RESPONSE TO COMMENTS

BEKAERT STEEL CORPORATION
ROGERS, ARKANSAS
PERMIT #1053-AR-8
AFIN: 04-00291

On March 24, 2011, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted on May 26 and 27 and June 2, 2011 via email by Mr. Rodney Bland, Bekaert Environmental Coordinator, on behalf of the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1:

Specific Condition #8(c) and Table - These scrubbers [SN-92 and SN-93] will be plate scrubbers. These are counter current cascade systems with 5 plates. The last plate is the plate where the gas is entrained and is a clean plate. This technology is a means of retracting HCl for reuse at the last (5^{th}) plate. With this system and technology we avoid the need to pH adjust and respectfully request that this requirement be removed. Plate scrubbers are not pH adjusted per technical specifications.

Response to Comment #1:

Agreed. SN-92 and SN-93 are not designed for pH monitoring given their counter current cascade design. The monitoring of pH for SN-92 and SN-93 scrubber solution has been removed from Specific Condition #8c "~~The permittee shall test the caustic concentration once per day.~~"

Comment #2:

Specific Condition #10 - We request that the initial stack testing be removed as unnecessary for the new scrubber to go in. We have existing stack test data that shows these type scrubbers to perform very well. Please remove the following:

~~10. The permittee shall conduct a test of scrubber SN-92 to demonstrate compliance with the HCl hourly emission limit specified in Specific Condition #2. HCl testing shall be conducted using EPA Reference Method 26. Testing shall be performed in combined cycle mode at greater than or equal to 90% of the maximum operating load for OLW Lines #11 and #12. Testing shall otherwise be performed in accordance with General Condition #7. The permittee shall maintain the records of the performance test for the~~

~~life of the equipment. [Regulation 18, §18.1002, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]~~

Response to Comment #2:

Agreed. Since the new scrubbers will be exactly like the existing plate scrubbers currently in the plant, the testing requirement (SC #10) will be removed. The 1994 IPT is sufficient for establishment of the emission factor.

PC
6/2/11

ADEQ

ARKANSAS
Department of Environmental Quality

Jult 12, 2011

Rodney Bland
Environmental Coordinator
Bekaert Steel Corporation
One Bekaert Drive
Rogers, AR 72756

Dear Mr. Bland:

The enclosed Permit No. 1053-AR-8 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 3/24/2011.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1053-AR-8 for the construction, operation and maintenance of an air pollution control system for Bekaert Steel Corporation to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Mike Bates
Chief, Air Division

Enclosure

ADEQ
MINOR SOURCE
AIR PERMIT

Permit No. : 1053-AR-8

IS ISSUED TO:

Bekaert Steel Corporation
One Bekaert Drive
Bentonville, AR 72756
Benton County

AFIN: 04-00291

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'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:

Mike Bates
Chief, Air Division

July 12, 2011
Date

Bekaert Steel Corporation
Permit #: 1053-AR-8
AFIN: 04-00291

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Bekaert Steel Corporation
Permit #: 1053-AR-8
AFIN: 04-00291

List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SO_2	Sulfur Dioxide
tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Section I: FACILITY INFORMATION

PERMITTEE:	Bekaert Steel Corporation
AFIN:	04-00291
PERMIT NUMBER:	1053-AR-8
FACILITY ADDRESS:	One Bekaert Drive Rogers, AR 72756
MAILING ADDRESS:	One Bekaert Drive Rogers, AR 72756
COUNTY:	Benton County
CONTACT NAME:	Rodney Bland
CONTACT POSITION:	Environmental Coordinator
TELEPHONE NUMBER:	479-621-7529
REVIEWING ENGINEER:	Patty Campbell, PE
UTM North South (Y):	Zone 15: 4023941.03 m
UTM East West (X):	Zone 15: 395213.34 m

Section II: INTRODUCTION

Summary of Permit Activity

Bekaert Steel Corporation owns and operates a steel cord manufacturing facility (NAICS 314992) located at One Bekaert Drive, Rogers, Benton County, Arkansas 72756. The steel cord is used in the production of steel belted radial tires. This permitting action is necessary to:

1. Install four additional OLW wire drawing lines, SN-92 (Lines 11 & 12) and SN-93 (Lines 13 & 14);
2. Add scrubber parameter monitoring for SN-92 and 93, Specific Condition (SC) #8;
3. Add scrubber parameter recordkeeping for SN-92 and 93, SC #9;
4. Correct math error on NO_X emission summary; and
5. Add General Conditions #19 through #21.

