

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 299-AR-10

IS ISSUED TO:

Bekaert Corporation
1881 Bekaert Drive
Van Buren, AR 72956
Crawford County
CSN: 17-0043

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

SECTION I: FACILITY INFORMATION

PERMITTEE: Bekaert Corporation
CSN: 17-0043
PERMIT NUMBER: 299-AR-10

FACILITY ADDRESS: 1881 Bekaert Drive
Van Buren, AR 72956

COUNTY: Crawford

CONTACT POSITION: Dale King
TELEPHONE NUMBER: 501-474-5211

REVIEWING ENGINEER: Paula Parker

UTM North-South (X): Zone 15 - 3975.946
UTM East-West (Y): Zone 15 - 350.014

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SECTION II: INTRODUCTION

Summary

Bekaert Corporation manufactures drawn wire products at its facility in Van Buren, Arkansas. This de minimis modification covers the addition of three new ventilation fan stacks (SN-67, SN-68, and SN-69) at the previously permitted wire drawing building. In addition, emissions for several previously permitted sources (06, 28, 40, 50, 51, 53, 55, 59, 61-66) have been changed due to updated calculation methodologies.

Process Description

Steel wire rod is prepared for wire drawing by chemical pickling in an HCl acid solution (SN-01), water rinsed (SN-02), coated with one of two wire protectorants (SN-03), and dried (SN-04 and SN-05). The wire rod is then drawn on one of several wire drawing machines (combined dust emissions from SN-06, 53, 62) to become "bright" wire. Some wire also is further processed through redraw where the bright wire is put through the drawing process a second time in order to further reduce the diameter of the wire (SN-61, SN-63, and SN-64).

The bright wire is processed further on one of three lines utilizing two types of hot dip galvanizing processes. The lines differ mainly in the heat treating and galvanizing process. The first type of hot dip galvanizing line is identified as the IPV 40 line. Bright wire is heat treated in a patenting furnace, quenched in molten lead baths, and cooled in a water bath (SN-25, 26, 27, 28, 29). The wire receives further cleaning in an HCl pickling bath (SN-30, 31). A flux coating is then applied (SN-32) and dried (SN-33, 34). A zinc coating is then applied to the wire via dipping in a bath of molten zinc and/or a bath containing a mixture of molten zinc and aluminum (SN-35, 36). Final steps involve cooling and application of surface protectorants (SN-37, 38, 39, 55, 56, 57, 58, 60, 61).

The second type of galvanizing process is used on the IVD 40 and IVD 60 lines. Bright wire is heat treated in molten lead baths and water quenched (SN-08, 9, 17, 18). The wire receives further cleaning in an HCl pickling bath (SN-10, 19) and water rinse bath (SN-45, 48). A flux coating is then applied (SN-11, 20) and dried (SN-12, 21). A zinc coating is then applied to the wire via dipping in a bath of molten zinc or a bath containing a mixture of molten zinc and aluminum (IVD 40) (SN-13, 14, 22, 23, 44). Final steps involve cooling and application of surface protectorants (SN-15, 24, 46, 47, 49, 50).

Several mechanical finishing operations are performed on a portion of the galvanized and/or bright wire delivered from the lines described above. Of these operations, only the Welded Wire Field Fence spot welding machine (SN-40), the Wire Concrete Additive

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drying oven (SN-41), the Galvanized Redrawing dust collectors (SN-63, 64, 65, 66) and the Strand Coating Applicator (SN-57) have air emission sources.

Two 28 MMBtu/hr water tube boilers are located within the plant and are used to provide process steam, steam heat, and hot water. These natural gas fired boilers are designated "service" and "standby" and are operated at 33% of rated capacity. Only one system is required to be fired for plant steam demand. Products of natural gas combustion are exhausted through two stacks (SN-42 and SN-43) serving each boiler, respectively. These boilers are not subject to the *New Source Performance Standards* (NSPS), Subpart Dc, since they were constructed before June 9, 1989.

The emission of hydrochloric acid originates from the pickling and electro-chemical baths. These emissions are controlled by either packed column or sieve tray scrubbers (98% efficiency) which have a combined emission rate of 8.5 tons per year.

