INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: January 25, 2007

RE: Belden Wire and Cable Company / 177-22766-00003

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 03/23/06

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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Belden Wire & Cable Company
350 NW N Street
Richmond, Indiana 47374

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses new source review requirements and is intended to fulfill the new source review procedures and permit revision requirements pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F177-22766-00003	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	 Issuance Date: January 25, 2007 Expiration Date: January 25, 2012

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary wire and cable manufacturing process.

Authorized individual:	David R. Hooper, Plant Manager
Source Address:	350 NW N Street, Richmond, Indiana 47374
Mailing Address:	350 NW N Street, Richmond, Indiana 47374
General Source Phone:	(765) 983-7000
SIC Code:	3357
Source Location Status:	Wayne Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) Five (5) Wire Drawing Quench Systems, constructed in 2002, with a maximum capacity of 9.14 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
M1	5,000	1.43
M2	5,000	1.43
M4	5,000	1.43
Rod Mill	5,000	1.43
SN	5,000	1.43

(b) Nine (9) Wire Drawing Dip Systems, constructed in 2002, with a maximum capacity of 9.68 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
Rod Mill	5,000	1.43
I1	5,000	1.43
M1	5,000	1.43
M2	5,000	1.43
M3	5,000	1.43
M4	5,000	1.43
H1	5,000	1.43
Samp Dip	5,000	1.43
Niehoff Dip	5,000	1.43

(c) Nine (9) wire drawing Spray Misters, constructed in 2002, with a maximum capacity of 18.76 lb/hr of oil sprayed on the wire before being taken up.

(d) One (1) copper wire braiding process, constructed in 2005, with a maximum rate of 0.97 lbs of tape lubricating oil and 71.84 lbs of copper wire per hour.

(e) One (1) fiberglass braiding process constructed in 1999, with a maximum rate of 13.31 lbs of copper wire per hour, with a maximum capacity of 9,000 dscf/min, utilizing dust collector #06, for particulate matter control, and exhausting inside the building.

(f) One (1) continuous vulcanization process, constructed in 1993, consisting of six (6) vulcanizers, each with a maximum operating rate of 406.5 lbs of rubber per hour.

(g) One (1) extrusion process, constructed in 2004, consisting of 41 extruders, each with a maximum operating rate of 500 lbs of resin per hour, exhausting through sixteen (16) stacks identified as 12E-4, 22E-2 and H1-1, H1-2, H1-3, H1-4, H1-5, H1-6, H1-7, H2-1, H2-2, H2-3, H2-4 H2-5, H2-6 and H2-7.
(Note: Some units vent into the room).

(h) One (1) PVC compound handling process, constructed in 2000, with a maximum throughput of 6,351.92 pounds per hour consisting of:

(1) One (1) resin ground silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #01 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building.

(2) One (1) resin rooftop silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #02 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building.

(3) One (1) PVC mixer (Littleford Mixer), surge bin, and six powder bins, with a maximum rate of 6,351.92 lbs per hour, utilizing one dust collector for particulate matter and HAP control, identified as the Littleford dust collector (#04), and exhausting inside the building.

(4) One (1) PVC mixer (Henschel Mixer), manual Hopper and weigh scale, with a maximum rate of 6,351.91 lbs per hour, utilizing one dust collector, identified as Rooftop Baghouse (#05), and exhausting through (1) one Stack identified as 15E.

(5) One surge bin (Henschel surge bin) with a maximum rate 6,351.92 lbs per hour, utilizing one product recovery cyclone and dust collector, identified as Cyclone & Dust Collector (#03), and exhausting through (1) one stack identified as cyclone and dust collector stack.

(6) Seven (7) bulk bag antimony bins and two (2) small filter receivers with negligible particulate emissions, and exhausting inside the building.

(7) A PVC pelletizer process, consisting of four (4) pelletizers identified as #1, #2, #4 and #5, with negligible particulate emissions, and exhausting outside the building.

(i) One (1) coated wire printing operation, constructed in 2005, consisting of twenty (20) flowcoating wheel printers, (35) ink jet spray printers, and (15) ringband spray printers.

(j) One (1) lacquer tower, constructed in 1999, with a maximum application rate of 7.5 lbs of coating per hour.

(q) Three (3) tanks, identified as Tank #1, Tank #2 and Tank #3, each with a maximum tank capacity of 20,000 gallons, and each containing fuel oil grade 2, fuel oil grade 2 and propane, respectively.

(r) One (1) armor cabling process, constructed in 2006, with a maximum line speed of 20 fpm uses lubricating oil for aluminum tape forming. Lubricating oil is made up at a rate of approximately 423 gallons per year.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Two (2) natural gas-fired boilers (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 and #02, constructed in 1986, each with a maximum heat input rate of 9.20 MMBtu per hour, and exhausting through one (1) stack identified as IE.

(2) Four (4) natural gas-fired steam generators (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 through #04, each constructed in 1999, with a maximum heat input rate of 5.02, 5.02, 6.7, and 6.7 MMBtu per hour, respectively, and each exhausting through stacks 46E-3, 46E-3, 46E-3 and 1E, respectively.

(3) One (1) natural gas-fired lacquer tower, identified as Lacquer Tower, with a maximum heat input rate of 0.63 MMBtu per hour;

(4) One (1) natural gas-fired oven, identified as Ringband Oven #01, with a maximum heat input rate of 1.68 MMBtu per hour.

(5) One (1) natural gas-fired process water evaporating unit, with an engineered maximum heat input of 840,000 Btu/ hr, exhausting through one (1) stack identified as Evaporator Stack.

(6) Eighteen (18) natural gas preheaters, each constructed in 1999.

Area	Maximum Capacity of Each, MMBtu/Hr	Number	Total Capacity, MMBtu/Hr
H1/H2	0.046	4	0.184
H1/H2	0.092	4	0.368
H1/H2	0.184	1	0.184
Extrusion	0.223	3	0.669
Extrusion	0.120	6	0.720

(b) Two (2) tin electroplating lines, identified as #401 and #402, constructed in 1999, with a combined maximum rate of electroplating 46.70 pounds (lbs) of tin per hour and maximum capacity of 8000 Amp/hour, utilizing one (1) wet scrubber for acid gas control, and exhausting through one (1) stack identified as Scrubber Stack.

(c) The following VOC and HAP storage containers:

(1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Machining where an aqueous cutting coolant continuously floods the machining interface.

(e) Closed loop heating and cooling systems.

(f) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

(g) Forces and inducted draft cooling tower system not regulated under a NESHAP.

(h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(i) Heat exchanger cleaning and repair.

(j) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(k) Other emergency equipment as follows: Stationary fire pumps.

(l) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(m) Purge double block and bleed valves.

