TCEQ WORKSHEET 6: EXECUTIVE SUMMARY AND CERTIFICATE OF COMPLETENES AND CORRECTNESS

Planning Cycle: ____2004____ (1st year) to__2008__ (5th year, 1st year plus 4)

EXECUTIVE SUMMARY, PART 1: FACILITY INFORMATION

Company name:	Encore Wire Limited	Facility name:	McKinney Facility
Mailing address:	P.O. Box 1149	Physical address: *(if same as mailing, write "same")*	1410 Millwood Rd.
City, State, Zip:	McKinney, TX, 75069	City, State, Zip:	McKinney, TX, 75069
County:	Collin	County:	Collin
WRPA Contact:	Ken Knuth VP, Administration & Environmental Affairs	Fax:	972-562-3644
Phone:	972-562-9473 Ext. 224	E-mail:	ken.knuth@encorewire.com
TCEQ SW ID:	81412 small quantity generator	Customer reference number: *(if same as mailing, write "same")*	CN600130231
EPA ID:	TXD988088712 small quantity generator	Regulated entity number: *(if same as mailing, write "same")*	RN104301825
TRI ID:	75069-NCRWR-1410M		
Primary SIC Code: 3357: drawing and insulating of nonferrous wire		Secondary SIC Codes: 3351: rolling, drawing, and extruding of copper 3087: custom compounding of purchased plastics resins	
NAICS code: *(to convert SIC to NAICS, go to: www.census.gov/epcd/www/naics.html)* 331422: copper wire (except Mechanical) drawing (corresponds to SIC Code 3357) 331421: copper rolling, drawing, and extruding of copper (corresponds to SIC Code 3351) 325991: custom compounding of purchased resins (corresponds to SIC Code 3087)			

General description of facility:

The primary activity at the McKinney Facility is the manufacturing of insulated and jacketed copper wire *(SIC Code 3357 - Drawing and Insulating of Nonferrous Wire)* for both industrial and residential applications. Wire production operations at the facility began under the ownership of Encore Wire Corporation in 1989. A change of ownership of the facility took place on July 1, 1999. The new and current owner is Encore Wire Limited.

Physically, the property is separated into an "East Plant" and a "West Plant" by a public street, Millwood Road. Site operations are vertically integrated and include three Wire Plants (Wire Plants 1, 2 and 3), a Rod Mill, a Plastics Mill, a Wire Scrap Processing System, and a Finished Goods Warehouse. The Wire Plants manufacture the finished insulated wire. The Rod Mill and Plastics Mill manufacture the primary raw materials for the Wire Plants, i.e., copper rod and plastic pellets, respectively. In the Wire Scrap Processing System, copper and plastic are recovered from off-specification wire. The recovered copper is returned to the Rod Mill for processing into copper rod. The recovered plastic is sold. The Finished Goods Warehouse stores all finished product until shipped to customers.

Each of the McKinney Facility's major processing operations is separately addressed below. Also identified are the reportable TRI chemicals and hazardous wastes associated with each operation.

Wire Plants 1, 2, and 3 (SIC Code 3357 - Drawing and Insulating of Nonferrous Wire).
In Wire Plants 1, 2, and 3 *(startup 1989, 1993, and 2003, respectively),* pure copper rod *(99.9% pure)* is "stretched" or "drawn" into wire in wire drawing machines. The drawn wire is then heat-treated and insulated with plastic, nylon, and paper. Some of the drawn wire is cabled or stranded prior to being insulated. A small portion of the bare wire is not insulated. The finished wire is labeled and coiled onto spools for transfer to the facility's Finished Goods Warehouse where it is stored until shipped to customers. The primary raw materials used in the Wire Plants are copper rod, plastic pellets, nylon, and paper. The bulk of the copper rod and plastic pellets that are processed are produced in the facility's Rod Mill and Plastics Mill, respectively. The primary secondary materials include inks for labeling the wire, solvents used as ink additives and for printer cleanup, and drawing oils that are emulsified in water and used as coolant in the wire drawing and annealing (heat-treating) machines.

