

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1272-AR-7

IS ISSUED TO:

Remington Arms Company, Inc.
2592 Arkansas Highway 15 North
Lonoke, AR 72086
Lonoke County
AFIN 43-00024

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

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AFIN: 43-00024

SECTION I: FACILITY INFORMATION

PERMITTEE: Remington Arms Company, Inc.

AFIN: 43-00024

PERMIT NUMBER: 1272-AR-7

FACILITY ADDRESS: 2592 Arkansas Highway 15 North
Lonoke, AR 72086

COUNTY: Lonoke

CONTACT POSITION: Environmental Coordinator, Sammy R. Bates
TELEPHONE NUMBER: 501- 676-4185

REVIEWING ENGINEER: James G. Siganos, P. E.

UTM North-South (X): Zone 15: 3850.485 km
UTM East-West (Y): Zone 15: 591.949 km

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SECTION II: INTRODUCTION

Summary of Permit Activity

Remington Arms Company, Inc., located at 2592 Arkansas Highway 15 North, in Lonoke, Lonoke County, manufactures ammunition for sporting firearms (NAICS Code: 332993).

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 oxides of nitrogen during the manufacture of Trinitroresorcinol outlined in the process description.

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 which contains scrubber liquor, 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 the 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 byproducts 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

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Process Description-Facility

Remington manufacturers centerfire and rimfire cartridges, shotshells and primers. Each stack at the facility has been tested for lead emissions. Stack testing results were provided with the calculations. Lead is assumed to contain 5.2% antimony from the rotary furnace exhaust and 5.2% antimony and 1.2% arsenic from the scrap cartridge destruction unit exhaust.

Centerfire Process

Bullet: Lead bars (pigs) are fed to a natural gas fired melting pot with a hood vented to the atmosphere (SN-01). The molten lead from the melting pot is cast into billets that are fed through an extruder to form a lead “wire rope” from which slugs are formed. All scrap lead is sent to the remelt pot (SN-02). The slugs are first tumbled in a media of Maizorb and safety solvent (SN-05), and then tumbled in graphite. Bullets are then formed by swagging and are grooved (SN-06). Emissions from these sources consist primarily of lead and VOCs.

Bullets are inspected visually (SN-36) and with a Class II laser. Finished bullets are then tumbled using Maizorb and a safety solvent (SN-05). Particulate emissions from the tumbling process are controlled by a Rotoclone. Emissions from the inspection process are uncontrolled.

Bullet Jacket: Some bullets are copper jacketed. A blank cup is pressed from a copper strip. It is then annealed in a gas fired furnace, acid pickled, washed, rinsed, and drawn to length. The copper jacket is then again annealed, pickled, washed, and rinsed. Next, the completed jacket is joined with the lead bullet. The assembled, jacketed bullet goes through a final wash, rinse, and dry operation.

Shell: A blank cup is cut from a brass strip. This cup is annealed, acid pickled, washed, rinsed, and drawn. This process is repeated. It then goes through a 3-cone soap/wash process consisting of a slightly alkaline rinse, soaper, and another rinse. Next, the shells are cut to length, head stamped, and head turned. The body of the shell is annealed, lubricated, and trimmed. The mouth of the shell is also annealed again and the shell is washed for a final time. The final wash consists of an alkali rinse, acid rinse, and an inhibitor with Cobratec 99. A portion of the shells are nickel plated.

Primed Shell: Assembled primers are trucked to the centerfire area from the primer manufacturing area. Primers are mechanically seated and, in some cases, waterproofed, using a lacquer based compound, on the same machine.

Loading: In the loading operation, gun powder is placed into the primed shell and the bullet is then seated. This is an automated process for most rounds, with both operations being performed on the same machine. Certain metal case rounds used in law enforcement are water-proofed where the bullet is seated in the shell (SN-07 and SN-08). “Proof” loads are identified with a coat of Rhodamine powder, lacquer, and heptane mixture on the base of the shell.

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Packing: Loaded rounds are transferred to the packing area. Here they receive a final cleaning by tumbling in Maizorb and tripropylene methyl ether followed by tumbling in the Maizorb alone (SN-09 and SN-10). Cartridges are then labeled (SN-47), boxed, cased, and loaded onto pallets for shipping.

Rimfire Process

Lead Bullet: Rimfire bullets are formed in the same place as the centerfire bullets through an identical process up to the point where the slugs are formed. After the slugs are formed, they are tumbled (SN-11), go through two parallel shakers (SN-12), and are sent through a lube and drying operation (SN-44).

