

STATEMENT OF BASIS

For the issuance of Air Permit # 1272-AR-8 AFIN: 43-00024

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Remington Arms Company, LLC.
2592 Arkansas Highway 15 North
Lonoke, Arkansas 72086

3. PERMIT WRITER:

Travis Porter

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Small Arms Ammunition Manufacturing
NAICS Code: 332992

5. SUBMITTALS:

11/2/2009, 12/31/2009, 1/8/2010, 8/20/2010, 9/1/2010, 9/2/2010, 9/14/2010, 9/20/2010,
1/14/2011, 1/20/2011, 3/8/2011, 3/16/2011, 4/6/2011, 4/18/2011, 5/10/2011, 12/8/2011,
12/16/2011, 12/28/2011, 1/4/2012, 3/19/2012, 3/20/2012, 3/22/2012, 3/30/2012,
4/3/2012, 4/12/2012, 5/7/2012, 5/9/2012

6. REVIEWER'S NOTES:

Remington proposed to modify the operating procedure for the Centerfire Packaging Label Printing Process, SN-47 which will increase ketone ink and methyl ethyl ketone (MEK) usage (total for both) from 25 gallons/month to 120 gallons/month. In addition, a number of emergency engines (generators and fire water pumps), previously listed as Insignificant Activities, have been listed as individual sources, since they must comply with requirements of NESHAP ZZZZ. Two plating sources, SN-58 and SN-59 are now listed with this permit. A new process has been added at SN-02. Emissions on SN-45 and SN-46 were adjusted to reflect updated AP-42 factors. NO_x emissions at SN-34 have been reduced to reflect a reduction from the existing scrubber, which was not previously claimed. As well, the process description has been updated. Wastewater treatment has been removed as an insignificant activity because no air pollutants are emitted.

Since Permit 1272-AR-7 was issued, the NAAQS standard for Lead has changed. This precipitated a review of rates and concentrations for all Lead sources to compare with the new NAAQS standard.

At the facility's request, the date for updating records has been changed from the fifth day to the 15th day of the month following the month to which the records pertain. As well, the process description has been updated. These changes affect permitted emissions as follows: PM and PM₁₀ increased by 3.2 tpy each; SO₂ increased by 3.9 tpy; VOC increased by 4.0 tpy; CO increased by 17.3 tpy; NO_x decreased by 27.1 tpy; Arsenic decreased by 0.002784 tpy; Antimony decreased by 0.065344 tpy; Lead decreased by 0.56054 tpy; Methyl Ethyl Ketone decreased by 0.97 tpy; Acetone increased by 0.4 tpy; Cyanide increased by 0.00017 tpy; Nickel increased by 0.00042 tpy; and Methylene Chloride increased by 0.08 tpy.

AR-7 showed 0.00009 tpy for antimony. This is a typo and has been corrected to 0.0009 tpy. PM emissions for SN-30 were included in total emissions in AR-7, but were not listed as an emission from the individual source. This has been corrected. The emission summary in AR-7 shows tpy emission totals for two pollutants that do not agree with the sum of emissions for the individual sources. These pollutants are Antimony and Lead. AR-7 shows 0.17485 tpy Antimony emissions, while the total for the individual sources is 0.1514 tpy. AR-7 shows 1.4867 tpy for Lead emissions, while the individual sources total 1.6267 tpy.

Since the last permit, AR-7, was issued, MEK has been de-listed as a Hazardous Air Pollutant (HAP)

One time Lead testing is specified in this permit for SN-06, SN-35, and SN-36. This is due to the fact that permitted Lead emissions in this permit are significantly less than those in the active permit, R7, and SN-06, SN-35, and SN-36 are the sources with the most significant reductions in lead emissions.

Permanent Notes

Remington is not subject to 40 CFR 63 Subpart X because the facility does not contain any smelting operations.

Rotary Furnace SN-30 is not subject to 40 CFR 60, Subpart DDDD because the unit is not an incinerator (the flame does not directly impinge on the defective primed shell casings) and the Rotary Furnace is not combusting a solid waste, but is rendering it more amenable to ultimate recycling.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues. The last inspection, December 4, 2009, resulted in no enforcement actions.

