is equipped with a baghouse for particulate control.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

Each abrasive blasting operation would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A weekly visual check shall be performed to determine compliance with this rule.

Emission Monitoring:

A weekly visual check shall be conducted. If visible emissions greater than 10% opacity are observed, a VEO shall be conducted by a person certified with 40 CFR 60 Appendix A, Method 9. The facility shall investigate and initiate any necessary corrective action within four (4) hours. After any corrective action, an additional observation shall be performed in order to verify that emissions have been reduced below the allowable. In the event that a week goes by without the operation of a unit, a weekly visual inspection shall not be required [ADEM Admin. Code R 335-3-16-.05(c)].

Recordkeeping and Reporting Requirements:

Records of the weekly visual inspections shall be maintained and should be readily available for inspection for a period of five (5) years. These records shall include the date and results other visual inspections. During weeks that a unit is not in operation and weekly visible observation is not required, it shall be recorded that the unit was not in operation [ADEM Admin. Code R 335-3-16-.05(c)].

Applicability:

ADEM Admin. Code R 335-3-4-.04(1), "Process Industries – General"

No personnel shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount resulting from the following equations:

$$E = 3.59P^{0.62}$$

Where P is process weight < 30 tons per hour; OR

$$E = 17.31P^{0.16}$$

Where P is process weight \geq 30 tons per hour.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule. The facility has elected to impose the following ANTI-PSD limits for the listed blasting operations:

- L4463: PM emissions shall not exceed 3.4 lb/hr
- L6009: PM emissions shall not exceed 0.236 lb/hr

- L7734: PM emissions shall not exceed 0.68 lb/hr
- L7735: PM emissions shall not exceed 0.18 lb/hr
- L7733: PM emissions shall not exceed 0.68 lb/hr
- L6359: PM emissions shall not exceed 0.48 lb/hr
- L7589: PM emissions shall not exceed 0.18 lb/hr
- L7588: PM emissions shall not exceed 0.48 lb/hr

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

The Building 431 Spinner Hanger Abrasive Blast Unit (J4744) is subject to the applicable requirements of Compliance Assurance Monitoring (CAM) for particulate matter because the unit is subject to an emission limit for PM, uses a control device to comply with the emission limit, and has a potential uncontrolled emission rate greater than that of the major source threshold for PM. Visible emissions is the chosen performance indicator. There should be no visible emissions under normal operating conditions; therefore, any visible emissions indicate a decrease in PM control. The CAM Plan for the aforementioned unit is attached at the end of this document.

ABRASIVE BLASTING EMISSIONS

Anniston Army Depot used emission factors from the Texas Commission on Environmental Quality "Abrasive Blast Cleaning" document, studies of the blast media, and information obtained from interviews with the manufacturer of abrasive systems to determine emissions from these operations. The emissions from these operations are as follows:

| | | | A BRASI\ | /E B LA | STING EM | ISSIOI | NS [TPY A | ND LE | B/HR] | | | |
|-------|--------|------------------|-----------------|----------------|--------------|--------|--------------|-------|--------------|-----|--------|----|
| | Р | М | PM: | 2.5 | Cd | | Cr | | Pb | | PMcon | |
| | Р | С | Р | С | Р | С | P | С | Р | С | Р | С |
| L7029 | 25.8 | 2.683 lb/hr | 0.012 | - | 0.008 | | 0.008 | - | 0.008 | 1 | 0.004 | - |
| L7030 | 25.8 | 2.683 lb/hr | 0.012 | - | 0.008 | - | 0.008 | - | 0.008 | - | 0.004 | - |
| 09427 | 26 | 2.683 lb/hr | 0.236 | - | 0.004 | - | 0.004 | - | 0.004 | - | 0.118 | - |
| L7031 | 25.8 | 2.683 lb/hr | 0.026 | - | 0.008 | - | 0.008 | 1 | 0.008 | - | 0.013 | - |
| L4463 | 87.69 | 8.80 lb/hr | 1.752 | | 0.0106 | - | 0.0106 | - | 0.0106 | - | 0.876 | - |
| J4744 | 150 | 48.98 lb/hr | 1.373 | , | 0.045 | - | 0.045 | - | 0.045 | - | 0.6865 | - |
| L5056 | 26 | 2.683 lb/hr | 0.236 | - | 0.004 | - | 0.004 | - | 0.004 | - | 0.118 | 26 |
| L5057 | 26 | 2.683 lb/hr | 0.236 | - | 0.004 | - | 0.004 | - | 0.004 | - | 0.118 | 26 |
| L5058 | 26 | 2.683 lb/hr | 0.236 | - | 0.004 | | 0.004 | 1 | 0.004 | - | 0.118 | 26 |
| L6009 | 25.8 | 2.683 lb/hr - | 0.5256 | , | 0.008 | - | 0.008 | - | 0.008 | - | 0.3285 | - |
| L7734 | 2.17 | 0.22 lb/hr | 0.219 | | 6.50E- 04 | - | 6.50E- 04 | - | 6.50E- 04 | - | 0.1095 | - |
| L7735 | 0.033 | 0.003 lb/hr | 0.003 | - | 9.76E- 06 | - | 9.76E- 06 | - | 9.76E- 06 | - | 0.002 | - |
| L7733 | 2.17 | 0.22 lb/hr | 0.219 | - 1 | 6.50E- 04 | | 6.50E- 04 | - | 6.50E- 04 | - 1 | 0.1095 | - |
| L6359 | 1.08 | 0.11 lb/hr | 0.1095 | - | 3.25E- 04 | - | 3.25E- 04 | - | 3.25E- 04 | - | 0.055 | - |
| L7588 | 1.08 | 0.11 lb/hr | 0.1095 | - | 3.25E- 04 | - | 3.25E- 04 | - | 3.25E- 04 | - | 0.055 | - |
| TOTAL | 451.42 | 79.91 lb/hr | 85.49 | - | 0.11 | - | 0.11 | - | 0.11 | - | 2.72 | - |

Where "P" is potential emissions and "C" is controlled/allowable emissions determined by Rule 335-3-4-.04(1).

WOODWORKING AND CARPENTRY SHOPS REQUIREMENTS

Anniston Army Depot operates woodworking and carpentry shops in Buildings 4, 127, 379, and 689. Each shop contains power saws and other woodworking equipment. The particulate matter emissions from each woodworking operation are routed to an outdoor cyclone.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

Each woodworking and carpentry shop would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A weekly visual check shall be performed to determine compliance with this rule.

Emission Monitoring:

A weekly visual check shall be conducted. If visible emissions greater than 10% opacity are observed, a VEO shall be conducted by a person certified with 40 CFR 60 Appendix A, Method 9. The facility shall investigate and initiate any necessary corrective action within four (4) hours. After any corrective action, an additional observation shall be performed in order to verify that emissions have been reduced below the allowable. In the event that a week goes by without the operation of a unit, a weekly visual inspection shall not be required [ADEM Admin. Code R 335-3-16-.05(c)].

Recordkeeping and Reporting Requirements:

Records of the weekly visual inspections shall be maintained and should be readily available for inspection for a period of five (5) years. These records shall include the date and results other visual inspections. During weeks that a unit is not in operation and weekly visible observation is not required, it shall be recorded that the unit was not in operation [ADEM Admin. Code R 335-3-16-.05(c)].

ADEM Admin. Code R 335-3-4-.04(1), "Process Industries – General"

No personal shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount resulting from the following equations:

$$E = 3.59P^{0.62}$$

Where P is process weight < 30 tons per hour; OR

$$E = 17.31P^{0.16}$$

Where P is process weight \geq 30 tons per hour.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

WOODWORKING AND CARPENTRY SHOPS EMISSIONS

Emissions for these sources were calculated using material balances and engineering judgement. Particulate matter – condensable emissions were assumed to be 50% of $PM_{2.5}$.

| WOODWORKING AND CARPENTRY SHOPS EXPECTED EMISSIONS - PARTICULATE MATTER [TPY] | | | | | | | | | | |
|-------------------------------------------------------------------------------|------------------------------------------------------|------------|--------------|------------|--------------|------------|--|--|--|--|
| | PM ₁₀ PM _{2.5} PM _{CON} | | | | | | | | | |
| Building | Uncontrolled | Controlled | Uncontrolled | Controlled | Uncontrolled | Controlled | | | | |
| 5 | 18.95 | 3.79 | 18.95 | 3.79 | 9.475 | 1.89 | | | | |
| 127 | 18.95 | 3.79 | 18.95 | 3.79 | 9.475 | 1.89 | | | | |
| 379 | 18.95 | 3.79 | 18.95 | 3.79 | 9.475 | 1.89 | | | | |
| 689 | 18.95 | 3.79 | 18.95 | 3.79 | 9.475 | 1.89 | | | | |



PARTS WASHERS REQUIREMENTS

ANAD operates ten parts washers at the Power Train Transmission Addition Facility (PTAF). The parts washers are used to clean engine and transmission parts. The washers would use a cleaning solution composed of 50% water and 50% Chemetall Inprotect 670. The units in this section are as follows:

- L7508 : Large Spray Washer
- L6313: Scrap Parts Washer
- L6360: Dual Rinse Tank System
- L7118: Flow-Through Washer
- L7737: Flow-Through Washer
- L7738: Flow-Through Washer
- L7736: Large Turntable Washer
- L6371: Medium Turntable Washer
- L7506: Small Spray Washer
- L7507: Small Spray Washer

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

These sources are not subject to any additional requirements other than those listed in the General Provisos.

Emission Standards:

These sources are not subject to any additional requirements other than those listed in the General Provisos.

Compliance and Performance Test Methods and Procedures:

These sources are not subject to any additional requirements other than those listed in the General Provisos.

Emission Monitoring:

These sources are not subject to any additional requirements other than those listed in the General Provisos.

Recordkeeping and Reporting Requirements:

These sources are not subject to any additional requirements other than those listed in the General Provisos.

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

PARTS WASHERS EMISSIONS

Volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions were calculated using mass balances, expected hours of operation, and the percentage of VOC and HAPs in the washing solution.

| | PARTS WASHERS EMISSIONS | | | | | | | | | | |
|-------|-------------------------|------|-------|------|--|--|--|--|--|--|--|
| | V | OC . | HAP | | | | | | | | |
| | Lb/hr | TPY | Lb/hr | TPY | | | | | | | |
| L7508 | 0.08 | 0.16 | 0.13 | 0.27 | | | | | | | |
| L6313 | 0.11 | 0.23 | 0.18 | 0.38 | | | | | | | |
| L6360 | 0.06 | 0.13 | 0.10 | 0.22 | | | | | | | |
| L7118 | 0.17 | 0.36 | 0.29 | 0.60 | | | | | | | |
| L7737 | 0.17 | 0.36 | 0.29 | 0.60 | | | | | | | |
| L7738 | 0.17 | 0.36 | 0.29 | 0.60 | | | | | | | |
| L7736 | 0.17 | 0.36 | 0.29 | 0.60 | | | | | | | |
| L6371 | 0.17 | 0.36 | 0.29 | 0.60 | | | | | | | |
| L7506 | 0.04 | 0.08 | 0.07 | 0.14 | | | | | | | |
| L7507 | 0.04 | 0.08 | 0.07 | 0.14 | | | | | | | |

SURFACE COATING OPERATIONS REQUIREMENTS

Anniston Army Depot operates numerous surface coating operations. Chemical Agent Resistant Coating is most widely used at these operations. Thinner, which may be composed of methyl ethyl ketone or the HAP solvents, toluene and xylene, is used as a diluent and for cleaning paint guns. All booths use dry filters for air pollution control, except for the two (2) identical booths in Building 433, which have three-stage filter systems. Surface coating operations at Anniston Army Depot are as follows:

Building 8 Paint Booth (K1366)

This is a walk-in paint booth used to paint large and small wooden panels, furniture, and sign components. Particulate matter emissions are controlled by a dry particulate filter.

Building 58 Paint Booth (12718)

This is a walk-in paint booth used to paint miscellaneous metal parts. Particulate matter emissions are controlled by a dry particulate filter.

Building 117 Paint Booth (L5352)

This paint booth is used to paint tracked and wheeled military vehicle components. The paint booth is equipped with a 1.00 MMBtu/hr natural gas drying oven and a dry particulate filter for particulate matter control.

Building 130 Paint Booth (G3401)

This paint booth is used to paint tracked and wheeled military vehicle components. The paint booth is equipped with a drying oven and a dry particulate filter for particulate matter control. Anniston Army Depot has elected to impose an ANTI-PSD limit of 39.0 TPY for VOC and 1.80 TPY for PM for this booth.

Building 143 Paint Booth (J2101)

This paint booth is a drive-through paint booth used to coat tracked and wheeled military vehicles. The booth is equipped with a 2.00 MMBtu/hr natural gas drying oven and a dry particulate filter for particulate control. The facility has elected to impose an ANTI-PSD limit for this booth of 65.0 TPY of VOC.