Total permitted annual emission rate changes associated with this modification include: 1.0 tons per year (tpy) NO_X and 0.8 tpy Hydrogen Chloride (HCl).

Process Description

Two processes are currently in use at this facility, the OLW process and the ISC process. These names are used for convenience and do not have any particular meaning.

The initial 'raw material' is comprised of two ton coils of high carbon steel wire rod. After the coils are unloaded from trucks, they are loaded on to large C-hooks. This is the very beginning of the processes. The coil 'pays' off ("is pulled off") one loop at a time. The first process area is called **OLW**. The OLW line serves one purpose and that is to reduce the diameter of the wire rod from the diameter of a pencil down to the diameter of pencil lead for example. Since the wire is being pulled through dies, scale removal is critical at the first step. As the loops pay off, they are sent through a machine that basically 'bends' the wire in order to 'flake' off the hard and brittle scale that covers the ductile wire rod. After the scale is removed, it is cleaned with diluted HCl and/or water rinse bath (scrubbers - SN-69, 70, 71, 90, 91, 92 and 93), coated with a lubricant carrier and then fed into the CAZ or diameter reducing machine. These series of steps are completed in a continuous fashion through a process line that is in a straight line set-up. The lubricant carrier coated wire enters a machine comprised of a series of die and soap chambers. As the wire passes through each pass, its diameter is reduced to smaller diameters (SN-67, 68, 88, and 89). When the wire leaves the machine it is at the pencil sized diameter and is collected on large spools thus ending the first of four major process steps.

From the CAZ / dry-draw area, the spools are taken to the **ISC area.** These process lines are 'straight and continuous' as the OLW process is; however, the ISC lines are much longer, serve different process purposes, and are more involved. The ISC lines serve to do two things mainly. First, heat treat and correct damaged wire structures created from diameter reductions in the CAZ area. Second, plate a brass layer on the wire before the next step. The spools from the OLW area pay-off and are fed into natural gas-fired furnaces (SN-01, 02, 17-18, 33-34, and 49-

50) where a certain temperature is reached to dissolve the damaged internal structure of the wire. From here the wire enters machines (SN-03-05, 19-21, 35-37, and 51-53) that quench / cool the wire to 're-establish or fix' the again corrected structure. Hot temperatures and oxygen (air) create hard brittle scales that are not good for electroplating; therefore, the next step is designed to remove the hard scales (SN-06-09, 22-25, 38-41, 54-57, and 76-79). This is done by chemical pickling on a continuous basis. At this point the wire is ready for plating. The wire is plated with copper (SN-10-11, 26-27, 42-43, 58-59, and 80-81), then zinc (SN-12, 28, 44, 60, and 82). The wire is rinsed with water after each of the processing steps. Once plated, the wire is again heated to positively affect structures, collected on spools and shipped to the next major processing area. The ISC line is the only process in which plating is involved. (OTHER: SN-13-16, 29-32, 45-48, 61-66, 72-75, and 83-87).

From the ISC area, the wire is transferred to the Cord production area. The Cord area is comprised of a large number of independent drawing machines similar to the CAZ's mentioned earlier. There are major differences however. The NDW's , related do not have support equipment such as descalers, C-hooks, etc. They are stand-alone machines. These stand-alone machines use wet lubricant as opposed to dry soaps used in the CAZ area. The wet draw machines reduce the wire from the size of pencil lead down to the size of a hair. The hair sized wire is collected on 'much' smaller spools as it comes out of the machines.

From the cord wet draw area, the wire is moved to the bunching area. Here the small spools of hair-sized wire are loaded into cabling machines, a large number of stand-alone independent machines. The spools of filaments are paid off into the machine on one end. As the wires / filaments feed into the machine, the internal components of the machine rotate to 'twist / cable' the individual filaments into different combined filament configurations. This cabled wire is the final product that is sold as a major component of steel belted radial tires, hose wire, related.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 18, 2009

Total Allowable Emissions

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	6.6	26.4
PM_{10}	6.6	26.4
SO_2	2.2	8.8
VOC	2.2	8.8
CO	2.2	8.8
NO_X	3.1	13.3
Cu	0.5	2.0
$ZnSO_4$	0.5	2.0
HCl	1.7	6.8

Section III: PERMIT HISTORY

Permit #1053-A was issued to Bekaert Corporation on June 4, 1990 for the initial construction of the facility. The permit limits for the original facility were: PM/PM_{10} - 4.2 tpy; NO_X - 49.45 tpy; and HCl - 1.58 tpy.

