STATEMENT OF BASIS

For the issuance of Air Permit # 2198-AR-2 AFIN: 62-00118

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Federal Bureau of Prisons - Federal Correctional Complex 1301 Dale Bumpers Road Forrest City, Arkansas 72335

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Correctional Institutions NAICS Code: 922140

5. SUBMITTALS:

Date of Application	Type of Application	Short Description of Any Changes
	(New, Renewal, Modification,	That Would Be Considered New or
	Deminimis/Minor Mod, or	Modified Emissions
	Administrative Amendment)	
11/3/2015	Modification	Increase throughput of gasoline tank

6. **REVIEWER'S NOTES:**

With this modification, the facility is increasing the annual throughput limit for the 12,000 gallon gasoline tank (SN-030) from 24,000 gallon to 84,000 gallon per rolling 12 month period. The permitted annual emission rate is increasing by 0.3 tpy VOC and 0.17 tpy total HAPs.

7. COMPLIANCE STATUS:

As of November 3, 2015, there are no compliance issues with the facility.

8. PSD APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

Ν

- b) Is the facility categorized as a major source for PSD?
- Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list

If yes, explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
001-003	РМ	NSPS Dc
030	НАР	NESHAP CCCCCC

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

- a) Reserved.
- b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)		Emission Fact (lb/ton, lb/hr, e	 Control Equipment	Control Equipment Efficiency	Comments
001- 003	AP-42 1.4 & 1.3	NG PM PM ₁₀ SO ₂ VOC CO NOx	lb/MMBTU 0.00746 0.00746 0.00059 0.00540 0.08236 0.09804	None	N/A	14 MM Btu/hr Boilers permitted at 8760 hrs/yr natural gas + 30 days/year maximum on diesel fuel

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
		Diesel PM PM ₁₀ SO ₂ VOC CO NOx	lb/MMBTU 0.01429 0.01429 0.50715 0.00929 0.03572 0.14286				
004- 025	AP-42 1.4	NG PM PM ₁₀ SO ₂ VOC CO NOx	lb/MMBTU 0.00746 0.00746 0.0059 0.00540 0.08236 0.09804		None	N/A	22 natural gas boilers permitted at 8760 hrs/year TPY bubbled
026- 028	AP-42 3.4	PM PM ₁₀ SO2 VOC CO NOx	lb/hp-hr 7.00E-04 7.00E-04 4.05E-03 7.05E-04 5.50E-03 2.40E-02	lb/MMBTU 0.0697 0.0573 0.202 0.09 0.85 3.2	None	N/A	Three diesel emergency generators permitted at a maximum of 500 hrs/yr maximum
029	MSDS	Maxim	um 1.0% by w	eight VOC	None	N/A	Unicor Gluing Operation
030	TANKS & MSDS	12,000 gallon Gas tank Horizontal, 34'x8' 7 turnovers a year VOC emissions=2,275.01 lb/yr 20% Toluene 20% Xylene 15% Ethyl benzene 11% MTBE 5% Benzene			None	N/A	operation

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants Test Met		Test Interval	Justification
		None		

14. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
026				
027	Hours of operation	Non-resettable hour meter	monthly	No
028				

15. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
001-003	natural gas and diesel fuel consumed	73,080 gal/12m for each boiler Boilers permitted @ capacity on NG	monthly	Ν
001-003 026-028	fuel oil sulfur content	0.5% maximum	each delivery	Ν
026-028	Hours of operation	500 total hours/12m per generator	Monthly	Ν
	Adhesive usage	185,860 lb/12m max	Monthly	Ν
029	VOC content (wt.%) of adhesives used	1.0 % by weight max	Each MSDS	N
030	Casalina tank thruput	9,999 gallons/month max	Each delivery	Ν
030	Gasoline tank thruput	84,000 gallons/12m max	Monthly	Ν

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16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
001-003	5%, natural gas	§18.501	Inspector Observation
001-005	20%, #2 fuel oil	§19.503	Inspector Observation
004-025	5%	§18.501	Natural gas only
026-028	20%	§19.503	Inspector Observation

17. DELETED CONDITIONS:

Former SC	Justification for removal
	None

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source	Group A	Emissions (tpy)					
Name	Category	PM/PM_{10}	SO_2	VOC	СО	NO _x	HAPs
	6.	1 IVI / 1 IVI ₁₀	302	VUC	CO	NO _X	Single Total
No additio	No additions to the insignificant activities list were made with this permit; therefore, this						
informatio	information was not provided or required.						

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
2198-AR-1

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 08-26-15

Facility Name: Federal Bureau of Prisons-Federal Correctional Complex Permit Number: 2198-AR-2 AFIN: 62-00118

				Old Permit	New Permit
\$/ton factor	23.93		Permit Predominant Air Contaminant	78.1	78.1
Minimum Fee \$	400		Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee \$	500				
			Permit Fee \$	400	_
Check if Administrative Amendment			Annual Chargeable Emissions (tpy)	78.1	
					-
Pollutant (tpy)	Old Permit	New Permit	Change		

Pollutant (tpy)	Old Permit	New Permit	Change
PM	5.5	5.5	0
PM ₁₀	5.5	5.5	0
SO ₂	17	17	0
VOC	6.6	6.9	0.3
СО	39.5	39.5	0
NO _X	78.1	78.1	0
Α	0.64	0.81	0.17
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