Regulations

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This facility is subject to all applicable requirements in the *Arkansas Air Pollution Control Code (Regulation 18)* and the regulations under the *Arkansas Plan of Implementation for Air Pollution Control (Regulation 19)*.

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

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	10.6	31.3
PM ₁₀	10.6	31.3
SO ₂	4.4	12.1
VOC	2.1	3.5
CO	5.1	12.0
NO _x	15.0	44.9
Lead	0.1	0.1
Zinc	1.0	1.1
Hydrochloric Acid	2.3	8.5
*	1.0	2.3
Chlorine *	0.1	0.1
Hydrogen Sulfide	2.4	11
Ammonia	0.1	0.1
Zinc Oxide	0.2	0.2
Aluminum		

* Hazardous Air Pollutant

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SECTION III: PERMIT HISTORY

Permit 299-A was the initial air permit for Bekaert Corporation. It established process and emission limits for the facility.

Permit 299-AR-1 (issued 11/28/89) addressed emission changes within the facility.

Permit 299-AR-2 (issued 1/20/93) and 299-AR-3 (issued 3/17/94) established emission limits following process changes at the facility.

Permit 299-AR-4 (issued 7/25/95) was an update of all sources into one application due to past permit modifications and future production increases. Emissions data for the facility were modified slightly due to emission test results. Two additional sources were added in that modification which included a wire drawing department exhaust (SN-53) and a wax bath vacuum wipe (SN-54).

Air Permit 299-AR-5 was issued to Bekaert on January 29, 1996, to include the addition of a new pickling inhibitor chemical that will be used in the rod pickling HCl tanks, and the requirement to measure the pressure drop across the sieve trays on SN-10 and SN-19 instead of measuring across the scrubbers. The manufacturer stated that this would better ensure proper HCl removal efficiency.

Permit 299-AR-6 (issued 8/13/96) was a minor modification which involved the replacement of the EG 32 (electro-galvanizing) line with another Hot Dip line (designated IPV 40) similar to the previously permitted IVD 40 and 60 lines. The IPV 40 sources, from the heat treating steps through the pickling steps, are the same type as the currently permitted EG 32 line. This replacement eliminated sulfuric acid from Bekaert's galvanizing process lines. The IPV 40 and the IVD 40 lines also have an additional hot dip step involving a mixture of zinc and aluminum. The operation of the IPV 40 line resulted in a total plant operational capacity increase of approximately 16%. From this modification, emissions of zinc sulfate, sulfuric acid, and sulfate were eliminated. The most significant increases in emissions were due mainly to more natural gas combustion and a larger pickling bath. The pollutant which was increased the most from this modification was nitrogen oxides with an increase of 10.4 tons per year.

Permit 299-AR-7 (issued 4/25/97) was a minor modification which made the following permit changes:

- C Modified SN-29 to include fugitive and the vacuum wipe emissions on the East side of the IPV 40 line.**
- C Deleted SN-31. This source ducted to SN-30 inlet.**

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- C Added a point source to include fugitive and the vacuum wipe emissions on the West side of the IPV 40 line as SN-31.**
- C Modified stack heights on SN-30.**
- C Modified the stack height, emissions, velocity, and scrubber type on SN-32.**
- C Corrected a typo on SN-34 (equipment serial number section).**
- C Modified the stack height, diameter, temperature, velocity, and collector type on SN-35.**
- C Combined sources 38, 39, and 57 into one source renumbered as SN-38. Adjusted stack height, diameter, velocity and emissions.**
- C Combined sources 55, 59, and 61 into one source renumbered as SN-39. Adjusted stack height, diameter, velocity and emissions.**
- C Added source emissions for IPV 40 air knife exhaust as SN-55.**
- C Corrected typo on SN-60 (changed description from east standard to east light).**
- C Added a source number for the Wire drawing Dept. Hand vacuum system (SN-62).**
- C Added the redraw dept. Dust Collector and Hand vacuum system (SN-63 and 64).**
- C Modified plot plan to include all applicable changes.**
- C Added source emissions for the strand coating applicator as SN-57.**

Permit #299-AR-8 (issued 10/27/97) was a minor modification which involved adding Dust Collector No. 2 (SN-61) to the Redraw Dept.