Permit #1053-AR-1 was issued to Bekaert Corporation on November 30, 1992 for a small facility expansion. Permit Limits were PM/PM_{10} - 0.95 tpy; CO -1.08 tpy; NO_X - 5.31 tpy; and HCl - 1.2 tpy.

Permit #1053-AR-2 was issued to Bekaert Corporation in 1994. Another small facility expansion occurred on this permit. Permit Limits were PM/PM_{10} - 20.0 tpy; SO_2 - 8.8 tpy; VOC - 8.8 tpy; CO - 8.8 tpy; NO_X - 13.8 tpy; Cu - 1.6 tpy; $ZnSO_4$ - 1.6 tpy; and HCl - 4.4 tpy.

Permit #1053-AR-3 was issued to Bekaert Corporation on November 12, 1996. A small plant expansion and modification to the water baths on the ISC line 3 occurred on this permit modification. Permit Limits were PM/PM_{10} - 26.4 tpy; SO_2 - 9.6 tpy; VOC - 9.6 tpy; CO - 9.6 tpy; NO_X - 15.1 tpy; Cu - 2.0 tpy; $ZnSO_4$ - 2.0 tpy; and HCl - 5.6 tpy.

Permit #1053-AR-4 was issued to Bekaert Corporation on May 11, 1998. The type of control device used at SN-90 was changed to allow either a packed tower or a plate tower on this permit modification. Permit Limits were PM/PM_{10} - 26.4 tpy; SO_2 - 9.6 tpy; VOC - 9.6 tpy; CO - 9.6 tpy; NO_X - 15.1 tpy; Cu - 2.0 tpy; $ZnSO_4$ - 2.0 tpy; and HCl - 5.6 tpy.

Permit #1053-AR-5 was issued to Bekaert Steel Corporation on December 10, 1999. The type of control device used at SN-20 was changed from a sand bed quench unit to a water quench unit on this permit modification. Permit Limits were PM/PM_{10} - 26.4 tpy; SO_2 - 8.8 tpy; VOC - 8.8 tpy; CO - 8.8 tpy; NO_X - 14.3 tpy; Cu - 2.0 tpy; $ZnSO_4$ - 2.0 tpy; and HCl - 5.6 tpy.

Permit #1053-AR-6 was issued to Bekaert Steel Corporation on June 21, 2001. The facility added dilute hydrochloric acid pickling baths for removal of oxidation products prior to the drawing process on the remaining two OLW lines. Permit Limits were PM/PM_{10} - 26.4 tpy; SO_2 - 8.8 tpy; VOC - 8.8 tpy; CO - 8.8 tpy; NO_X - 14.3 tpy; Cu - 2.0 tpy; $ZnSO_4$ - 2.0 tpy; and HCl – 6.0 tpy.

Permit #1053-AR-7 was issued on November 17, 2004. The facility proposed adding a new (tenth) dilute hydrochloric acid bath. The new bath was added to a scrubber which controlled only one other bath. There was no change in emission limits.

Permit #1053-AR-7 was amended on March 31, 2005. The spool touch-up painting process has been added to the Insignificant Activities List. There were no changes in emission limits.

Permit #1053-AR-7 was amended a second time on May 19, 2008. The facility has 9 dilute hydrochloric acid (HCl) baths, which are used to remove residual oxides from the wire rod prior to processing. The facility proposes to add a 10^{th} dilute HCl bath. There were 5 scrubbers listed

in the permit which control the emissions from these acid baths. Four of the baths controlled 2 acid baths and the other controls only one bath. The new bath was added to the scrubber which controlled only one bath. There were no changes in emission limits.