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-03, SN-04	VOC	40 CFR 63, Subpart T, <i>National Emission Standards for Halogenated Solvent Cleaning.</i>
SN-48, SN-49, SN-50, SN-51, SN-52, SN-53, SN-54, SN-55, SN-56, and SN-57	Formaldehyde	40 CFR 63, Subpart ZZZZ - <i>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>
58	Ni	40 CFR 63, Subpart WWWW - <i>National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations</i>

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Refined modeling was performed for Lead using 2005-2009 MET data, including Airminute values.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu\text{g}/\text{m}^3$)	Averaging Time	Highest Concentration ($\mu\text{g}/\text{m}^3$)	% of NAAQS
		150	24-Hour		
SO ₂		80	Annual		
		1300	3-Hour		
		365	24-Hour		
CO		10,000	8-Hour		
		40,000	1-Hour		
NO _x		100	Annual		
Pb		0.15	Rolling 3-month Period over 3 years (not to be exceeded in any 3 month period)	0.1492	99.5

Non-Criteria Pollutants:

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Arsenic	0.01	0.0011	0.001264	N
Perchloroethylene	165.5	18.6	10.1	Y

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH. Refined modeling was performed for Arsenic using 2005—2009 MET data, which included Airminute values. The 2nd high value was selected as per the Modeling Protocol.

Pollutant	PAIL ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Arsenic	0.10	0.00817	Y

Other Modeling:

H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation; refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards

N/A

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3 Lead—stack testing	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³ Lead—0.001 lb/hr Antimony=1% of Pb			2.1 MM BTU/hr Pb stack test=0.000 741 lb/hr
02	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³ For Remelt Lead—0.01 lb/hr Antimony=1% of Pb For New Process Lead—0.003 lb/hr Antimony—0.00012 lb/hr			2 burners @0.75 MM BTU/hr each Pb stack test=0.007 891 lb/hr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
03 - 04	Based on throughput limit	SN-03—2.0 lb/hr SN-04-8.1 lb/hr Sources Bubbled			19,800 lb/hr limit on Perchloro ethylene
05	Historical Stack Testing of similar source, SN-11 for lead VOC(safety solvent) throughput limit	Lead-0.031 lb/hr Antimony-0.0003 lb/hr	Rotoclone		Rotoclone controls emissions from 3 tumblers VOC limit = 11,000 lb/yr
06	Based on emissions from similar operation, SN-12, which has been stack tested	Lead-0.00017 lb/hr Antimony-0.000002 lb/hr (1% of lead)			Common exhaust for bullet groover & shaker
07	Maximum VOC emission rate taken to be 5X the average.	VOC = 8.0 lb/hr (5X average)			7.0 tons/yr total of lacquer thinner, heptane, lacquer, and Black Asphaltum
08, 09	Deleted sources				
10	Emissions based on mass balance	VOC = 3.2 lb/hr			17,100 lb/year limit
11	Stack testing for lead	Lead = 0.031 lb/hr Antimony = 0.0003 lb/hr (1% of Pb)	Baghouse		Tested at 7000 lb/hr proc. rate
12	Stack testing for lead	Lead = 0.000162 lb/hr Antimony = 0.000002 lb/hr (1% Pb)	Baghouse		Tested at 3500 lb/hr proc. rate

