

OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 1155-AOP-R0

IS ISSUED TO:

The Trane Company
4811 South Zero Street
Fort Smith, AR 72903
Sebastian County
CSN: 66-0050

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

and

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

SECTION I: FACILITY INFORMATION

PERMITTEE: The Trane Company
CSN: 66-0050
PERMIT NUMBER: 1155-AOP-R0

PHYSICAL LOCATION: 4811 South Zero Street
Fort Smith (Sebastian County), AR 72903

FACILITY MAILING ADDRESS: 4811 South Zero Street
Fort Smith, AR 72903

CONTACT POSITION: Van Reeder
PHONE NUMBER: 501-648-4279

REVIEWING ENGINEER: Loretta Reiber

UTM North - South (X): 380.0
UTM East - West (Y): 3920.0

SECTION II: INTRODUCTION

The Trane Company in Fort Smith, AR, manufactures commercial air conditioners. Used in the manufacturing process are metal working machines such as shears, mechanical power presses, and press brakes; welding and brazing operations; paint line; washing and degreasing; and assembling/shipping operations. The basic manufacturing process consists of cutting, punching, and forming sheet metal parts; washing, drying, painting, and baking; copper-copper/ copper-steel brazing operations; parts degreasing; assembling; and packing and shipping.

After the sheet metal parts are formed, the parts that are to be painted are hung on a conveyor line. The line passes through a gas heated spray washer and dryoff oven, a powder coat spray paint booth, and a gas heated baking oven.

Paint line conveyor hooks are cleaned of paint buildup by placing the hooks in a controlled pyrolysis furnace. Emissions from the furnace consist of water vapor, carbon dioxide, and particulate emissions.

Air conditioner coil manufacturing consists principally of punching out cooling fins from light gauge aluminum on one of three fin presses. (A fourth fin press is planned to be installed in 1997.) Also involved in air conditioner coil manufacturing is the cutting and bending of copper tubing for refrigerant circuitry and the brazing of the copper tubing and related components in place. Copper tubing for the refrigeration circuitry is cut and bent on four hairpin benders.

Metal chips and slivers remaining on the tubing from various subassembly operations are removed using an aqueous cleaning solution.

Certain other subassembly operations consist of applying a water based adhesive containing no VOCs to adhere insulation to metal parts. The adhesive is applied in one of two manners: (1) on open assembly line locations, and (2) in adhesive spray booths which are vented to the outside atmosphere.

One product line includes the manufacturing of a natural gas furnace which is subjected to a run test on the assembly line. These tests typically run about six minutes each. Typical emissions from these tests include emissions from natural gas combustion and the products of the decomposition from a synthetic draw lubricant used in the furnace tube bending process.

Fugitive emissions occurring at this facility consist of emissions from aerosols, paint touch up, cleaning, and welding/brazing operations.

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Certain other subassembly operations consist of inking wires for identification and labeling. Acetone is the solvent used in the inking operations. This facility also refabricates, repairs, and maintains units that it has manufactured in the past. This is done in the Product Services area. One operation to mention concerning this area is the cutting of furnace flues from pipe. The cutting operation is performed on occasion with negligible emissions. However, the cutting area is aspirated and vented to the outside.

Trane also uses a soap wash and mist elimination system in the cleaning of some parts. The cleaner is non-hazardous and non-VOC in nature.

1155-AOP-R0 is the first operating air permit issued to The Trane Company under Regulation 26. No physical modifications have occurred with the issuance of this permit. A summary of the emissions from this facility can be found in the table below.

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
Total Allowable Emissions		PM/PM ₁₀	0.6	0.6	N/A
		SO ₂	0.6	0.6	
		VOC	149.2	245.7	
		CO	0.6	0.6	
		NO _x	0.9	2.7	
		HAPs	3.1	2.7	
		Acetone	0.1	0.1	
01	Heated Parts Washer	PM/PM ₁₀	0.1	0.1	8
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.1	0.4	
02	Dry Off Oven	PM/PM ₁₀	0.1	0.1	8
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.2	0.7	

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
03	Bake Oven	PM/PM ₁₀	0.1	0.1	9
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.2	0.7	
04	Paint Hook Strip Furnace	PM/PM ₁₀	0.1	0.1	10
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.1	0.1	
05	Boiler	PM/PM ₁₀	0.1	0.1	12
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.2	0.7	
06	Gas Furnace Run Test	PM/PM ₁₀	0.1	0.1	13
		SO ₂	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.1	0.1	
		NO _x	0.1	0.1	
07 thru 10	Fin Presses (4)	VOC	111.3	208.4	14
11 thru 14	Hairpin Benders (4)	VOC	4.6	8.6	15
15	Plantwide Fugitive Emissions	VOC	29.8	28.1	16
		Acetone	0.1	0.1	
		HAPs	3.1	2.7	

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SECTION III: PERMIT HISTORY

1155-A was issued to Trane Company on October 3, 1991. This was the initial permit for this facility. Operations at the plant at this time included pressing, welding, brazing, painting, washing, degreasing, assembling, and shipping.