Shell: Cups are pressed from brass strips and then washed and annealed. These cups are pickled, rinsed, and sent to the shell maker area. On the shell maker machines, the cups are drawn, cut off, trimmed and the head is formed. Next, the shells are relief annealed, acid pickled, rinsed, and sent to the head gauge operation. After gauging, the shells are ready to be primed.

Priming: Rimfire priming mixture is trucked from the primer manufacturing area to the priming area. The priming mixture is manually placed into plates that are then put on the priming machines. The machine pushes mixture from the plates into the “rim” of the rimfire shell. Primed shells are then automatically inspected.

Loading: Automatic loading machines place gunpowder into primed shells and then seat the bullet.

Packaging: Loaded rounds are automatically lubricated with a wax/water mixture and packed. The packs are manually cased.

Shotshell Process

Heads: Caps are pressed from pre-plated steel or brass strips. They are sent through a slightly alkaline wash before going to the half-head for the final forming. The finished head is then coated with an inhibitor, Cobratec 99 (SN-13 and SN-14).

Bodies: Plastic slugs are formed by extrusion of polyethylene beads and color concentrate (SN-15). Bodies are formed from these slugs by one of two methods: rotary cam machines form the body and then heat set or the slug is oriented and cut off to size. The shell is then flame treated (SN-53).

Assemble, Head, and Prime: Finished heads are transferred to the assemble, head, and prime area. Component primers are trucked to the area from the primer manufacturing area. The heads are assembled on the bodies and the primer is seated into the head, all on the same machine. The shotshells are now primed and ready to be loaded.

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Lead Shot: Lead shot is formed by melting pigs in an electrically heated pot (SN-20), then dropping the molten lead through sizing screens into a water bath (SN-17). The shot is then dried (SN-35), polished with graphite, graded for roundness, and sized by tumbling screens. Emissions from the lead melting pot and drop tube are vented through stacks. All other operations are open to room ventilation.

Loading: Gun powder, shot wad, power piston, and lead shot are mechanically loaded into the shot shell in one operation. The shells are also crimped and printed on the same machine. Buckshot is formed on a machine in the centerfire area, where Vydak is used as a lubricant. Alcohol vapors are emitted at SN-38.

Packaging: Loaded shotshells are packed into boxes, cased, and placed on pallets for shipment.

Burn Plant

The burn plant consists of two emissions sources: scrap cartridge destruction (primer and centerfire cartridges) and a rotary furnace. The scrap cartridge destruction unit (SN-31) consists of two propane fired melting pots that share a common stack. Emissions from this stack are controlled by a baghouse.

Live rounds are hand fed onto a conveyor that feeds the units. Primed rimfire and centerfire shells are fed into the rotary furnace (SN-30) by hand. Brass is recovered from the unit. The rotary furnace is equipped with a propane fired burner. The small amount of ash generated by this unit consists mainly of ground glass, which is disposed of off site. Particulate emissions of lead and antimony are controlled using a mechanical dust collector with an efficiency of 90%.

Scrap primed empty shotshells are fed to two hammer mills operating in tandem to grind the plastic bodies and metal heads. Plastic recovered from this unit is sent to an off site land fill. This source is exhausted to the same baghouse which controls the scrap cartridge destruction unit (SN-31). A cyclone is used to remove large particles prior to exhausting to the baghouse.

Ballistics

The ballistics area is used for test firing live ammunition rounds and testing primers. Remington has four shooting ranges a 20 yd. (SN-26), 50 yd. (SN-27), 100 yd. (SN-28), and a 200 yd. (SN-29). Each range has a stack with a rotoclone to control emissions. These ranges also have a duct to provide ventilation for the booths where the firing occurs. These ducts lead to a common stack (SN-25). The function and casualty area (F&C) range has two stacks, one in the booth and one for the range (SN-23 and SN-24, respectively). The primer drop test area also has a stack (SN-22).

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Except as noted above, there are no air pollution control devices on these stacks. SN-23 through SN-29 exhaust stacks have been tested for lead emissions. Stack testing results were provided with the corresponding calculations. Lead is assumed to contain 5.2% antimony and 1.2% arsenic from all stacks.

The F&C booth exhaust stack test results were used to determine emissions rates from the drop test exhaust (SN-22).