Building 409 Spray Bake Booth (S6) (X063)

This paint booth is used to paint military vehicle parts. The paint booth is equipped with a 4.0 MMBtu/hr natural gas drying oven. Particulate matter emissions are controlled by a dry particulate filter. Anniston Army Depot has elected to impose an ANTI-PSD limit of 87.7 TPY of VOC across all Building 409 Paint Booths.

Building 409 Paint Booths [S1, S2, S3, S4] (X061 & X062)

These booths are side-draft paint booths used to paint military vehicle parts. Parts are primer coated, flash tunnel dried, top coated, and oven dried. The system is equipped with a 2.0 MMBtu/hr natural gas drying oven and a dry particulate filter for particulate matter control.

Anniston Army Depot has elected to impose an ANTI-PSD limit of 87.7 TPY of VOC across all

Building 409 Paint Booths.

Building 433 Paint Booth (J9027)

This is a drive-through paint booth used to paint armored military vehicles and mobility containers. The particulate matter emissions are controlled by a dry particulate filter. Anniston Army Depot has elected to impose two limits on these booths:

- 1. A 39.5 TPY limit on VOC [ANTI-PSD across all Building 433 Booths]
- 2. 9.5 single/24.5 combined TPY limit on HAPs [ANTI-112(g)]

Building 433 Four (4) Spray Bake Booth (X086)

These paint booth are used to coat military vehicle parts and air equipped with natural has direct fired air handlers for drying as well as dry particulate filters for particulate control. Anniston Army Depot has elected to impose an ANTI-PSD limit of 46.0 TPY of VOC from the paint booths permitted in Air Permit X086..

Building 474 Paint Booths #1 and #2 (L6049 & L6050)

These booths are walk-in paint booths used for coating small parts of armored vehicles and engine components. Each booth is equipped with a 0.5 MMBtu/hr natural gas drying oven and a dry particulate filter for particulate matter control. Anniston Army Depot has elected to impose an ANTI-PSD limit of 35.0 TPY of VOC for booths L6049/L6050/L6133 as well as ANTI-PSD limit of 0.36 lb/hr of PM for the same units. An ANTI-112(g) limit of 9.5/23.5 TPY of HAPs has been imposed as well.

Building 474 Paint Booth #3 (L6133)

This paint booth will be used to paint tracked military vehicle components (engine parts). The booth will be equipped with a dry particulate filter for particulate matter control and a drying oven. Anniston Army Depot has elected to impose an ANTI-PSD limit of 35.0 TPY of VOC for booths L6049/L6050/L6133 as well as ANTI-PSD limit of 0.36 lb/hr of PM for the same units. An ANTI-112(g) limit of 9.5/23.5 TPY of HAPs has been imposed as well.

Building 499 Paint Booth (G8729)

This booth is a drive-through paint boot used for the coating of tracked and wheeled military vehicles. This booth is equipped with a dry particulate filter for particulate matter control. Anniston Army Depot has elected to impose an ANTI-PSD limit of 39.5 TPY of VOC for this booth. An ANTI-112(g) limit of 9.5/24.5 TPY of HAPs has been imposed as well.

Building 501 Paint Booth (E7634 & E7635)

These booths are drive-through paint booths used for coating of tracked and wheeled military vehicles. Particulate matter emissions are controlled with a dry particulate filter.

Building 680 Paint Booths (X081, Three (3) Booths)

These booths are used to paint military ammunition. Particulate matter emissions are controlled by a dry particulate filter. These booths are subject to 40 CFR 63 Subpart GG, "National Emission

Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities." The only requirements would be for hand wipe cleaning, waste storage, and handling.

Power Train Transmission Addition Facility (PTAF) Paint Booths (L7115, 2 booths)

These booths are used to paint transmission and engine parts using HVLP spray guns. Booth #1 is equipped with a 2.67 MMBtu/hr natural gas drying oven and booth #2 is equipped with a 1.33MMBtu/hr natural gas drying oven. Particulate matter emissions from both booths are controlled by dry particulate filters.

PTAF Paint Conveyor Line (L7116)

This booth is used to paint transmission and engine parts with HVLP spray guns. The paint booth is equipped with a 4.0 MMBtu/hr natural gas drying oven. Particulate matter emissions are controlled with a dry particulate filter.

The dry filters associated with each paint booth shall be inspected on at least an annual basis to ensure maintenance is being performed in such a manner as to minimize the emission of particulate matter. The facility shall be required to keep records of the dry filter inspections, along with any maintenance performed on the filter(s) in a form suitable for inspection for at least five (5) years following the date of generation of the record [Rule 335-3-16-.05(c)].

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The paint booths located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

These sources are not subject to any unit specific emission monitoring requirements.

Recordkeeping and Reporting Requirements:

These sources are not subject to any unit specific reporting or recordkeeping requirements.

ADEM Admin. Code R 335-3-4-.03, "Fuel Burning Equipment"

Per this rule, units in Class I Counties are given an allowable particulate matter emission rate of 0.5 lb/MMBtu. Particulate matter emissions are expected to be well below the allowable emission rate since natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from the boilers in this section are not expected to exceed the allowable emission rate since natural gas would be the only fuel source for the drying ovens in this section.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule. Anniston Army Depot has imposed the following ANTI-PSD limits:

- Building 130 Booth (G3401): 39.0 TPY VOC; 1.80 TPY PM
- Building 143 Booth (J2101): 65.0 TPY VOC
- Building 409 Booths: 87.7 TPY VOC across all booths
- Building 433 Booth (J9027): 39.5 TPY VOC
- Building 474 Booths (L6049/L6050/L6133): 35.0 TPY VOC; 0.36 lb/hr PM
- Building 499 Booth (G8728): 39.5 TPY VOC

All units with enforceable ANTI-PSD limits will be subject to the following recordkeeping requirements [Rule 335-3-16-.05]:

- Accurate and understandable records, concerning PM, VOC, and/or HAP emissions, as applicable, shall be kept in a form suitable for inspection for at least 5 years following the date of the record for each paint booth subject to Anti-PSD limits. These records will be made available immediately upon request and will contain the following information:
 - a. The type, quantity in gallons, and weight in lbs, of each VOC and HAP containing materials used each calendar month.
 - b. The HAP content by weight (in pounds per gallon) of each coating used shall be determined using EPA Test Method 311, as defined in 40 CFR Part 63, Appendix A, or equivalent vendor data approved by the Department in advance.
 - c. The VOC content by weight (in pound per gallon) of each VOC containing material used, determined by EPA Test Method 24, as defined in 40 CFR Part 60, Appendix A, or equivalent vendor data approved by the Department in advance. The VOC content of coatings may be determined by test method on a random basis to verify formulation data and such other times as the Department may request;

- d. The percent by volume and percent of weight of VOCs, HAPs, solids, water and content of each VOC and HAP containing materials used each calendar month.
- e. Complete inventories of VOC and HAP containing materials (their usage with VOC and HAP content) shall be made at the end of each calendar month. Compliance with VOC, HAP, and PM limits shall be based upon these monthly materials use inventories and the use and control efficiency of the particulate filters. Emissions calculations and records will also incorporate the use and control efficiency of the particulate filters.
- f. The transfer efficiency of each coating operation and control efficiencies for all control devices. Total PM emissions shall be calculated based on these efficiencies.
- g. The amount of PM, VOCs, and HAPs emitted each calendar month expressed in the units of pounds and tons.

The rolling twelve month total of PM, VOCs, and HAPs emitted in the units of pounds and tons.

Applicability:

ADEM Admin. Code R. 335-3-14-.06, "Determinations for Major Sources in Accordance with Clean Air Act Section 112(g)"

Because HAP emissions greater than 10 TPY of any single HAP or 25 TPY of any combination of HAPS are expected from some of these emissions sources, a case by case MACT review would be necessary. However, in order to avoid this review, Anniston Army Depot has imposed the following ANTI-112(g) limits:

- Building 433 Booth (J9027): 9.5 TPY single/24.5 TPY combination
- Building 474 Booths: 9.5 TPY single/ 23.5 TPY combination
- Building 499 Booth (G8728): 9.5 TPY single/ 24.5 TPY combination

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 60 Subpart D_c, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units."

Per §60.40c, this subpart is applicable to steam generating units for which construction, modification, or reconstruction commences after June 9, 1989, and that has a maximum heat input capacity or 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. The oven is not a steam generating unit nor does it meet the minimum heat input capacity; therefore, the ovens used at the sources in this section would not be subject to the requirements of this rule.

Applicability:

40 CFR 63 Subpart GG, "National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities."

Per §63.741(a), this subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in §63.2. The Building 680 Paint Booths are used for the rework of Hellfire Missiles; therefore, these booths are subject to the applicable requirements of this rule. The other booths in this section do no coat aerospace vehicles or components; therefore, booths other than the booths in Building 680 are not subject to this subpart. However, this subpart does not regulate specialty coatings [§63.714(f)], so this operation is only subject to the standards for hand wipe cleaning, storage, and handling.

Emissions Standards:

Building 680 Paint Booths shall use specialty coatings only as defined in 40 CFR 63 Subpart GG [§63.742]. These booths are subject to the General Standards outlined in §63.743, the standards for hand wipe cleaning in §63.744(b), and the standards for handling and storage of waste in §63.748.

Compliance and Performance Test Methods and Procedures:

These booths are subject to the General Standards outlined in §63.743, the standards for hand wipe cleaning in §63.744(b), and the standards for handling and storage of waste in §63.748.

Emission Monitoring:

The Building 680 Paint Booths are subject to the applicable monitoring in §63.751.

Reporting and Recordkeeping Requirements:

The facility is subject to the applicable reporting and recordkeeping requirements outlined in §63.752 and §63.753.

40 CFR 63 Subpart MMMM, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products."

Per §63.3881(c)(4), the surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States is not subject to the requirements of this subpart. This operation will take place on site at an installation owned by the Armed Forces of the United States; therefore, the sources in this section would not be subject to the requirements of this regulation.

Applicability:

40 CFR 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters."

Per §63.7485, this subpart is applicable to industrial, commercial, or institutional boilers or process heaters as defined in §63.7575 that is located at, or is a part of, a major source of HAP. *Boiler* is defined as an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. *Process heater* is defined as an enclosed device using controlled flame of which the primary purpose is to *indirectly* transfer heat to a process material or to a heat transfer material for use in a process unit, instead of generating steam. The proposed oven does not meet the definition of a boiler, nor does it meet the definition of process heater because the oven is direct fired rather than indirect fired; therefore, this subpart does not apply to the ovens used in this section.

Applicability:

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

This subpart is applicable to new, reconstructed, and existing industrial, commercial, or institutional boilers located at an area source of hazardous air pollutants (HAPs) [40 CFR 63.11193]. This facility is a major source of HAPs; therefore, this regulation is not applicable.

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

The proposed units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

SURFACE COATING OPERATIONS EMISSIONS

Emissions calculations for surface coating operations were calculated based on actual coating, cleaner, and diluent usage data. Potential emissions for coating sources were determined by factoring emissions derived from actual use with the ratio of 8,760 hours to actual operating hours. Emissions for these operations, including associated drying ovens, are as follows:

| | | | | PAINT | Воотн Ро | TENTIAL EN | II SNOISSII | ГРҮ] | | | |
|-------------------|----------|-------|-------|--------|----------|------------|-------------|----------|--------|--------------|-------|
| Paint Booth | voc | PM | НАР | MIBK | HDI | Toluene | Xylene | Chromium | Cobalt | Ethylbenzene | MEK |
| K1366 | 86.87 | 0.122 | | 1.587 | 26.494 | 4.624 | 6.475 | 0.353 | | | |
| 12718 | 86.87 | 0.122 | | 16.204 | 26.494 | 4.624 | 6.475 | 0.353 | | | |
| L5352 | 23.85 | 0.441 | | 0.543 | - | 0.388 | 0.233 | 0.059 | 0.233 | 0.233 | |
| G3401 | 356.8 | 0.543 | | 0.625 | 64.88 | 20.91 | 21.96 | 0.865 | - | - | 53.24 |
| J2101 | 197.94 | 0.275 | | 4.089 | 60.95 | 10.36 | 14.72 | 0.813 | - | - | - |
| S6 | 9.22 | 0.017 | | 0.19 | 0.0097 | 0.47 | 0.75 | 0.0013 | - | - | - |
| S 1 | 19.6 | 0.035 | | 0.40 | 0.021 | 1.01 | 1.59 | 0.0028 | - | - | - |
| S2 | 19.6 | 0.035 | | 0.40 | 0.021 | 1.01 | 1.59 | 0.0028 | - | - | - |
| S 3 | 19.6 | 0.035 | | 0.40 | 0.021 | 1.01 | 1.59 | 0.0028 | - | - | - |
| S4 | 19.6 | 0.035 | | 0.40 | 0.021 | 1.01 | 1.59 | 0.0028 | - | - | - |
| J9027 | 23.91 | 0.112 | | | - | 0.433 | 2.526 | 0.365 | - | - | - |
| X086 (4booths) | 79.34 | 0.302 | 6.368 | - | - | 0.866 | 5.051 | 0.450 | - | - | |
| L6049 | 81.5 | 0.12 | | 0.14 | 0.15 | 4.77 | 5.01 | 0.001 | - | - | 12.2 |
| L6050 | 81.5 | 0.12 | | 0.14 | 0.15 | 4.77 | 5.01 | 0.001 | - | - | 12.2 |
| L6133 | 3.28 | 0.03 | | 0.292 | - | - | 0.84 | - | - | 0.0013 | - |
| G8729 | 89.24 | 0.125 | | 1.824 | 26.28 | 4.637 | 6.455 | 0.350 | - | - | - |
| E7634 | 82.38 | 0.197 | | 2.437 | 45.136 | 1.221 | 6.795 | 0.602 | - | - | - |
| E7635 | 82.38 | 0.197 | | 2.437 | 45.136 | 1.221 | 6.795 | 0.602 | - | - | - |
| Bldg 680 #1 | 2.119 | 0.003 | | 0.065 | 0.821 | 0.084 | 0.163 | 0.011 | - | - | 0.406 |
| Bldg 680 #2 | 2.119 | 0.003 | | 0.065 | 0.821 | 0.084 | 0.163 | 0.011 | - | - | 0.406 |
| Bldg 680 #3 | 2.119 | 0.003 | | 0.065 | 0.821 | 0.084 | 0.163 | 0.011 | - | - | 0.406 |
| L7115 #1 | 7.65 | 0.031 | 0.85 | - | - | - | - | - | - | - | - |
| L7115 #2 | 7.65 | 0.031 | 0.85 | - | - | - | - | - | - | - | - |
| L7116 | 7.18 | 0.028 | 0.49 | | | | | | | | |
| TOTAL | 1,474.42 | 2.962 | 8.558 | 32.703 | 298.23 | 63.59 | 95.94 | 4.86 | 0.233 | 0.234 | 78.86 |