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
13	VOC emissions based on volatility of Oakite and Cobratec 99 (benzotriazole)	VOC = 0.001 lb/hr			
14	VOC emissions based on volatility of Oakite and Cobratec 99 (benzotriazole)	VOC = 0.001 lb/hr			
15	Based on previous permitting experience of ECCI personnel, the review of emissions inventories of similar extrusion facilities, and vendor information, the emissions associated with extrusion are negligible	VOC = 0.01 lb/hr			
16	Deleted Source				
17	Stack testing for lead	PM/PM ₁₀ -0.001 lb/hr Lead-0.005 lb/hr Antimony-0.0003 lb/hr Arsenic-0.0001 lb/hr Pb is 1.2% arsenic & 5.2% antimony			Tested at a proc. rate of 8,122 lb/hr
18	permit at the same rate as the tested emissions of the Shot Tower Drop Tube (SN-17)	PM/PM ₁₀ -0.001 lb/hr Lead-0.005 lb/hr Antimony-0.0003 lb/hr Arsenic-0.0001 lb/hr Pb is 1.2% arsenic & 5.2% antimony			
19	permit at the same rate as the tested emissions of the Shot Tower Drop Tube (SN-17)	PM/PM ₁₀ -0.001 lb/hr Lead-0.005 lb/hr Antimony-0.0003 lb/hr Arsenic-0.0001 lb/hr Pb is 1.2% arsenic & 5.2% antimony			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
20	Stack tested for lead	PM/PM ₁₀ -0.1 lb/hr Lead-0.035 lb/hr Antimony-0.002 lb/hr Arsenic-0.0004 lb/hr Pb is 1.2% arsenic & 5.2% antimony			Tested at proc. Rate of 8122 lb/hr
21	Emissions from paint booth calculated by mass balance	Total VOC-0.141 lb/hr Acetone-0.088 lb/hr Methylene Chloride-0.018 lb/hr			Based on throughput of 3000 lbs/yr Paint typically 25% acetone, 25% MEK, 10% toluene, 5% Methylene Chloride, 5% Butyl Alcohol
22	Remington uses the results from the Function and Casualty Booth (SN-24)	PM/PM ₁₀ -0.1 lb/hr Lead-0.001 lb/hr Antimony-0.000052 lb/hr Arsenic 0.000012 lb/hr			Lead is 1.2% Arsenic and 5.2% Antimony
23	SN-23 is reasonably similar to the Ballistics Range (SN-25) that has been tested at 0.006 lbs/hr. Remington has historically permitted SN-23 at 0.008 lbs/hr	PM/PM ₁₀ -0.1 lb/hr- Lead-0.008 lb/hr- Antimony-0.00042 lb/hr Arsenic-0.0001 lb/hr			
24	Emissions have been stack tested for Lead	PM/PM ₁₀ -0.1 lb/hr- Lead-0.001 lb/hr Antimony-0.000052 lb/hr Arsenic-0.000012 lb/hr			Lead is 1.2% Arsenic and 5.2% Antimony

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
25	Stack testing for lead	Lb/hr PM/PM ₁₀ -0.1 Lead-0.006 Antimony-0.000312 Arsenic-0.000072	Rotoclone		Lead is 1.2% Arsenic and 5.2% Antimony
26	Stack testing for lead	Lb/hr PM/PM ₁₀ -0.1 Lead-0.003 Antimony-0.000156 Arsenic-0.000036	Rotoclone		Lead is 1.2% Arsenic and 5.2% Antimony
27, 28, 29	Stack testing for lead	Lb/hr PM/PM ₁₀ -0.1 Lead-0.002 Antimony-0.000104 Arsenic-0.000024	Rotoclone (3 total)		Lead is 1.2% Arsenic and 5.2% Antimony
30	Fifth Edition of AP-42, Section 1.5, Liquefied Petroleum Gas Combustion, Table 1.5.2 Stack tested for Lead	Lb/1000 gal PM/PM ₁₀ -0.6 SO ₂ -0.018 NO _x -19 CO-3.2 VOC-0.5 Lb/hr Lead-0.034 Antimony-0.019 PM/PM ₁₀ -0.05	Multiclone	90%	4.0 MM Btu/hr burner Propane 43.8 gal/hr Lead contains 55% Antimony

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
31	Fifth Edition of AP-42, Section 1.5, Liquefied Petroleum Gas Combustion, Table 1.5.2 Stack tested for Lead, Antimony, Arsenic—prior to installation of baghouse	Lb/1000 gal PM/PM ₁₀ -0.6 SO ₂ -0.018 NO _x -19 CO-3.2 VOC-0.5 Lb/hr—before baghouse Lead-0.235 Antimony-0.017 Arsenic-0.017 Lb/hr after baghouse efficiency Lead-0.012 Antimony-0.00085 Arsenic-0.0002	Baghouse	95%	Two propane fired melting pots with common stack 1.5 MM Btu/hr 16.4 gal/hr
32, 33	Sources deleted				
34	Uncontrolled NO _x emissions based on stack testing in 2002 prior to installation of scrubber	NO _x -45.1 lb/hr maximum from stack test	Wet counter flow scrubber	95% Based on EPA fact sheet "Air Pollution Control Tech. Fact Sheet, "EPA-452/F-03-015	175 ft ³ packing
35	Remington assumes emissions to be similar to those at SN-17, SN-18 and SN-19	Lb/hr PM/PM ₁₀ -0.1 Lead-0.005 Antimony-0.00026 Arsenic-0.00006			Lead is 1.2% Arsenic and 5.2% Antimony
36	Similar in operation to the Ballistics Range (SN-25) due to the nature of handling and inspection (SN-25) has been tested	Lb/hr PM/PM ₁₀ -0.1 Lead-0.006 Antimony-0.000312			
37	Source deleted				