1155-AR-1 was issued to The Trane Company on December 20, 1995. This permit modification allowed this facility to replace a wet, solvent based paint system with an electrostatic dry powder coating system which eliminated emissions from this process. Emissions of volatile organic compounds (VOCs) were increased from 126.3 tons per year to 233.0 tons per year in order to accommodate increased production demands and recent chemical usage rate sampling.

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SECTION IV: EMISSION UNIT INFORMATION

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SN-01 and SN-02
Parts Washer and Dryer

Source Description

The parts washer (SN-01) uses a non-VOC based cleanser to remove grease, dirt, and other contaminants from the surface of metal parts before they are sent to be painted. The water is heated by a small package boiler rated at 1.0 MM BTU/ hr.

Following the parts washer, the washed pieces are then conveyed through a dry off oven (SN-02) to dry the surface completely and prepare it for coating. The oven is natural gas fired and rated at 1.5 MM BTU/hr.

Specific Conditions

1. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN-#	Pollutant	lb/hr	tpy
01	PM/PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.1	0.1
	NO _x	0.1	0.4
02	PM/PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.1	0.1
	NO _x	0.2	0.7

2. Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9 from SN-01 and SN-02. Compliance with this emission rate will be shown by firing only natural gas at this source.

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SN-03
Bake Oven

Source Description

After leaving the drying oven, a powdered coating is then applied to the parts in place of a solvent based paint. The parts are then conveyed to the bake oven for curing. The oven is natural gas fired with a rated capacity of 1.5 MM BTU/ hr.

Specific Conditions

- Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-03.

Pollutant	lb/hr	tpy
PM/PM ₁₀	0.1	0.1
SO ₂	0.1	0.1
VOC	0.1	0.1
CO	0.1	0.1
NO _x	0.2	0.7

- Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9 from SN-03. Compliance with this emission rate will be shown by firing only natural gas at this source.

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SN-04

Paint Hook Strip Furnace

Source Description

The hook strip furnace operates an average of 6 hours per day, five days per week at an average load of 300 hooks per batch per day. The total amounts of solids on the hooks in each batch has been estimated to be a minimum of two to three pounds.

The paint hook strip furnace is equipped with a Controlled Pyrolysis System (C.P.S.) which is a method of anticipating and controlling the rate of emission of volatile material from the parts being processed. Parts are heated to 700 - 800 EF in the furnace to decompose the combustible material into smoke and ashes.

Smoke given off by the combustible material (paint) is drawn through an afterburner compartment where its temperature is raised to 1200 EF or above for at least 1/2 second to completely burn it. The C.P.S. monitors the afterburner exit temperature. If the exit temperature rises above a preselected set point, a fine water spray is turned on to cool the emissions before they reach the ignition temperature. When the temperature drops due to the decreased amount of volatiles, the water spray is turned off. Should the volatiles increase, the water spray will come back on. The system is interlocked so that the lower burner on the furnace cannot come on if there is insufficient water pressure for the C.P.S.

The effluent discharge to the atmosphere through the stack consists primarily of water vapor and carbon dioxide. Particulate emissions will be in the form of carbonaceous ash and common combustible particles of low molecular weight. Solids remaining from the pyrolysis would generally be considered nonhazardous and acceptable for landfill disposal.

Specific Conditions

5. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-04.

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Pollutant	lb/hr	tpy
PM/PM ₁₀	0.1	0.1
SO ₂	0.1	0.1
VOC	0.1	0.1
CO	0.1	0.1
NO _x	0.1	0.1

6. Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9 at SN-04. Compliance with this emission rate will be shown by firing only natural gas at this source.

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SN-05

Boiler

Source Description

The boiler located at SN-05 is used for miscellaneous heating operations around the plant. This boiler is a natural gas fired boiler with a rated capacity of 1.5 MM BTU/hr.

Specific Conditions

7. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-05.