Trinitroresorcinol Manufacture-Nitration Building (SN-34)

Water, resorcinol, sodium nitrite, and nitric acid are combined in primary nitration steps which are temperature controlled. Additional nitric acid is added during secondary nitration. The product is filtered, washed, and then stored in 1,000 pound magazines. Nitrous oxide emissions are based on mass balance calculations.

Power House

Remington operates two boilers at this facility. Boiler No. 1 (SN-45) and boiler No. 2 (SN-46) are both natural gas fired and rated at 750 horsepower. Also located in the power house, and considered insignificant sources, are two firewater pump diesel engines, emergency generators, and three fuel storage tanks. The fuel storage tanks store No. 2 fuel oil for use in the boilers in the event of natural gas curtailment.

Miscellaneous Emission Sources

Near the power house there are three storage tanks for gasoline and diesel fuel that are used in the mobile operations in the plant. Two of these tanks are gasoline storage tanks and the other is a diesel storage tank; these are considered insignificant sources. There is also a 160 horsepower emergency generator located in the plant waste water treatment area, listed as an insignificant source.

Miscellaneous parts cleaning and maintenance activities exist at the facility and are also permitted. Solvents used in the maintenance areas include kerosene, safety solvent, isopropyl alcohol, Axarel 9000, and Pensolv 945L.

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Regulations

This facility is subject to regulation under the Arkansas Air Pollution Control Code (Regulation 18), the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19), and 40 CFR 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*.

The following table is a summary of the facility's total emissions.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	1.1	3.9
PM ₁₀	1.1	3.9
SO ₂	0.1	0.1
VOC	40.2	72.5
CO	1.9	8.2
NO _x	20.1	88.5
Arsenic	0.00282	0.00844
Antimony	0.02993	0.17485
Lead	0.386	1.4867
Methyl Ethyl Ketone	0.97	0.97
Perchloroethylene	5.94	9.9

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SECTION III: PERMIT HISTORY

Permit #0050-I was issued on August 18, 1970.

Permit #1272-A was issued on July 10, 1992.

Permit #1272-AR-1 was issued on March 2, 1993. It increased the allowable hours of operation for the rotary furnace burning plant, the scrap primer/centerfire cartridge burning plant, and the primed shotshell forced air burning plant.

Permit #1272-AR-2 was issued on June 16, 1994, to further increase the allowable hours of operation for the rotary furnace burning plant and the scrap powder burn unit. This permit also removed the primed shotshell forced air burning unit from service.

Permit #1272-AR-3 was issued on January 20, 1995, and it allowed the elimination of 1,1,1-trichloroethane and methylene chloride usage at the facility and increased emissions of volatile organic compounds (VOC) by 31.6 tons per year.

Permit #1272-AR-4 was issued on August 5, 1997. This permit allowed the removal of the Dip Lube Dryer Exhaust (SN-03) and Dip Lube Tank Exhaust (SN-04), as well as the scrap powder burn unit (SN-33). It also allowed for the installation of two hammer mills (SN-31) whose emissions are controlled by an inline cyclone and baghouse, shotshell body flame treat units (SN-39 through SN-44), and the recognition of boiler #1 (SN-45) and boiler #2 (SN-46) which were installed in 1969 and previously unpermitted.

Permit #1272-AR-5 was issued on November 20, 1998. This modification corrected a typographical error on a previously submitted emission rate table for the burning plant rotary furnace (SN-30). In the previous submittal the stated values were reported in "pieces" and Remington wanted this to be changed to read "pounds." The facility added the Dip Lube Dryer Exhaust and the Dip Lube Tank Exhaust back to the permit with a bubble of 9.9 tpy of perchloroethylene (a HAP) emissions.

Permit #1272-AR-6 was issued on March 29, 2000. It added to the permitted sources a dust collector on the Burning Plant Rotary Furnace (SN-30) and changed the method used for emission rate calculations at this source. It also added two VOC/HAP compounds to the facility paint and ink usage. They are Ketone Ink and Methyl Ethyl Ketone. These compounds will be used in a label printer located in the centerfire packaging department. This addition result in 0.97 tpy increase in VOC and HAP emissions. Other emissions were due to changes in the method used for calculations at SN-30.