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19 §19.501 et seq. and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Natural Gas Furnace, ISC 1	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
02	Furnace Heat Exchanger Exhaust, ISC 1	Accounted for in SN-01		
03	Fluidized Bed Cooling Exchanger, ISC 1	Accounted for in SN-04		
04	Fluidized Bed, ISC 1 (Natural Gas Fired)	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
05	Cooling Bath, ISC 1	PM_{10}	0.1	0.4
08	Rinse Separator, ISC 1	PM_{10}	0.1	0.4
09	Ultrasonic Separator, ISC 1	PM_{10}	0.1	0.4
10	Copper Pyro-Phosphate Bath, ISC 1	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
11	Post Copper Pyro-Phosphate Bath, ISC 1	PM_{10}	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
13	Hot Rinse, ISC 1	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
14	Cooling Bath, ISC 1	PM_{10}	0.1	0.4
15	Rinse Bath, ISC 1	PM_{10}	0.1	0.4
16	Separator after Hot Rinse, ISC 1	PM_{10}	0.1	0.4
17	Natural Gas Furnace, ISC 2	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
18	Furnace Heat Exchanger Exhaust, ISC 2	Accounted for in SN-17		
19	Water Cooling Exchanger, ISC 2	Accounted for in SN-20		
20	Cooling Bath, ISC 2	PM_{10}	0.1	0.4
21	Cooling Bath, ISC 2	PM_{10}	0.1	0.4
24	Rinse Separator, ISC 2	PM_{10}	0.1	0.4
25	Ultrasonic Separator, ISC 2	PM_{10}	0.1	0.4
26	Copper Pyro-Phosphate Bath, ISC 2	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
27	Post Copper Pyro-Phosphate Bath, ISC 2	PM_{10}	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
29	Hot Rinse, ISC 2	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
30	Cooling Bath, ISC 2	PM_{10}	0.1	0.4
31	Rinse Bath, ISC 2	PM_{10}	0.1	0.4
32	Separator after Hot Rinse, ISC 2	PM_{10}	0.1	0.4
33	Natural Gas Furnace, ISC 3	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
34	Furnace Heat Exchanger Exhaust, ISC 3	Accounted for in SN-33		
35	Water Cooling Exchanger, ISC 3	Accounted for in SN-36		
36	Cooling Bath, ISC 3	PM_{10}	0.1	0.4
37	Cooling Bath, ISC 3	PM_{10}	0.1	0.4
40	Rinse Separator, ISC 3	PM_{10}	0.1	0.4
41	Ultrasonic Separator, ISC 3	PM_{10}	0.1	0.4
42	Copper Pyro-Phosphate Bath, ISC 3	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
43	Post Copper Pyro-Phosphate Bath, ISC 3	PM_{10}	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
45	Hot Rinse, ISC 3	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
46	Cooling Bath, ISC 3	PM_{10}	0.1	0.4
47	Rinse Bath, ISC 3	PM_{10}	0.1	0.4
48	Separator after Hot Rinse, ISC 3	PM_{10}	0.1	0.4
49	Natural Gas Furnace, ISC 4	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
50	Furnace Heat Exchanger Exhaust, ISC 4	Accounted for in SN-49		
51	Fluidized Bed Cooling Exchanger, ISC 4	Accounted for in SN-52		
52	Fluidized Bed, ISC 4	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
53	Cooling Bath, ISC 4	PM_{10}	0.1	0.4
56	Rinse Separator, ISC 4	PM_{10}	0.1	0.4
57	Ultrasonic Separator, ISC 4	PM_{10}	0.1	0.4
58	Copper Pyro-Phosphate Bath, ISC 4	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4

SN	Description	Pollutant	lb/hr	tpy
59	Post Copper Pyro-Phosphate Bath, ISC 4	PM_{10}	0.1	0.4
61	Hot Rinse after Zinc Sulfate, ISC 4	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
62	Cooling Bath, ISC 4	PM_{10}	0.1	0.4
63	Rinse Bath, ISC 4	PM_{10}	0.1	0.4
64	Separator after Hot Rinse, ISC 4	PM_{10}	0.1	0.4
65	Boiler, ISC Lines 1 & 2	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
66	Boiler, ISC Lines 3 & 4	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
67	2 Boilers, CAZ Area	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
68	Dust Collector, CAZ Machines	PM_{10}	0.4	1.6
72	Water "Quench" Cooling Bath, ISC 3	PM_{10}	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
73	Natural Gas Furnace, ISC 5	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
74	Water "Quench" Cooling Bath, ISC 5	PM_{10}	0.1	0.4
75	Cooling Bath, ISC 5	PM_{10}	0.1	0.4
78	Rinse Separator, ISC 5	PM_{10}	0.1	0.4
79	Ultrasonic Separator, ISC 5	PM_{10}	0.1	0.4
80	Copper Pyro-Phosphate Bath, ISC 5	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
81	Post Copper Pyro-Phosphate Bath, ISC 5	PM_{10}	0.1	0.4
83	Hot Rinse, ISC 5	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.1	0.4 0.4 0.4 0.4 0.4
84	Cooling Bath, ISC 5	PM_{10}	0.1	0.4
85	Rinse Bath, ISC 5	PM_{10}	0.1	0.4
86	Separator after Hot Rinse, ISC 5	PM_{10}	0.1	0.4
87	Boiler, ISC 5	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9