Reported TRI chemicals: copper, lead compounds, antimony compounds, and zinc compounds

> TRI chemicals used in the Wire Plants which are subject to Form R reporting are the copper which is contained in the copper rod, and lead compounds, antimony compounds, and zinc compounds which are a component of the plastic pellets that are used as wire insulating and jacketing material.
>
> TRI copper releases from the Wire Plants occur in the form of air emissions during mechanical processing of the copper; in the copper "mud" *(a sludge of copper fines and water)* that is recovered from the drawing solution basins and is shipped off-site for recycle; in the spent drawing solution that is shipped off-site; and in the storm water that is discharged from the site. Releases of lead, antimony, and zinc to the air may theoretically occur during processing, but amounts are slight. Releases of these metals may also occur in the "floor sweeping" pellets that are a component of the general production refuse that is shipped off-site to the local landfill. Lead and zinc are also measured in the storm water discharged from the site.

Hazardous waste: ink/solvent waste

> The only hazardous waste that is generated at the site is at the Wire Plants. Hazardous ink/solvent waste is generated from the ink labeling operation, and from associated printer cleanup activities. The ink/solvent waste is drummed and shipped off-site to an approved disposal facility.

Rod Mill (SIC Code 3351 - Rolling, Drawing, and Extruding of Copper)
Startup of the Rod Mill was in June 1998. In the Rod Mill, pure copper cathode *(99.9% pure)* is melted in a shaft furnace. The cathode is received via both truck and rail. The molten metal is continuously cast into metal bars, and the metal bars are processed into finished copper rod. Some pure copper scrap from the Wire Scrap Processing System *(discussed below),* and scrap generated during the Rod Mill process, are also used as furnace charge. The copper rod that is produced in the Rod Mill is processed in the facility's Wire Plants or is sold to outside sources. The primary Rod Mill activities include metal melting and casting, cast bar handling and rolling, and rod picking, coating *(water-based coating),* and coiling. The primary raw material is 99.9% pure copper metal. Secondary materials include rolling oils that are emulsified in water and used as coolant in the rolling machine, pickling solvent that is mixed with water and used to remove oxides and scale from the copper rod, and a wax-like coating that is mixed with water and used as a protective coating on the finished rod.

Reported TRI chemicals: copper, lead compounds

TRI chemicals used in the Rod Mill which are subject to Form R reporting is the copper that is melted in the shaft furnace and processed by downstream equipment into copper rod, and the lead compounds which are a trace metal component of the copper metal that is used.

TRI releases of copper and lead off-site occur in the form of air emissions during processing of the copper metal, primarily from the shaft furnace; in the copper "mud" *(a sludge of copper fines and water)* and slag that is recovered from the process and is shipped off-site for recycle; in the wastewater that is discharged off-site to the publicly owned treatment works *(POTW);* and in the storm water that is discharged from the site.

Hazardous waste: There are no hazardous wastes generated at the Rod Mill.

Plastics Mill (SIC Code 3087 – Custom Compounding of Plastic Resins)

The Plastics Mill began operations in April 1999. This mill produces plastic pellets *(non-colorized)* which are utilized in the Wire Plants or are sold to outside sources as wire insulating and jacketing material. In summary, plastic resin, a low vapor pressure oily "plasticizer", stabilizers and additives are mixed to form a plastic "dough". The dough is extruded, cut into small pellets and water-cooled. The finished pellet is packaged in boxes for internal use or shipment to customers, or, is pneumatically transferred to onsite-site storage silos for internal use.

Reported TRI chemicals: lead compounds, antimony compounds, and zinc compounds

TRI chemicals used in the Plastics Mill which are subject to Form R reporting are the lead compounds and zinc compounds which are a component of the finished plastic pellets and which function as stabilizers to prevent thermal decomposition of the plastic molecular structure, and antimony compounds that are also a component of the plastic pellets and which function as a fire retardant.