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SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

- Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
05	Bullet Tumbler Exhaust	VOC	2.0	5.5
07	Varnish Table Exhaust	VOC	6.2	5.4
08	Varnish Room Exhaust	VOC	6.2	5.4
09	Cartridge Tumbler	VOC	0.4	1.0
10	Cartridge Tumbler	VOC	3.2	8.6
13	Burnish/Lube #416	VOC	<0.001	<0.01
14	Burnish/Lube #415	VOC	<0.001	<0.01
15	Shotshell Extruder Exhaust	VOC	<0.001	<0.01
21	Maintenance Paint Booth	VOC	0.4	1.5
30	Burning Plant Rotary Furnace	PM ₁₀	0.05	0.22
		SO ₂	<0.1	<0.1
		VOC	<0.1	<0.1
		CO	0.1	0.4
		NO _x	0.3	1.4
34	Nitration Building Exhaust- Trinitroresorcinol Manufacturing-Scrubber	NO _x	10.8	47.2
38	Centerfire Buckshot Forming	VOC	9.0	6.5
39	Centerfire 10 Cone Gas Dryer	NO _x	0.2	0.9
40	Centerfire Jacket Dryer	NO _x	0.2	0.9
41	Centerfire Body Annealing	PM ₁₀	0.1	0.3
		NO _x	0.5	2.3

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SN	Description	Pollutant	lb/hr	tpy
42	Centerfire Mouth Annealing	PM ₁₀	0.1	0.3
		NO _x	0.5	2.3
43	Centerfire 7 Cone Gas Dryer	NO _x	0.2	0.9
44	Rimfire Gas dryer	NO _x	0.4	1.8
45	Boiler #1	PM ₁₀	0.4	1.5
		VOC	0.2	0.7
		CO	0.9	3.9
		NO _x	3.5	15.4
46	Boiler #2	PM ₁₀	0.4	1.5
		VOC	0.2	0.7
		CO	0.9	3.9
		NO _x	3.5	15.4
47	Centerfire Packaging Label Printing	VOC	1.0	1.0
XX	Parts Cleaning and Maintenance	VOC	11.2	36.0

2. Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Centerfire Lead Kettle	Lead	0.001	0.0044
		Antimony	0.00001	0.00005
02	Centerfire Remelt Lead	Lead Antimony	0.001 0.00001	0.0044 0.00005
03	Dip Lube Dryer Exhaust	Perchloroethylene	5.94	9.9
04	Dip Lube Tank Exhaust			
05	Bullet Tumbler Exhaust	Lead Antimony	0.031 0.0003	0.14 0.0014
06	Bullet Groove and Shaker	Lead Antimony	0.06 0.0006	0.26 0.0026

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SN	Description	Pollutant	lb/hr	tpy
11	Rimfire Bullet Tumbler	Lead Antimony	0.031 0.0003	0.14 0.0014
12	Peen Plating and Bullet Shakers	Lead Antimony	0.001 0.00001	0.0044 0.00005
17	Shot Tower Drop Tube	Lead Antimony Arsenic	0.005 0.0003 0.0001	0.0219 0.0013 0.0004
18	Shot Tower Room Exhaust	Lead Antimony Arsenic	0.005 0.0003 0.0001	0.0219 0.0013 0.0004
19	Shot Tower Room Vent	Lead Antimony Arsenic	0.005 0.0003 0.0001	0.0219 0.0013 0.0004
20	Shot Tower-Kettle Exhaust	Lead Antimony Arsenic	0.035 0.002 0.0004	0.16 0.008 0.002
22	Primer Drop Test Exhaust	Lead Antimony	0.001 0.0002	0.0044 0.0009
23	Ballistic Function Range	Lead Antimony Arsenic	0.008 0.0005 0.0001	0.035 0.0022 0.0004
24	Ballistics Function Booth	Lead Antimony Arsenic	0.001 0.0002 0.00001	0.0044 0.00009 0.00005
25	Ballistics Firing Bay	Lead Antimony Arsenic	0.006 0.0003 0.001	0.0263 0.0013 0.0004
26	Ballistic 20 yd. Range	Lead Antimony Arsenic	0.003 0.0001 0.00003	0.0131 0.0004 0.00013
27	Ballistic 50 yd. Range	Lead Antimony Arsenic	0.002 0.0001 0.00002	0.0088 0.0004 0.00009