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
38	Emissions calculated on mass balance	VOC-9.0 lb/hr			13,000 lb/yr annual limit
39	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			1.5MM Btu/hr NG fired
40	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			1.5MM Btu/hr NG fired
41	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			Eight annealing furnaces NG fired @ 0.665 MM Btu/hr each; total=5.32 MM Btu/hr
42	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			Ten mouth anneals NG fired @ 0.532 MM Btu/hr each; total = 5.32 MM Btu/hr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
43	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			NG fired; 1.5 MM Btu/hr
44	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			Two NG Fired dryers @ 1.5 MM Btu/hr each; total = 3.0 MM Btu/hr
45	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			Boiler-NG fired 750 boiler HP, 25.11 MM Btu/hr
46	Fifth Edition of AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4.1, 1.4.2, and 1.4.3	PM/PM ₁₀ -12.0 lb/10 ⁶ ft ³ SO ₂ -0.6 lb/10 ⁶ ft ³ NO _x -100.0 lb/10 ⁶ ft ³ CO-21.0 lb/10 ⁶ ft ³ VOC-5.8 lb/10 ⁶ ft ³			Boiler-NG fired 750 boiler HP, 25.11 MM Btu/hr
47	VOC emissions determined by mass balance	VOC-1.2 Lb/hr			Limit is 5.0 tpy MEK; Primary emission is MEK (VOC) Formerly two sources (47 & 48) designated the printing; now, only one source, SN-47) designates this activity

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
48	Table 3.3-1 (Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines) from a guidance document on EPA's AP-42	Lb/hp-hr PM/PM ₁₀ - 2.20 E-03 SO _x -0.05 E-03 CO-6.68 E-03 NO _x -0.031 VOC-0.015			380 HP 500 hrs/yr
49	Table 3.3-1 (Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines) from a guidance document on EPA's AP-42	Lb/hp-hr PM/PM ₁₀ - 2.20 E-03 SO _x -0.05 E-03 CO-6.68 E-03 NO _x -0.031 VOC-0.015			380 HP 500 hrs/yr
50	Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines) and Table 3.4-2 (Particulate and Particle-sizing Emission Factors for Large Uncontrolled Stationary Diesel Engines) from a guidance document on EPA's AP-42	Lb/hp-hr PM/PM ₁₀ -0.0007 SO _x -8.09 E-03 CO-5.5 E-03 NO _x -0.024 VOC-7.05 E-04			830 HP diesel engine 500 hrs/yr
51, 52, 53, 55, 56	AP-42 Table 3.2-1	Lb/MM Btu PM/PM ₁₀ -0.034 SO ₂ -5.88E-4 CO-0.386 NO _x -3.17 VOC-0.12			Emissions based on 100 hrs/yr operation
54	AP-42 Table 3.3-1	PM/PM ₁₀ -0.1 SO ₂ -0.84 CO-0.99 NO _x -1.63 VOC-3.1			Emissions based on 100 hrs/yr operation

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
57	Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines) from a guidance document on EPA's AP-42.	Lb/hp-hr PM/PM ₁₀ -0.0007 SO _x -8.09 E-03 CO-5.5 E-03 NO _x -0.024 VOC-7.05 E-04			160 HP diesel Emissions based on 500 hrs/yr
58	Fifth Edition of AP-42, Section 12.20, Electroplating, Tables 12.20-4, Emission Factors for Electroplating—Other Metals Hourly nickel emission rate is based on the maximum amperage of the nickel tank rectifier of 1000 amps	6.7 grains/10 ⁶ dscf [AP-42] * 100 (grains/A-hr)/(grains/dscf)			
59	Fifth Edition of AP-42, Section 12.20, Electroplating, Tables 12.20-4, Emission Factors for Electroplating—Other Metals Hourly cyanide emission rate is based on the maximum amperage of the copper tank rectifier of 1000 amps	2.7 grains/10 ⁶ dscf [AP-42] * 100 (grains/A-hr)/(grains/dscf)*			
X X	VOC based on mass balance	VOC = 11.0 lb/hr			36.0 tpy limit on usage

