

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 299-AR-11

IS ISSUED TO:

Bekaert Corporation
1881 Bekaert Drive
Van Buren, AR 72956
Crawford County

AFIN: 17-00043

THIS PERMIT IS Bekaert Corporation's 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 THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

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Section I: FACILITY INFORMATION

PERMITTEE: Bekaert Corporation

AFIN: 17-00043

PERMIT NUMBER: 299-AR-11

FACILITY ADDRESS: 1881 Bekaert Drive
Van Buren, AR 72956

COUNTY: Crawford

CONTACT POSITION: Tommy Johns

TELEPHONE NUMBER: (479) 474-5211

REVIEWING ENGINEER: Paula Parker

UTM North-South (Y) Zone 15 3975.9

UTM East-West (X): Zone 15 350.0



Section II: INTRODUCTION

Summary

Bekaert Corporation manufactures drawn wire products at its facility in Van Buren, Arkansas. This modification includes several changes to the air permit sources. SN-70 through SN-74 are being added to quantify emissions from each separate wire welding machine stack. A new air knife system is being installed (SN-75), similar to currently permitted SN-55. New vacuum wipe systems on the galvanizing line HCl baths are being installed which will discharge into the current scrubber system, causing a slight increase in HCl emissions for SN-01, SN-10, SN-19, and SN-30. Finally, inhibitor usage (SN-01) is increasing to 1650 gallons per year. Emission increases are 1.1 ton/yr VOC, 0.5 ton/yr zinc oxide, and 0.24 ton/yr HCl.

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, 75).

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 drying oven (SN-41), the Galvanized Redrawing dust collectors (SN-63, 64, 65, 66), the Strand Coating Applicator

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(SN-57), and six (SN-59, SN-70 through SN-74) welded wire machines 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.

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 8.74 tons per year.

Regulations

This facility is subject to regulation under the Arkansas Air Pollution Control Code (Regulation 18) and the State Plan of Implementation for Air Pollution Control (Regulation 19).

Service Boilers #1 and #2 (SN-42 and SN-43) are not subject to NSPS Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, since they were constructed before June 9, 1989.

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

Table 1 - Total Allowable Emissions

Total Allowable Emissions		
Pollutant	Emissions Rates	
	lb/hr	tpy
PM	10.5	30.6
PM ₁₀	10.5	30.6
SO ₂	4.4	11.8
VOC	2.4	4.6
CO	5.1	11.9
NO _x	14.9	44.4
Pb	0.3	0.3
Ammonia	2.7	11.0
Zinc	1.0	1.1
Zinc Oxide	0.6	0.6
Aluminum	0.2	0.2
HCl*	2.13	8.74
Chlorine*	0.90	2.20
Total HAP	3.03	10.94

Section III: PERMIT HISTORY

- 299-A Initial air permit for Bekaert Corporation. It established process and emission limits for the facility.
- 299-AR-1 Issued 11/28/89 and addressed emission changes within the facility.
- 299-AR-2 Issued 1/20/93 and 3/17/94 which established emission limits following process changes at the facility.
- 299-AR-3
- 299-AR-4 Issued 7/25/95 and updated 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 which included a wire drawing department exhaust (SN-53) and a wax bath vacuum wipe (SN-54).
- 299-AR-5 Issued 1/29/96 and included the addition of a new pickling inhibitor chemical in the rod pickling HCl tanks and required the facility to measure the pressure drop across the sieve trays on SN-10 and SN-19 instead of measuring across the scrubbers.
- 299-AR-6 Issued 8/13/96 as a minor modification which involved the replacement of the EG 32 (electro-galvanizing) line with another Hot Dip line 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.
- 299-AR-7 Issued 4/25/97 and with the following modifications: modified SN-29 to include fugitive and the vacuum wipe emissions on the East side of the IPV 40 line; deleted SN-31 and ducted to SN-30 inlet; added a point source to include fugitive and the vacuum wipe emissions on the West side of the IPV 40 line as SN-31; combined sources 38, 39, and 57 into one source renumbered as SN-38;; combined sources 55, 59, and 61 into one source renumbered as SN-39; added source emissions for IPV 40 air knife exhaust as SN-55; added a source number for the Wire drawing Dept. Hand vacuum system (SN-62); added the redraw dept. Dust Collector and Hand vacuum system (SN-63 and 64); added source emissions for the strand coating applicator as SN-57.