(n) Two (2) electric burn-off tooling ovens used to heat tools or maintenance parts to burn any cured resin residue remaining on the tool; and

(o) Plastic grinding equipment used to reduce the size of plastic scrap to size available for reuse in the extrusion operation.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]

(a) This permit, FESOP 177-22766-00003, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1 when furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.10 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F177-22766-00003 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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 (40%) in 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.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) Five (5) Wire Drawing Quench Systems, constructed in 2002, with a maximum capacity of 9.14 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
M1	5,000	1.43
M2	5,000	1.43
M4	5,000	1.43
Rod Mill	5,000	1.43
SN	5,000	1.43

(b) Nine (9) Wire Drawing Dip Systems, constructed in 2002, with a maximum capacity of 9.68 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
Rod Mill	5,000	1.43
I1	5,000	1.43
M1	5,000	1.43
M2	5,000	1.43
M3	5,000	1.43
M4	5,000	1.43
H1	5,000	1.43
Samp Dip	5,000	1.43
Niehoff Dip	5,000	1.43

(c) Nine (9) wire drawing Spray Misters, constructed in 2002, with a maximum capacity of 18.76 lb/hr of oil sprayed on the wire before being taken up.

(d) One (1) copper wire braiding process, constructed in 2005, with a maximum rate of 0.97 lbs of tape lubricating oil and 71.84 lbs of copper wire per hour.

(e) One (1) fiberglass braiding process constructed in 1999, with a maximum rate of 13.31 lbs of copper wire per hour, with a maximum capacity of 9,000 dscf/min, utilizing dust collector #06, for particulate matter control, and exhausting inside the building;

(f) One (1) continuous vulcanization process, constructed in 1993, consisting of six (6) vulcanizers, each with a maximum operating rate of 406.5 lbs of rubber per hour;

(g) One (1) extruder process, constructed in 2004, consisting of 41 extruders, each with a maximum operating rate of 500 lbs of resin per hour, exhausting through sixteen (16) stacks identified as 12E-4, 22E-2 and H1-1, H1-2, H1-3, H1-4, H1-5, H1-6, H1-7, H2-1, H2-2, H2-3, H2-4 H2-5, H2-6 and H2-7.
(Note: Some units vent into the room)

(h) One (1) PVC compound handling process, constructed in 2000, with a maximum throughput of 6,351.92 pounds per hour consisting of:

(1) One (1) resin ground silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #01 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building;

(2) One (1) resin rooftop silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #02 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building;

(3) One (1) PVC mixer (Littleford Mixer), surge bin, and six powder bins, with a maximum rate of 6,351.92 lbs per hour, utilizing one dust collector for particulate matter and HAP control, identified as the Littleford dust collector (#04), and exhausting inside the building.

(4) One (1) PVC mixer (Henschel Mixer), manual Hopper and weigh scale, with a maximum rate of 6,351.91 lbs per hour, utilizing one dust collector, identified as Rooftop Baghouse (#05), and exhausting through (1) one Stack identified as 15E.

(5) One surge bin (Henschel surge bin) with a maximum rate 6,351.92 lbs per hour, utilizing one product recovery cyclone and dust collector, identified as Cyclone & Dust Collector (#03), and exhausting through (1) one stack identified as cyclone and dust collector stack;

(6) Seven (7) bulk bag antimony bins and two (2) small filter receivers with negligible particulate emissions, and exhausting inside the building.

(7) A PVC pelletizer process, consisting of four (4) pelletizers identified as #1, #2, #4 and #5, with negligible particulate emissions, and exhausting outside the building.

(i) One (1) coated wire printing operation, constructed in 2005, consisting of twenty (20) flowcoating wheel printers, (35) ink jet spray printers, and (15) ringband spray printers; and

(j) One (1) lacquer tower, constructed in 1999, with a maximum application rate of 7.5 lbs of coating per hour.

(k) One (1) armor cabling process, constructed in 2006, with a maximum line speed of 20 fpm uses lubricating oil for aluminum tape forming. Lubricating oil is made up at a rate of approximately 423 gallons per year.

(l) Two (2) tin electroplating lines, identified as #401 and #402, constructed in 1999, with a combined maximum rate of electroplating 46.70 pounds (lbs) of tin per hour and maximum capacity of 8000 Amp/hour, utilizing one (1) wet scrubber for acid gas control, and exhausting through one (1) stack identified as Scrubber Stack.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP limit (HAPs) [326 IAC 2-8]

The single hazardous air pollutant (HAP) and total HAPs input usage to the operations including Wire drawing, Copper wire braiding, Lacquer, and Wire printing shall be limited to less than 9.0 and 24.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively. In determining the HAP input usage for these operations, the Permittee may subtract the quantity of HAPs contained in any waste products shipped from the plant for recovery or disposal only if a HAP content test is performed for the respective waste. Therefore, the source-wide single HAP and total HAPs emissions shall be limited to less than 10 and 25 tons per twelve (12) consecutive month period, respectively.

Compliance with above conditions will also render the requirements of 326 IAC 2-7 (Part 70) and 40 CFR 63 (NESHAP) not applicable.

D.1.2 Volatile Organic Compounds [326 IAC 8-1-6]

The VOC input usage to Lacquer tower shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with the above limit will render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

D.1.3 Particulate Matter Limitation (PM) [326 IAC 6-3]

The particulate matter (PM) emissions from the following processes shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Emission Unit/Process	Process Weight Rate (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency %	Controlled PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Fiberglass Braider	13.31	0.76	95.00%	0.038	0.14
Resin Ground Silo	4230.28	0.06	95.00%	0.003	6.77
Resin Rooftop Silo	4230.28	0.06	95.00%	0.003	6.77
Extruder	20500	0.63	N/A	0.63	19.50
Lacquer Tower	7.5	0.07	N/A	0.07	0.10
Plastic Grinding	1000	0.17	N/A	0.17	2.58

According to the tables, the operation of all the above listed emission units will be in compliance with the requirements of 326 IAC 6-3-2.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP input limitations contained in Condition D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall perform testing to verify HAP content in any waste products shipped from the plant for recovery or disposal in order to demonstrate compliance with Conditions D.1.1. Testing shall be conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAPs emission limits established in Condition D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) VOC and HAP content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The volume weighted VOC and HAP content of the coatings used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC and HAP usage for each month; and

(6) The weight of VOC and HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter month period being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) Two (2) natural gas-fired boilers (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 and #02, constructed in 1986, each with a maximum heat input rate of 9.20 MMBtu per hour, and exhausting through one (1) stack identified as IE;

(b) Four (4) natural gas-fired steam generators (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 through #04, each constructed in 1999, with a maximum heat input rate of 5.02, 5.02, 6.7, and 6.7 MMBtu per hour, respectively, and each exhausting through stacks 46E-3, 46E-3, 46E-3 and 1E, respectively;

(c) One (1) natural gas-fired lacquer tower, identified as Lacquer Tower, with a maximum heat input rate of 0.63 MMBtu per hour;

(d) One (1) natural gas-fired oven, identified as Ringband Oven #01, with a maximum heat input rate of 1.68 MMBtu per hour;

(e) One (1) natural gas-fired process water evaporating unit, with an engineered maximum heat input of 840,000 Btu/ hr, exhausting through one (1) stack identified as Evaporator Stack.