SN	Description	Pollutant	lb/hr	tpy
88	Boiler, CAZ Area	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2	0.4 0.4 0.4 0.4 0.9
89	Filtrex Dust Collector, OLW Lines 8, 9, & 10	PM_{10}	0.1	0.4

2. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Natural Gas Furnace, ISC 1	PM	0.1	0.4
02	Furnace Heat Exchanger Exhaust, ISC 1	Accounted for in SN-01		
03	Fluidized Bed Cooling Exchanger, ISC 1	Accounted for in SN-04		
04	Fluidized Bed, ISC 1 (Natural Gas Fired)	PM	0.1	0.4
05	Cooling Bath, ISC 1	PM	0.1	0.4
06	Head Discharge for HCL Pickling Baths, ISC 1	HCl	0.1	0.4
07	Rinsing Bath after HCL ISC 1	HCl	0.1	0.4
08	Rinse Separator, ISC 1	PM	0.1	0.4
09	Ultrasonic Separator, ISC 1	PM	0.1	0.4
10	Copper Pyro-Phosphate Bath, ISC 1	PM	0.1	0.4
11	Post Copper Pyro-Phosphate Bath, ISC 1	PM Cu	0.1 0.1	0.4 0.4
12	Post Zinc Sulphate Rinse, ISC 1	$ZnSO_4$	0.1	0.4
13	Hot Rinse, ISC 1	PM	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
14	Cooling Bath, ISC 1	PM	0.1	0.4
15	Rinse Bath, ISC 1	PM	0.1	0.4
16	Separator after Hot Rinse, ISC 1	PM	0.1	0.4
17	Natural Gas Furnace, ISC 2	PM	0.1	0.4
18	Furnace Heat Exchanger Exhaust, ISC 2	Accounted for in SN-17		
19	Water Cooling Exchanger, ISC 2	Accounted for in SN-20		
20	Cooling Bath, ISC 2	PM	0.1	0.4
21	Cooling Bath, ISC 2	PM	0.1	0.4
22	Head Discharge for HCL Pickling Baths, ISC 2	HCl	0.1	0.4
23	Rinsing Bath after HCL, ISC 2	HCl	0.1	0.4
24	Rinse Separator, ISC 2	PM	0.1	0.4
25	Ultrasonic Separator, ISC 2	PM	0.1	0.4
26	Copper Pyro-Phosphate Bath, ISC 2	PM Cu	0.1 0.1	0.4 0.4
27	Post Copper Pyro-Phosphate Bath, ISC 2	PM	0.1	0.4
28	Post Zinc Sulphate Rinse, ISC 2	$ZnSO_4$	0.1	0.4
29	Hot Rinse, ISC 2	PM	0.1	0.4
30	Cooling Bath, ISC 2	PM	0.1	0.4
31	Rinse Bath, ISC 2	PM	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
32	Separator after Hot Rinse, ISC 2	PM	0.1	0.4
33	Natural Gas Furnace, ISC 3	PM	0.1	0.4
34	Furnace Heat Exchanger Exhaust, ISC 3	Accounted for in SN-33		
35	Water Cooling Exchanger, ISC 3	Accounted for in SN-36		
36	Cooling Bath, ISC 3	PM	0.1	0.4
37	Cooling Bath, ISC 3	PM	0.1	0.4
38	Head Discharge for HCL Pickling Baths, ISC 3	HCl	0.1	0.4
39	Rinsing Bath after HCL, ISC 3	HCl	0.1	0.4
40	Rinse Separator, ISC 3	PM	0.1	0.4