Pollutant	lb/hr	tpy
PM/PM ₁₀	0.1	0.1
SO ₂	0.1	0.1
VOC	0.1	0.1
CO	0.1	0.1
NO _x	0.2	0.7

8. Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9 at SN-05. Compliance with this emission rate will be shown by firing only natural gas at this source.

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SN-06
Gas Furnace Run Test

Source Description

One product line includes the manufacturing of a natural gas furnace which is subjected to a run test on the assembly line. Units are run tested for approximately six minutes each. Typical emissions from the run test are oxides of nitrogen from the natural gas and the products of decomposition from a synthetic draw lubricant used in the furnace tube bending process. Decomposition products upon combustion of the synthetic draw lubricant consist of carbon monoxide, carbon dioxide, oxides of nitrogen, sulfur, and phosphorous. A wiper system is used in the bending process to minimize lubrication residue. Emissions of products of decomposition will be trace emissions.

Specific Conditions

9. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-06.

Pollutant	lb/hr	tpy
PM/PM ₁₀	0.1	0.1
SO ₂	0.1	0.1
VOC	0.1	0.1
CO	0.1	0.1
NO _x	0.1	0.1

10. Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity as measured by EPA Reference Method 9 at SN-06. Compliance with this emission rate will be shown by firing only natural gas at this source.

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SN-07, SN-08, SN-09, & SN-10
Fin Presses

Source Description

Air conditioner coil manufacturing consists primarily of punching out cooling fins from light gauge aluminum, cutting and bending copper tubing for refrigerant circuitry, and brazing the copper tubing and related components in place. Aluminum for the cooling fins is punched and cut on three fin presses, designated as FP-1, FP-2, and FP-3. A fourth fin press, FP-4, is planned to be installed in 1997. Rolls of aluminum feed stock are loaded onto a spindle at the rear of the fin press and threaded through the machine where it is punched and cut. An evaporative lubricant, which is 90% odorless mineral spirits, is used as the process lubricant for the fin presses process. The lubricant evaporates while the machines are operating and continues to evaporate from the finished coils while the coils are in storage awaiting further processing. The evaporative lubricant is also used to a lesser extent during the fabrication of small copper tube subassemblies.

VOCs generated by this process and the bending process account for more than 85% of the total VOC emissions from this facility. They are exhausted to the atmosphere by general plant ventilation.

Specific Conditions

11. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN-#	Pollutant	lb/hr	tpy
07 thru 10	VOC	111.3	208.4

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SN-11, SN-12, SN-13, & SN-14
Hairpin Benders

Source Description

Copper tubing for the refrigeration circuitry is cut and bent on four “hairpin” benders, designated as HP-1, HP-2, HP-3, and HP-4. Rolls of copper tubing are loaded onto spindles at the front of the bender, threaded into the machine where it is cut to the proper length, and then bent 180E into a “hairpin” configuration. The hairpins are later inserted into the aluminum fins. An evaporative lubricant, which is 90% odorless mineral spirits, is used as the process lubricant for the bending process. The lubricant evaporates while the machines are operating and continues to evaporate from the finished coils while the coils are still in storage awaiting further processing. The evaporative lubricant is also used to a lesser extent during the fabrication of small copper tube subassemblies.

Specific Conditions

12. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN-#	Pollutant	lb/hr	tpy
11 thru 14	VOC	4.6	8.6

SN-15

Miscellaneous Plantwide Fugitive Emissions

Source Description

Certain subassembly operations consisting of cutting, punching, and bending copper tubing, leaves metal chips and slivers on the tubing. Chips and slivers are removed from these parts by placing them in an open top degreaser which uses 95.8% HCFC-141b as the degreasing solvent. The balance of the degreasing solvent material consists of miscellaneous solvents. The HCFC-141b degreaser solvent was replaced with an aqueous solution in 1996, which reduced fugitive VOC emissions.

Other fugitive emissions consist principally of emissions from aerosols, paint touch up, cleaning, and welding/brazing operations (trace emissions).

Specific Conditions

13. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

Pollutant	lb/hr	tpy
VOC	29.8	28.1

14. Pursuant to §18.10 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the air contaminant emission rates set forth in the following table.

Air Contaminant	lb/hr	tpy
Acetone	0.1	0.1
HAPs	3.1	2.7

15. Pursuant to A.C.A. §8-3-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR 70.6, VOC usage from fugitive emission sources shall not exceed a total of 28.1 tons in any consecutive twelve month period.