| | ASSOCIATED DRYING OVEN POTENTIAL EMISSIONS [TPY] | | | | | | | | | | |
|----------------|--------------------------------------------------|-------|---------------------|-------------------|-----------------|-------|--------|-----------|--|--|--|
| Drying Oven | NO _x | СО | PM _{total} | PM _{CON} | SO ₂ | voc | HAPs | GHGs | | | |
| L5352 | 0.429 | 0.359 | 0.033 | 0.024 | 0.003 | 0.024 | | | | | |
| J2101 | 0.88 | 0.74 | 0.067 | - | 0.0053 | 0.047 | 0.0167 | - | | | |
| S6 | 1.75 | 1.47 | 0.133 | - | 0.011 | 0.096 | 0.033 | 1,909.85 | | | |
| X061/X062 | 0.88 | 0.74 | 0.067 | | 0.0053 | 0.047 | 0.0167 | 945.93 | | | |
| X086 | 7.88 | 6.62 | 0.599 | - | 0.0473 | 0.434 | 0.149 | 8,579.14 | | | |
| L7115 #1 | 1.17 | 0.98 | 0.089 | - | 0.007 | 0.064 | 0.022 | 605.12 | | | |
| L7115 #2 | 0.58 | 0.49 | 0.044 | - | 0.003 | 0.032 | 0.011 | 301.56 | | | |
| L7116 | 1.75 | 1.47 | 0.13 | - | 0.011 | 0.096 | 0.033 | 906.96 | | | |
| TOTAL | 15.32 | 12.87 | 1.16 | 0.024 | 0.093 | 0.84 | 0.281 | 13,248.53 | | | |

DEPAINTING OPERATIONS REQUIREMENTS

Anniston Army Depot operates depainting vats in Building 409. This operation is used to remove paint and clean various metal parts.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-14-.01(g), "General Provisions"

Anniston Army Depot should equip the vats with tight-fitting covers that shall remain closed at all times, except when parts are inserted or removed and when maintenance is being performed. Anniston Army Depot shall perform a weekly inspection to verify that the vat covers fit tightly and close properly. Records of these weekly inspections shall be maintained for at least five (5) years after the date of generation and should be made readily available for inspection [Rule 335-3-16-.05(c)].

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

DEPAINTING OPERATIONS EMISSIONS

Emissions for Depainting operations were calculated using material balances and expected hours of operation.

| DEPAINTING OPERATIONS EMISSIONS | | | | | | | |
|---------------------------------|---------------|------|--|--|--|--|--|
| | VOC Emissions | | | | | | |
| | Lb/hr | TPY | | | | | |
| Building 409 | 1.22 | 5.30 | | | | | |



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CHROME ELECTROPLATING REQUIREMENTS

Anniston Army Depot performs chrome electroplating in Building 1114 and uses chromium, leadtin, zinc, nickel, and copper for plating of various metal parts/ Line 1 consists of hard chromium electroplating of outer diameter parts and is equipped with a mist eliminator. Line 2 consists of hard chromium electroplating of inner diameter parts and is equipped with a mist eliminator.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

Chrome Electroplating operations would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A weekly visual check shall be performed to determine compliance with this rule.

Emission Monitoring:

A weekly visual check shall be conducted. If visible emissions greater than 10% opacity are observed, a VEO shall be conducted by a person certified with 40 CFR 60 Appendix A, Method 9. The facility shall investigate and initiate any necessary corrective action within four (4) hours. After any corrective action, an additional observation shall be performed in order to verify that emissions have been reduced below the allowable. In the event that a week goes by without the operation of a unit, a weekly visual inspection shall not be required [ADEM Admin. Code R 335-3-16-.05(c)].

Recordkeeping and Reporting Requirements:

Records of the weekly visual inspections shall be maintained and should be readily available for inspection for a period of five (5) years. These records shall include the date and results other visual inspections. During weeks that a unit is not in operation and weekly visible observation is not required, it shall be recorded that the unit was not in operation [ADEM Admin. Code R 335-3-16-.05(c)].

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 63 Subpart N, "National Emission Standards for Hazardous Air Pollutants for Chromium Emission from Hard and Decorative Electroplating and Chromium Anodizing Tanks"

Per §63.340, each chromium electroplating or chromium andodizing tank at facilities performing hard chromium electroplating is subject to the applicable requirements of this rule. This operation is used for hard chromium electroplating; therefore, this operation is subject to the applicable requirements of this rule.

Emission Standards:

Per §63.342(c)(1)(ii), the Permittee shall control chromium emissions discharged to the atmosphere by limiting the concentration of the exhaust gas stream discharged to the atmosphere to 0.015 mg/dscm. The emission limitation applies during tank operation as defined in §63.341 and during periods of startup and shutdown [§63.642(b)(1)]. At all times, the Permittee shall operate and maintain these units and all air pollution control devices associated with these units in a manner consistent with good air pollution control practices. Malfunctions shall be corrected as soon as possible [§63.342(f)(1)(i),(ii)].

Compliance and Performance Test Methods and Procedures

Method 306 or 306A shall be used to determine the chromium concentration from these units [§63.344(c)(1)].

Emission Monitoring

The permittee shall monitor the pressure drop across each mesh pad system once each day that the each affected source is operating. The pressure drop must be within ± 2 inches of water column of the pressure drop established during the initial compliance test [§63.343(c)(1)(ii)]. The operation and maintenance practices listed in Table 1 of this subpart shall be conducted. The requirements are as follows:

- Once per quarter, visually inspect each composite mesh pad system to ensure there is proper drainage, no chromic-acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device;
- Once per quarter, visually inspect the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist;
- One per quarter, visually inspect ductwork from the tank to the composite mesh pad system to ensure there are no leaks; and
- Perform washdowns of composite mesh pads in accordance with the manufacturer's recommendations.

The above operation and maintenance plan should include the following elements [§63.342(f)(3)(i)]:

- The plan shall specify the operation and maintenance criteria for the affected source, the add-on pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
- The plan shall incorporate the operation and maintenance practices, as identified in Table 1 of this subpart;
- The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable condition do not occur;
- The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing correction action to address such malfunctions; and
- The plan shall include housekeeping procedures, as specified in Table 2 of this subpart.

Reporting and Recordkeeping Requirements

If actions taken by the Permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the Permittee shall record the actions taken for that event and shall report such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements in advance with the Department [§63.342(f)(3)(iv)]. The Permittee shall keep the operation and maintenance plan on record and available for inspection. If the operation and maintenance plans changes, the previous versions should also be retained for a period of five (5) years after each revision to the plan [§63.342(f)(3)(v)]. The records specified in §63.346(b) and (c) should be maintained. An ongoing compliance status report shall be submitted to the Department and shall include the information specified in §63.347(g)(3) [§63.347(g)(1)].

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

CHROME ELECTROPLATING EMISSIONS

Emissions for chrome electroplating operations are calculated based on AP-42 emission factors and testing. Emissions from this operation is as follows:

| CHROME ELECTROPLATING POTENTIAL EMISSIONS [TPY] | | | | | | | | | | |
|-------------------------------------------------|--------|--------|--------|------------------|--|-------------------|--------|-------------------|--------|--|
| Chromium PM | | | Л | PM ₁₀ | | PM _{2.5} | | PM _{CON} | | |
| Line 1 | Line 2 | Line 1 | Line 2 | Line 1 Line 2 | | Line 1 | Line 2 | Line 1 | Line 2 | |
| 0.015 | | | | | | | | | | |



GASOLINE DISPENSING FACILITIES - STAGE 1 REQUIREMENTS

Anniston Army Depot has storage tanks located on site for storing petroleum products such as No.2 fuel oil, diesel fuel, gasoline, jet propellant (JP-8), propane, lube oil, hydraulic oil, and used oil. The only significant sources of air pollution are the Stage 1 Gasoline Dispensing facility located at Buildings 6, 422, and Site 603 (formerly Building 78).

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-6-.03, "Loading and Storage of VOC"

The gasoline dispensing facilities located at this site would be subject to the applicable requirements of this rule and, as such, a permanent submerged fill pipe is required for loading and storage of gasoline.

Applicability:

ADEM Admin. Code R 335-3-6-.07(3), (5)(a), and (6), "Gasoline Dispensing Facilities – Stage I"

Gasoline dispensing facilities shall mean any outlet where gasoline is dispensed to motor vehicles from stationary storage tanks. Anniston Army Depot has gasoline dispensing facilities on site; therefore, Anniston Army Depot should comply with the requirements of this rule.

Emission Standards:

The permittee shall not transfer, cause or allow the transfer of gasoline from any gasoline tank truck into a tank unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are processed by a vapor control system in accordance with ADEM Admin. Code R 335-3-6-.07(3) [ADEM Admin. Code R 335-3-6-.07(3)]..

The permittee shall not permit the transfer of gasoline between a gasoline tank truck and this unit unless the gasoline tank truck complies with ADEM Admin. Code R 335-3-6-.20 and the vapor control system is connected and operating in accordance with ADEM Admin. Code R 335-3-6-.07(4) [ADEM Admin. Code R 335-3-6-.07(5)(a)].

The permittee shall not cause or allow gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation of the gasoline to the atmosphere [ADEM Admin. Code R 335-3-6-.07(6)].

Compliance and Performance Test Methods and Procedures:

In the event that testing is required by the Department, Anniston Army Depot shall demonstrate compliance with the emission standards above by following the procedures outlined in Section 12 of ADEM Admin. Code R 335-3-6-.16, "Testing and Monitoring Procedures for Leaks from Gasoline Tank Trucks and Vapor Collection Systems."

Emission Monitoring:

The permittee shall inspect the unit during loading and unloading for visible liquid leaks [ADEM Admin. Code R 335-3-16-.05].

Recordkeeping and Reporting Requirements:

The permittee shall maintain written records of the monthly throughout quantities in gallons for each unit for a minimum of five (5) years after the date on which the record was created. These records should be readily available to the Department for inspection upon request [ADEM Admin. Code R 335-3-6-.07(5)(b&c)].

Applicability:

ADEM Admin. Code R. 335-3-6-.20, "Leaks from Gasoline Storage Tanks and Vapor Collection Systems"

The gasoline storage tanks located at Anniston Army Depot are subject to the applicable requirements of this rule. The gasoline tank trucks shall be equipped with a vapor collection system and a valid Department Air Sticker, which is visibly displayed.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

The proposed units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

GASOLINE DISPENSING FACILITIES – STAGE 1 EMISSIONS

Emissions for these sources were calculated using AP-42 emissions factors and EPA Tanks Program.

| GASOLINE DISPENSING FACILITIES EMISSIONS | | | | | | | | | | |
|------------------------------------------|-------|------|-------|------|--|--|--|--|--|--|
| VOC HAP | | | | | | | | | | |
| | Lb/hr | TPY | Lb/hr | TPY | | | | | | |
| Site 603 | 0.33 | 1.43 | 0.024 | 0.11 | | | | | | |
| Building 6 | 0.17 | 0.78 | - | - | | | | | | |
| Building 422 | | | | | | | | | | |

SALT BATH SYSTEM REQUIREMENTS

Salt bath cleaning is one of the initial steps in engine rework. The salt bath system consists of two (2) salt baths vented to a common venture scrubber, a brightener tank, rust preventative tanks, and two (2) rinse tanks. Parts coated with paint are introduced to the bath where they are cleaned by molten salt and transferred to a rinse tank. When removed from the bath, parts are still hot and coated in salt to be removed. The rinse tank is used to remove salt and cool the parts. All emissions are captured by air pollution control equipment, where the air stream is cleaned of particulates and then released to the atmosphere.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The salt bath system would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A weekly visual check shall be performed to determine compliance with this rule.