Permit #229-AR-9 (issued) was a modification that removed collectors on the lead annealing process (SN-7 and SN-16) and added SN-65 and SN-66 (dust collectors). This permit also authorized the installation of the welded wire machines (SN-59).

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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
01	HCl Pickling Baths/Rod Pickling with Scrubber	VOC	0.2	0.8
02	Borax Coating Bath/Pickling	PM ₁₀	0.1	0.1
03	Lime Coating Bath/Pickling	PM ₁₀	0.1	0.1
04	Drying Furnace #1/Pickling (Fugitive) (2.5 MMBtu/hr)	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.3
		NO _x	0.3	1.1
05	Drying Furnace #1/Pickling (Fugitive) (2.5 MMBtu/hr)	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.3
		NO _x	0.3	1.1
06	Wire Drawing Dept. Exhaust - System #1	PM ₁₀	2.0	8.3
07	Heat Treatment Lead Bath	PM ₁₀	0.1	0.1
		SO ₂	0.3	1.4
		NO _x	0.2	1.0
		CO	0.1	0.2
		Pb	0.1	0.1
08	Heat Treatment Lead Bath Furnace (7.6 MMBtu/hr)	PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		CO	0.2	0.7
		NO _x	0.8	3.4

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SN	Description	Pollutant	lb/hr	tpy
09	Quench Bath (Fugitive)	PM ₁₀	0.1	0.1
11	Fluxing Bath	PM ₁₀	0.1	0.1
12	Drying Furnace	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
13	Hot Dip Galvanizing Kettle	PM ₁₀	0.1	0.5
		SO ₂	0.5	2.2
		CO	0.1	0.1
		NO _x	0.1	0.2
14	Hot Dip Galvanizing Bath (3.7 MMBtu/hr)	PM ₁₀	0.1	0.2
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		CO	0.1	0.4
		NO _x	0.4	1.7
15	Wax Bath (Fugitive)	SO ₂	0.1	0.1
		CO	0.1	0.1
16	Heat Treatment Lead Bath	PM ₁₀	0.1	0.1
		SO ₂	0.2	0.6
		CO	0.1	0.2
		NO _x	0.2	0.6
		Pb	0.1	0.1
17	Heat Treatment Lead Bath (8.6 MMBtu/hr)	PM ₁₀	0.1	0.5
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		CO	0.2	0.8
		NO _x	0.9	3.8
18	Quench Bath (Fugitive)	PM ₁₀	0.1	0.1
20	Fluxing Bath	PM ₁₀	0.1	0.1
21	Drying Furnace (0.56 MMBtu/hr)	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1

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SN	Description	Pollutant	lb/hr	tpy
		VOC	0.1	0.1
		CO	0.1	0.1
		NO _x	0.1	0.3
22	Hot Dip Galvanizing Kettle	PM ₁₀	0.1	0.5
		SO ₂	0.5	2.2
		CO	0.1	0.1
		NO _x	0.1	0.2
23	Hot Dip Galvanizing Bath Furnace (3.4 MMBtu/hr)	PM ₁₀	0.1	0.2
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.4
		NO _x	0.4	1.5
24	Wax Bath (Fugitive)	SO ₂	0.1	0.1
		CO	0.1	0.1
25	Patenting Furnace (11 MMBtu/hr)	PM ₁₀	0.2	0.7
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		CO	0.4	1.7
		NO _x	1.6	6.8
26	Heat Treatment Lead Bath (Fugitive)	PM ₁₀	0.1	0.1
		SO ₂	0.2	1.0
		CO	0.1	0.2
		NO _x	0.2	0.7
		Pb	0.1	0.1
27	Heat Treatment Lead Bath Furnace (1.5 MMBtu/hr)	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.2
		NO _x	0.2	0.7
28	Heat Treatment Lead Bath	PM ₁₀	0.1	0.1
29	Quench Bath and Vacuum Wipe East	PM ₁₀	0.1	0.1
31	Quench Bath and Vacuum Wipe West	PM ₁₀	0.1	0.1

