April 24, 2001

Mr. Tom Smith
Kokoku Wire Industries Corporation
1217 South Walnut
South Bend, IN 46619

Dear Mr. Smith:

Re: Exempt Construction and Operation Status,
Exemption 141-13653-00113, Plt ID 141-00113

The registration renewal application from Kokoku Wire Industries Corporation, received on December 21, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following drawn wire operation, to be located at 1217 South Walnut, South Bend, Indiana 46619, is now classified as exempt from air pollution permit requirements:

(a) Two (2) natural gas boilers, B-1 and B-2, with capacities of 5.021 and 2.009 million Btu per hour (MM Btu/hr) respectively, connected to stacks B-1 and B-2, heights 15 and 8 feet above ground, diameters 1.25 and 1 feet inside, and;

(b) One (1) natural gas atmospheric generator, with a capacity of 0.48825 MM Btu/hr, with general ventilation, and;

(c) One (1) natural gas fluidized bed, with a capacity of 1.575 MM Btu/hr, with general ventilation, and;

(d) Fifty (50) natural gas infra red heaters, each with a capacity of 0.1 MM Btu/hr, with general ventilation, and;

(e) One (1) natural gas water heater, with a capacity of 0.11 MM Btu/hr, with general ventilation, and;

(f) One (1) natural gas heater, with a capacity of 0.06 MM Btu/hr, with general ventilation, and;

(g) One (1) natural gas heater, H-1, with a capacity of 0.045 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.33 feet inside, and;

(h) One (1) natural gas heater, H-4, with a capacity of 0.1 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.41X0.41 feet inside, and;

(i) One (1) natural gas heater, H-2, with a capacity of 0.045 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.33 feet inside, and;

(j) One (1) natural gas heater, H-3, with a capacity of 0.045 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.5 feet inside, and;

(k) Three (3) surface coating processes, flattening, rust preventative and splicing/marking, capacity of each 2710.99 pounds of wire per hour, with general ventilation, and;

(l) Sixteen (16) "butt welding" stations utilizing no electrode/filler material or gas shield.

The construction and operation of this drawn wire production shall be subject to the conditions of the attached **Exemption No. 141-13653-00113, Plant ID No. 141- 00113**. This Exemption will supersede Construction Permit No. CP 141-5075, issued on February 5, 1996.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

pbb/

cc: File - St. Joseph County
St. Joseph County Health Department
Air Compliance - Rick Reynolds

Southwest Regional Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management
Office of Air Quality
and St. Joseph County Health Department

Technical Support Document (TSD) for an Exempted Source

Source Background and Description

Source Name:	**Kokoku WIre Industries Corporation**
Source Location:	**1217 South Walnut, South Bend, IN 46619**
County:	**St. Joseph County**
SIC Code:	**3315**
Operation Permit No.:	**141-13653-00113**
Permit Reviewer:	**Patrick B. Burton**

The Office of Air Quality (OAQ) has reviewed an application from Kokoku WIre Industries Corporation relating to the construction and operation of a drawn wire production.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) natural gas boilers, B-1 and B-2, with capacities of 5.021 and 2.009 million Btu per hour (MM Btu/hr) respectively, connected to stacks B-1 and B-2, heights 15 and 8 feet above ground, diameters 1.25 and 1 feet inside, and;

(b) One (1) natural gas atmospheric generator, with a capacity of 0.48825 MM Btu/hr, with general ventilation, and;

(c) One (1) natural gas fluidized bed, with a capacity of 1.575 MM Btu/hr, with general ventilation, and;

(d) Fifty (50) natural gas infra red heaters, each with a capacity of 0.1 MM Btu/hr, with general ventilation, and;

(e) One (1) natural gas water heater, with a capacity of 0.11 MM Btu/hr, with general ventilation, and;

(f) One (1) natural gas heater, with a capacity of 0.06 MM Btu/hr, with general ventilation, and;

(g) One (1) natural gas heater, H-1, with a capacity of 0.045 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.33 feet inside, and;

(h) One (1) natural gas heater, H-4, with a capacity of 0.1 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.41X0.41 feet inside, and;

(i) One (1) natural gas heater, H-2, with a capacity of 0.045 MM Btu/hr, connected to a

stack, height 33 feet above ground, diameter 0.33 feet inside, and;

(j) One (1) natural gas heater, H-3, with a capacity of 0.045 MM Btu/hr, connected to a stack, height 33 feet above ground, diameter 0.5 feet inside, and;

(k) Three (3) surface coating processes, flattening, rust preventative and splicing/marking, capacity of each 2710.99 pounds of wire per hour, with general ventilation, and;

(l) Sixteen (16) "butt welding" stations utilizing no electrode/filler material or gas shield.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

There are no new emission units located at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Construction Permit **CP 141-5075**, issued on February 5, 1996