Emission Monitoring:

A weekly visual check shall be conducted. If visible emissions greater than 10% opacity are observed, a VEO shall be conducted by a person certified with 40 CFR 60 Appendix A, Method 9. The facility shall investigate and initiate any necessary corrective action within four (4) hours. After any corrective action, an additional observation shall be performed in order to verify that emissions have been reduced below the allowable. In the event that a week goes by without the operation of a unit, a weekly visual inspection shall not be required [ADEM Admin. Code R 335-3-16-.05(c)].

Recordkeeping and Reporting Requirements:

Records of the weekly visual inspections shall be maintained and should be readily available for inspection for a period of five (5) years. These records shall include the date and results other visual inspections. During weeks that a unit is not in operation and weekly visible observation is not required, it shall be recorded that the unit was not in operation [ADEM Admin. Code R 335-3-16-.05(c)].

ADEM Admin. Code R 335-3-4-.04(1), "Process Industries – General"

No personal shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount resulting from the following equations:

$$E = 3.59P^{0.62}$$

Where P is process weight < 30 tons per hour; OR

$$E = 17.31P^{0.16}$$

Where P is process weight \geq 30 tons per hour.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule. The facility has elected to impose an ANTI-PSD limit of 1.4 lb/hr of particulate matter.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

SALT BATH SYSTEM EMISSIONS

Potential emissions for particulate matter were calculated using material balance and were found to be 30.7 TPY. However, this process is controlled by a wet scrubber, which would result in a controlled emissions rate of 3.07 TPY. Process heater emissions associated with this system are show below:

| SALT BATH SYSTEM BURNER POTENTIAL EMISSIONS [TPY] | | | | | | | | | |
|---------------------------------------------------|------|-----------------|------------------|-------------------|-------|-------|-------|----------|--|
| | СО | NO _X | PM ₁₀ | PM _{2.5} | SOx | VOC | HAP | GHG | |
| Brightener Tank | 0.37 | 0.44 | 0.033 | 0.033 | 0.003 | 0.024 | 0.008 | 477.93 | |
| Salt Burners | 1.84 | 2.19 | 0.166 | 0.166 | 0.013 | 0.120 | 0.041 | 2,389.64 | |

COATING VAT REQUIREMENTS

Anniston Army Depot operates a manganese phosphate coating vat in Building 114. Anniston Army Depot shall perform regular repair, maintenance, and preventative maintenance of racks, barrels, and other equipment associated with this operation. ANAD should also perform regular inspections to identify leaks and other opportunities for pollution prevention. Records of the required monitoring shall be kept in a form suitable for inspection and should be retained for a period of at least five (5) years following the date of generation of the record [Rule 335-3-16-.05(c)].

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The coating vat operation would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

There are no additional requirements other than those listed in the General Provisos.

Emission Monitoring:

There are no additional requirements other than those listed in the General Provisos.

Recordkeeping and Reporting Requirements:

There are no additional requirements other than those listed in the General Provisos.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

COATING VAT EMISSIONS

Expected emissions from this operation were calculated using material balances, the expected hours of operation and the percent of composition of manganese and nickel sulfate in the coating solution.

| Coating | COATING VAT OPERATIONS POTENTIAL EMISSIONS | | | | | | | |
|---------------------|--------------------------------------------|------|--|--|--|--|--|--|
| Pollutant Lb/hr TPY | | | | | | | | |
| Manganese | Manganese 0.24 | | | | | | | |
| Nickel Sulfate | Nickel Sulfate 0.07 0.31 | | | | | | | |
| Total | 0.31 | 1.34 | | | | | | |

INDUSTRIAL WASTEWATER TREATMENT PLANT REQUIREMENTS

Anniston Army Depot operated an Industrial Wastewater Treatment Plant (IWTP) that treats four (4) separate waste streams, based on contaminants and the operations that generated the waste. The streams are chromium, cyanide, general waste, and stream cleaning. The IWTP consists of two equalization basins, two chemical feed systems, two solids separation and dewatering effluent neutralization, pressure filtration, trickling filter clarifiers, and effluent holding tank,

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The Industrial Wastewater Treatment Plant would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

This source does not have any additional compliance requirements.

Emission Monitoring:

This source is not subject to any additional emission monitoring requirements other than those in the General Provisos.

Recordkeeping and Reporting Requirements:

This source does not have any additional recordkeeping and reporting requirements.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

INDUSTRIAL WASTEWATER TREATMENT PLANT EMISSIONS

The IWTP emits VOCs and HAPs. The expected emissions from this source were calculated using EPA's WATER 9 Modeling Program.

| Industrial | INDUSTRIAL WASTEWATER TREATMENT PLANT EMISSIONS | | | | | | | | |
|------------------------|-------------------------------------------------|-----------|--|--|--|--|--|--|--|
| Pollutant | Lb/hr | TPY | | | | | | | |
| Ethylbenzene | 0.0047 | 0.0206 | | | | | | | |
| Naphthalene | 0.007 | 0.0307 | | | | | | | |
| Toluene | 0.0001 | 0.000438 | | | | | | | |
| TCE | 0.1981 | 0.8677 | | | | | | | |
| Phenol | 0.000395 | 0.00173 | | | | | | | |
| Chloroform | 0.00287 | 0.0126 | | | | | | | |
| Methylene chloride | 1.4119 | 6.1841 | | | | | | | |
| Acetone | 0.00479 | 0.021 | | | | | | | |
| 1,2 dichloroethene | 0.00078 | 0.00342 | | | | | | | |
| MEK | 0.000211 | 0.0009266 | | | | | | | |
| Xylenese | 0.0019 | 0.00834 | | | | | | | |
| Isopropyl benzene | 0.000142 | 0.000621 | | | | | | | |
| N-propylbenzene | 0.000558 | 0.00244 | | | | | | | |
| 1,3,5 trimethylbenzene | 0.000916 | 0.00401 | | | | | | | |
| 1,2,4 trimethylbenzene | 0.0034 | 0.0149 | | | | | | | |
| Sec-butylbenzene | 0.000258 | 0.00113 | | | | | | | |
| 4-isopropyltoluene | 0.00108 | 0.00475 | | | | | | | |

ENERGETIC TREATMENT UNIT (FLASHING FURNACE) REQUIREMENTS

The Energetic Treatment Unit located at Anniston Army Depot is used to support military demilitarization as an Explosive Contaminated Waste Processor (CWP). This unit will thermally treat scrap metal materials from the missile recycling facility to destroy residual contamination. This unit will be operated in flashing mode only, in which two (2) burners rapidly heat the furnace contents to a desired temperature. After the desired flashing temperature has been reached, the burners will cut off and cold air is injected until the scrap metal may be removed. Propane will be the primary fuel used during this operation, though the unit can operate on fuel oil and natural gas as well. This unit has a throughput capacity of 5,000 pounds of metal per hour.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-3-.02(3), "Incinerators"

Per this rule, no person shall cause emissions in the open air from any incinerator, particulate matter in the exhaust gases to exceed 0.10 pounds per 100 pounds of refuge charged.

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The Energetic Treatment unit would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

There are no compliance requirements for this unit outside of the General Provisos of this permit.

Emission Monitoring:

There are no monitoring requirements for this unit outside of the General Provisos of this permit.

Recordkeeping and Reporting Requirements:

There are no reporting or recordkeeping requirements for this unit outside of the General Provisos of this permit.

Applicability:

ADEM Admin. Code R 335-3-4-.04(1), "Process Industries – General"

No personal shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount resulting from the following equations:

$$E = 3.59P^{0.62}$$

Where P is process weight < 30 tons per hour; OR

$$E = 17.31P^{0.16}$$

Where P is process weight \geq 30 tons per hour.

Applicability:

ADEM Admin. Code R 335-3-4-.03, "Fuel Burning Equipment"

Per this rule, units in Class I Counties are given an allowable particulate matter emission rate of 0.5 lb/MMBtu. Particulate matter emissions are expected to be well below the allowable emission rate.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from the energetic treatment unit is not expected to exceed the allowable emission rate.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule. Anniston Army Depot has elected to impose an ANTI-PSD limit for fuel oil in this process. The sulfur content of the fuel oil shall not exceed 15 ppm by weight. As such, records of fuel oil sulfur content shall be kept in a form suitable for inspection for a period of at least five (5) years after the date of generation of the record.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

ENERGETIC TREATMENT UNIT (FLASHING FURNACE) EMISSIONS

This unit will burn primarily propane; however, fuel oil and natural gas may be used. Anniston Army Depot factored all three fuels in their emissions analysis and chose the worst-case or maximum emissions value to represent the potential to emit from this unit. AP-42 emissions factors and mass balance data were used in the emissions analysis.

| | ENERGETIC TREATMENT UNIT POTENTIAL EMISSIONS [TPY] | | | | | | | | | |
|-------|-------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| CO | CO NO _X PM PM _{2.5} SO ₂ VOC Ammonia HAPs GHGs | | | | | | | | | |
| 2.184 | | | | | | | | | | |

THERMAL TREATMENT CLOSED DISPOSAL PROCESS (TTCDP) - BUILDING 670 REQUIREMENTS

The Thermal Treatment Closed Disposal Process (TTCDP) shall be utilized to enhance the Anniston Munition Center's (ANMC) organic conventional munitions disposal capabilities. This operation consists of two (2) process lines (Grenade Treatment Unit and Munitions Destruction System) for thermal destruction of M77 submunition grenades and fuze assemblies that are generated as a result of disassembly of M26 Multi Launch Rocket System rocket pods. This operation is equipped with a High Efficiency Particulate Air (HEPA) Filter.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The TTCDP operation would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

This operation is not subject to any additional monitoring other than those in the General Provisos.

Emission Monitoring:

This operation is not subject to any additional monitoring other than those in the General Provisos.

Recordkeeping and Reporting Requirements:

This operation is not subject to any additional monitoring other than those in the General Provisos.

Applicability:

ADEM Admin. Code R 335-3-4-.04(1), "Process Industries – General"

No personnel shall cause or permit the emission of particulate matter in any one hour from any source in a Class I County in excess of the amount resulting from the following equations:

$$E = 3.59 P^{0.62}$$
 Where P is process weight < 30 tons per hour; OR
$$E = 17.31 P^{0.16}$$

Where P is process weight ≥ 30 tons per hour.

The allowable particulate matter emissions resulting from this process equation would be 2.77 lb/hr.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

THERMAL TREATMENT CLOSED DISPOSAL PROCESS (TTCDP) - BUILDING 670 EMISSIONS

The emissions were calculated based off of material balances, analytical data, and the POLU combustion model. The emissions from this operation are as follows:

| | TTCDP POTENTIAL EMISSIONS [TPY] | | | | | | | | | | | |
|-------|------------------------------------------------------------------------------------|------|--------------|--------------|----------|----------|----------|-------|--|--|--|--|
| | CO ₂ CO PM PM _{2.5} Pb Barium Antimony Compounds Compounds HCN | | | | | | | | | | | |
| TTCDP | 482 | 23.2 | 1.04E- 02 | 1.04E- 02 | 3.97E-04 | 1.71E-05 | 1.60E-05 | 0.125 | | | | |

OPEN BURNING AND OPEN DETONATION (OB/OD) REQUIREMENTS

Open Burning and Open Detonation at Anniston Army Depot involves the destruction/demilitarization of unserviceable munitions such as projectiles, rockets, warheads, propellants, ammunition, and pyrotechnics.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

Open Burning and Open Detonation operations would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

There are no compliance requirements for this operation other than those in the General Permit Provisos.

Emission Monitoring:

There are no monitoring requirements other than those in the General Permit Provisos.

Recordkeeping and Reporting Requirements:

There are no recordkeeping or reporting requirements other than those in the General Permit Provisos.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

This source is uncontrolled; therefore CAM does not apply.

OPEN BURNING AND OPEN DETONATION (OB/OD) EMISSIONS

Potential emissions for Open Burning and Open Detonation operation at Anniston Army Depot are calculated using emission factors and are as follows:

| OPEN BURNING AND OPEN DETONATION POTENTIAL EMISSIONS [TPY] | | | | | | | | | |
|------------------------------------------------------------|--------------------------------------------------------------|--|--|--|--|--|--|--|--|
| СО | CO NO _X SO ₂ PM ₁₀ VOC HAPs | | | | | | | | |
| 14.649 | | | | | | | | | |

ENGINE TESTING REQUIREMENTS

Anniston Army Depot operates thirty-four (34) engine test cells. These cells are used for engine testing, wash down, adjustment, and preservation. The facilities that house engine testing service various types of reciprocating and turbine engines. The engines are operated using either diesel or Jet Propellant (JP) – 8 fuels.