(f) Eighteen (18) natural gas preheaters, each constructed in 1999.

Area	Maximum Capacity of Each, MMBtu/Hr	Number	Total Capacity, MMBtu/Hr
H1/H2	0.046	4	0.184
H1/H2	0.092	4	0.368
H1/H2	0.184	1	0.184
Extrusion	0.223	3	0.669
Extrusion	0.12	6	0.72

(g) Plastic grinding equipment used to reduce the size of plastic scrap to size available for reuse in the extrusion operation.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter Limitation (PM)

(a) Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from Boilers #01 and #02 shall be limited to 0.51 pounds of particulate matter per million British thermal units heat input based on the following equation in the D.3.1 (b).

(b) Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from the four (4) natural gas-fired steam generators, identified as #01 through #04, shall be limited to less than 0.41 pounds of particulate matter per million British thermal units heat input based on the following equation.

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input
Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

D.2.2 Particulate Matter Limitation (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate matter (PM) from the Plastic Grinding shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10*(0.5)^{0.67} = 2.58$ lbs PM/hour

Based on the above equation, particulate matter emissions from the Plastic Grinding shall be limited to 2.58 pounds per hour.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Visible Emissions Notations

(a) Daily visible emission notations of the two (2) boilers, and four (4) steam generators stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere and combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: **Belden Wire & Cable Company.**
Source Address: **350 NW N Street, Richmond, IN 47374**
Mailing Address: **350 NW N Street, Richmond, IN 47374**
FESOP No.: **177-22766-00003**

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: **Belden Wire & Cable Company.**
Source Address: **350 NW N Street, Richmond, IN 47374**
Mailing Address: **350 NW N Street, Richmond, IN 47374**
FESOP No.: **177-22766-00003**

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Belden Wire & Cable Company.
Source Address: 350 NW N Street, Richmond, IN 47374
Mailing Address: 350 NW N Street, Richmond, IN 47374
FESOP No.: 177-22766-00003
Facility: Wire Drawing, Copper Wire Drawing, Lacquer, and Wire printing.
Parameter: Toluene and total HAPs per twelve (12) consecutive month period
Limit: Toluene and total HAPs input usage shall be limited to less than 9.0 and 24.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively.

YEAR:_____

Month	Column 1		Column 2		Column 1 + Column 2	
	This Month		Previous 11 Months		12 Month Total	
	Single HAP	Total HAPs	Single HAP	Total HAPs	Single HAP	Total HAPs
Month 1						
Month 2						
Month 3						

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: **Belden Wire & Cable Company.**
Source Address: **350 NW N Street, Richmond, IN 47374**
Mailing Address: **350 NW N Street, Richmond, IN 47374**
FESOP No.: **177-22766-00003**
Facility: Lacquer Tower
Parameter: Volatile Organic Compounds (tons per 12 consecutive month period)
Limit: Less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: **Belden Wire & Cable Company.**
Source Address: **350 NW N Street, Richmond, IN 47374**
Mailing Address: **350 NW N Street, Richmond, IN 47374**
FESOP No.: **177-22766-00003**

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit

Source Name:	**Belden Wire & Cable Company**
Source Location:	**350 NW N Street, Richmond, IN 47374**
County:	**Wayne**
SIC Code:	**3357**
Permit Number:	**F177-22766-00003**
Permit Reviewer:	**Surya Ramaswamy/EVP**

On November 27, 2006, the Office of Air Quality (OAQ) had a notice published in the Palladium Item, Richmond, Indiana, stating that Belden Wire & Cable Company had applied for a Federally Enforceable Source Operating Permit (FESOP) to operate an electronic wire and cable manufacturing facility. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 22, 2006, David R. Jordan, Principal-in-Charge at Environmental Resources Management submitted comments on the proposed FESOP. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1

Condition A.2 (j): The Lacquer tower is described in this condition as having a "maximum rate of 7.5 pounds per hour". The value provided in this description represents the maximum amount of coating that would be applied in this process. The total production weight of wire that would be processed through this equipment will vary based on wire diameter. Belden requests that this description be changed to read ".....a maximum **application** rate of 7.5 lbs **of coating** per hour." This changed should be made to item (j) of the Facility Description for Section D.1 of the permit as well.

Response 1

The following changes have been made to Sections A.2 and D.1 as requested.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

.....

(j) One (1) lacquer tower, constructed in 1999, with a maximum **application** rate of 7.5 lbs **of coating** per hour.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

....
(j) One (1) lacquer tower, constructed in 1999, with a maximum **application** rate of 7.5 lbs **of coating** per hour.

Comment 2

Condition D.1.1 – Belden has two comments related to this condition:

(a) As currently drafted, this condition limits the hazardous air pollutant (HAP) emissions input usage to wire drawing, copper wire braiding, lacquer, and wire printing to 10 tons per year of single HAP and 25 tons per year of total HAPs. This limit is established to ensure that the plant is a minor source of HAP emissions. Because there are small quantities of HAP emissions that will occur from insignificant activities, Belden suggests that limits in this condition be established as 9.0 tons per year of a single HAP and 24.0 tons per year of a combination of HAPs. With this adjustment, trace HAP emissions from other activities (such as combustion) would not cause the facility to have potential HAP emission above major source thresholds.

(b) Compliance with the HAP limit is determined on the bases of HAP "input usage" to the indicated processes. There is some waste that is generated through these processes that would be subtracted from plants totals in order to obtain a more representative estimate of HAP emissions. While this is being the source request, does the source has the option of sampling if they want to (i.e., they could subtract the VOC/HAP shipped off site if a sample was performed, but would base emissions on input VOC/HAP quantities only if no sampling was performed)? The source don't want a permit condition that required them to perform VOC/HAP testing on all liquid wastes shipped from the plant (particularly if their input VOC/HAP levels were well below major source thresholds).

Comment 3

FESOP Quarterly Report for HAP Compliance – the "Facility" description on this form should be revised to remove reference to insignificant activities, as Condition D.1.1 does not include insignificant activities. In addition, the limit contained in the form should be changed to 9.0 tons of a single HAP and 24.0 tons of total HAPs, consistent with Belden's comment above.

Response 2 & 3

The following changes have been made to Condition D.1.1 and FESOP Quarterly Reporting form as requested. In addition, a new Testing Requirements condition has been as added.

D.1.1 FESOP limit (HAPs) [326 IAC 2-8]

The single hazardous air pollutant (HAP) and total HAPs input usage to the operations including Wire drawing, Copper wire braiding, Lacquer, and Wire printing shall be limited to less than ~~10~~ **9.0** and ~~25~~ **24.0** tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively. **In determining the HAP input usage for these operations, the Permittee may subtract the quantity of HAPs contained in any waste products shipped from the plant for recovery or disposal only if a HAP content test is performed for the respective waste.** Therefore, the source-wide single HAP and total HAPs emissions shall be limited to less than 10 and 25 tons per twelve (12) consecutive month period, respectively.