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16. Pursuant to §19.7 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records in the form of Attachment A in order to demonstrate compliance with the limit set in Specific Condition #22 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and made available to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. The first submittal shall be due February 1, 1998, and shall include data from the months January 1997 to December 1997. (This schedule is consistent with the scheduled submittals in 1155-AR-1.)
17. Pursuant to A.C.A. §8-3-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed the usage limits set forth in the table for the designated HAPs and air contaminants.

HAP or Air Contaminant	Usage, tons per consecutive 12 month period
Acetone	0.1
HAPs	2.7

18. Pursuant to A.C.A. §8-3-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall maintain records in the form of Attachment B which demonstrate compliance with the limits set in Specific Conditions #24 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted to the Department in accordance with General Provision 7. The first submittal shall be due February 1, 1998, and shall include data from the months January 1997 to December 1997. (This schedule is consistent with the scheduled submittals in 1155-AR-1.)
19. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not emit any HAP which has a relative toxicity lower than 1.0. The permittee may only emit HAPs which have a relative toxicity of 1.0.

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SECTION V: DEMINIMIS EMISSION SOURCES

Pursuant to §26.3(d) of Regulation 26, the following sources are below the de minimis emission levels. De minimis emission determinations rely upon the information submitted by the permittee in an application dated August 12, 1996.

One lubricant storage tank (5,000 gallons and 0.5 psia)

Pursuant to §26.3(d) of Regulation 26, the following emission units, operations, or activities have been determined by the Department to be below the de minimis emission levels. Activities included in this list are allowable under this permit and need not be specifically identified.

1. Natural gas-burning equipment with a design rate less than 1 million BTU per hour.
2. Combustion emissions from propulsion of mobile sources and emissions from refueling these sources unless regulated by Title II and required to obtain a permit under title V of the federal Clean Air Act, as amended. This does not include emissions from any transportable units, such as temporary compressors or boilers. This does not include emission from loading racks or fueling operations covered under any applicable federal requirements.
3. Air conditioning and heating units used for comfort that do not have applicable requirements under Title VI of the Act.
4. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process.
5. Non-commercial food preparation or food preparation at restaurants, cafeterias, or caterers, etc.
6. Consumer use of office equipment and products, not including commercial printers or businesses primarily involved in photographic reproduction.
7. Janitorial services and consumer use of janitorial products.
8. Internal combustion engines used for landscaping purposes.
9. Laundry activities, except for dry-cleaning and steam boilers.
10. Bathroom/toilet emissions.

11. Emergency (backup) electrical generators at residential locations.
12. Tobacco smoking rooms and areas.
13. Blacksmith forges.
14. Maintenance of grounds or buildings, including: lawn care, weed control, pest control, and water washing activities.
15. Repair, up-keep, maintenance, or construction activities not related to the sources' primary business activity, and not otherwise triggering a permit modification. This may include, but is not limited to such activities as general repairs, cleaning, painting, welding, woodworking, plumbing, re-tarring roofs, installing insulation, paved/paving parking lots, miscellaneous solvent use, application of refractory, or insulation, brazing, soldering, the use of adhesives, grinding, and cutting.¹
16. Surface-coating equipment during miscellaneous maintenance and construction activities. This activity specifically does not include any facility whose primary business activity is surface-coating or includes surface coating or products.
17. Portable electrical generators that can be "moved by hand" from one location to another.²
18. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic.
19. Brazing or soldering equipment related to manufacturing activities that do not result in emission of HAPs.³
20. Air Compressors and pneumatically operated equipment, including hand tools.
21. Batteries and battery charging stations, except at battery manufacturing plants.

¹ Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must get a permit.

²"Moved by hand" means that it can be moved by one person without assistance of any motorized or non-motorized vehicle, conveyance, or device.

³Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production thresholds. Brazing, soldering, and welding equipment, and cutting torches related directly to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately.

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22. Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOCs or HAPs.⁴
23. Containers of less than or equal to 5 gallons in capacity that do not emit any detectable VOCs or HAPs when closed. This includes filling, blending, or mixing of the contents of such containers by a retailer.
24. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and non-volatile aqueous salt solutions, provided appropriate lids and covers are used and appropriate odor control is achieved.
25. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and non-volatile aqueous salt solution, provided appropriate lids and covers are used and appropriate odor control is achieved.
26. Drop hammers or presses for forging or metalworking.
27. Equipment used exclusively to slaughter animals, but not including, other equipment at slaughter-houses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
28. Vents from continuous emission monitors and other analyzers.
29. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
30. Hand-held applicator equipment for hot melt adhesives with no VOCs in the adhesive.
31. Equipment used for surface coating, painting, dipping, or spraying operations, containing less than 0.4 lb/gal VOCs, any hexavalent chromium, or that emit no more than 0.1 tpy of all other HAPs.
32. Lasers used only on metals and other materials which do not emit HAPs in the process.
33. Consumer use of paper trimmers/binders.