Building 467 (467-L and 467-R)

Used for reciprocating engines.

Building 410

This site contains eighteen (18) active engine test cells along with a cell used for testing auxiliary power units (APUs), which are typically small (<25 HP) engines. Descriptions of the test cells are as follows:

- Cells 11, 12, and 20: Used for testing turbine engines
- Cells 3, 4, 5, 7, 8, 9, 13, 14, 15, 17, 18, and 19: used for testing reciprocating engines. Cell 7 is occasionally used for Hercules 1050 HP engines
- Cell 2: Used for both electric transmission and reciprocating engine testing
- Cell 6: Used for both APUs and reciprocating engine testing
- Cells 10 and 16: Used for both turbine and reciprocating engine testing

Building 474

This site contains seven (7) test cells used for reciprocating engines. These units have ANTI-PSD limits.

Building 128

This site contains five (5) test cells used for turbine engines rated at 1,500 HP. This site has an ANTI-PSD limit of 635,000 gallons of fuel oil in any consecutive 12-month period. There is also a Power Pack Test Stand located near this site and is used to do minor operational performance and leak checks on turbine engines/engine sets (power packs).

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The engine test cells located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

These sources are not subject to any unit specific emission monitoring requirements.

Recordkeeping and Reporting Requirements:

These sources are not subject to any unit specific reporting or recordkeeping requirements.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from engine testing is not expected to exceed the allowable emission rate.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule. The facility has elected to impose the following ANTI-PSD limits:

- The five (5) engine test cells in Building 128 shall not burn more than 635,000 gallons of diesel, JP-8, or Jet A/F 24 fuel in any consecutive rolling 12-month period
- Building 128 test cells shall not emit more than 39.0 TPY NO_X in any consecutive rolling 12-month period
- Building 410 Cell #2 shall burn no more than 124,380 gallons of diesel or JP-8 in any consecutive 12-month rolling period.
- Building 410 Cell #6 shall burn no more than 124,380 gallons of diesel or JP-8 in any consecutive 12-month rolling period.
- Building 410 Cells #10 & #16 shall burn no more than 130,000 gallons of diesel or JP-8 in any consecutive 12-month rolling period.
- Building 474 test cells shall not emit more than 34.0 TPY NO_X in any consecutive rolling 12-month period and VOC emissions shall not exceed 3.72 TPY in any consecutive 12month rolling period.

Records of the monthly and 12-month rolling totals of the type and amount of fuel combusted shall be kept in a form suitable for inspection, shall be retained for at least five (5) years following the date of generation of the record, and shall be readily available for inspection.

Records of the monthly and 12-month rolling totals of NO_X emissions shall be kept in a form suitable for inspection, shall be retained for at least five (5) years following the date of generation of the record, and shall be readily available for inspection. Records shall include the following information:

- The quantity in gallons of fuel used each calendar month;
- The emission factor used for determining the amount of NO_X and VOC emitted;
- The amount of NO_X and VOCs emitted each calendar month expressed in the units of pounds and tons;
- The rolling12-month total of all NO_X and VOCs emitted in the units of pounds and tons.

A report summarizing this information shall be submitted for each calendar quarter by the 30th day of the month following the end of the quarter.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR 63 Subpart PPPPP, "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands"

Per §63.9285, this subpart is applicable to permittee if they permittee owns or operates an engine test cell or stand. Anniston Army Depot operates thirty-four (34) test cells; therefore, Anniston Army Depot is subject to the applicable requirements of this rule. However, per §63.9290(b) and 63.9290(d)(1), new/reconstructed sources at an affected source used exclusively for testing combustion turbine engines and existing affected sources do not have to meet the requirements of this subpart or Subpart A of Part 63.

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

The proposed units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

ENGINE TESTING EMISSIONS

Expected emissions from the test cells are based on AP-42 emission factors.

| | ENGINE TEST CELL POTENTIAL EMISSIONS [TPY] | | | | | | | | | | |
|----------------------|--------------------------------------------|-----------------|------------------|-------------------|-----------------|--------|-------|-------|-------------------|--|--|
| Cell Number | СО | NO _x | PM ₁₀ | PM _{2.5} | SO ₂ | voc | НАР | GHG | PM _{CON} | | |
| Bldg 128 Total | 0.3 | 81.6 | 1.14 | 1.14 | 3.06 | 0.036 | 0.12 | 2,527 | 2.222 | | |
| Bldg 410 Total | 117.65 | 588.4 | 39.13 | 39.13 | 37.53 | 44.458 | 2.168 | - | 19.62 | | |
| Bldg 467-R | 7.5 | 35.0 | 2.46 | 2.46 | 2.30 | 2.86 | 0.16 | _ | 1.23 | | |
| Bldg 467-L | 8.3 | 28 | 2.7 | 2.7 | 1.35 | 3.0 | 0.056 | - | 2.5 | | |
| Bldg 474 Total | 23.43 | 99.54 | 5.48 | 5.48 | 10.15 | 5.91 | 0.075 | - | 2.74 | | |
| TOTAL | 157.18 | 832.54 | 50.91 | 50.91 | 54.39 | 56.264 | 2.579 | 2,527 | 28.312 | | |

MOBILE TUB GRINDERS REQUIREMENTS

Anniston Army Depot operates two (2) mobile tub grinders with 860 HP diesel engines. One of these grinders is located in the ammunition area and the other is located near Building 49. The grinders are used to shred wood pallets, wood crates, and other clean wood. The engines associated with the tub grinders are not subject to 40 CFR Part 60 Subpart IIII but are subject to the applicable requirements of 40 CFR Part 63 Subpart ZZZZ.

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

Each woodworking and carpentry shop would be subject to the requirements of this subpart.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

These sources are no subject to any additional requirements other than those in the General Provisos.

Emission Monitoring:

These sources are no subject to any additional requirements other than those in the General Provisos.

Recordkeeping and Reporting Requirements:

These sources are no subject to any additional requirements other than those in the General Provisos.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

The PSD threshold for this type of facility is 250 TPY of criteria pollutants. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the applicable requirements of this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines""

This regulation applies to owners and operators of engines that commence construction after July 11, 2005, where the engines are manufactured on or after April 1, 2006 and are not fire pump engines. The compression ignition generators in this section that were manufactured prior to April 1, 2006 and are not fire pump engines are not subject to the requirements of this regulation [§60.4200(a)(3)].

Applicability:

40 CFR Part 60 Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines"

This regulation applies to owners and operators of engines that commenced construction after July 1, 2008 where the engines are manufactured on or after January 1, 2009, for emergency engines with a maximum engine power greater than 25 HP. The spark ignition generators in this section were manufactured prior to January 1, 2009; therefore, the requirements of NSPS JJJJ do not apply [§60.4230(a)(4)(iv)].

Applicability:

40 CFR Part 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)"

Per §63.6590(b)(1)(ii), the engines associated with the Mobile Tub Grinding operation are considered "new, limited use stationary RICE" under this subpart; therefore, the engines do not have to meet the requirements of this subpart or Subpart A of this part, except for the initial notification requirements of §63.6645(f).

Emission Standards

The engines in this section are not subject to any numerical emissions limitations. However, the engines are subject to a 100 hour per engine in any consecutive rolling twelve-month period operating limit [§63.6675].

Compliance and Performance Test Methods and Procedures

There are no additional requirements for these units under this subpart.

Emission Monitoring

There are no additional requirements for these under this subpart.

Recordkeeping and Reporting

Records of monthly and twelve-month rolling total hours of each engine should be kept in a form suitable for inspection for a period of at least five (5) years following the date of generation and shall be made available immediately upon request [Rule 335-3-16-.05(c)].

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These units do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

MOBILE TUB GRINDERS EMISSIONS

Emissions from these sources are based on AP-42 emission factors, manufacturer's data, and the expected hours of operation.

| | MOBILE TUB GRINDERS POTENTIAL EMISSIONS | | | | | | | | | | |
|-----------------|-----------------------------------------|---------|-------|------|--|--|--|--|--|--|--|
| Pollutant | Each E | Engine | Grir | nder | | | | | | | |
| | Lb/hr | TPY | Lb/hr | TPY | | | | | | | |
| PM | 0.204 | 0.011 | - | 0.02 | | | | | | | |
| SO ₂ | 9.74E-5 | 4.87E-6 | - | - | | | | | | | |
| NO _X | 11.37 | 0.569 | - | - | | | | | | | |
| СО | 1.7 | 0.085 | - | - | | | | | | | |
| VOC | 0.56 | 0.028 | - | - | | | | | | | |
| GHG | - | 45.86 | - | - | | | | | | | |

SMALL NATURAL GAS BOILERS (APPENDIX A) REQUIREMENTS

Boilers located at Anniston are used to generate heat for various facilities on site. "Small" natural gas boilers have a rated capacity of less than 10 MMBtu/hr heat input and burn natural gas only, except during period of gas curtailment. Boilers in this section are subject to the applicable requirements of 40 CFR 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." Boilers that fall into this category are as follows:

| BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) | BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) |
|-------------------|---------------------------|------------------------------|---------------------------|
| Building 19 #1 | 8.4 | Building 503 | 2.68 |
| Building 19 #2 | 8.4 | Building 647 | 6.695 |
| Building 87 | 1.73 | Building 654 | 4.184 |
| Building 201 | 2.50 | Building 695-1 | 3.15 |
| Building 375-1 | 3.00 | Building 695-2 | 1.25 |
| Building 375-2 | 3.00 | Salt Bath Brightener Tank | 1.00 |
| Water Tank Burner | 1.00 | 474 (20 Process Heaters) | 0.20 |
| 726, Pallet Kiln | 2.0 | Batch Quench Furnace (L5366) | 2.3 |

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The small natural gas boilers located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

Daily visual emissions observation.

Recordkeeping and Reporting Requirements:

The facility shall keep records of the daily visual emissions observations in a form suitable for inspection shall be made available upon request. These records shall include the date and results of the visual observation. If any visual emissions are observed, the records shall include the date and time of the initial observation, a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up inspection. These records shall be retained for at least five (5) years after generation of the record.

Applicability:

ADEM Admin. Code R 335-3-4-.03, "Fuel Burning Equipment"

Per this rule, units in Class I Counties are given an allowable particulate matter emission rate of 0.5 lb/MMBtu. Particulate matter emissions are expected to be well below the allowable emission rate since natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from the boilers in this section are not expected to exceed the allowable emission rate since natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

Anniston Army Depot is a major source in regards to this rule. In order to avoid a PSD review, the facility has elected to enforce a requirement that the boilers in this section shall only burn natural gas. The facility has also imposed an ANTI-PSD limit of 0.13 lb/hr PM for each boiler in Building 19 (2 boilers).

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart D_c, "Standards of Performance for Small Industrial – Commercial – Industrial Steam Generating Units"

Per §60.40c, this regulation applies to units with a maximum heat capacity of 100 MMBtu/hr and a minimum heat capacity of 10 MMBtu/hr. The boilers in this section have a heat capacity rating less than 10 MMBtu/hr; therefore, the boilers in this section would not be subject to this rule.

Applicability:

40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters"

Per §63.7485, a boiler is subject to the applicable requirements of this subpart if it meets the definition of an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is a part of, a major source of HAP. The boilers in this section meet the definition of a boiler or process heater in this subpart and are located at a major source of HAP emissions; therefore, the boilers in this section would be subject to any applicable requirement of this rule.

Emission Standards

The boilers in this section are not subject any numerical emission standards in this rule. However, per §63.7500(a)(3) and Table 3 of this subpart, the owner or operator must conduct a tune-up every five years as specified in §63.7540. The Permittee shall combust natural gas and No. 2 fuel oil only, which may only be used for periodic testing, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year or during periods of gas curtailment or gas supply interruptions of any duration. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight [Rule 335-3-14-.04 and §63.7575].

Compliance and Performance Test Methods and Procedures

Per §63.7500(a)(3), the permittee must operate and maintain these sources, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Boilers in this category that are classified as new or reconstructed (constructed or reconstructed after June 4, 2010) must be in compliance with the applicable portions of this subpart by January 31, 2013 or upon startup, whichever is later [§63.7495(a)]. Boilers in this section classified as existing (constructed before June 4, 2010) must be in compliance with the applicable requirements of this subpart no later than January 31, 2016 [§63.7495(b)].

Emission Monitoring

Anniston Army Depot must conduct a one-time energy assessment of each existing boiler performed by a qualified energy assessor. The energy assessment should be completed as described in §63.7575. Anniston Army Depot must conduct a tune-up of each boiler with a heat input capacity less than 5 MMBtu.hr every five (5) years as specified in §63.7540(a)(10)(i)-(vi) [§63.7540(a)(12)]. Biennial tune-ups of each boiler rated between 5 MMBtu/hr and 10 MMBtu/hr should be conducted as specified in §63.7540(a)(10)(i)-(vi) [§63.7540(a)(11)]. If a boiler is not operating on the required tune-up date, the tune-up must be completed within one (1) week of startup of the boiler. Daily visuals of the stack associated with Building 19 Boilers (19-1 and 19-2) and the Building 647 boiler when the units are burning fuels other than natural gas shall be conducted by personnel familiar with Method 9. If any visual emissions are observed, corrective actions must be taken.