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
34	NO _x	EPA Reference	One Time	Regulation 19,

SN	Pollutants	Test Method	Test Interval	Justification
		Method 7E		§19.702 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31
06, 35, 36	Lead	EPA Reference Method 12	One Time	[Regulation 19, §19.702, Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

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)
None				

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)
3, 4	Gallons of Perchloroethylene per rolling twelve-month period	1450	monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
30	Tons of primed centerfire and rimfire shells or loaded rimfire cartridges mixed with rimfire shells processed	3000 tons per rolling twelve-month period	monthly	N
31	Tons of loaded pistol, rifle, rimfire, and shotshell rounds processed	2200 tons per rolling twelve month period	monthly	N
34	pH of scrubber liquor	10 minimum	monthly	N
SN-07, SN-10, SN-13, SN-14, SN-21, SN-38, SN-47, and SN-XX, combined.	Tons of VOCs per rolling twelve-month period	63.9 tons	monthly	N
58	Wetting agent/fume suppressant concentration	As specified by Manufacturer	monthly	N
SN-48, SN-49, SN-50, SN-51, SN-52, SN-53, SN-54, SN-55, SN-56, and SN-57	Maintenance Conducted	N/A	As performed	N
	Hours of operation	100 hours/year maximum per unit for maintenance checks/readiness testing; 50 hrs/year/unit for non-emergency, but these hours counted in 100 hrs maximum above	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
1, 2,3/4, 5, 6, 7, 10,	5%	[Regulation No. 18	Inspector Observation

SN	Opacity	Justification for limit	Compliance Mechanism
11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 51, 52, 53, 54, 55, 56, 58, & 59		§18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]	
30, 34, 48, 49, 50, & 57	20%	[Regulation No. 19 §19.503 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]	Inspector Observation

17. DELETED CONDITIONS:

Former SC	Justification for removal
#6	Redundant with General Condition #9
#11	Not necessary, MEK is not a HAP, and all non-combustion VOCs have been combined into Specific Condition #9.

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Shotshell body flame treatment units (2.3MMBtu/hr)	A-1	0.1	0.1	0.1	1.0	1.0		
Shotshell body printers (<1 tpy)	A-13	Negligible						
Closed containers (5 gallons or less)	A-8	No calculations needed						
6,000 gallon Sodium Hydroxide tank	A-4	No calculations needed						
Laboratory hood vents (3)	A-5						0.08	0.08

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Shotshell body crimp waterproofing process	A-13			1.7			0.02	0.02
Pistol and revolver label printer and centerfire pistol and revolver label printer (<1 tpy)	A-13	Negligible						

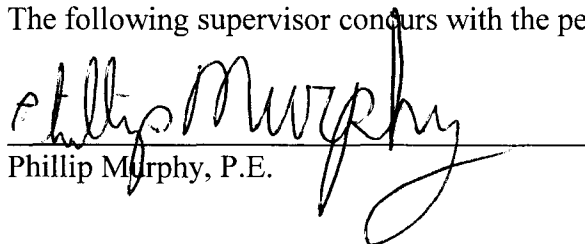
19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1272-AR-7

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 Minor Source

Revised 08-30-11

Facility Name:
 Permit Number:
 AFIN:

			Old Permit	New Permit
\$/ton factor	22.65	Permit Predominant Air Contaminant	88.5	76.5
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	-12	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$	400	
		Annual Chargeable Emissions (tpy)	76.5	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	3.9	7.1	3.2
PM ₁₀	3.9	7.1	3.2
SO ₂	0.1	4	3.9
VOC	72.5	76.5	4
CO	8.2	25.5	17.3
NO _x	88.5	61.4	-27.1
Arsenic	0.00844	0.005656	-0.002784
Antimony	0.17485	0.109506	-0.065344
Lead	1.4867	0.9262	-0.5605
Methyl Ethyl Ketone	0.97	0	-0.97
Perchloroethylene	9.9	9.9	0
Acetone	0	0.4	0.4
Cyanide	0	0.00017	0.00017
Nickel	0	0.00042	0.00042
Methylene Chloride	0	0.08	0.08