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- 299-AR-8 Issued 10/27/97 and involved adding Dust Collector No. 2 (SN-61) to the Redraw Dept.

- 229-AR-9 Issued 6/30/99 and authorized the removal of 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).

- 299-AR-10 Issued 3/8/01 and covered the addition of three new ventilation fan stacks (SN-67, SN-68, and SN-69) for the wire drawing building. In addition, emissions for several permitted sources (06, 28, 40, 50, 51, 53, 55, 59, 61-66) were changed due to updated calculation methodologies.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee will not exceed the emission rates set forth in the following table. [§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]

Table 2 - Criteria Pollutants

SN	Description	Pollutant	lb/hr	tpy
01	HCl Pickling Baths/Rod Pickling with Scrubber	VOC	0.5	1.9
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 (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 (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	1.1	4.5
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
09	Quench Bath	PM ₁₀	0.1	0.1
11	Fluxing Bath	PM ₁₀	0.1	0.1

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SN	Description	Pollutant	lb/hr	tpy
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	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	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
		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

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SN	Description	Pollutant	lb/hr	tpy
24	Wax Bath	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	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
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

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SN	Description	Pollutant	lb/hr	tpy
37	West Light Wax Bath	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
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	1.1	4.5
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	0.9	0.9
62	Wire Drawing Dept. Hand Vacuum System	PM ₁₀	0.3	1.3

SN	Description	Pollutant	lb/hr	tpy
63	Redraw Dept. Soapdust Collector #1	PM ₁₀	0.3	0.9
64	Redraw Dept. Hand Vacuum System	PM ₁₀	0.2	0.4
65	Redraw Dept. Dust Collector System #3	PM ₁₀	0.3	0.9
66	Redraw Dept. Dust Collector System #4	PM ₁₀	0.3	0.9
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
75	Zinc Quench Air Knife Exhaust System #2	PM ₁₀	0.1	0.1

2. The permittee will not exceed the emission rates set forth in the following table. [§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]

Table 3 - Non-Criteria Pollutants

SN	Description	Pollutant	lb/hr	tpy
01	HCl Pickling Baths/Rod Pickling with Scrubber	HCl	0.45	1.90
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 (2.5 MMBtu/hr)	PM	0.1	0.1
05	Drying Furnace #1/Pickling (2.5 MMBtu/hr)	PM	0.1	0.1
06	Wire Drawing Dept. Exhaust - System #1	PM	1.1	4.5
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	PM	0.1	0.1
10	Chemical/Electro-Chemical Pickling with Scrubber	HCl	0.52	2.18
11	Fluxing Bath	PM	0.1	0.1
		Zinc	0.1	0.1
		Chlorine	0.10	0.10
		Ammonia	0.1	0.2
12	Drying Furnace	PM	0.1	0.1

SN	Description	Pollutant	lb/hr	tpy
13	Hot Dip Galvanizing Kettle	PM	0.1	0.5
		Zinc	0.1	0.1
		Chlorine	0.20	0.60
		Ammonia	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	PM	0.1	0.1
19	Chemical/Electro-Chemical Pickling with Scrubber	HCl	0.43	1.81
20	Fluxing Bath	PM	0.1	0.1
		Zinc	0.1	0.1
		Chlorine	0.10	0.10
		Ammonia	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
		Zinc	0.1	0.1
		Aluminum	0.1	0.1
		Chlorine	0.20	0.60
		Ammonia	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
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	0.63	2.65
31	Quench Bath and Vacuum Wipe West	PM	0.1	0.1
32	Fluxing Bath	PM	0.1	0.2
		Zinc	0.1	0.1
		Chlorine	0.10	0.20
		Ammonia	0.1	0.4