Reporting and Recordkeeping Requirements

Anniston Army Depot shall keep records of all tune-ups conducted on these boilers for a period of five (5) years. Anniston Army Depot should also keep a record of each notification and report that is submitted to comply with this subpart. All records should be readily available for inspection. The Permittee must submit a biennial or 5-year compliance report as required by §63.7550(b).

Applicability:

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

Per §63.11193, an industrial, commercial, or institutional boiler that is located at or is part of an area source of hazardous air pollutants (HAPs) is subject to the applicable requirements of this rule. Anniston Army Depot is a major source of HAPs; therefore, the boilers in this section would not be subject to the requirements of this rule.

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These sources are uncontrolled: therefore, CAM does not apply.

SMALL NATURAL GAS BOILERS (APPENDIX A) EMISSIONS

Expected emissions were calculated using AP-42 emission factors and continuous operation.

| | SMALL NA | ATURAL GAS | FIRED BOILI | ERS EXPECT | ED EMISSION | s [TPY] | |
|---------------------------------|----------|-----------------|-------------|------------|-------------|---------|-----------|
| Boiler | PM | SO ₂ | NOx | СО | voc | HAPs | GHGs |
| 19 #1 | 0.569 | 18.7 | 5.27 | 3.09 | 0.202 | 0.082 | 3,487.23 |
| 19 #2 | 0.569 | 18.7 | 5.27 | 3.09 | 0.202 | 0.082 | 3,487.23 |
| 87 | 0.10 | 3.9 | 1.10 | 0.30 | 0.018 | 0.017 | 826.01 |
| 201 | 0.10 | 0.007 | 1.10 | 0.90 | 0.060 | 0.035 | 954.90 |
| 375-1 | 0.10 | 0.009 | 1.30 | 1.10 | 0.10 | - | 1,432.39 |
| 375-2 | 0.10 | 0.009 | 1.30 | 1.10 | 0.10 | - | 1,432.39 |
| 503 | 0.089 | 0.007 | 1.17 | 0.986 | 0.0645 | 0.022 | 1,279.60 |
| 647 | 0.50 | 14.90 | 4.20 | 2.46 | 0.161 | 0.065 | 7,498.96 |
| 654 | 0.31 | 9.30 | 2.62 | 1.54 | 0.101 | 0.041 | 4,694.70 |
| 695-1 | 0.105 | 0.008 | 1.38 | 1.16 | 0.076 | 0.026 | 1,504.01 |
| 695-2 | 0.042 | 0.003 | 0.55 | 0.46 | 0.030 | 0.010 | 596.83 |
| Salt Bath Brightener Tank | 0.033 | 0.003 | 0.44 | 0.37 | 0.024 | 0.008 | 477.93 |
| 474 (20 Process Heaters) | 0.008 | 0.001 | 0.11 | 0.092 | 0.006 | 0.002 | 2,389.64 |
| Water Tank Burner | 0.033 | 0.003 | 0.44 | 0.37 | 0.024 | 0.008 | 477.93 |
| Building 726 Pallet Kiln | 0.048 | - | 1.24 | - | 0.096 | - | - |
| L5366 | 0.077 | 0.006 | 1.01 | 0.85 | 0.055 | 0.019 | |
| Total | 2.214 | 65.586 | 28.50 | 17.778 | 1.32 | 0.41 | 30,539.75 |

SMALL FUEL OIL/ DUAL FUEL BOILERS (APPENDIX B) REQUIREMENTS

Boilers located at Anniston Army Depot are used to generate heat for various facilities on site. These boilers are classified as "small fuel oil/dual fuel" boilers each because each boiler has a rated heat capacity of less than 10 MMBtu/hr and will burn either No. 2 fuel oil or natural gas only. The boilers that fall into this category are as follows:

| BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) | BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) |
|-----------------|---------------------------|-----------------|---------------------------|
| Building 21 | 1.51 | Building 600 | 1.00 |
| Building 54 | 2.34 | Building 669 | 1.80 |
| Building 380 | 1.25 | Building 680 | 4.185 |

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The boilers located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

Daily visual observations of the stacks associated with the Building 654 and Building 680 Boilers, when the units are burning fuels other than natural gas, shall be conducted by personnel certified in accordance with 40 CFR 60, Appendix A, Method 9. If any visible emissions are observed, corrective action must be taken [ADEM Admin. Code R 335-3-16-.05(c)].

Recordkeeping and Reporting Requirements:

Records of the required daily visual observations shall be kept in a form suitable for inspection and shall be made available upon request. These records should include the date and results of the visual observation. If any emissions are observed, the records should also include a description of the corrective action taken, the date and time of the initial corrective action, and the results of the follow up observation. These records should be retained for a period of at least five (5) years following the generation of the record [ADEM Admin. Code R 335-3-16-.05(c)].

Applicability:

ADEM Admin. Code R 335-3-4-.03, "Fuel Burning Equipment"

Per this rule, units in Class I Counties are given an allowable particulate matter emission rate of 0.5 lb/MMBtu. Particulate matter emissions are expected to be well below the allowable emission rate since No.2 fuel oil and natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from the boilers in this section are not expected to exceed the allowable emission rate since No.2 fuel oil and natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

Anniston Army Depot is a major source in regards to this rule. In order to avoid a PSD review, the facility has elected to enforce the following requirements:

- The units in this section shall burn only natural gas or No. 2 fuel oil
- Building 680 Boiler shall burn natural gas, propane, and No. 2 fuel oil only. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight.

Records of the sulfur content of the fuel oil combusted must be kept in a form suitable for inspection shall be made available upon request. These records should be retained for a period of at least five (5) years following the date of generation of the record [ADEM Admin. Code R 335-3-16-.05(c)].

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart D_c, "Standards of Performance for Small Industrial – Commercial – Industrial Steam Generating Units"

Per §60.40c, this regulation applies to units with a maximum heat capacity of 100 MMBtu/hr and a minimum heat capacity of 10 MMBtu/hr. The boilers in this section have a heat capacity rating less than 10 MMBtu/hr; therefore, the boilers in this section would not be subject to this rule.

Applicability:

40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters"

Per §63.7485, a boiler is subject to the applicable requirements of this subpart if it meets the definition of an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is a part of, a major source of HAP. The boilers in this section meet the definition of a boiler or process heater in this subpart and are located at a major source of HAP emissions; therefore, the boilers in this section would be subject to any applicable requirement of this rule.

Emission Standards

The boilers in this section are not subject any numerical emission standards in this rule. However, per §63.7500(a)(3) and Table 3 of this subpart, the owner or operator must conduct a tune-up every five years as specified in §63.7540.

Compliance and Performance Test Methods and Procedures

Per §63.7500(a)(3), the permittee must operate and maintain these sources, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Boilers in this category that are classified as new or reconstructed (constructed or reconstructed after June 4, 2010) must be in compliance with the applicable portions of this subpart by January 31, 2013 or upon startup, whichever is later [§63.7495(a)]. Boilers in this section classified as existing (constructed before June 4, 2010) must be in compliance with the applicable requirements of this subpart no later than January 31, 2016 [§63.7495(b)].

Emission Monitoring

Anniston Army Depot must conduct a one-time energy assessment of each existing boiler performed by a qualified energy assessor. The energy assessment should be completed as described in §63.7575. Anniston Army Depot must conduct a tune-up of each boiler with a heat input capacity less than 5 MMBtu.hr every five (5) years as specified in §63.7540(a)(10)(i)-(vi) [§63.7540(a)(12)]. Biennial tune-ups of each boiler rated between 5 MMBtu/hr and 10 MMBtu/hr should be conducted as specified in §63.7540(a)(10)(i)-(vi) [§63.7540(a)(11)]. If a boiler is not operating on the required tune-up date, the tune-up must be completed within one (1) week of startup of the boiler.

Reporting and Recordkeeping Requirements

Anniston Army Depot shall keep records of all tune-ups, maintenance, and inspections conducted on these boilers for a period of five (5) years. Anniston Army Depot should also keep a record of each notification and report that is submitted to comply with this subpart. All records should be readily available for inspection. The Permittee must submit a biennial or 5-year compliance report as required by §63.7550(b).

Applicability:

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

Per §63.11193, an industrial, commercial, or institutional boiler that is located at or is part of an area source of hazardous air pollutants (HAPs) is subject to the applicable requirements of this rule. Anniston Army Depot is a major source of HAPs; therefore, the boilers in this section would not be subject to the requirements of this rule.

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These sources are uncontrolled; therefore, CAM does not apply.

SMALL FUEL OIL/DUAL FUEL BOILERS (APPENDIX B) EMISSIONS

Expected emissions were calculated using AP-42 emission factors and continuous operation.

| SMALL FUEL OIL/DUAL FUEL BOILERS EXPECTED EMISSIONS [TPY] | | | | | | | | | | | |
|-----------------------------------------------------------|-------|-----------------|-----------------|-------|-------|-------|----------|-----------------|--|--|--|
| Boiler | PM | SO ₂ | NO _X | СО | VOC | HAP | GHGs | NH ₃ | | | |
| 21 | 0.11 | 3.40 | 0.95 | 0.56 | 0.018 | 0.003 | 721.0 | - | | | |
| 54 | 0.17 | 5.21 | 1.47 | 0.86 | 0.056 | 0.023 | 1,117.26 | - | | | |
| 380 | 0.09 | 2.78 | 0.78 | 0.20 | 0.013 | 0.002 | 803.27 | - | | | |
| 600 | 0.075 | 2.228 | 0.628 | 0.368 | 0.024 | 0.01 | 642.61 | - | | | |
| 669 | 0.11 | 4.00 | 1.59 | 0.66 | 0.043 | 0.016 | 1,166.23 | - | | | |
| 680 | 0.26 | 9.40 | 3.72 | 1.55 | 0.101 | 0.037 | 4,694.70 | 0.11 | | | |
| Total | 0.82 | 27.02 | 9.14 | 4.20 | 0.26 | 0.09 | 9,145.07 | 0.11 | | | |



LARGE NATURAL GAS BOILERS (APPENDIX C) REQUIREMENTS

Boilers in this section of the MSOP are classified as "large natural gas boilers" because each boiler in this section has a rated heat capacity greater than 10 MMBtu/hr and will only burn natural gas. The boilers in this category are as follows:

| BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) | BUILDING NUMBER | RATED CAPACITY (MMBTU/HR) |
|-----------------|---------------------------|-----------------|---------------------------|
| Building 381A-1 | 21.0 | Building 401-2 | 20.1 |
| Building 381A-2 | 21.0 | Building 401-3 | 61.5 |
| Building 401-1 | 20.1 | Building 501 | 20.085 |

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The boilers located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

Daily visual observations of the stacks associated with these units, when the units are burning fuels other than natural gas, shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, corrective action must be taken.

Recordkeeping and Reporting Requirements:

Records of the required daily visual observations shall be kept in a form suitable for inspection and shall be made available upon request. These records shall include the date and results of the visual observation. If any visible emissions are observed, the records shall include the date and time of the initial observation, a description of the corrective action attempt, and the results of the follow-up observation. These records shall be retained for at least five (5) years following the date of generation.

Applicability:

ADEM Admin. Code R 335-3-4-.03, "Fuel Burning Equipment"

Per this rule, units in Class I Counties are given an allowable particulate matter emission rate of 0.5 lb/MMBtu. Particulate matter emissions are expected to be well below the allowable emission rate since natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-5-.01(1)(b), "Fuel Combustion"

Per this rule, units installed in Category II Counties have an allowable sulfur dioxide emission rate of 4.0 lb/MMBtu. Sulfur dioxide emissions from the boilers in this section are not expected to exceed the allowable emission rate since natural gas would be the only fuel source for the boilers in this section.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

Anniston Army Depot is a major source in regards to this rule. In order to avoid a PSD review, the facility has elected to impose the following limits:

- Building 381A Boilers (21.0 MMBtu/hr) shall combust no more than 1,067,761 gallons of fuel oil in any consecutive 12-month rolling period;
- Particulate matter emissions from Building 381A boilers shall not exceed 1.59 lb/hr, each:
- 401-1 & 401-2 (20.1 MMBtu/hr) shall combust natural gas and No. 2 fuel oil only. The
 No. 2 fuel oil may only be used for periodic testing, maintenance, or operator training,
 not to exceed a combined total of 48 hours during any calendar year or during periods
 of gas curtailment or gas supply interruptions of any duration. The sulfur content of the
 No. 2 fuel oil shall not exceed 0.5% by weight;
- Particulate matter emissions from 401-1, 401-2, & 401-3 boilers shall not exceed 0.28 lb/hr each:
- 401-3 (20.1 MMBtu/hr) shall combust natural gas and No. 2 fuel oil only. The No. 2 fuel oil may only be used for periodic testing, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year or during periods of gas curtailment or gas supply interruptions of any duration. The sulfur content of the No. 2 fuel oil shall not exceed 0.5% by weight;
- Building 501 Boiler (20.085 MMBtu/hr) shall combust no more than 1,098,592 gallons of fuel oil in any consecutive rolling twelve-month period.