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SN	Description	Pollutant	lb/hr	tpy
32	Fluxing Bath	PM ₁₀	0.1	0.2
33	West Drying Oven	PM ₁₀	0.1	0.2
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.3
		NO _x	0.3	1.0
34	East Drying Oven	PM ₁₀	0.1	0.2
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.3
		NO _x	0.3	1.0
35	Hot Dip Galvanizing Kettles	PM ₁₀	0.4	1.7
		SO ₂	0.5	2.2
		CO	0.1	0.1
		NO _x	0.1	0.2
36	BEZINAL Bath Furnace	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.2
		NO _x	0.2	0.5
37	West Light Wax Bath (Fugitive)	SO ₂	0.1	0.1
		CO	0.1	0.1
38	West Cooling & Wax Baths Vacuum Wipe Systems	PM ₁₀	0.3	1.0
39	East Cooling & Wax Baths Vacuum Wipe Systems	PM ₁₀	0.3	1.0
41	Dramix Electric Drying Oven Finished Products	PM ₁₀	0.1	0.1
		VOC	0.1	0.1
42	Service Boiler #1 (28 MMBtu/hr)	PM ₁₀	0.4	0.9
		SO ₂	0.1	0.1
		VOC	0.2	0.4
		CO	1.0	2.2
		NO _x	4.0	8.9

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SN	Description	Pollutant	lb/hr	tpy
43	Service Boiler #2 (28 MMBtu/hr)	PM ₁₀	0.4	0.9
		SO ₂	0.1	0.1
		VOC	0.2	0.4
		CO	1.0	2.2
		NO _x	4.0	8.9
44	BEZINAL Bath Furnace	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.2
		NO _x	0.1	0.4
47	Wax Bath Vacuum Wipe	PM ₁₀	0.3	1.3
50	Zinc Quench Bath Area Ventilation	PM ₁₀	0.1	0.1
51	Zinc Quench Bath Area Ventilation	PM ₁₀	0.1	0.1
53	Wire Drawing Department Exhaust System #2	PM ₁₀	2.0	8.3
54	Wax Bath Vacuum Pipe	PM ₁₀	0.3	1.3
55	Zinc Quench Air Knife Exhaust System	PM ₁₀	0.1	0.1
56	West Standard Wax Bath	SO ₂	0.1	0.1
		CO	0.1	0.1
57	Strand Coating Applicator	PM ₁₀	0.1	0.4
58	East Standard Wax Bath	SO ₂	0.1	0.1
		CO	0.1	0.1
60	East Light Wax Bath	SO ₂	0.1	0.1
		CO	0.1	0.1
61	Redraw Department Soapdust Collector #2	PM ₁₀	0.4	1.6
62	Wire Drawing Dept. Hand Vacuum System	PM ₁₀	0.3	1.3
63	Redraw Dept. Soapdust Collector #1	PM ₁₀	0.4	1.6
64	Redraw Dept. Hand Vacuum System	PM ₁₀	0.1	0.4

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SN	Description	Pollutant	lb/hr	tpy
65	Redraw Dept. Dust Collector System #3	PM ₁₀	0.4	1.6
66	Redraw Dept. Dust Collector System #4	PM ₁₀	0.4	1.6
67	Wire Drawing Department VF#1	PM ₁₀	0.2	0.6
68	Wire Drawing Department VF#2	PM ₁₀	0.2	0.6
69	Wire Drawing Department VF#3	PM ₁₀	0.2	0.6

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	HCl Pickling Baths/Rod Pickling with Scrubber	HCl	0.5	1.9
02	Borax Coating Bath/Pickling	PM	0.1	0.1
03	Lime Coating Bath/Pickling	PM	0.1	0.1
04	Drying Furnace #1/Pickling (Fugitive) (2.5 MMBtu/hr)	PM	0.1	0.1
05	Drying Furnace #1/Pickling (Fugitive) (2.5 MMBtu/hr)	PM	0.1	0.1
06	Wire Drawing Dept. Exhaust - System #1	PM	2.0	8.3
07	Heat Treatment Lead Bath	PM	0.1	0.1
08	Heat Treatment Lead Bath Furnace (7.6 MMBtu/hr)	PM	0.1	0.4
09	Quench Bath (Fugitive)	PM	0.1	0.1
10	Chemical/Electro-Chemical Pickling with Scrubber	HCl	0.5	2.1
11	Fluxing Bath	PM Zn	0.1 0.1	0.1 0.1