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SN	Description	Pollutant	lb/hr	tpy
33	West Drying Oven	PM	0.1	0.2
34	East Drying Oven	PM	0.1	0.2
35	Hot Dip Galvanizing Kettles	PM Zinc Aluminum Chlorine Ammonia	0.4 0.1 0.1 0.20 0.8	1.7 0.2 0.1 0.60 3.4
36	BEZINAL Bath Furnace	PM	0.1	0.1
38	West Cooling & Wax Baths Vacuum Wipe Systems	PM Zinc	0.3 0.1	1.0 0.1
39	East Cooling & Wax Baths Vacuum Wipe Systems	PM Zinc	0.3 0.1	1.0 0.1
40	Welded Field Fence/Finished Products	Zinc Oxide	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
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	0.10	0.10
46	Zinc Quench Bath Vacuum Wipe	Zinc	0.1	0.1
47	Wax Bath Vacuum Wipe	PM	0.3	1.3
48	Pickling Final Rinse Vacuum Wipe	HCl	0.10	0.10
49	Zinc Quench Bath Vacuum Pipe	Zinc	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
53	Wire Drawing Department Exhaust System #2	PM	1.1	4.5
54	Wax Bath Vacuum Pipe	PM	0.3	1.3
55	Zinc Quench Air Knife Exhaust System #1	PM	0.1	0.1
57	Strand Coating Applicator	PM	0.1	0.4
59	Welded Wire Machine #1 Stack	Zinc Oxide	0.1	0.1
61	Redraw Department Soapdust Collector #2	PM	0.3	0.9

SN	Description	Pollutant	lb/hr	tpy
62	Wire Drawing Dept. Hand Vacuum System	PM	0.3	1.3
63	Redraw Dept. Soapdust Collector #1	PM	0.3	0.9
64	Redraw Dept. Hand Vacuum System	PM	0.2	0.4
65	Redraw Dept. Dust Collector System #3	PM	0.3	0.9
66	Redraw Dept. Dust Collector System #4	PM	0.3	0.9
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
70	Welded Wire Machine #2 Stack	Zinc Oxide	0.1	0.1
71	Welded Wire Machine #3 Stack	Zinc Oxide	0.1	0.1
72	Welded Wire Machine #4 Stack	Zinc Oxide	0.1	0.1
73	Welded Wire Machine #5 Stack	Zinc Oxide	0.1	0.1
74	Welded Wire Machine #6 Stack	Zinc Oxide	0.1	0.1
75	Zinc Quench Air Knife Exhaust System #2	PM	0.1	0.1

3. Visible emissions will not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 4 - Visible Emissions

SN	Limit	Regulatory Citation
08,12,14,17,21,23,25,27,33,34,36,44	5%	§19.503 and A.C.A
42,43	5%	§19.503 and A.C.A
06,07,11,13,16,20 22,28,29,31,32 35,36,38,39,41 47,50,51,53,54,55,61 62,63,64,65,66,75	20%	§19.503 and A.C.A

4. The permittee will 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. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

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5. The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
6. The permittee shall use only pipeline quality natural gas as fuel 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. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. 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. [§19.705 of Regulation 19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
8. 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. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall limit throughput of pickled steel rod to 144,870 tons per consecutive twelve (12) month period based on a rolling 12 month total. [§18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. 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. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
11. The permittee shall limit usage of pickling inhibitor to 1650 gallons per consecutive twelve (12) month period based on a rolling 12 month total. [§19.705 of Regulation 19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
12. 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. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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13. The permittee shall maintain all control equipment in proper working order 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: [§18.1003 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 5 – Control Equipment Parameters

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 Department deems the following types of activities or emissions as 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 April 2, 2003.

Table 6 - Insignificant Activities

Description	Category
NONE	

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that 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 that 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. This permit does 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 under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [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]
4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [§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]
5. The permittee must keep records for five years to 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 Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [§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]
6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [§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]

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

7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [§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]
8. The permittee will provide: [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]
 - 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. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [§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]
10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will 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: [§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]
 - 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 the permittee took all reasonable measures 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 must 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, the information need not be submitted again.
11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - 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. The Department issued this permit 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. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [§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]
 14. This permit may be transferred. An applicant for a transfer must 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. The Department may deny a transfer on the basis of the

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information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [§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]

15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]