Records of the sulfur content of the fuel oil combusted must be kept in a form suitable for inspection and shall be made available upon request. These records shall be retained for at least five (5) years following the date of generation of the record [Rule 335-3-16-.05(c)]. Records of the daily, monthly, and rolling twelve-month total fuel oil usage for each boiler shall be maintained in form suitable for inspection and for a period of at least five (5) years following the date of generation of the record

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart D_c, "Standards of Performance for Small Industrial – Commercial – Industrial Steam Generating Units"

Per §60.40c, this regulation applies to units with a maximum heat capacity of 100 MMBtu/hr and a minimum heat capacity of 10 MMBtu/hr. The boilers in this section have a heat capacity rating greater than or equal to 10 MMBtu/hr; therefore, the boilers in this section would be subject to this rule.

Emissions Standards

There are no numerical emission standards applicable to the proposed boilers in this section. The facility should comply with the emission standards in the General Provisos of the MSOP.

Compliance and Performance Test Methods and Procedures

There are no compliance and performance test methods and procedures applicable to the proposed boilers because the boilers have no numerical emission standards.

Emission Monitoring

There are no emission monitoring requirements applicable to the proposed boilers listed in this subpart.

Reporting and Recordkeeping Requirements

Anniston Army Depot should keep a daily record of the amount of fuel combusted in each unit and should be kept in a permanent form suitable for inspection for at least two years after the generation of the record [§60.48c(g), (i)]. Quarterly report concerning boiler operations shall be submitted to the Department and shall include the information outlined in §60.48c(d) & (e). These reports shall be postmarked by the 30th day following the end of the reporting period.

Applicability:

40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters"

Per §63.7485, a boiler is subject to the applicable requirements of this subpart if it meets the definition of an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is a part of, a major source of HAP. The boilers in this section meet the definition of a boiler or process heater in this subpart and are located at a major source of HAP emissions; therefore, the boilers in this section would be subject to any applicable requirement of this rule.

Emission Standards

The boilers in this section are not subject any numerical emission standards in this rule.

Compliance and Performance Test Methods and Procedures

Per §63.7500(a)(3), the permittee must operate and maintain these sources, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Boilers in this category that are classified as new or reconstructed (constructed or reconstructed after June 4, 2010) must be in compliance with the applicable portions of this subpart by January 31, 2013 or upon startup, whichever is later [§63.7495(a)]. Boilers in this section classified as existing (constructed before June 4, 2010) must be in compliance with the applicable requirements of this subpart no later than January 31, 2016 [§63.7495(b)].

Emission Monitoring

Anniston Army Depot must conduct a one-time energy assessment of each existing boiler performed by a qualified energy assessor. The energy assessment should be completed as described in §63.7575. Anniston Army Depot must conduct an annual tune-up of each boilers based on the requirements outlined in §63.7540(a)(10)(i)-(vi) [§63.7540(a)(10)]. If a boiler is not operating on the required tune-up date, the tune-up must be completed within one (1) week of startup of the boiler.

Reporting and Recordkeeping Requirements

Anniston Army Depot shall keep records of all tune-ups, maintenance, and inspections conducted on these boilers for a period of five (5) years. Anniston Army Depot should also keep a record of each notification and report that is submitted to comply with this subpart. All records should be readily available for inspection Anniston Army Depot should submit an annual compliance report as required by §63.7550(b) [63.7550(b)].

Applicability:

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

Per §63.11193, an industrial, commercial, or institutional boiler that is located at or is part of an area source of hazardous air pollutants (HAPs) is subject to the applicable requirements of this rule. Anniston Army Depot is a major source of HAPs; therefore, the boilers in this section would not be subject to the requirements of this rule.

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These sources are uncontrolled; therefore, CAM does not apply.

LARGE NATURAL GAS BOILERS (APPENDIX C) EMISSIONS

The expected emissions for this category of boilers are based on AP-42 emission factors and continuous emissions.

| LARGE NATURAL GAS FIRED BOILERS EXPECTED EMISSIONS [TPY] | | | | | | | | | | |
|----------------------------------------------------------|------|-----------------|-----------------|-------|-------|-------|------------|--|--|--|
| Boiler | PM | SO ₂ | NO _X | СО | VOC | HAP | GHGs | | | |
| 381A-1 | 0.70 | 19.0 | 9.20 | 7.73 | 0.506 | 0.016 | 15,494.12 | | | |
| 381 A-2 | 0.70 | 19.0 | 9.20 | 7.73 | 0.506 | 0.016 | 15,494.12 | | | |
| 401-1 | 1.23 | 44.7 | 12.6 | 7.4 | 0.48 | 0.196 | 144,806.63 | | | |
| 401-2 | 1.23 | 44.7 | 12.6 | 7.4 | 0.48 | 0.196 | 144,806.63 | | | |
| 401-3 | 4.59 | 137.0 | 38.60 | 22.60 | 1.48 | 0.599 | 15,912.52 | | | |
| 501 | 1.50 | 44.70 | 12.60 | 7.39 | 0.484 | 0.196 | 20,840.36 | | | |
| Total | 9.95 | 309.10 | 94.80 | 60.25 | 3.94 | 1.22 | 357,354.38 | | | |

NSPS SUBPART IIII - COMPRESSION IGNITION EMERGENCY GENERATORS (APPENDIX D) REQUIREMENTS

These emergency generators are classified as compression ignition emergency generators because they are diesel fired generators. The engines in this section vary in size and power rating and are run on diesel fuel. Generators that were constructed after April 1, 2006 are subject to the applicable requirements in 40 CFR 60 Subpart IIII. Generators constructed before the applicability date are subject to 40 CFR 63 Subpart ZZZZ. The generators in this category are as follows:

| BUILDING NUMBER | RATED CAPACITY (HP) | BUILDING NUMBER | RATED CAPACITY (HP) | | |
|-----------------|---------------------|-----------------|---------------------|--|--|
| 27C | 121 | 505A (X078) | 619 | | |
| 52C (X065) | 237 | 721 | 26.8 | | |
| 53 | 198 | IWTP (X073) | 1,502 | | |
| 105 | 49 | | | | |
| 107 (X055) | 268 | STP | 318 | | |
| 127 | 175 | 801 | 800 | | |
| 201 | 275 kW | 813 | 800 | | |
| 445 | 364 | | | | |

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The generators located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

There are no emissions monitoring requirements for these units.

Recordkeeping and Reporting Requirements:

There are no recordkeeping or reporting requirements for these units.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to any applicable requirement in this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines""

Per §60.4200(a), this regulation is applicable to compression ignition engines manufactured after April 1, 2006. The generators in this section that meet the criteria listed in §60.4200(a) would be subject to the requirements of this rule and generators manufactured prior to that date would be subject to the applicable requirements of 40 CFR 63 Subpart ZZZZ.

Emission Standards:

Pre- 2007 models with a displacement less than 10 liters per cylinder must comply with the emissions standards in Table 1 of this subpart [§60.4205(a)]; post 2007 models with a displacement less than 30 liters per cylinder must comply with the requirements in §60.4202 [§60.4205(b)]. Beginning October 1, 2007, owners and operators that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a) [§60.4207(a)]. Beginning October 1, 2010, owners and operators of generators with a displacement less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a) for nonroad diesel fuel, except that any existing diesel fuel purchase prior to October 1, 2010 may be used until depleted.

Compliance and Performance Test Methods and Procedures

Owners and operators that must comply with the emissions standards of this subpart must do the following [§60.4211(a)(1)-(3)]:

- 1. Operate and maintain the generator and control device according to the manufacturer's emission-related written instructions;
- 2. Change only those emission-related setting that are permitted by the manufacturer; and
- 3. Meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as applicable.

Owners and operators of pre-2007 generators that must comply with the emission standards specified in §60.4204(a) or §60.4205(a) must demonstrate compliance according to one or more of the following methods [§60.4211(b)]:

- 1. By purchasing an engine certified according to 40 CFR Part 89 or Part 84, as applicable, for the same model year and maximum engine power. The engine must be installed according to the manufacturer's specifications:
- 2. Keeping records of performance test results;
- 3. Keeping records of engine manufacturer data indicating compliance with the standards;
- 4. Keeping records of control device vendor data indication compliance with the standards; OR
- 5. Conducting an initial performance test to demonstrate compliance with the emissions standards according to the requirements specified in §60.4212, as applicable.

Owners and operators of 2007 and later model year generators that must comply with the emissions standards in §60.4204(b) or §60.4205(b) must demonstrate compliance by purchasing a generator certified to the emissions standards for the same model year and maximum engine power [§60.4211(c)]. Emergency generators must be operated according to the requirements outlined in §60.4211(f).

Emission Monitoring

If the emergency generator does not meet the standards of non-emergency generators, Anniston Army Depot must install a non-resettable hour meter [§60.4209(a)].

Reporting and Recordkeeping Requirements

Owners and operators are not required to submit initial notifications for emergency generators. If the emergency generator of the model years listed in Table 5 of this subpart do not meet the standards applicable to non-emergency generators in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the generator and the reason the engine was in operation [§60.4214(b)]. Emergency generators that have a maximum engine power more than 100 HP that operates or is contractually obligated to operate more than 15 hours per calendar year for the purposes specified in §60.4211(f)(3)(i), an annual report must be submitted. The report must contain the company name and address where the engine is located; the date of the report and beginning and ending dates of the reporting period; the engine site rating and model year; the latitude and longitude of the engine; and the hours operated for the purposes outlined in §60.4211(f)(2)(ii), (iii) including the date, start time, and end time of the operation [§60.4214(d)].

Applicability:

40 CFR Part 60 Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines"

Per §60.4230(a), the provisions of this subpart are applicable to owners and operators of stationary spark ignition (SI) internal combustion engines (ICE). The generators in this section are compression ignition; therefore, the proposed generators would not be subject to this rule.

Applicability:

40 CFR 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines"

Per §63.6590, this subpart is applicable to new, reconstructed or existing stationary RICE located at a major source or area source of HAP emissions. Existing stationary RICE are defined as RICE constructed or reconstructed before December 19, 2002 with a rating greater than 500 HP or RICE constructed/reconstructed before June 12, 2006 with a rating of less than 500 HP. New stationary RICE are defined as a stationary RICE with a rating greater than 500 HP that commenced construction on or after December 19, 2002 or a stationary RICE rated less than 500 HP that commenced construction on or after June 12, 2006. Generators in this section are subject to these requirements. Generators that meet any of the criteria in §63.6590(c) meet the requirements of this subpart by meeting the requirements of 40 CFR Part 60 Subpart IIII for compression ignition engines. New and reconstructed generators greater than 500 HP are only subject to the initial notification requirements of this subpart [§63.6590(b)(1)(i)]. Existing emergency generators greater than 500 HP that do not operate or are not contractually obligated to operate more than 15 hours per calendar year for the purposes specified in §6306640(f)(2)(ii) and (iii) do not have to meet the requirements of this subpart [§63.6590(b)(3)(iii)].

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These sources are uncontrolled; therefore, CAM does not apply.