Compliance with above conditions will also render the requirements of 326 IAC 2-7 (Part 70) and 40 CFR 63 (NESHAP) not applicable.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall perform testing to verify HAP content in any waste products shipped from the plant for recovery or disposal in order to demonstrate compliance with Conditions D.1.1. Testing shall be conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name:	Belden Wire & Cable Company.
Source Address:	350 NW N Street, Richmond, IN 47374
Mailing Address:	350 NW N Street, Richmond, IN 47374
FESOP No.:	177-22766-00003
Facility:	Wire Drawing, Copper Wire Drawing, Lacquer, **and** Wire printing~~, and insignificant activities~~
Parameter:	Toluene and total HAPs per twelve (12) consecutive month period
Limit:	Toluene and total HAPs input usage shall be limited to less than ~~10 and 25~~ **9.0 and less than 24.0** tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Belden Wire & Cable Company**
Source Location:	**350 NW N Street, Richmond, IN 47374**
County:	**Wayne**
SIC Code:	**3357**
Operation Permit No.:	**MSOP 177-11735-00003**
Operation Permit Issuance Date:	**October 24, 2000**
Permit No.:	**F177-22766-00003**
Permit Reviewer:	**Surya Ramaswamy/EVP**

The Office of Air Quality (OAQ) has reviewed an application from Belden Wire & Cable Company relating to the operation of an electronic wire and cable manufacturing facility. The source was issued MSOP Permit No. 177-11735-00003 issued on October 24, 2000.

History

On March 9, 2006, IDEM, OAQ received an application from Belden Wire & Cable Company requesting a transition from their existing MSOP Permit No. 177-11735-00003, issued on October 24, 2000 to a FESOP.

Due to changes in method of calculating potential to emit, the source-wide potential to emit HAPs exceed Title V thresholds. Although the potential to emit HAPs exceed the Title V thresholds, actual emissions are well below these levels. Therefore, this source qualifies for a Federally Enforceable State Operating Permit (FESOP) pursuant to 326 IAC 2-8. Therefore, this permit is being reviewed pursuant to the requirements of 326 IAC 2-8 (FESOP).

Permitted Emission Units and Pollution Control Equipment

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

(a) Five (5) Wire Drawing Quench Systems, constructed in 2002, with a maximum capacity of 9.14 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
M1	5,000	1.43
M2	5,000	1.43
M4	5,000	1.43
Rod Mill	5,000	1.43
SN	5,000	1.43

(b) Nine (9) Wire Drawing Dip Systems, constructed in 2002, with a maximum capacity of 9.68 lb/hr, and consisting of following list of tanks:

Area	Tank Size, Gallons	Drip Pumps (Gallons/Day)
Rod Mill	5,000	1.43
I1	5,000	1.43
M1	5,000	1.43
M2	5,000	1.43
M3	5,000	1.43
M4	5,000	1.43
H1	5,000	1.43
Samp Dip	5,000	1.43
Niehoff Dip	5,000	1.43

(c) Nine (9) wire drawing Spray Misters, constructed in 2002, with a maximum capacity of 18.76 lb/hr of oil sprayed on the wire before being taken up.

(d) One (1) copper wire braiding process, constructed in 2005, with a maximum rate of 0.97 lbs of tape lubricating oil and 71.84 lbs of copper wire per hour.

(e) One (1) fiberglass braiding process constructed in 1999, with a maximum rate of 13.31 lbs of copper wire per hour, with a maximum capacity of 9,000 dscf/min, utilizing dust collector #06, for particulate matter control, and exhausting inside the building.

(f) One (1) continuous vulcanization process, constructed in 1993, consisting of six (6) vulcanizers, each with a maximum operating rate of 406.5 lbs of rubber per hour.

(g) One (1) extrusion process, constructed in 2004, consisting of 41 extruders, each with a maximum operating rate of 500 lbs of resin per hour, exhausting through sixteen (16) stacks identified as 12E-4, 22E-2 and H1-1, H1-2, H1-3, H1-4, H1-5, H1-6, H1-7, H2-1, H2-2, H2-3, H2-4 H2-5, H2-6 and H2-7.
(Note: Some units vent into the room)

(h) One (1) PVC compound handling process, constructed in 2000, with a maximum throughput of 6,351.92 pounds per hour consisting of:

(1) One (1) resin ground silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #01 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building.

(2) One (1) resin rooftop silo, with a maximum rate of 4230.28 lbs per hour, utilizing dust collector #02 which uses one (1) baghouse for particulate matter and HAP control, and exhausting outside the building.

(3) One (1) PVC mixer (Littleford Mixer), surge bin, and six powder bins, with a maximum rate of 6,351.92 lbs per hour, utilizing one dust collector for particulate matter and HAP control, identified as the Littleford dust collector (#04), and exhausting inside the building.

(4) One (1) PVC mixer (Henschel Mixer), manual Hopper and weigh scale, with a maximum rate of 6,351.91 lbs per hour, utilizing one dust collector, identified as Rooftop Baghouse (#05), and exhausting through (1) one Stack identified as 15E.

(5) One surge bin (Henschel surge bin) with a maximum rate 6,351.92 lbs per hour, utilizing one product recovery cyclone and dust collector, identified as Cyclone & Dust Collector (#03), and exhausting through (1) one stack identified as cyclone and dust collector stack.

(6) Seven (7) bulk bag antimony bins and two (2) small filter receivers with negligible particulate emissions, and exhausting inside the building.

(7) A PVC pelletizer process, consisting of four (4) pelletizers identified as #1, #2, #4 and #5, with negligible particulate emissions, and exhausting outside the building.

(i) One (1) coated wire printing operation, constructed in 2005, consisting of twenty (20) flowcoating wheel printers, (35) ink jet spray printers, and (15) ringband spray printers.

(j) One (1) lacquer tower, constructed in 1999, with a maximum rate of 7.5 lbs per hour.

(q) Three (3) tanks, identified as Tank #1, Tank #2 and Tank #3, each with a maximum tank capacity of 20,000 gallons, and each containing fuel oil grade 2, fuel oil grade 2 and propane, respectively.

(r) One (1) armor cabling process, constructed in 2006, with a maximum line speed of 20 fpm uses lubricating oil for aluminum tape forming. Lubricating oil is made up at a rate of approximately 423 gallons per year.

Emission Units and Pollution Control Equipment Removed From This Source

The following permitted emission units have been removed from this source:

(a) Five (5) natural gas-fired annealing ovens (using propane as backup fuel), identified as #01 through #05, each with a maximum heat input rate of 0.6 million (MM) British thermal units (Btu) per hour, exhausting through five (5) stacks identified as 24E-1 through 24E-5;

(b) Two (2) lead bins, with a maximum rate of 41.89 lbs per hour, utilizing dust collector #04 which uses one (1) baghouse for particulate matter control;

(c) One (1) natural gas-fired steam generator, identified as #05, with a maximum heat input rate of 6.7 MMBtu per hour, exhausting through one (1) stack identified as 1 E; and

(d) One (1) natural gas-fired blower, identified as Kemp Gas Machine, with a maximum heat input rate of 6.3 MMBtu per hour;

Unpermitted Emission Units and Pollution Control Equipment

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

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Two (2) natural gas-fired boilers (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 and #02, constructed in 1986, each with a maximum heat input rate of 9.20 MMBtu per hour, and exhausting through one (1) stack identified as IE.