41	Ultrasonic Separator, ISC 3	PM	0.1	0.4
42	Copper Pyro-Phosphate Bath, ISC 3	PM Cu	0.1 0.1	0.4 0.4
43	Post Copper Pyro-Phosphate Bath, ISC 3	PM	0.1	0.4
44	Post Zinc Sulphate Rinse, ISC 3	$ZnSO_4$	0.1	0.4
45	Hot Rinse, ISC 3	PM	0.1	0.4
46	Cooling Bath, ISC 3	PM	0.1	0.4
47	Rinse Bath, ISC 3	PM	0.1	0.4
48	Separator after Hot Rinse, ISC 3	PM	0.1	0.4
49	Natural Gas Furnace, ISC 4	PM	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
50	Furnace Heat Exchanger Exhaust, ISC 4	Accounted for in SN-49		
51	Fluidized Bed Cooling Exchanger, ISC 4	Accounted for in SN-52		
52	Fluidized Bed, ISC 4	PM	0.1	0.4
53	Cooling Bath, ISC 4	PM	0.1	0.4
54	Head Discharge for HCL Pickling Baths, ISC 3	HCl	0.1	0.4
55	Rinsing Bath after HCL, ISC 3	HCl	0.1	0.4
56	Rinse Separator, ISC 4	PM	0.1	0.4
57	Ultrasonic Separator, ISC 4	PM	0.1	0.4
58	Copper Pyro-Phosphate Bath, ISC 4	PM Cu	0.1 0.1	0.4 0.4
59	Post Copper Pyro-Phosphate Bath, ISC 4	PM	0.1	0.4
60	Post Zinc Sulphate Rinse, ISC 4	$ZnSO_4$	0.1	0.4
61	Hot Rinse after Zinc Sulfate, ISC 4	PM	0.1	0.4
62	Cooling Bath, ISC 4	PM	0.1	0.4
63	Rinse Bath, ISC 4	PM	0.1	0.4
64	Separator after Hot Rinse, ISC 4	PM	0.1	0.4
65	Boiler, ISC Lines 1 & 2	PM	0.1	0.4
66	Boiler, ISC Lines 3 & 4	PM	0.1	0.4
67	2 Boilers, CAZ Area	PM	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
68	Dust Collector, CAZ Machines	PM	0.4	1.6
69	Head Discharge for HCL Pickling Baths, OLW 3 & 4 (with Scrubber)	HCl	0.1	0.4
70	Head Discharge for HCL Pickling Baths, OLW 7 & 8 (with Scrubber)	HCl	0.1	0.4
71	Head Discharge for HCL Pickling Baths, OLW 5 & 6 (with Scrubber)	HCl	0.1	0.4
72	Water "Quench" Cooling Bath, ISC 3	PM	0.1	0.4
73	Natural Gas Furnace, ISC 5	PM	0.1	0.4
74	Water "Quench" Cooling Bath, ISC 5	PM	0.1	0.4
75	Cooling Bath, ISC 5	PM	0.1	0.4
76	Head Discharge for HCL Pickling Baths, ISC 5	HCl	0.1	0.4
77	Rinsing Bath after HCL, ISC 5	HCl	0.1	0.4
78	Rinse Separator, ISC 5	PM	0.1	0.4
79	Ultrasonic Separator, ISC 5	PM	0.1	0.4
80	Copper Pyro-Phosphate Bath, ISC 5	PM Cu	0.1 0.1	0.4 0.4
81	Post Copper Pyro-Phosphate Bath, ISC 5	PM	0.1	0.4
82	Post Zinc Sulphate Rinse, ISC 4	$ZnSO_4$	0.1	0.4
83	Hot Rinse, ISC 5	PM	0.1	0.4
84	Cooling Bath, ISC 5	PM	0.1	0.4