⁴Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids are based on size and limits including storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

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34. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boiler deliver the steam.
35. Salt baths using non-volatile salts that do not result in emissions of any air pollutant covered by this regulation.
36. Laser trimmers using dust collection to prevent fugitive emissions.
37. Bench-scale laboratory equipment used for physical or chemical analysis.
38. Routine calibration and maintenance of laboratory equipment or other analytical instruments.
39. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
40. Hydraulic and hydrostatic testing equipment.
41. Environmental chambers not using hazardous air pollutant gases.
42. Shock chambers, humidity chambers and solar simulators.
43. Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
44. Process water filtration systems and demineralizers.
45. Demineralized water tanks and demineralizer vents.
46. Boiler water treatment operations, not including cooling towers.
47. Emissions from storage or use of water treatment chemicals, except for hazardous air pollutants or pollutants listed under regulations promulgated pursuant to Section 112(r) of the Act, for use in cooling towers, drinking water systems, and boiler water/feed systems.
48. Oxygen scavenging (de-aeration) of water.
49. Ozone generators.

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50. Fire suppression systems.
51. Emergency road flares.
52. Steam vents and safety relief valves.
53. Steam leaks.
54. Steam cleaning operations.
55. Steam and microwave sterilizers.
56. Site assessment work to characterize waste disposal or remediation sites.
57. Miscellaneous additions or upgrades of instrumentation.
58. Emissions from combustion controllers or combustion shutoff devices.
59. Use of products for the purpose of maintaining motor vehicles operated by the facility, not including air cleaning units or such vehicles (i.e. antifreeze, fuel additives).
60. Stacks or vents to prevent escape of sanitary sewer gases through the plumbing traps.
61. Emissions from equipment lubricating systems (i.e. oil mist), not including storage tanks, unless otherwise exempt.
62. Residential wood heaters, cookstoves, or fireplaces.
63. Barbecue equipment or outdoor fireplaces used in conjunction with any residential or recreation.
64. Log wetting areas and log fumes.
65. Periodic use of pressurized air for cleanup.
66. Solid waste dumpsters.
67. Emissions of wet lime from lime mud tanks, lime mud washers, lime mud piles, lime mud filter and filtrate tanks, and lime mud slurry tanks.

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68. Natural gas odoring activities unless the Department determines that a nuisance may occur.
69. Emissions from engine crankcase vents.
70. Storage tanks used for the temporary containment of materials resulting from an emergency reporting to an unanticipated release.
71. Equipment used exclusively to mill or grind coatings in roll grinding rebuilding, and molding compounds where all materials charged are in paste form.
72. Mixers, blenders, roll mills, or calendars for rubber or plastic for which no materials in powder form are added and in which no organic solvents, diluents, or thinners are used.
73. The storage, handling, and handling equipment for bark and wood residues not subject to fugitive dispersion offsite (this applies to equipment only).
74. Maintenance dredging of pulp and paper mill surface impoundments and ditches containing cellulosic and cellulosic derived biosolids and inorganic materials such as lime, ash, or sand.
75. Tall oil soap storage, skimming, and loading.
76. Water heaters used strictly for domestic (non-process) purposes.
77. Facility roads and parking areas, unless necessary to control offsite fugitive emissions.
78. Agricultural operations, including onsite grain storage.

SECTION VI: PLANTWIDE CONDITIONS

1. Pursuant to §19.4(m) of Regulation 19, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or the facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.4(p) of Regulation 19, construction must commence within eighteen (18) months after the approval of the permit application. Records must be kept for two (2) years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset condition, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of this permit.
3. Pursuant to §19.7 of Regulation 19, each emission point for which an emission test method is specified in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after the initial start-up of the permitted source. 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. The permittee shall provide:
 - (1) Sampling ports adequate for applicable test methods
 - (2) Safe sampling platforms
 - (3) Safe access to sampling platforms
 - (4) Utilities for sampling and testing equipment
4. Pursuant to §19.3 of Regulation 19, the equipment, control apparatus, and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
5. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit shall supersede and void all previously issued air permits for this facility.
6. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not use more than a total of 76,000 gallons of lubricant with the VOC content not to exceed 5.71 pounds per gallon at the fin presses and the hairpin benders.