(2) Four (4) natural gas-fired steam generators (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 through #04, each constructed in 1999, with a maximum heat input rate of 5.02, 5.02, 6.7, and 6.7 MMBtu per hour, respectively, and each exhausting through stacks 46E-3, 46E-3, 46E-3 and 1E, respectively.

(3) One (1) natural gas-fired lacquer tower, identified as Lacquer Tower, with a maximum heat input rate of 0.63 MMBtu per hour;

(4) One (1) natural gas-fired oven, identified as Ringband Oven #01, with a maximum heat input rate of 1.68 MMBtu per hour.

(5) One (1) natural gas-fired process water evaporating unit, with an engineered maximum heat input of 840,000 Btu/ hr, exhausting through one (1) stack identified as Evaporator Stack.

(6) Eighteen (18) natural gas preheaters, each constructed in 1999.

Area	Maximum Capacity of Each, MMBtu/Hr	Number	Total Capacity, MMBtu/Hr
H1/H2	0.046	4	0.184
H1/H2	0.092	4	0.368
H1/H2	0.184	1	0.184
Extrusion	0.223	3	0.669
Extrusion	0.120	6	0.720

(b) Two (2) tin electroplating lines, identified as #401 and #402, constructed in 1999, with a combined maximum rate of electroplating 46.70 pounds (lbs) of tin per hour and maximum capacity of 8000 Amp/hour, utilizing one (1) wet scrubber for acid gas control, and exhausting through one (1) stack identified as Scrubber Stack.

(c) The following VOC and HAP storage containers:

(1) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Machining where an aqueous cutting coolant continuously floods the machining interface.

(e) Closed loop heating and cooling systems.

(f) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

(g) Forces and inducted draft cooling tower system not regulated under a NESHAP.

(h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(i) Heat exchanger cleaning and repair.

(j) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(k) Other emergency equipment as follows: Stationary fire pumps.

(l) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(m) Purge double block and bleed valves.

(n) Two (2) electric burn-off tooling ovens used to heat tools or maintenance parts to burn any cured resin residue remaining on the tool; and

(o) Plastic grinding equipment used to reduce the size of plastic scrap to size available for reuse in the extrusion operation.

Existing Approvals

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

Minor Source Operating Permit 177-11735-00003, issued on October 24, 2000.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP initial application for the purposes of this review was received on March 09, 2006. Additional information was received on May 1, 2006

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Appendix A, pages 1 through 17).

Potential to Emit

Pursuant to 326 IAC 2-7-1(29), 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, inclulding 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.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/yr)
PM	14.75
PM-10	14.89
SO_2	38.93
VOC	81.27
CO	17.33
NO_x	28.41
HAPs	**Potential to Emit (tons/yr)**
Toluene	20.84
Hexane	9.09
Glycol Ethers	2.53
Methyl Isobutyl Ketone	2.10
Total	> 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP because the source will limit its emissions below the Title V levels.

Potential to Emit After Issuance

The source has opted to be a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)						
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_x	HAPs
Electroplating	0.00	0.00	0.00	1.47	0.00	0.00	0.00
Combustion(1)	4.35	4.49	38.93	1.14	17.33	28.41	0.04
Wire Drawing	0.00	0.00	0.00	10.92	0.00	0.00	(2)
Copper Wire Braiding	0.00	0.00	0.00	14.71	0.00	0.00	(2)
Fiber Glass Braiding	3.37	3.37	0.00	0.00	0.00	0.00	0.00
Vulcanizing	0.00	0.00	0.00	0.38	0.00	0.00	0.20
Extrusion	2.77	2.77	0.00	3.17	0.00	0.00	0.01
PVC Compound Handling	3.16	3.16	0.00	0.00	0.00	0.00	0.32
Lacquer Tank(3)	0.33	0.33	0.00	< 25	0.00	0.00	(2)
Printing	0.00	0.00	0.00	19.97	0.00	0.00	(2)
Plastic Grinding	0.77	0.77	0.00	0.00	0.00	0.00	0.00
Arm Cell	0.00	0.00	0.00	1.67	0.00	0.00	0.00
Total Emissions	**14.75**	**14.89**	**38.93**	**82.94**	**17.33**	**28.41**	**Single < 10 Total < 25**

(1) Boilers ID # 1 and 2 use natural gas as the primary fuel and # 2 fuel oil as back up fuel. The total represents worst case emissions for each pollutant.

(2) Single HAP and total HAPs emissions from these operations are limited to less than 10 and 24.43 tons per year, respectively.
(3) Belden wire & Cable Company has opted to limit the potential to emit VOC from Lacquer Tank to less than twenty-five (25) tons twelve (12) consecutive month period, with compliance determined at the end of each month to render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(c) Wayne County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

(d) Wayne County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Federal Rule Applicability

(a) The requirements of New Source Performance Standard (NSPS), 326 IAC 12 and 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) are not included in the permit for the two (2) heating boilers, identified as #01 and #02 and the four (4) steam generators, identified as #01 through #04. This NSPS applies only to boilers or process heaters with a maximum heat input capacity greater than ten (10) MMBtu per hour. The natural gas-fired boilers and steam generators at the source operate at a maximum heat input capacity of less than 10 MMBtu per hour each.

(b) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12 and 40 CFR 60, Subpart QQ - Standards of Performance for the Graphic Arts Industry : Publication Rotogravure Printing (326 IAC 12), are not included in the permit, because this rule only applies to rotogravure printing presses. The source does not operate any rotogravure presses at the plant.

(c) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the two (2) 20,000 gallon grade 2 fuel oil storage tanks were constructed after July 23, 1984. Although these tanks have a storage capacity greater than 75 cubic meters but less than 151 cubic meters each, the volatile organic liquids stored in the tanks has a maximum true vapor pressure of less than 15.0 kPa each. Therefore, pursuant to 40 CFR 60.110b (b), as amended in the October 15, 2003 Federal Register, these tanks are not subject to this rule.

(d) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" are not included in the permit for the tanks in the wire drawing quench system and wire drawing dip system, because each tank has a capacity less than 75 cubic meters.

(e) The requirements of New Source Performance Standard (NSPS), 326 IAC 12 , (40 CFR 60.110, Subpart K) "Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978", are not included in the permit for the one (1) 20,000 gallon propane storage tank (constructed in 1975) because it does not have a storage capacity greater than 40,000 gallons.

(f) The requirements of 326 IAC 20 and 40 CFR Part 63, Subpart KK - National Emission Standards for the Printing and Publishing Industry (NESHAP)(326 IAC 20) are not included in the permit, because this source is not a major source of hazardous air pollutants (HAPs).

(g) The requirements of 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, are not included in this permit for the two (2) heating boilers, identified as #01 and #02 and the four (4) steam generators, identified as #01 through #04 because this source is not a major source of HAPs.

