

STATEMENT OF BASIS

for the issuance of Draft Air Permit #1272-AR-7

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Remington Arms Company, Inc.
2592 Arkansas Highway 15 North
Lonoke, AR 72086,
Lonoke County

3. PERMIT WRITER: James G, Siganos, P. E.

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Manufacturing Ammunition
NAICS Code: 332993

5. REVIEWER'S NOTES:

This permit modification is being issued to include the installation of a wet counter flow exhaust scrubber, at the Nitration Building, designated as SN-34. The purpose of this installation is to control opacity produced from the emission of nitrous dioxide during the manufacture of Trinitroresorcinol.

The scrubber is comprised of a roof-mounted vessel containing approximately 175 cubic feet of plastic two-inch packing material topped by a demister pad. A 500-gallon recirculation tank is located on the first floor with a ten-horsepower pump. The pump sends the scrubber liquor from the recirculation tank to the top of the scrubber vessel which in turn drains out the bottom of the scrubber and back to the recirculation tank.

A twenty-horsepower fan draws air off of the nitration process exhausts and into the lower portion of the scrubber vessel. The exhaust air flows up through the packed tower in the opposite direction of the scrubber liquor before exiting the vessel above the demister pad. The air then passes through the fan and out a ten-inch no-loss stack.

A solution of 10% sodium hydroxide and 8 % hydrogen sulfide is placed into the tank to form scrubber liquor. The liquor is pumped continuously to the top of the scrubber and dispersed evenly across the top of the packing through spray nozzles. The solution reacts with the nitration process emission by products to reduce opacity to below 20%. The liquor is reused until the pH drops below 10, at which point additional sodium hydroxide is added to the solution to maintain the solution's effectiveness.

6. COMPLIANCE STATUS:

The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues. **NONE**

7. EMISSION CHANGES:

The following table summarizes plant wide emission changes associated with this permitting action.

Plant Wide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1272-AR-6	Air Permit 1272-AR-7]	Change
PM/PM ₁₀	3.9	3.9	0
SO ₂	0.1	0.1	0
VOC	72.5	72.5	0
CO	8.2	8.2	0
NO _x	88.5	88.5	0
Arsenic	0.00844	0.00844	0
Antimony	0.17485	0.17845	0
Lead	1.4867	1.4867	0
Methyl Ethyl Ketone	0.97	0.97	0
Perchloroethylene	9.9	0.97	0

8. CALCULATIONS: Not required for this permitting action.

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/uncontrolled, etc)

9. TESTING REQUIREMENTS: Not required for this permitting action.

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement

10. MONITORING OR CEMS: Not required for this permitting action.

The permittee must monitor the following parameters with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and the need for records included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**

* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)

** Indicates whether the parameter needs to be included in reports.

11. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency*	Report (Y/N)**
34	pH of scrubber liquor	10	Per batch	N

* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)

** Indicates whether the item needs to be included in reports

12. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
34	20	Dept. Guidance	Daily observation & operation of scrubber

13. DELETED CONDITIONS: Not applicable for this permitting action.

14. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

Permit #
1272-AR-6

15. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Thomas Rheume, P.E.