All conditions from previous approvals were incorporated into this approval except the following:

(1) Construction Permit CP 141-5075, issued on February 5, 1996

Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following drawn wire production operation is exempt from air pollution permit requirements. During the review of the registration renewal application received on December 20, 2000, the potential to emit of any regulated pollutant from the entire source did not exceed an emission threshold. More specifically, the allowable emissions (as defined in the Indiana Rule) of NOx and VOC are less than 10 tons per year, respectively. Therefore, pursuant to 326 IAC 2-1.1-3, a requirement to have a registration or permit is not required.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

An application for the purposes of this review was received on December 21, 2000, with additional information received on March 5, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant,

including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	less than 5 (tpy)
PM-10	less than 5 (tpy)
SO_2	less than 10 (tpy)
VOC	less than 10 (tpy)
CO	less than 25 (tpy)
NO_x	less than 10 (tpy)

HAP's	Potential To Emit (tons/year)
Toulene	.00876
Xylenes	.00438
Chromium Compounds	.00876
Lead Compounds	.00876
TOTAL	***.03066***

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-6 (Emission Reporting)

This facility is not subject to 326 IAC 2-6 (Emission Reporting), because the source does not emit 10 tons/yr of VOC in St. Joseph county.

326 IAC 8-2-9 (Surface Coating Emission Limitation: Miscellaneous Metal Coating Operations)

This rule does not apply because the facility's actual VOC emissions are less than 15 pounds per day before add-on control. Any change or modification that shall cause the potential to emit of VOC emissions to exceed 15 pounds per day before add-on control shall require prior approval from the Office of Air Quality (OAQ).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Construction Permit Application Form Y.

(a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The construction and operation of this drawn wire production shall be subject to the conditions of the attached **Exemption No. 141-13653-00113, Plant ID No. 141- 00113**. This Exemption supersedes Construction Permit No. CP 141-5075, issued on February 5, 1996.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Kokoku Wire Industries Corporation**
Address City IN Zip: **1217 South Walnut, South Bend, IN 46619**
CP: **141-13653**
Plt ID: **141-00113**
Reviewer: **PBB**
Date: **03/30/01**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
14.5	127.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.1	0.5	0.0	6.4	0.3	5.3

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions
Company Name: Kokoku Wire Industries Corporation
Address City IN Zip: 1217 South Walnut, South Bend, IN 46619
CP: 141-13653
Plt ID: 141-00113
Reviewer: Patrick B. Burton
Date: 03/30/01

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.334E-04	7.621E-05	4.763E-03	1.143E-01	2.159E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.176E-05	6.986E-05	8.891E-05	2.413E-05	1.334E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Plt ID: 141-00113
Reviewer: Patrick B. Burton
Date: 03/30/01

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Kerosene	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.00002000	2710.990	6.75	6.75	0.37	8.78	1.60	0.00	ERR	0%
DAP Spray Paint	7.3	94.00%	35.0%	59.0%	30.8%	6.00%	0.00000028	2710.990	6.25	4.32	0.00	0.08	0.01	0.00	72.08	0%
Dykem Steel Red Layout	7.1	94.90%	0.0%	94.9%	0.0%	50.00%	0.00000012	2710.990	6.72	6.72	0.00	0.05	0.01	0.00	13.44	0%
Dykem Steel Blue Layout	7.2	96.20%	0.0%	96.2%	0.0%	3.80%	0.00000012	2710.990	6.89	6.89	0.00	0.05	0.01	0.00	181.26	0%
Dykem Yellow	7.4	84.30%	0.0%	84.3%	0.0%	15.70%	0.00000115	2710.990	6.25	6.25	0.02	0.47	0.09	0.02	39.79	0%
Rust-Oleum Spray Paint	7.2	66.00%	0.0%	66.0%	0.0%	34.00%	0.00000007	2710.990	4.73	4.73	0.00	0.02	0.00	0.00	13.90	0%
NCH Corp. Voltz II	6.4	100.00%	0.0%	100.0%	0.0%	50.00%	0.00000090	2710.990	6.41	6.41	0.02	0.38	0.07	0.00	12.82	0%
Amrep. Misty MG-41	6.9	82.69%	0.0%	82.7%	0.0%	17.31%	0.00000166	2710.990	5.73	5.73	0.03	0.62	0.11	0.02	33.10	0%
Mineral Spirits	6.6	100.00%	0.0%	100.0%	0.0%	0.00%	0.00000060	2710.990	6.58	6.58	0.01	0.26	0.05	0.00	ERR	0%
Premium Gold	6.8	100.00%	0.0%	100.0%	0.0%	0.00%	0.00000390	2710.990	6.83	6.83	0.07	1.73	0.32	0.00	ERR	0%

State Potential Emissions **Add worst case coating to all solvents** **0.52** **12.44** **2.27** **0.04**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used