(h) The requirements of 326 IAC 20 and 40 CFR 63, Subpart MMMM - National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products are not included in this permit, because this source is not a major source of HAPs.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Belden's plant located at 350 NW N Street, Richmond is not one (1) of the twenty-eight (28) source categories. Since the source was originally constructed in 1986, the potential to emit of each criteria pollutant before control has always been less than the 250 tons per year. No major modification has been done since the source was originally constructed. Therefore, it is a minor source for PSD (Prevention of Significant Deterioration), 326 IAC 2-2 purposes.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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 the permit:

(a) Opacity shall not exceed an average of forty percent (40%) in 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 8-9-1 (Volatile Organic Liquid Storage Vessels)

The Permittee is not subject to the provisions of 326 IAC 8-9-1, because it is not located in Lake, Porter, Clark or Floyd counties as listed under this rule.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this stationary wire and cable manufacturing plant is not subject to the requirements of 326 IAC 2-4.1, because it is not a major source of HAPs.

326 IAC 2-8 (FESOP)

The single hazardous air pollutant (HAP) and total HAPs input usage to the operations including Wire drawing, Copper wire braiding, Lacquer, and Wire printing shall be limited to less than 10 and 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month, respectively. Therefore, the source-wide single HAP and total HAPs emissions shall be limited to less than 10 and 25 tons per twelve (12) consecutive month period, respectively.

Compliance with above conditions will also render the requirements of 326 IAC 2-7 (Part 70) not applicable.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

(a) The two (2) natural gas fired boilers (#01 and #02), constructed in 1986, using no. 2 fuel oil as backup, each rated at 9.2 MMBtu per hour, respectively, are subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, the boilers are limited by the following equation from 326 IAC 6-2-4:

$Pt = 1.09/Q^{0.26}$

where:

Pt = maximum allowable particulate matter (PM) emitted per MMBtu

Q = total source max. indirect heat input (#01 and #02) = 9.2 + 9.2 = 18.4MMBtu/hr

$Pt = 1.09/18.4^{0.26}$ = 0.51 lbs PM/MMBtu

The PM emissions from the two (2) boilers shall be limited to less than 0.51 lbs PM/MMBtu.

Compliance calculation:
Potential PM emissions for all two boilers = 1.9 lb PM/mmCF * (1/1000) (mmCF/MMBtu) = 0.0019 lbs PM/MMBtu.

Potential PM emissions for the two boilers (0.0019 lbs PM/MMBtu) are less than allowable 0.51 lbs PM/MMBtu, therefore, the boilers will be able to comply with the requirements of 326 IAC 6-2-4.

(b) Four (4) natural gas-fired steam generators (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 through #04, each constructed in 1999, with a maximum heat input rate of 5.02, 5.02, 6.7, and 6.7 MMBtu per hour, respectively, are subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, the boilers are limited by the following equation from 326 IAC 6-2-4:

$Pt = 1.09/Q^{0.26}$

where:

Pt = maximum allowable particulate matter (PM) emitted per MMBtu

Q = total source max. indirect heat input (Boilers and steam Generators) = 9.2 + 9.2 + 5.02 + 5.02 + 6.7 + 6.7 = 41.84 MMBtu/hr

$Pt = 1.09/41.84^{0.26}$ = 0.41 lbs PM/MMBtu

The PM emissions from the four (4) natural gas-fired steam generators (using no. 2 fuel oil as backup, with a maximum sulfur content of 0.21%), identified as #01 through #04 shall be limited to less than 0.41 lbs PM/MMBtu.

Compliance calculation:
Potential PM emissions for all steam generators

= 1.9 lb PM/mmCF * (1/1000) (mmCF/MMBtu) = 0.0019 lbs PM/MMBtu.

Potential PM emissions for the two boilers (0.0019 lbs PM/MMBtu) are less than allowable 0.41 lbs PM/MMBtu, therefore, the boilers will be able to comply with the requirements of 326 IAC 6-2-4.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) The particulate matter (PM) emissions from the following processes shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Emission Unit/Process	Process Weight Rate (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency %	Controlled PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Fiberglass Braider	13.31	0.76	95.00%	0.038	0.14
Resin Ground Silo	4230.28	0.06	95.00%	0.003	6.77
Resin Rooftop Silo	4230.28	0.06	95.00%	0.003	6.77
Surge bin (Henschel surge bin)	6351.92	0.25	95.00%	0.0125	8.89
PVC mixer (Littleford Mixer)	6351.92	0.08	95.00%	0.004	8.89
PVC mixer (Henschel Mixer)	6351.92	0.25	95.00%	0.0125	8.89
Extruder	20500	0.63	N/A	0.63	19.50
Lacquer Tower	7.5	0.07	N/A	0.07	0.10
Plastic Grinding	1000	0.17	N/A	0.17	2.58

According to the tables, the operation of all the above listed emission units will be in compliance with the requirements of 326 IAC 6-3-2.

(b) The potential to emit of particulate emissions from: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations are less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), this operation is exempt from particulate emission limitations for manufacturing processes (326 IAC 6-3-2).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The two (2) natural gas-fired boilers, identified as #01 and #02, each constructed in 1986 and four (4) natural gas-fired steam generators, identified as #01 through #04, each constructed in 1999 are not subject to this rule because the potential to emit of SO_2 from each unit is less than 25 tons per year or 10 pounds per hour.

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Pursuant to this rule, the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate (pounds SO_2 per MMBtu), to the OAQ upon request.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

Pursuant to 326 IAC 8-1-6, new facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a potential to emit (PTE) VOC at 25 tons or more per year, and which are not otherwise regulated by another provision of Article 8, are subject to the requirements of this rule. Potential VOC emissions from the Lacquer tower are greater than 25 tons per year and were constructed in 1999. Therefore the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 are potentially applicable to this facility.

Belden Wire & Cable Company has opted to limit the VOC input usage to Lacquer tower to less than twenty-five (25) tons twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to this facility.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Pursuant to 326 IAC 8-4-1 (Applicability) and 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons) containing VOC whose true vapor pressure is greater than 10.5 kPa (1.52 psi) shall comply with the requirements for external fixed and floating roof tanks and the specified record keeping and reporting requirements. The tanks identified as Tank #1, Tank #2 and Tank #3, each with a maximum tank capacity of 20,000 gallons, and each containing fuel oil grade 2, fuel oil grade 2 and propane, respectively, are not subject to the requirements of 326 IAC 8-4-3, since the storage capacity of each tank is below the rule applicability threshold of 39,000 gallon.

