

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0617-AOP-R10 AFIN: 07-00035

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Aerojet - General Corporation  
East Walton Road, Highland Industrial Park  
East Camden, Arkansas 71701

3. PERMIT WRITER:

Shawn Hutchings

4. PROCESS DESCRIPTION AND NAICS CODE:

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

5. SUBMITTALS:

4/15/2011

6. REVIEWER'S NOTES:

Aerojet – General Corporation, currently operates a manufacturing facility located in the Highland Industrial Park near East Camden, Arkansas. Aerojet manufactures solid rocket propellants and motors, related components for rocket and missile systems, warheads and ordnance, and similar products for the United States Department of Defense. Aerojet also produces the propellants for automobile air bag systems. These energetic materials are utilized in the on-site production operations and are commercially distributed as finished products. Research and Development (R&D) activities for the products are also performed

In this modification Aerojet is adding a 125hp natural gas-fired emergency generator, SN-87, to be located at Building 61.

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 compliance 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? Increases were less than 250 tpy.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
87	HAPs VOC CO NO <sub>x</sub>	MACT ZZZZ  NSPS JJJJ
The information below was reviewed in previous permits.		
86	HAPs VOC CO NO <sub>x</sub>	MACT ZZZZ  NSPS JJJJ
36	VOC/HAP	NESHAP Part 63 Subpart T
71	VOC/HAP	NSPS Kb
72	VOC/HAP	NSPS Kb
Plantwide	VOC/HAP	NESHAP Part 63 Subpart GG

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

Non-Criteria Pollutants:

No changes in HAP emissions were made. HAPs were not modeled.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
87	AP-42 for Natural gas-fired engines	Varied	Catalytic converter	Not used to calculate emissions.	

13. TESTING REQUIREMENTS:

No additional testing was added to the permit.

14. MONITORING OR CEMS

This permit required no additional monitoring or CEMs

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)
87	Hours of operation	500 and NSPS limits	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
87	5%	Department Guidance	Natural gas combustion only

17. DELETED CONDITIONS:

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No conditions were removed.

18. GROUP A INSIGNIFICANT ACTIVITIES

No insignificant activities were changed.

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
0617-AOP-R9

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

\_\_\_\_\_  
Phillip Murphy, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 12-15-10

Aerojet - General Corporation  
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\$/ton factor	22.07	Annual Chargeable Emissions (tpy)	798.9
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)	1.4
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 condensible 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	<input checked="" type="checkbox"/>	241.6	241.7	0.1	0.1	241.7
PM <sub>10</sub>	<input type="checkbox"/>	241.6	241.7	0.1		
SO <sub>2</sub>	<input checked="" type="checkbox"/>	3.3	3.4	0.1	0.1	3.4
VOC	<input checked="" type="checkbox"/>	153.9	154	0.1	0.1	154
CO	<input type="checkbox"/>	77.2	79.1	1.9		
NO <sub>x</sub>	<input checked="" type="checkbox"/>	73.3	74.4	1.1	1.1	74.4
Lead	<input type="checkbox"/>	5.61	5.61	0		
Acetaldehyde	<input type="checkbox"/>	1.06	1.06	0		
Acrolein	<input type="checkbox"/>	0.14	0.14	0		
Benzene	<input type="checkbox"/>	1.23	1.23	0		
1,2 Butylene Oxide	<input type="checkbox"/>	0.36	0.36	0		
1,3 Butadiene	<input type="checkbox"/>	0.09	0.09	0		
Cadmium	<input type="checkbox"/>	0.08	0.08	0		
Chlorine	<input checked="" type="checkbox"/>	6.35	6.35	0	0	6.35
Chromium	<input type="checkbox"/>	0.54	0.54	0		
Diethylene Glycol Monobutyl Ether Acetate	<input type="checkbox"/>	1.42	1.42	0		
Diethylene Glycol Monoethyl Ether Acetate	<input type="checkbox"/>	2.84	2.84	0		
Ethyl Acrylate	<input type="checkbox"/>	4.48	4.48	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Ethyl Benzene	<input type="checkbox"/>	7.89	7.89	0		
Formaldehyde	<input type="checkbox"/>	1.72	1.72	0		
Hydrogen Chloride	<input checked="" type="checkbox"/>	123.46	123.46	0	0	123.46
Hydrogen Fluoride	<input checked="" type="checkbox"/>	0.67	0.67	0	0	0.67
Methanol	<input type="checkbox"/>	10.84	10.84	0		
Methylene Chloride	<input checked="" type="checkbox"/>	96.25	96.25	0	0	96.25
Methyl Isobutyl Ketone	<input type="checkbox"/>	32.53	32.53	0		
PAH	<input type="checkbox"/>	0.03	0.03	0		
Phenol	<input type="checkbox"/>	3.41	3.41	0		
Propylene Oxide	<input type="checkbox"/>	3.42	3.42	0		
Tetrachloroethylene	<input checked="" type="checkbox"/>	2.1	2.1	0	0	2.1
Toluene	<input type="checkbox"/>	42.33	42.33	0		
1,1,1 Trichloroethane	<input checked="" type="checkbox"/>	48.25	48.25	0	0	48.25
Trichloroethylene	<input type="checkbox"/>	5.52	5.52	0		
Xylene	<input type="checkbox"/>	33.56	33.56	0		
Acetone	<input checked="" type="checkbox"/>	48.3	48.3	0	0	48.3
Ammonia	<input checked="" type="checkbox"/>	0.02	0.02	0	0	0.02