SN	Description	Pollutant	lb/hr	tpy
85	Rinse Bath, ISC 5	PM	0.1	0.4
86	Separator after Hot Rinse, ISC 5	PM	0.1	0.4
87	Boiler, ISC 5	PM	0.1	0.4
88	Boiler, CAZ Area	PM	0.1	0.4
89	Filtrex Dust Collector, OLW Lines 8, 9, & 10	PM	0.1	0.4
90	HCl Baths, OLW Lines 1 & 2 (with Scrubber)	HCl	0.1	0.4
91	HCl Baths, OLW Lines 9 & 10 (with Scrubber)	HCl	0.1	0.4
92	HCl Baths, OLW Lines 11 & 12 (with Plate Scrubber)	HCl	0.1	0.4
93	HCl Baths, OLW Lines 13 & 14 (with Plate Scrubber)	HCl	0.1	0.4

3. Visible emissions may 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]

SN	Limit	Regulatory Citation
01, 04, 06, 07, 13, 17, 22, 23, 26, 29, 33, 38, 39, 42, 45, 49, 52, 54, 55, 58, 61, 65, 66, 67, 68, 69, 70, 71, 72, 73, 76, 77, 80, 83, 87, 88, 89, 90, 91, 92, 93	5%	§18.501 and A.C.A.
05, 08, 09, 10, 11, 12, 14, 15, 16, 20, 21, 24, 25, 27, 28, 30, 31, 32, 36, 37, 40, 41, 43, 44, 46, 47, 48, 53, 56, 57, 59, 60, 62, 63, 64, 74, 75, 78, 79, 81, 82, 84, 85, 86	0%	§18.501 and A.C.A.

4. 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. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18 §18.901 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 in the process equipment and the boilers. Emissions from the natural gas-fired equipment and the boilers have been calculated at full load for continuous operation and no recordkeeping is required. [Regulation 19 §19.705, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

7. The permittee may operate the facility for 8,760 hours per rolling 12 month period. As the emissions are all based upon the facility running at capacity full time, no records are required to be kept. [Regulation 19 §19.705, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The SN-92 and SN-93 plate scrubbers shall be kept in good working condition at all times, shall operate at all times that their respective HCl pickling lines are operating and shall be monitored to meet the following conditions: [Regulation 18 §18.1104 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Control Equipment	Parameter	Units	Minimum Operating Limits
92 & 93	QZW Plate (5) Scrubber	Pressure Drop across Pads	Millimeters (mm) of H_2O	50 - 110 mm (1.97 – 4.33 in) of H_2O
		Pressure Drop across Stack	Millimeters (mm) of H_2O	100 – 350 mm (3.94 – 13.78 in) of H_2O
		Scrubbing Liquid Flow	gallons per minute	0.26 gal/min

a. The permittee shall use a manometer or equivalent measuring device to measure the pressure drop of the scrubbing liquid in the scrubber across the pads and stack once per day.
b. The permittee shall measure the scrubber liquid flow rate once per day.

9. The permittee shall maintain records of the liquid pressure drop and flow rate to demonstrate compliance with Specific Condition #8. These records shall be maintained on-site and made available to Department personnel upon request. [Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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 March 31, 2005.

Description	Category
Spool touch up painting process	A-13

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 §8-4-304 and §8-4-311]

3. The permittee shall 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. [Regulation 19 §19.704 and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19 §19.410(B) and/or Regulation 18 §18.309(B) and A.C.A. §8-4-203 as referenced by §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. [Regulation 19 §19.705 and/or Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §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. [Regulation 19 §19.705 and/or Regulation 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

   Arkansas Department of Environmental Quality
   Air Division
   ATTN: Compliance Inspector Supervisor

5301 Northshore Drive
North Little Rock, AR 72118-5317

7. The permittee shall 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 startup 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) business days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) calendar days after the completion of testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The permittee shall provide: [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §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; and
   d. Utilities for sampling and testing equipment

9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19 §19.303 and/or Regulation 18 §18.1104 and A.C.A. §8-4-203 as referenced by §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: [Regulation 19 §19.601 and/or Regulation 18 §18.1101 and A.C.A. §8-4-203 as referenced by §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 §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; and
    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 §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. [Regulation 19 §19.410(A) and/or Regulation 18 §18.309(A) and A.C.A. §8-4-203 as referenced by §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 information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19 §19.407(B) and/or Regulation 18 §18.307(B) and A.C.A. §8-4-203 as referenced by §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 §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]

18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]

19. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:

    a. Such an extension does not violate a federal requirement;
    b. The permittee demonstrates the need for the extension; and
    c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

    [Regulation 18 §18.314(A), Regulation 19 §19.416(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

20. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facilities total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

    a. Such a request does not violate a federal requirement;
    b. Such a request is temporary in nature;
    c. Such a request will not result in a condition of air pollution;
    d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
    e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
    f. The permittee maintains records of the dates and results of such temporary emissions/testing.

    [Regulation 18 §18.314(B), Regulation 19 §19.416(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

21. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:

    a. The request does not violate a federal requirement;
    b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
    c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

    [Regulation 18 §18.314(C), Regulation 19 §19.416(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

CERTIFICATE OF SERVICE

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first class mail to Bekaert Steel Corporation, One Bekaert Drive, Rogers, AR, 72756, on this 12th day of July 2011.

Pam Owen

Pam Owen, AAII, Air Division