326 IAC 8-5-5 (Graphic Arts Operation)

The printers used at this source do not meet the definition of packaging rotogravure printers, publication rotogravure printers, or flexographic printers as defined in 326 IAC 8-5-5(b); therefore, 326 IAC 8-5-5 does not apply to the printing operations.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(1) The two (2) boilers, and four (4) steam generators, have applicable compliance monitoring conditions as specified below:

(a) Daily visible emission notations of the two (2) boilers, and four (4) steam generators stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere and combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Conclusion

The operation of this electric wire and cable manufacturing facility shall be subject to the conditions of the **FESOP 177-22766-00003.**

Appendix A: Emissions Calculations
Company Name: Belden Wire & Cable Company
Address City IN Zip: 350 NW N Street, Richmond, IN 47374
Plt ID: 177-00003
Reviewer: Surya Ramaswamy / EVP

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity												
Pollutant	Electroplating	Natural Gas Combustion	Wire Drawing	Copper Wire Braiding	Fiber Glass Braiding	Vulcanizing	Extrusion	PVC Resin	Lacquer	Wire Printing	Armor Cell	Grinding	Total
Emission Unit			Quench System, Dip System & Spray Misters										
PM	0.00	4.35	0.00	0.00	3.37	0.00	2.77	3.16	0.33	0.00	0.00	0.77	14.75
PM10	0.00	4.49	0.00	0.00	3.37	0.00	2.77	3.16	0.33	0.00	0.00	0.77	14.89
SO2	0.00	38.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.93
NOx	0.00	28.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.41
VOC	1.47	1.14	10.92	14.71	0.00	0.38	3.17	0.00	29.52	19.97	1.67	0.00	82.94
CO	0.00	17.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.33
Total HAPs	0.00	0.04	5.39	10.77	0.00	0.20	0.01	0.32	9.86	8.60	0.00	0.00	35.18
Single HAP	0.00	0.04	2.53	7.18	0.00	0.01	0.01	0.32	9.86	6.43	0.00	0.00	16.29
		(Hexane)	(Glycol Ethers)	(Hexane)		(Toluene)	(Formaldehyde)	(Animony)	(Toluene)	(Toluene)			(Toluene)

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

	Emissions Generating Activity												
Pollutant	Electroplating	Natural Gas Combustion	Wire Drawing	Copper Wire Braiding	Fiber Glass Braiding	Vulcanizing	Extrusion	PVC Resin	Lacquer	Wire Printing	Armor Cell	Grinding	Total
Emission Unit			Quench System, Dip System & Spray Misters										
PM	0.00	4.35	0.00	0.00	3.37	0.00	2.77	3.16	0.33	0.00	0.00	0.77	14.75
PM10	0.00	4.49	0.00	0.00	3.37	0.00	2.77	3.16	0.33	0.00	0.00	0.77	14.89
SO2	0.00	38.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.93
NOx	0.00	28.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.41
VOC	1.47	1.14	10.92	14.71	0.00	0.38	3.17	0.00	25.00	19.97	1.67	0.00	78.42
CO	0.00	17.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.33
Total HAPs	0.00	0.00	*	*	0.00	0.20	0.01	0.32	*	*	0.00	0.00	< 25
Single HAP	0.00	0.04	*	*	0.00	0.01	0.01	0.32	*	*	0.00	0.00	
		(Hexane)				(Toluene)	(Formaldehyde)	(Animony)					

Total emissions based on rated capacity at 8,760 hours/year, after control.

* Note: Single HAP and total HAPs emissions from these operations are limited to less than 10 and 24.43 tons per year, respectively.

Appendix A: Emissions Calculations

MM BTU/HR <100

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)
Boiler 01 (Natural Gas)	0.0092	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.3062	0.3062	0.0242	4.0296	0.2216	3.3849
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
9.20 MMBtu/hr = 0.0092 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
Boiler 01 (#2 Fuel Oil)	0.065	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.9395	0.9395	8.4898	5.6940	0.0717	1.4235
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
9.20 MMBtu/hr = 0.065 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Boiler 02 (Natural Gas)	0.0092	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.3062	0.3062	0.0242	4.0296	0.2216	3.3849
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
9.20 MMBtu/hr = 0.0092 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
Boiler 02 (#2 Fuel Oil)	0.065	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.9395	0.9395	8.4898	5.6940	0.0717	1.4235
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
9.20 MMBtu/hr = 0.065 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Steam Generator 01 (Natural Gas)	0.0050	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.1671	0.1671	0.0132	2.1988	0.1209	1.8470
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
5.02 MMBtu/hr = 0.00502 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
Steam Generator 01 (#2 Fuel Oil)	0.036	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.5203	0.5203	4.7020	3.1536	0.0397	0.7884
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
5.02 MMBtu/hr = 0.036 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Steam Generator 02 (Natural Gas)	0.0050	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.1671	0.1671	0.0132	2.1988	0.1209	1.8470
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
5.02 MMBtu/hr = 0.00502 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						

Steam Generator 02 (#2 Fuel Oil)	0.036	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.5203	0.5203	4.7020	3.1536	0.0397	0.7884
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
5.02 MMBtu/hr = 0.036 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Steam Generator 03 (Natural Gas)	0.0067	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.2230	0.2230	0.0176	2.9346	0.1614	2.4651
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
6.7 MMBtu/hr = 0.0067 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
Steam Generator 03 (#2 Fuel Oil)	0.048	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.6938	0.6938	6.2694	4.2048	0.0530	1.0512
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
6.7 MMBtu/hr = 0.048 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Steam Generator 04 (Natural Gas)	0.0067	PM	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%	0.2230	0.2230	0.0176	2.9346	0.1614	2.4651
	MMcf/hr	PM-10	7.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
1,000 BTU = 1 cf		SO2	0.6	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
6.7 MMBtu/hr = 0.0067 MMCf/hr		NOx	100	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
		VOC	5.5	lb/mmcf	AP-42 Table 1.4-2	0.00%	0.00%						
SCC 1-02-006-02		CO	84	lb/mmcf	AP-42 Table 1.4-1	0.00%	0.00%						
Steam Generator 04 (#2 Fuel Oil)	0.048	PM*	3.3	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%	0.6938	0.6938	6.2694	4.2048	0.0530	1.0512
% Sulfur content = 0.21%	kgal/hr	PM-10*	3.3	lb/kgal	FIRE 6.25 Database	0.00%	0.00%						
SO2 = 142*(% Sulfur content)		SO2	29.82	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
140 MMBtu per 1000 gal (of 1 kgal)		NOx	20	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
6.7 MMBtu/hr = 0.048 kgal/hour		VOC	0.252	lb/kgal	AP-42 Table 1.3-3	0.00%	0.00%						
SCC 1-02-005-03		CO	5	lb/kgal	AP-42 Table 1.3-1	0.00%	0.00%						
Total Emissions								**4.31**	**4.31**	**38.92**	**26.10**	**1.01**	**15.39**

Notes:

1. Total emissions are calculated by adding the maximum emissions from each unit for that pollutant.
For example: PM emission would be equal to 0.9395 tpy burning fuel oil and VOC would total 0.2216 for natural gas because it is the higher of two for those pollutants.
(for this reason highlighted cells do NOT get added in the total)
2. PM and PM-10 Emissions for the fuel oil combustion include both filterable particulate and condensible particulate.
3. The maximum sulfur content in the fuel oil is 0.21%
4. Sulfur emission factor for #2 (distillate oil) = 124*S where S is the % Sulfur
Emission factor = 142*0.21 = 29.82 lb/kgal
5. #2 fuel oil will be used as back-up fuel.
6. Boilers 01, 02 & Steam Generator 04 exhaust through a shared stack identified as Stack IE.
7. Steam Generator 01 exhasuts through Stack 46E-1
8. Steam Generator 02 exhasuts through Stack 46E-2
9. Steam Generator 03 exhasuts through Stack 46E-3