NSPS SUBPART IIII - COMPRESSION IGNITION EMERGENCY GENERATORS (APPENDIX D) EMISSIONS

The expected emissions for the generators in this section were calculated using manufacturer's literature and AP-42 emission factors.

| NSPS IIII GENERATORS – EXPECTED EMISSIONS [TPY] | | | | | | | | | | | |
|-------------------------------------------------|------|------------------|-------------------|-----------|--------|-------|-------|------|-----------------|-----|---------|
| Building | PM | PM ₁₀ | PM _{2.5} | PM CON | NOx | voc | тос | СО | SO ₂ | НАР | GHGs |
| 27C | - | 0.07 | 0.07 | - | 0.94 | 0.07 | - | 0.20 | 0.06 | | 26.91 |
| 52C | - | 0.13 | 0.13 | - | 1.837 | 0.146 | - | 0.40 | 0.121 | - | 22.1 |
| 53 | 0.01 | - | - | - | 0.31 | 0.12 | - | 0.07 | 0.10 | - | 49.16 |
| 105 | - | - | - | • | 0.09 | 0.03 | - | 0.04 | 0.03 | - | 12.80 |
| 107 | - | 0.04 | 0.04 | - | 0.75 | 0.06 | - | 0.16 | 0.05 | - | 25.67 |
| 127 | - | 0.10 | 0.10 | - | 1.36 | 0.11 | - | 0.29 | 0.09 | - | 26.91 |
| 201 | - | 0.023 | 0.023 | - | 0.576 | | 0.228 | 0.20 | 0.189 | - | 113.16 |
| 445 | - | 0.64 | 0.64 | - | 13.41 | 1.06 | 1 | 2.89 | 0.88 | - | 447 |
| 505A | - | 0.044 | 0.044 | - | 0.882 | - | - | 0.77 | - | - | 49.9 |
| 721 | - | 0.01 | 0.01 | - | 0.21 | - | 0.02 | 0.04 | 0.01 | - | 2.50 |
| IWTP | - | 0.263 | 0.263 | | 9.012 | - | 0.265 | 2.07 | 1.502 | - | 140.12 |
| STP | - | 0.013 | 0.013 | • | 0.427 | - | 0.013 | 0.08 | 0.001 | - | 125.45 |
| 801 | - | 0.33 | 0.33 | - | 4.65 | 0.37 | - | 1.00 | 0.31 | - | 26.91 |
| 813 | - | 0.33 | 0.33 | - | 4.65 | 0.37 | - | 1.00 | 0.31 | - | 26.91 |
| MH027 | - | 0.01 | 0.01 | - | 0.21 | - | 0.02 | 0.04 | 0.01 | - | - |
| Total | 0.01 | 2.003 | 2.003 | | 39.314 | 2.336 | 0.546 | 9.25 | 3.663 | - | 1,098.5 |

MACT Subpart ZZZZ - Existing Emergency Generators (Appendix E) REQUIREMENTS

The generators in this section are classified as Existing Emergency Generators subject to MACT ZZZZ because they were manufactured prior to the applicability dates in 40 CFR 60 Subpart IIII for compression ignition engines and 40 CFR 60 Subpart JJJJ for spark ignition engines. The generators in this category are as follows:

| BUILDING NUMBER | RATED CAPACITY (HP) | BUILDING NUMBER | RATED CAPACITY (HP) | | |
|-----------------|---------------------|-----------------|---------------------|--|--|
| 2 | 268 | 235 | 80.4 | | |
| 7 | 201.07 | 266 | 53.6 | | |
| 53 | 107.2 | 364 | 1,330 | | |
| 79 | 201.07 | 367 | 80.4 | | |
| 81 | 80.4 | 376 | 33.5 | | |
| 82 | 274.8 | 513 | 67 | | |
| 87 | 46.9 | 552# 1 | 288.2 | | |
| 96A | 107.2 | 552 #2 | 288.2 | | |
| 97A | 174 | 552 #3 | 288.2 | | |
| 114 | 167.6 | 695 | 167.6 | | |
| 189 | 234.6 | 715 | 53.6 | | |
| 194 | 469 | Gate 5A | 80.4 | | |
| 223 | 201.07 | | | | |

STATE REGULATIONS

Applicability:

ADEM Admin. Code R 335-3-4-.01, "Visible Emissions" for Control of Particulate Emissions

The generators located at Anniston Army Depot are required to comply with the visible emissions requirements outlined in this rule.

Emission Standards:

These units shall not discharge into the atmosphere more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

Compliance and Performance Test Methods and Procedures:

A visible emission observation (VEO) shall be conducted according to either EPA Method 9 or Method 22 found in 40 CFR 60 Appendix A.

Emission Monitoring:

There are no emissions monitoring requirements for these units.

Recordkeeping and Reporting Requirements:

There are no recordkeeping or reporting requirements for these units.

Applicability:

ADEM Admin. Code R 335-3-14, "Prevention of Significant Deterioration [PSD]"

Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to any applicable requirement in this rule.

Applicability:

ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits"

The major source threshold for criteria pollutants in 100 TPY of criteria pollutants, 10 TPY of a single HAP, and 25 TPY of a combination of HAPs. Anniston Army Depot is a major source in regards to this rule; therefore, the facility would be subject to the requirements of this rule.

FEDERAL REGULATIONS

Applicability:

40 CFR Part 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines""

This regulation applies to owners and operators of engines that commence construction after July 11, 2005, where the engines are manufactured on or after April 1, 2006 and are not fire pump engines. The compression ignition generators in this section that were manufactured prior to April 1, 2006 and are not fire pump engines are not subject to the requirements of this regulation [§60.4200(a)(3)].

Applicability:

40 CFR Part 60 Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines"

This regulation applies to owners and operators of engines that commenced construction after July 1, 2008 where the engines are manufactured on or after January 1, 2009, for emergency engines with a maximum engine power greater than 25 HP. The spark ignition generators in this section were manufactured prior to January 1, 2009; therefore, the requirements of NSPS JJJJ do not apply [§60.4230(a)(4)(iv)].

Applicability:

40 CFR 63 Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines"

Per §63.6590, this subpart is applicable to new, reconstructed or existing stationary RICE located at a major source or area source of HAP emissions. Existing stationary RICE are defined as RICE constructed or reconstructed before December 19, 2002 with a rating greater than 500 HP or RICE constructed/reconstructed before June 12, 2006 with a rating of less than 500 HP. New stationary RICE are defined as a stationary RICE with a rating greater than 500 HP that commenced construction on or after December 19, 2002 or a stationary RICE rated less than 500 HP that commenced construction on or after June 12, 2006. Generators in this section are subject to these requirements. Generators that meet any of the criteria in §63.6590(c) meet the requirements of this subpart by meeting the requirements of 40 CFR Part 60 Subpart IIII for compression ignition engines. New and reconstructed generators greater than 500 HP are only subject to the initial notification requirements of this subpart [§63.6590(b)(1)(i)]. Existing emergency generators greater than 500 HP that do not operate or are not contractually obligated to operate more than 15 hours per calendar year for the purposes specified in §6306640(f)(2)(ii) and (iii) do not have to meet the requirements of this subpart [§63.6590(b)(3)(iii)].

Emission Standards:

The generators in this section are subject to the applicable requirements in Table 2c of this subpart [§63.6602]. Anniston Army Depot must operate and maintain the units in this section 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 [§63.6625(e)(2)].

Compliance and Performance Test Methods and Procedures:

All compression ignition engines must be in compliance with the applicable requirements of this rule no later than May 3, 2013 [§63.6595(a)(1)]. All spark ignition engines must be in compliance with the applicable requirements of this subpart no later than October 19, 2013 [§63.6595(a)(1)]. Anniston Army Depot must operate and maintain the units in this section 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 [§63.6625(e)(2)]. These units may be operated for the purpose of maintenance checks and readiness testing; however, this type of operation is limited to 100 hours per calendar year. These is no time limit on the use of the generators in emergency situations. The generators in this section may operate up to 50 hours per calendar year for non-emergency situations, which is included in the allotted 100 hours per year for maintenance checks and readiness testing. The 50 hours per calendar year may not be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity [§63.6640(f)(1)].

Emission Monitoring:

Anniston Army Depot must install a non-resettable hour meter on each applicable unit [§63.6625(f)]. The facility should perform the following monitoring activities as specified in Table 2c of this subpart: change the oil filter every 500 hours of operation or annually, whichever comes first; inspect all air filters every 1,000 hours of operation or annually, whichever comes first, and inspection all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary [40 CFR Part 63 Subpart ZZZZ, Table 2c(1), (6)].

Reporting and Recordkeeping Requirements:

Anniston Army Depot must be keep records of the maintenance conducted on the units in this section in order to demonstrate that the units were operated according to the maintenance plan [§63.6655(e)]. Anniston Army Depot must keep records of the hours of operation of each engine that is recorded through the non-resettable hour meter. The facility should document how many hours are spent for emergency operation, including why the operation was considered emergency, and how many hours were spent in non-emergency operation. If the engines were used for demand response operation, Anniston Army Depot must keep records of the notification of the emergency situation and the time the engine was operated as part of the demand response [§63.6655(f)].

Applicability:

40 CFR 64, "Compliance Assurance Monitoring (CAM)"

These sources are uncontrolled; therefore, CAM does not apply.

MACT Subpart ZZZZ - Existing Emergency Generators (Appendix E) Emissions

The emissions for these generators were calculated using manufacturer's literature and AP-42 emission factors.

| MACT ZZZZ GENERATORS – EXPECTED EMISSIONS [TPY] | | | | | | | | | | | |
|-------------------------------------------------|----|------------------|-------------------|-----------|-----------------|------|-------------|------|-----------------|-----|---------|
| Building | PM | PM ₁₀ | PM _{2.5} | PM CON | NO _X | voc | тос | СО | SO ₂ | НАР | GHGs |
| 2 | - | 0.15 | 0.15 | - | 2.08 | - | 0.17 | 0.45 | 0.14 | - | 25.03 |
| 7 | 1 | 0.11 | 0.11 | - | 1.56 | - | 0.12 | 0.34 | 0.10 | - | 18.77 |
| 53 | 1 | 0.06 | 0.06 | - | 0.83 | - | 0.07 | 0.18 | 0.05 | - | 10.01 |
| 79 | - | 0.11 | 0.11 | • | 1.56 | | 0.12 | 0.34 | 0.10 | - | 18.77 |
| 81 | - | 0.04 | 0.04 | - | 0.62 | - | 0.05 | 0.13 | 0.04 | - | 7.51 |
| 82 | | 1.35E- 5 | 1.35E- 5 | - | 0.15 | 0.02 | - | 0.10 | 1.03E- 4 | - | 18.69 |
| 87 | - | 2.29E- 6 | 2.29E- 6 | · | 0.03 | - | 3.51E- 3 | 0.02 | 1.75E- 5 | - | 4.39 |
| 96A | - | 0.06 | 0.06 | - | 0.83 | • | 0.07 | 0.18 | 0.05 | - | 10.01 |
| 97A | - | 0.10 | 0.10 | - | 1.35 | - | 0.11 | 0.29 | 0.09 | - | 16.27 |
| 114 | - | 0.09 | 0.09 | - | 1.30 | 0.10 | - | 0.28 | 0.09 | - | 15.64 |
| 189 | - | 0.13 | 0.13 | - | 1.82 | - | 0.14 | 0.39 | 0.12 | - | 21.90 |
| 194 | - | 0.26 | 0.26 | - | 3.63 | - | 0.29 | 0.78 | 0.24 | - | 43.80 |
| 223 | - | 0.11 | 0.11 | - | 1.56 | - | 0.12 | 0.34 | 0.10 | - | 18.77 |
| 235 | - | 0.04 | 0.04 | - | 0.62 | - | 0.05 | 0.13 | 0.04 | - | 7.51 |
| 266 | - | 0.03 | 0.03 | - | 0.42 | - | 0.03 | 0.09 | 0.03 | - | 5.01 |
| 364 | - | 0.233 | 0.233 | - | 7.98 | - | 0.234 | 1.83 | 0.004 | - | 124.15 |
| 367 | - | 0.04 | 0.04 | - | 0.62 | - | 0.05 | 0.13 | 0.04 | - | 7.51 |
| 376 | - | 1.64E- 6 | 1.64E- 6 | - | 0.02 | - | 2.51E- 3 | 0.01 | 1.25E- 5 | - | 2.33 |
| 513 | ď | 3.28E- 6 | 3.28E- 6 | 1 | 0.04 | 0.01 | - | 0.02 | 2.50E- 5 | 1 | 4.63 |
| 552 #1 | - | 0.16 | 0.16 | - | 2.23 | 0.08 | - | 0.48 | 0.15 | - | 26.91 |
| 552 #2 | - | 0.16 | 0.16 | - | 2.23 | 0.08 | - | 0.48 | 0.15 | - | 26.91 |
| 552 #3 | - | 0.16 | 0.16 | - | 2.23 | 0.08 | - | 0.48 | 0.15 | - | 26.91 |
| 695 | - | 0.09 | 0.09 | - | 1.30 | - | 0.10 | 0.28 | 0.09 | - | 15.64 |
| 715 | - | 0.03 | 0.03 | - | 0.42 | - | 0.03 | 0.09 | 0.03 | - | 5.01 |
| Gate 5A | - | 0.04 | 0.04 | - | 0.62 | • | 0.05 | 0.13 | 0.04 | - | 7.51 |
| Total | - | 2.20 | 2.20 | - | 36.05 | 0.37 | 1.81 | 7.97 | 1.84 | - | 490.598 |

RECOMMENDATIONS

Based on my analysis and pending the resolution of any comments received during the 30-day public comment period and the 45-day EPA review, I recommend issuing Anniston Army Depot's Title V MSOP Renewal.

Marla K. Smith Date **Industrial Minerals Section Energy Branch** Air Division

CAM PLAN FOR BUILDING 431 SPINNER HANGER ABRASIVE BLAST UNIT (J4744)

Indicator 1

I. Indicator Opacity

Measurement Approach Visible Emissions Observation by persons

familiar with Method 9

II. Indicator Range While the unit is operating, an excursion is

defined as the presence of **any** visible emissions. Excursions trigger an inspection,

corrective action, and a reporting

requirement.

III. Performance Criteria

A. Data Representativeness Measurement is being made at the emission

point (baghouse exhaust.)

B. Verification of Operation Status N/A

C. QA/QC Practices and Criteria The observer will be familiar with Reference

Method 9.

D. Monitoring Frequency Daily

E. Data Collection Procedures The VE observation will be recorded with the

time, date, and name of the observer.

F. Averaging Period Instantaneous