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SN	Description	Pollutant	lb/hr	tpy
		Cl ₂	0.1	0.1
		NH ₃ /NH ₄	0.1	0.2
12	Drying Furnace	PM	0.1	0.1
13	Hot Dip Galvanizing Kettle	PM	0.1	0.5
		Zn	0.1	0.1
		Cl ₂	0.2	0.6
		NH ₃ /NH ₄	0.8	3.4
14	Hot Dip Galvanizing Bath (3.7 MMBtu/hr)	PM	0.1	0.2
16	Heat Treatment Lead Bath	PM	0.1	0.1
17	Heat Treatment Lead Bath (8.6 MMBtu/hr)	PM	0.1	0.5
18	Quench Bath (Fugitive)	PM	0.1	0.1
19	Chemical/Electro-Chemical Pickling with Scrubber	HCl	0.4	1.7
20	Fluxing Bath	PM	0.1	0.1
		Zn	0.1	0.1
		Cl ₂	0.1	0.1
		NH ₃ /NH ₄	0.1	0.2
21	Drying Furnace (0.56 MMBtu/hr)	PM	0.1	0.1
22	Hot Dip Galvanizing Kettle	PM	0.1	0.5
		Zn	0.1	0.1
		Al	0.1	0.1
		Cl ₂	0.2	0.6
		NH ₃ /NH ₄	0.8	3.4
23	Hot Dip Galvanizing Bath Furnace (3.4 MMBtu/hr)	PM	0.1	0.2
25	Patenting Furnace (11 MMBtu/hr)	PM	0.2	0.7
26	Heat Treatment Lead Bath	PM	0.1	0.1

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SN	Description	Pollutant	lb/hr	tpy
	(Fugitive)			
27	Heat Treatment Lead Bath Furnace (1.5 MMBtu/hr)	PM	0.1	0.1
28	Heat Treatment Lead Bath	PM	0.1	0.1
29	Quench Bath and Vacuum Wipe East	PM	0.1	0.1
30	Chemical/Electro-Chemical Pickling with Scrubber	HCl	0.6	2.5
31	Quench Bath and Vacuum Wipe West	PM	0.1	0.1
32	Fluxing Bath	PM Zn Cl ₂ NH ₃ /NH ₄	0.1 0.1 0.1 0.1	0.2 0.1 0.2 0.4
33	West Drying Oven	PM	0.1	0.2
34	East Drying Oven	PM	0.1	0.2
35	Hot Dip Galvanizing Kettles	PM Zn Al Cl ₂ NH ₃ /NH ₄	0.4 0.1 0.1 0.2 0.8	1.7 0.2 0.1 0.6 3.4
36	BEZINAL Bath Furnace	PM	0.1	0.1
38	West Cooling & Wax Baths Vacuum Wipe Systems	PM Zn	0.3 0.1	1.0 0.1
39	East Cooling & Wax Baths Vacuum Wipe Systems	PM Zn	0.3 0.1	1.0 0.1
40	Welded Field Fence/Finished Products	ZnO ₂	0.1	0.1
41	Dramix Electric Drying Oven Finished Products	PM	0.1	0.1
42	Service Boiler #1 (28 MMBtu/hr)	PM	0.4	0.9

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SN	Description	Pollutant	lb/hr	tpy
43	Service Boiler #2 (28 MMBtu/hr)	PM	0.4	0.9
44	BEZINAL Bath Furnace	PM	0.1	0.1
45	Pickling Final Rinse Vacuum Wipe	HCl	0.1	0.1
46	Zinc Quench Bath Vacuum Wipe	Zn	0.1	0.1
47	Wax Bath Vacuum Wipe	PM	0.3	1.3
48	Pickling Final Rinse Vacuum Wipe	HCl	0.1	0.1
49	Zinc Quench Bath Vacuum Pipe	Zn	0.1	0.1
50	Zinc Quench Bath Area Ventilation	PM	0.1	0.1
51	Zinc Quench Bath Area Ventilation	PM	0.1	0.1
52	H ₂ S/Natural Gas Mixing Station	H ₂ S Cl ₂	0.1 0.1	0.1 0.1
53	Wire Drawing Department Exhaust System #2	PM	2.0	8.3
54	Wax Bath Vacuum Pipe	PM	0.3	1.3
55	Zinc Quench Air Knife Exhaust System	PM	0.1	0.1
57	Strand Coating Applicator	PM	0.1	0.4
59	Welded Wire Machine	Zn	0.1	0.5
61	Redraw Department Soapdust Collector #2	PM	0.4	1.6
62	Wire Drawing Dept. Hand Vacuum System	PM	0.3	1.3
63	Redraw Dept. Soapdust Collector #1	PM	0.4	1.6
64	Redraw Dept. Hand Vacuum System	PM	0.1	0.4
65	Redraw Dept. Dust Collector System #3	PM	0.4	1.6
66	Redraw Dept. Dust Collector System #4	PM	0.4	1.6

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SN	Description	Pollutant	lb/hr	tpy
67	Wire Drawing Department VF#1	PM	0.2	0.6
68	Wire Drawing Department VF#2	PM	0.2	0.6
69	Wire Drawing Department VF#3	PM	0.2	0.6

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
01-07, 10, 12-13, 15-16, 19-20, 22, 24-69	20%	§19.503
08-09, 11, 14, 17-18, 21, 23	40%	§19.503

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 A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, only pipeline quality natural gas shall be used to fuel permitted sources at this facility. Propane gas shall be used only as a standby source of energy during natural gas curtailments. During times of natural gas curtailment, the permittee shall maintain records of propane gas usage.**

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7. **Pursuant to §19.705 of Regulation 19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, total natural gas usage at the plant shall not exceed 684.42 million cubic feet per consecutive twelve (12) month period based on a rolling 12 month total.**
8. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition 7. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. A twelve month rolling total and each individual month's data shall be submitted in accordance with General Condition 6.
9. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, throughput of pickled steel rod shall not exceed 144,870 tons per consecutive twelve (12) month period based on a rolling 12 month total.
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, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition 9. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. A twelve month rolling average and each individual month's data shall be submitted in accordance with General Condition 6.
11. Pursuant to §19.705 of Regulation 19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the usage of pickling inhibitor shall not exceed 218 gallons per consecutive twelve (12) month period based on a rolling 12 month total. Usage of a pickling inhibitor with a VOC content higher than 80 percent by weight shall require a permit modification before the event taking place.
12. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition 11. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, and shall be made available to Department personnel upon request. A twelve month rolling average and each individual month's data shall be submitted in accordance with General Condition 6.
13. Pursuant to §18.1003 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, all control equipment shall be maintained in proper working order

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according to the manufacturer's specifications submitted in the permit application. Compliance with this condition shall be demonstrated by maintaining daily records of the pressure drop across the HCl scrubber (SN-01) and the total sieve tray differential pressure on SN-10, SN-19, and SN-30. Acceptable pressure differentials are as follows:

Scrubber Designation	Acceptable Pressure Drop (Inches of Water)
Rod Pickling (SN-01)	2.5 to 5.0
Pickling / IVD 60 (SN-10)	5 to 8
Pickling / IVD 40 (SN-19)	5 to 8
Pickling / IPV 40 (SN-30)	5 to 8

If the pressure drop falls out of the acceptable range then this shall be noted on the daily record keeping and the corrective action shall also be noted. Corrective action for the problem shall be taken within 24 hours. If the pressure drop cannot be corrected to an acceptable level within 24 hours, then this process shall be shut down until the problem is resolved. These records shall be kept on-site and shall be 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 March 10, 1999.

Description	Category
N/A	N/A

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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.
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.
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.