Conversion Factors

140 MMBtu = 1000 gallons (1 Kgal)
1,000 BTU = 1 cf
8,760 hours = 1 year (365 days/year * 24 hours/day)
1 ton = 2,000 pounds

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

Company Name: Belden Wire & Cable Company
Address City IN Zip: 350 NW N Street, Richmond, IN 47374
Plt ID: 177-00003
Reviewer: Surya Ramaswamy / EVP

Facilities	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
Four Preheaters each rated at 46,000 Btu/hr	0.184	**46.2**
Four Preheaters each rated at 92,000 Btu/hr	0.368	
One Preheater is rated at 184,000 Btu/hr	0.184	
Three Preheaters each rated at 223,200 Btu/hr	0.670	
Six Preheaters each rated at 120,000 Btu/hr	0.720	
One Evaporator is rated at 840,000 Btu/hr	0.840	
Lacquer Tower	0.630	
Oven (Ringband Oven #01)	1.680	
Total	**5.276**	

	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	0.04	0.18	0.01	2.31	0.13	1.94

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable 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

	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	4.852E-05	2.773E-05	1.733E-03	4.159E-02	7.856E-05

	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	1.155E-05	2.542E-05	3.235E-05	8.781E-06	4.852E-05

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

Appendix A: Emissions Calculations

Electroplating

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls						
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)
Electroplating	8,000.00	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	1.4725	0.0000	0.0000
	Amp/hour	PM-10	-	-	-	0.00%	0.00%							
		SO2	-	-	-	0.00%	0.00%							
VOCs are from T-8738		NOx	-	-	-	0.00%	0.00%							
		VOC	4.68%	Percentage	MSDS	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	-	-	-	0.00%	0.00%							

Tank Makeup

Tank Description	Tank Size (gallons)	Component	Description	Percentage	Gallons	Amount VOCs	VOC (lb)
Degreaser Tank	400	City Water	Water	93.0%	372	0	
		T-8865	Ronaclean E-950 LF	7.0%	**28**	0	
Pickling Tank	400	Deionized Water	Water	85.0%	340.0	0.0	
		T-8908	Solderon ™ Acid HC	15.0%	60	0	
Tin "A" Tank	400	Deionized Water	Water	66.7%	266.8	0.0	
		T-7078	Solderon ™ Tin HS-300 Concentrate	12.5%	50	0	
		T-8908	Solderon ™ Acid HC	10.6%	42.4	0	
		T-8738	Solderon ™ MHS-W Primary	8.7%	34.8	4.68%	13.58
		T-8748	Solderon ™ RD Concentrate	1.5%	6	0	
		Tin Metal Balls	Tin Metal Balls	-	-	0	
Tin "B" Tank	400	Deionized Water	Water	66.7%	266.8	0	
		T-7078	Solderon ™ Tin HS-300 Concentrate	12.5%	50	0	
		T-8908	Solderon ™ Acid HC	10.6%	42.4	0	
		T-8738	Solderon ™ MHS-W Primary	8.7%	34.8	4.68%	13.58
		T-8748	Solderon ™ RD Concentrate	1.5%	6	0	
		Tin Metal Balls	Tin Metal Balls	-	-	0	
Water Rinse Tank	400	Water	Water	100.0%	400	0	
						Total	**27.17** **lbs**
						Tank Makeup	

Additives

Maximum Current	8,000	Amp/hour
Average	6,000	Amp/hour
Addition of T8738	200	ml/1,000 Amp-hours
	8,760	hours/year
Density of T8738	8.34	lb/gal
	3.785	L/gal
	1,000	ml/L
T8738 Added	3,703.04	Gal/hour
VOC	1,445.34	Pounds VOC/hour

Total Uncontrolled VOC 0.74 TPY VOC per line

Total Uncontrolled VOC 1.47 TPY VOC per both electroplating lines

Notes

1. Non Emitting Additives include 15 gallons of T-8908 Acid per week, 22 pounds of degreaser per week, tin concentrate is only added on a new make-up tank or major leak.
2. The two electroplaing lines utilize a wet scrubber for control of the acid mist from the electroplating tanks. The emission calculated do NOT include controls from the scrubber.
3. Particulate emissions are assumed to be negilible.
4. The maximum amount of tin balls added per hour is 46.2 lb/hour. This assumes utilizing the heaviest tin product 12-735. Average rate is 29.1 lb/hour.

Appendix A: Emissions Calculations

Wire Drawing

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)	Glycol Ethers (TPY)	Toluene (TPY)	Hexane (TPY)
Quench Systems	9.14	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	2.8028	0.0000	0.0000	0.0000	0.0000	0.0000
	lb/hr	PM-10	-	-	-	0.00%	0.00%										
		SO2	-	-	-	0.00%	0.00%										
		NOx	-	-	-	0.00%	0.00%										
		VOC	7.00%	Percentage	MSDS	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	0.00%	Percentage	MSDS	0.00%	0.00%										
Dip Systems	9.66	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	4.2300	0.0000	2.5380	2.5380	0.0000	0.0000
	lb/hr	PM-10	-	-	-	0.00%	0.00%										
		SO2	-	-	-	0.00%	0.00%										
		NOx	-	-	-	0.00%	0.00%										
		VOC	10.00%	Percentage	MSDS	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	6%	Percentage	MSDS	0.00%	0.00%										
9 Spary Misters	18.76	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	3.8961	0.0000	2.8529	0.0000	0.951	1.902
T8653	lb/hr	PM-10	-	-	-	0.00%	0.00%										
(see copper wire braiding		SO2	-	-	-	0.00%	0.00%										
tab for MSDS info)		NOx	-	-	-	0.00%	0.00%										
		VOC	0.82	1lb/lb	MSDS	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	0.6	lb/lb	MSDS	0.00%	0.00%										
Totals								0.0000	0.0000	0.0000	0.0000	10.9289	0.0000	5.3909	2.5380	0.9510	1.9019

Supporting Calculations

Emission Unit	Area	Material	Tank Size	Drip Pumps (gal/day)	Concentration of Drawing Fluid	SG	VOC	HAPs
Five (5) Wire Drawing Quench Systems	M1	T8723	5,000	1.43	10%	-	-	-
	M2	T8933	5,000	1.43	10%	0.92	7%	None
	M4	T8910	5,000	1.43	10%	-	-	-
	Rod Mill	T8933	5,000	1.43	10%	0.92	7%	None
	SN	T8723	5,000	1.43	10%	-	-	-
Nine (9) Wire Drawing Dip Systems	Rod Mill	T8929	5,000	1.43	10%	0.925	Unknown	6% