217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

American Bare Conductor, Inc.
Attn: Marcos Ramalho
421 North California Street
Sycamore, Illinois 60178

Application No.: 08060038 ID. No.: 099030ABM
Applicant's Designation: Wire production Date Received: June 12, 2008
Subject: Copper Wire Production Facility
Data Issued: Expiration Date:
Location: 5 Danfoss Road, LaSalle, LaSalle County

This permit is hereby granted to the above designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a

Copper Rod Mill Process consisting of:
Shaft Furnace (EU1), Holding Furnace, Tundish, Launderers (EU2), Casting Wheel (EU3), Rolling Mills (EU4), Quenching and Coiling Operations;
Two (2) Cooling Towers (EU5 and EU6);
Wire Drawing;
Wire Extrusion with Wire Printing;
Twenty-two (22) Natural Gas-Fired Air Makeup and Building Heating Units (< 2.5 mmBtu/hour, each); and
Oil Storage Tank

pursuant to the above-reference application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Material (VOM)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.

4a. Pursuant to 35 Ill. Adm. Code 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 215.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 215.121(b)(2).

b. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K (Use of Organic Material) shall apply only to photochemically reactive material.

5a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q because the

cooling towers are not operated with chromium-based water treatment chemicals.

b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP): Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries, 40 CFR 63 Subpart ZZZZZZ, because this source does not use material containing copper foundry HAP, as defined in 40 CFR 63.11556.

6. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

7. Pursuant to 35 Ill. Adm. Code 215.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

8a. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

b. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

c. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

d. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.

9a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.

b. The furnaces and heating units shall only be operated with natural gas as the fuel. The use of any other fuel in the furnaces and heating units requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

c. This permit is issued based on the cooling towers at this source not using chromium-based water treatment chemicals. As a result, this permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q.

10a. Emissions and operation of the natural gas combustion units (excluding shaft furnace) shall not exceed the following limits:

i. Natural Gas Usage: 16.8 mmscf/month, 168 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lb/mmscf)	Emissions (Ton/Mo)	Emissions (Ton/Yr)
Carbon Monoxide (CO)	84	0.71	7.06
Nitrogen Oxides (NO_x)	100	0.84	8.40
Particulate Matter (PM)	7.6	0.06	0.64
Sulfur Dioxide (SO_2)	0.6	0.005	0.05
Volatile Organic Material (VOM)	5.5	0.05	0.46

These limits are based on maximum natural gas usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

b. Emissions and operation of the natural gas shaft furnace shall not exceed the following limits:

i. Natural Gas Usage: 25.76 mmscf/month, 257.6 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lb/mmscf)	Emissions (Ton/Mo)	Emissions (Ton/Yr)
Carbon Monoxide (CO)	168	2.16	21.64
Nitrogen Oxides (NO_x)	200	2.58	25.76
Particulate Matter (PM)	15.2	0.20	1.96
Sulfur Dioxide (SO_2)	1.2	0.02	0.15
Volatile Organic Material (VOM)	11	0.14	1.42

These limits are based on maximum natural gas usage and standard emission factors with a safety factor of two (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

c. VOM emissions and operation of the rolling mill wire extrusion with wire printing shall not exceed the following limits:

Emission Unit	VOM containing Material (Tons/Mo)	VOM containing Material (Tons/Yr)	VOM Emissions (lbs/ton)	VOM Emissions (Tons/Mo)	VOM Emissions (Tons/Yr)
Rolling Mill	7.19	71.88	2,000	7.19	71.88

	Rod Production Rate (Tons/Mo)	Rod Production Rate (Tons/Yr)	VOM Emissions (lbs/ton)	VOM Emissions (Tons/Mo)	VOM Emissions (Tons/Yr)
	3,600	36,000	0.08	0.14	1.44
				Total:	73.32

Emission Unit	VOM containing Material (Gal/Mo)	VOM containing Material (Gal/Yr)	VOM Emissions (lbs/gal)	VOM Emissions (Tons/Mo)	VOM Emissions (Tons/Yr)
Wire Extrusion/Printing	75	750	7.5	0.281	2.81

	Wire Production Rate (Tons/Mo)	Wire Production Rate (Tons/Yr)	VOM Emissions (lbs/ton)	VOM Emissions (Tons/Mo)	VOM Emissions (Tons/Yr)
	3,600	36,000	0.078	0.14	1.40
				Total:	4.21

These limits are based on material usage and material balance, maximum wire production, and an emission factor derived from a similar operation.

d. PM emissions and operation of the source shall not exceed the following limits:

Emission Unit	Production Rate (Tons/Mo)	Production Rate (Tons/Yr)	PM Emissions (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
Casting Wheel	3,600	36,000	0.015	0.03	0.27
Rolling Mill	3,600	36,000	0.08	0.14	1.44
Wire Extrusion	3,600	36,000	0.0468	0.08	0.84
Shaft Furnace	3,600	36,000	0.20	0.36	3.60
				Total:	6.15

These limits are based on the maximum wire production, standard emission factors (Factor Information Retrieval (FIRE) Version 6.25 September 2004), and emission factors for similar sources.

e. The emissions of particulate matter (PM) from the cooling tower shall not exceed 9.89 tons/year. This limit is based on information in the application indicating a nominal emission rate of 0.019 lb/hour total for the cooling tower operating at an overall design flow rate of 990 gallons/minute and continuous operation of the cooling towers. The cooling towers shall each be equipped, operated and maintained with drift eliminators or other comparable features designed to limit the loss of water droplets from the cooling tower to not more than 0.001% of the circulating water flow (0.00001 drift).

f. This permit is issued based on negligible emissions of particulate matter and volatile organic material from the wire drawing operation. For this purpose emissions of each emission pollutant, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

g. This permit is issued based on negligible emissions of volatile organic material from the oil storage tank. For this purpose emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year

h. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

11. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of any HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.

12. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

13a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Copper wire production rate (tons/month and tons/year);

ii. Name and usage of VOM-containing materials (tons/month and tons/year);

iii. VOM content of VOM-containing material used (weight%);

iv. Natural gas usage (mmscf/month and mmscf/year);

v. Cooling water flow rate (gallons/hour) based on representative operation of the cooling towers;

vi. Cooling water total dissolved solids (PM) content, based on representative sampling of water discharge;

vii. Total operation of cooling towers (hours/month and hours/year); and

viii. Monthly and annual CO, NO_x, PM, SO_2, VOM and HAP emissions from the source (tons/month and tons/year) with supporting calculations.

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

14a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
412 SW Washington Street
Peoria, Illinois 61602

If you have any questions on this permit, please contact Jocelyn Stakely at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:JRS:psj

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the Copper Wire Production plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant (this is producing 36,000 tons/yr of wire). The resulting maximum emissions are below the levels, (e.g., and 100 tons/year for Volatile Organic Material (VOM)) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)				
Equipment	CO	NO_x	PM	SO_2	VOM
Rolling Mill (EU4)			1.44		73.32
Casting Wheel (EU3)			0.27		
Shaft Furnace (EU1)	21.64	25.76	5.56	0.15	1.42
Two Cooling Towers (EU5 and EU6)			9.89		
Wire Drawing			0.44		0.44
Wire Extrusion with Wire Printing			0.84		4.21
Natural Gas-Fired Units excluding shaft furnace	8.40	7.06	0.64	0.05	0.46
Oil Storage Tank	-----	-----	-----	-----	0.44
Totals:	30.04	32.82	19.08	0.2	80.29

REP:JRS:psj