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7. Pursuant to §19.7 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of lubricant used at the hairpin benders as well as the VOC content of the lubricant in order to demonstrate compliance with the limits set forth in Plantwide Condition #6 and may be used by the Department for enforcement purposes. These records shall be updated no later than the fifteenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each individual month's total shall be submitted to the Department in accordance with General Provision #7. The first submittal shall be due February 1, 1998, and shall include data from the months January 1997 thru December 1997. (This schedule is consistent with the scheduled submittals in 1155-AR-1.)

Title VI Provisions

8. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers containing a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced interstate commerce pursuant to §82.106.
 - b. The placement of required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
9. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, excepts as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

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- c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152.)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
10. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, subpart A, Production and Consumption Controls.
11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
12. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

Permit Shield

13. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in item A of this condition:

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- A. Regulation 19 - Compilation of Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Regulation 26 - Regulations of the Arkansas Operating Air Permit Program
- B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application received by the Department August 12, 1996.

Description of Regulation	Regulatory Citation	Basis for Determination
New Source Performance Standards for Small Industrial Commercial Institutional Steam Generating Units	40 CFR 60 Subpart Dc	The boilers have an input capacity less than 10 MM BTU/ hour.
New Source Performance Standards for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and prior to May 19, 1978	40 CFR 60 Subpart K	No storage vessel has a capacity greater than 40,000 gallons.
New Source Performance Standards for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and prior to July 23, 1984.	40 CFR 60 Subpart Ka	No storage vessel has a capacity greater than 40,000 gallons.
New Source Performance Standards for Volatile Organic Liquids Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.	40 CFR 60 Subpart Kb	No volatile organic liquids storage vessel at this facility has been constructed after July 23, 1984.

- C. Nothing shall alter or affect the following:

provisions of Section 303 of the Clean Air Act;

the liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance;

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the applicable requirements of the acid rain program, consistent with section 408(a) of the Clean Air Act; or

the ability of the EPA to obtain information under Section 114 of the Clean Air Act.

SECTION VII: GENERAL PROVISIONS

1. Pursuant to 40 C.F.R. 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 as the 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 as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 C.F.R. 70.6(a)(1)(ii) and §26.7 of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.

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6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
7. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Pollution Control and Ecology
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72119

8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.6 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department within 24 hours of discovery of the occurrence. The initial report may be made by telephone and shall include:
 - a. The facility name and location,
 - b. The process unit or emission source which is deviating from the permit limit,
 - c. The permit limit, including the identification of pollutants, from which deviation occurs,
 - d. The date and time the deviation started,
 - e. The duration of the deviation,
 - f. The average emissions during the deviation,
 - g. The probable cause of such deviations,
 - h. Any corrective actions or preventive measures taken or being take to prevent such deviations in the future, and
 - i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length

of time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) within 24 hours of discovery of the occurrence and such report will serve as both the initial report and full report.

9. Pursuant to 40 C.F.R. 70.6(a)(5), §26.7 of Regulation #26, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
10. Pursuant to 40 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
11. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 of Regulation #26, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
12. Pursuant to 40 C.F.R. 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
13. Pursuant to 40 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
14. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.

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15. Pursuant to 40 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
17. Pursuant to 40 C.F.R. 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
18. Pursuant to 40 C.F.R. 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
19. Pursuant to 40 C.F.R. 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 - a. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.

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21. Pursuant to 40 C.F.R. 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.

22. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

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Calculations

The calculations for VOC emissions from the fin presses and the hairpin benders that were submitted in the application did not agree with the calculations performed by the Department. Following are the calculations performed by the Department. The results of these calculations were used in determining the limits set forth in this permit.

SN-07 thru SN-10 (4 Fin Presses)

74,880 gallons of lubricant per consecutive twelve months
VOC content = 90% of 6.34 pounds per gallon

$$74,880 * 6.34 * 0.9 * 1/2000 = 213.7 \text{ tpy}$$

SN-11 thru SN-14

3000 gallons of lubricant per consecutive twelve months
VOC content = 90% of 6.34 pounds per gallon

$$3000 * 6.34 * 0.9 * 1/2000 = 8.6 \text{ tpy}$$