

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0617-AOP-R13 AFIN: 07-00035

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Aerojet Rocketdyne, Inc.
East Walton Road, (Highway 274), Highland Industrial Park
East Camden, Arkansas 71701

3. PERMIT WRITER:

Shawn Hutchings

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Ammunition (except Small Arms) Manufacturing
NAICS Code: 332993

5. SUBMITTALS:

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
7/6/2015	Minor Mod	New boiler.

6. REVIEWER'S NOTES:

Aerojet Rocketdyne, Inc., currently operates a manufacturing facility located in the Highland Industrial Park near East Camden, Arkansas. This modification adds a natural gas fired boiler, SN-97. Permitted Emissions increased 0.2 tpy of particulate and VOC, 0.1 tpy of SO₂ and HAPs, 1.6 tpy of CO, and 1.9 tpy of NO_x.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.
There are no known enforcement issues with the facility.

8. PSD APPLICABILITY:

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

b) Is the facility categorized as a major source for PSD? N

- *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)
SN-86, SN-87, SN-89 and SN-95	VOC CO NO _x	NSPS JJJJ
81 86 87 89 90 91 92 93 95	HAPs	MACT ZZZZ
71	VOC/HAP	NSPS Kb
72	VOC/HAP	NSPS Kb
Plantwide	VOC/HAP	NESHAP Part 63 Subpart GG
02A 02B 02C 02D 02E 02F 02H SN-25A SN-25B	HAPs	MACT DDDDD

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-25C		
SN-25D		
SN-25E		
SN-25F		
SN-25G		
SN-69A		
SN-69B		
SN-69C		
SN-69D		
SN-69E		
SN-69F		
SN-69G		
SN-69H		
SN-94		
SN-96		
SN-97		

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 Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
97	AP-42	Varied	None	N/A	

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
This permit required no additional testing.				

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)
This permit required no additional monitoring.				

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)
97	DDDDD Records	None	As necessary	Y

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
97	5%	Department Guidance	Natural gas combustion only

17. DELETED CONDITIONS:

Former SC	Justification for removal
No conditions were removed.	

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
DOA Storage Tank (3,500 gallons)	Group A, Number 3							
MLRS Igniter Assembly (SN-55) at Building M-85	Group A, Number 13			0.09			.06	.06
SN-60 Ingredient Preparation Room	Group A, Number 13	0.03						
SN-66 Lathes at Building 2-SH-3	Group A, Number 13	.28						
SN-70 Polymer Tank Farm	Group A, Number 13			0.04				
Motor Case Cutting Equipment	Group A, Number 13	.27						
Motor Case Grinding	Group A, Number 13	.14						
Composite Case Grinding Machine at Building M-8	Group A, Number 13	.01						
Total	A-13	.73		.13		.06	.06	
Water Heater	Group A, Number 1	0.14	0.01	0.09	1.19	1.41	0.01	

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Building #47								
Diesel Tank for Generator at M-2 Building	Group A, Number 3							

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
0617-AOP-R11

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-25-14

Aerojet Rocketdyne, Inc.
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\$/ton factor	23.89	Annual Chargeable Emissions (tpy)	701.03
Permit Type	Minor Mod	Permit Fee \$	500

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	2.4
Initial Title V Permit Fee Chargeable Emissions (tpy)	

HAPs not included in VOC or PM: Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants: All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensable PM, H2S in TRS, etc.)

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		205.6	205.8	0.2		
PM ₁₀		205.6	205.8	0.2	0.2	205.8
SO ₂		6	6.1	0.1	0.1	6.1
VOC		150.5	150.7	0.2	0.2	150.7
CO		94.8	96.4	1.6		
NO _x		89.6	91.5	1.9	1.9	91.5
Lead	<input type="checkbox"/>	6.71	6.71	0		
Acetaldehyde	<input type="checkbox"/>	0.1	0.1	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acrolein	<input type="checkbox"/>	0.1	0.1	0		
Benzene	<input type="checkbox"/>	0.2	0.2	0		
1,2 Butylene Oxide	<input type="checkbox"/>	1.4	1.04	-0.36		
1,3 Butadiene	<input type="checkbox"/>	0.1	0.1	0		
Cadmium	<input type="checkbox"/>	0.08	0.08	0		
Chlorine	<input checked="" type="checkbox"/>	7.83	7.83	0	0	7.83
Chromium	<input type="checkbox"/>	0.11	0.11	0		
Cumene	<input type="checkbox"/>	1.5	1.5	0		
Diethylene Glycol Monobutyl Ether Acetate	<input type="checkbox"/>	1.5	1.5	0		
Diethylene Glycol Monoethyl Ether Acetate	<input type="checkbox"/>	2.9	2.9	0		
Ethyl Acrylate	<input type="checkbox"/>	4.3	4.3	0		
Ethyl Benzene	<input type="checkbox"/>	8.04	8.04	0		
Formaldehyde	<input type="checkbox"/>	0.48	0.48	0		
Hydrogen Chloride	<input checked="" type="checkbox"/>	145.4	145.4	0	0	145.4
Hydrogen Fluoride	<input checked="" type="checkbox"/>	0.8	0.8	0	0	0.8
Methanol	<input type="checkbox"/>	17.38	17.38	0		
Methylene Chloride	<input checked="" type="checkbox"/>	24.6	24.6	0	0	24.6
Methyl Isobutyl Ketone	<input type="checkbox"/>	31.6	31.6	0		
PAHs	<input type="checkbox"/>	0.1	0.1	0		
Phenol	<input type="checkbox"/>	3.58	3.58	0		
Tetrachloroethylene	<input checked="" type="checkbox"/>	2.25	2.25	0	0	2.25
Toluene	<input type="checkbox"/>	40.14	40.14	0		
1,1,1 Trichloroethane	<input checked="" type="checkbox"/>	34.91	34.91	0	0	34.91
Trichloroethylene	<input type="checkbox"/>	5.76	5.76	0		
Xylene	<input type="checkbox"/>	32.68	32.68	0		
HAPs	<input type="checkbox"/>	0.55	0.65	0.1		
Acetone	<input checked="" type="checkbox"/>	28.6	28.6	0	0	28.6
Ammonia	<input checked="" type="checkbox"/>	0.04	0.04	0	0	0.04

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
HFC-245fa	<input checked="" type="checkbox"/>	2.5	2.5	0	0	2.5
	<input type="checkbox"/>	0	0	0	0	
	<input type="checkbox"/>	0	0	0	0	
	<input type="checkbox"/>	0	0	0	0	
	<input type="checkbox"/>	0	0	0	0	
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