Releases of lead, zinc, and antimony occur in very slight amounts as air emissions and in the "floor sweeping" pellets that are a component of the general production refuse that is shipped off-site to the local landfill. Lead and zinc are also measured in the storm water discharged from the site.

Hazardous waste: There are no hazardous wastes generated at the Plastics Mill.

Wire Scrap Processing System

Startup of the wire scrap processing system was in March 1998. In this system, bare, insulated, or jacketed copper wire scrap is processed through a multi-step mechanical "chopping" and separating process to liberate the copper metal and plastic from the insulating/jacketing materials. A series of vibrating and bucket conveyors transport the materials between the major pieces of equipment. The copper fines that are recovered are used as charge material in the facility's Rod Mill *(discussed above).* The recovered plastic is sold to an outside source. Residual materials *(i.e., dust, nylon, paper, slight amounts of unrecoverable copper and plastic)* are pneumatically conveyed to an outside dust collector/hopper where the material "falls out" into a rolloff box or compactor. When full, the containers are temporarily stored onsite until shipment off-site to an approved landfill.

Reported TRI chemicals: copper, lead compounds, antimony compounds, and zinc compounds

TRI chemicals used in the Wire Scrap Processing System which are subject to Form R reporting are the copper, lead compounds, antimony compounds, and zinc compounds that are a component of the scrap insulated wire that is processed. The TRI chemicals other than copper are present in the plastic insulation.

TRI releases from the scrap processing system occur in the form of minor air emissions during mechanical processing of the scrap wire; and in the residual material that is shipped off-site to an approved landfill. Copper, lead, and zinc are also measured in the storm water that is released from the site.

Hazardous waste: There are no hazardous wastes generated by the Wire Scrap Processing System.

Finished Goods Warehouse

The Finished Goods Warehouse was constructed in 1997 and expanded in 2004. It is used to store finished goods produced at the three Wire Plants. Overhead, enclosed conveyors transport the finished goods from the Wire Plants to the warehouse. Finished wire is shipped solely via truck to customers.

Reported TRI chemicals: There are no reportable TRI chemicals used at the Finished Goods Warehouse.

Hazardous waste: There are no hazardous wastes generated at the Finished Goods Warehouse.

TCEQ EXECUTIVE SUMMARY, PART 2: FACILITY'S GENERATION AMOUNT

List amount of hazardous wastes generated in 2003.
(The data should be taken from your most recent Annual Waste Summary form (base-year data).*

Description of waste and TX waste code number:		Amount generated in tons
ink/solvent waste	0004203H	3.75 tons (7502 lb)

List below all reportable TRI chemicals, CAS numbers, and the amount released or transferred for 2003.
(The data should be taken from your most recent TRI Form R (base-year data).***

TRI chemicals and CAS number:		Amount released or transferred in tons:	
antimony compounds	N010	as antimony:	2.81 tons
copper	7440-50-8	as copper:	466 tons*
lead compounds	N420	as lead:	0.57 tons
zinc compounds	N982	as zinc:	0.22 tons

* Note that of this amount, 456 tons (98%) is transferred off-site for recycling by contracted parties.

Provide a prioritized list of pollutants and contaminants to be reduced during the five-year period.

		TRI Chemical / Hazardous Waste	CAS No./Waste Code
1.	copper	TRI chemical	7440-50-8
2.	lead compounds	TRI chemical	N010
3.	ink/solvent waste	hazardous waste	0004203H
4.	antimony compounds	TRI chemical	N420
5.	zinc compounds	TRI chemical	N982

TCEQ EXECUTIVE SUMMARY, PART 3: P2 PROJECTS AND GOALS

Statement of facility's measurable reduction goals:

Encore Wire Limited has identified for implementation or evaluation in 2004-2008 (2) source reduction projects and (3) waste minimization projects. The source reduction projects include activities which will employ good operating practices, and equipment/process modifications. The waste minimization projects will incorporate recycling and good operating practices.

The facility's 5-year source reduction and waste minimization goals resulting from implementation of projects are a "gross" 5% in the reduction in the amount of hazardous waste generated as compared to the base year, and a 5% reduction in the amount of reported TRI releases/transfers. Because of the company's projected substantial business growth, gross reductions relative to the base year will be a challenge.