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28	Ballistic 100 yd. Range	Lead Antimony Arsenic	0.002 0.0001 0.00002	0.0088 0.0004 0.00009
29	Ballistic 200 yd. Range	Lead Antimony Arsenic	0.002 0.0001 0.00002	0.0088 0.0004 0.00009
30	Burning Plant Rotary Furnace	Lead Antimony	0.034 0.019	0.15 0.08
31	Burning Plant-Scrap Primer and Centerfire Cartridge and Hammer mills	Lead Antimony Arsenic	0.02 0.0006 0.00002	0.01 0.027 0.00008
35	Shot Tower Dryer Exhaust (8th Floor)	Lead Antimony Arsenic	0.072 0.004 0.0009	0.3154 0.0175 0.0039
36	Centerfire Bullet Inspection	Lead Antimony	0.06 0.0006	0.2628 0.0026
41	Centerfire Body Annealing	PM	0.1	0.3
42	Centerfire Mouth Annealing	PM	0.1	0.3
45	Boiler #1	PM	0.4	1.5
46	Boiler #2	PM	0.4	1.5
47	Centerfire Packaging Label Printing	Methyl Ethyl Ketone	0.97	0.97

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3. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
01	5%	§18.501
02	5%	§18.501
03	5%	§18.501
05	5%	§18.501
06	5%	§18.501
11	5%	§18.501
12	5%	§18.501
17	5%	§18.501
18	5%	§18.501
19	5%	§18.501
20	5%	§18.501
22	5%	§18.501
23	5%	§18.501
24	5%	§18.501
25	5%	§18.501
26	5%	§18.501
27	5%	§18.501
28	5%	§18.501
29	5%	§18.501
30	20%	§19.503
31	5%	§18.501
34	20%	§19.503

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SN	Limit	Regulatory Citation
35	5%	§18.501
36	5%	§18.501
39	5%	§18.501
40	5%	§18.501
41	5%	§18.501
42	5%	§18.501
43	5%	§18.501
44	5%	§18.501
45	5%	§18.501
46	5%	§18.501

4. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
5. Pursuant to §18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.
6. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, all control equipment shall be kept in good operating condition and shall be used at all times when the equipment is running.
7. Pursuant to §19.705 of Regulation 19, §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the amount primed centerfire and rimfire shells or loaded rimfire cartridges mixed with rimfire shells processed at SN-30 (Burning Plant-Rotary Furnace) shall not exceed 3000 tons per consecutive twelve month period. The permittee shall maintain monthly records of pounds of primed centerfire and rimfire shells or loaded rimfire cartridges mixed with rimfire shells processed at this source. These records shall be updated no later than the 5th day of the month following the month which the update reflects and made available to Department personnel upon request.

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8. Pursuant to §19.705 of Regulation 19, §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the amount of loaded pistol, rifle, and rimfire rounds processed at SN-31 (Burning Plant-Scrap Primer and Centerfire Cartridges and Hammer mills) shall not exceed 3000 tons per consecutive twelve month period. The amount of shotshells processed at SN-31 (Burning Plant-Scrap Primer and Centerfire Cartridges and Hammer mills) shall not exceed 2,200 tons per consecutive twelve month period. The permittee shall maintain monthly records of the pounds of loaded shotshells, pistol, rifle, and rimfire rounds processed at the facility. These records shall be updated no later than the 5th day of the month following the month which the update reflects. These records shall be kept on site and made available to Department personnel upon request.
9. Pursuant to §19.501 et. seq. and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, emissions of volatile organic compounds (VOC) shall not exceed 71.4 tons of VOC per consecutive twelve month period. Compliance with VOC emission limits shall be determined by material balance. The permittee shall maintain monthly records, in the form of Attachment A, of material usage based on material issuance from plant inventory. These records must be sufficient to determine VOC emissions. These records shall be kept on site and made available to Department personnel upon request.
10. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, perchloroethylene usage at this facility shall not exceed 1,450 gallons per consecutive twelve month period. The permittee shall maintain monthly records of the amount of perchloroethylene used at the facility. These records shall be updated no later than the 5th day of the month following the month which the update reflects. These records shall be kept on site and made available to Department personnel upon request.
11. Pursuant to §19.705 of Regulation 19, §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not use more than 12 gallons of ketone ink or more than 288 gallons of methyl ethyl ketone per consecutive 12 month period. The permittee shall maintain records of the amounts of these compounds used. These records shall be updated no later than than the 5th day of the month following the month which the update reflects. These records shall be kept on site and made available to Department personnel upon request.
12. Pursuant to 40 CFR 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning* and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Dip Lube Tank (SN-03 & 04) is considered an immersion cold batch cleaning machine and is subject, but not limited to, the following requirements.
 - a. Pursuant to §63.462(a)(2), the permittee shall employ a tight fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.
 - b. Pursuant to §63.462(c), the permittee shall comply with the work and operational

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practice requirements listed below.