Explain the environmental and human health risks considered in determining reduction goals**:

The projects which will be implemented or evaluated in 2004-2008 will have an overall beneficial effect on human health and the environment. Therefore, there are no expected risks to human health or the environment resulting from project implementation/evaluation. VOC and HAP emissions may be reduced, thereby reducing worker exposure to these chemicals. When compared to base year production activities, overall usage of hazardous solvents is expected to decrease which will result in a relative decrease in the amount of hazardous waste generated. Reductions in off-site transfer of TRI chemicals and hazardous wastes will result a reduction in the transportation risks associated with off-site transfers. The environment will be benefited by the overall reduction in the release of hazardous wastes and TRI chemicals into different media.

List of pollution prevention projects with an implementation schedule of each project:

Project	*Source Reduction / Waste Minimization*	*Implementation Date*
1. Reduce quantity of copper that is discharged in the Rod Mill wastewater offsite to the POTW by installing holding tank. Reduction measured as total annual copper lbs that are discharged, as measured by sampling. (affects copper)	WM (process modifications; good operating practices)	6/04
2. Reduce quantity of residuals from Wire Scrap Processing system that is shipped offsite to the landfill by recycling offsite and/or increasing % recovery of copper and plastics. Reduction measured as a % of wire scrap that is processed. (affects copper, lead, antimony, zinc)	WM (recycling; process modifications)	1/07
3. Reduce quantity of wire scrap generated during processing of the finished wire. Reduction measured as a % of finished wire produced. (affects copper, lead, antimony, zinc)	SR (process/equipment modifications; good operating practices)	6/07
4. Improve printer cleanup operating procedures – reduce solvent use. Reduction measured as a % of total ink used. (affects ink/solvent waste)	SR (good operating practices)	6/07
5. Reduce quantity of copper that is discharged offsite in storm water by decreasing outside sources of wasted copper, e.g., copper "mud", fines. Reduction measured as total annual copper lbs that are discharged, as measured by sampling. (affects copper)	WM (good operating practices)	1/08

* Base year is the year prior to the 1st year of your plan

** Not required for SQG that are non-TRI Form R reporters

Implementation schedule for future reduction goals:

The plan incorporates a Pollution Prevention Team which will meet biannually to assess the results of source reduction and waste minimization efforts at the facility and to identify new projects which will establish ongoing, future reduction goals. Each year, a project-specific implementation schedule will be established which will identify future reduction goals and milestone dates.

Identify cases in which the implementation of a source reduction or waste minimization activity may result in the release of a different pollutant or contaminant, or may shift the release to another medium.**

Encore Wire does not anticipate that any of the planned projects will result in the release of a different pollutant or contaminant, or the shift of the release to another medium. The planned projects are expected to result in an overall reduction in TRI and hazardous waste releases into the same medium.

* Base year is the year prior to the 1st year of your plan
** Not required for SQG that are non-TRI Form R reporters

TCEQ CERTIFICATE OF COMPLETENESS AND CORRECTNESS

Certificate of Completeness and Correctness

The person who signs the Certification of Completion should have the authority to commit the corporation's resources to implement the plan. This is usually the plant manager, owner of the facility, or whoever runs the facility.

This document certifies that the Pollution Prevention Plan has been completed and meets the specified requirements of the Waste Reduction Policy Act of 1991, the Solid Waste Disposal Act and 30 TAC §§335.471-335.480, and that the information provided herein is true, correct, and complete.

This certificate should not be signed by the environmental health and safety manager. Signatures from consultants or other third parties are not compliant.

This document also certifies that the person whose signature appears below has the authority to commit the corporate resources necessary to implement this plan.

Name _____Ken Knuth_____ Title __Vice-President, Administration & Environmental Affairs____
(please print clearly)

Position *(check one)*: ☐ Facility Owner ☐ Corporate Officer

Signature _____ Date: _____December 31, 2004_____