- i. All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.
- ii. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.
- iii. Solvent cleaned parts shall be drained for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.
- iv. The solvent level shall not exceed the fill line.
- v. Spills during solvent transfer shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the requirements of paragraph 1.
- vi. When an air- or pump-agitated solvent bath is used, the permittee shall ensure that agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned.
- vii. The permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute) as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.
- viii. Sponges, fabric, wood, and paper products shall not be cleaned.

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13. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate that the degree of accuracy of the calculations used to determine emissions is sufficient to prove that the major source thresholds have not been exceeded if actual emissions are calculated at or above 95% of the major source thresholds, i.e., >9.5 tpy of a single HAP, >23.75 tpy of any combination of HAPs, and/or 95 tpy of a criteria pollutant (PM₁₀, SO₂, VOC, CO, and NO_x).

14. Pursuant to §19.501 et. seq. and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, emissions of oxides of nitrogen (NO_x), at SN-34, shall not exceed the emission rate set forth in specific condition #1 (47.2 tpy). Compliance with NO_x emission limits shall be determined by controlling pH of the scrubber liquor. Scrubber liquor shall contain 10% percent sodium hydroxide and 8% sodium bisulfide solution. The permittee shall maintain the scrubber liquor pH at 10 or above. The permittee shall maintain monthly records, of scrubber liquor pH. These records must be sufficient to determine that NO_x emissions are maintained below the designated opacity limit as set forth in specific condition #3 for SN-34. These records shall be kept on site and made available to Department personnel upon request.

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SECTION V: INSIGNIFICANT ACTIVITIES

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated September 21, 2001.

Description	Category
Shotshell body flame treat units (2.3 MMBtu/hr)	A-1
Shotshell body printers (+1 tpy)	A-13
Closed containers (5 gallons or less)	A-8
Emergency generators (5) and emergency firewater pumps (2)	A-12
6,000 gallon Sodium Hydroxide tank	A-14
Laboratory hood vents (3)	A-5
Shotshell body crimp waterproofing process (+1 tpy)	A-13
Wastewater treatment sludge dewatering filterpress, filter media exhaust	A-13
Pistol and revolver label printer and centerfire pistol and revolver label printer (+1 tpy)	A-13

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SECTION VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
3. Pursuant to §19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the Department shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
4. Pursuant to §19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, construction or modification must commence within eighteen (18) months from the date of permit issuance.
5. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, records must be kept for five years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

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6. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

7. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
8. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
9. Pursuant to §19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

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10. Pursuant to §19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, if the permittee exceeds an emission limit established by this permit, they shall be deemed in violation of said permit and shall be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met:
 - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and that all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
 - c. The permittee shall submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.

11. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
 - c. To inspect any monitoring equipment or monitoring method required in this permit
 - d. To sample any emission of pollutants
 - e. To perform an operation and maintenance inspection of the permitted source

12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus.

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13. Pursuant to §19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
14. Pursuant to §19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit may be transferred. An applicant for a transfer shall submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.
15. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.
16. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.
17. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.

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APPENDIX A

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Attachment A
Monthly VOC Emissions Report SN: _____ Month _____ 20__

1	2	3	4	5	6	7	8
Supplier Name	Product	MSDS#	Product Density (lb/gal)	Percent Volatile	VOC Content (lb/gal)	Product Used (gal/month)	VOC Emissions (lb/month)
	Heptane		5.81	100.0	5.81		
Du Pont	Lacquer	1541S	7.76	73.7	5.72		
Du Pont	Lacquer Thinner	36712	6.88	100.0	6.88		
Oakite	Oakite 98	0980	7.53	5.0	0.38		
	Spray Paint						
	Isopropyl Alcohol						
	Kerosene						
	Safety Solvent						
	Axarel 9000						
	Pensolv 945L						
	Tripropylene Glycol Methyl Ether (TPM)						
	Ketone Ink						
	Mehtyl Ethyl Ketone						
SUM							

VOC Emissions (ton/mo) = Sum of Col 8) 2000 =

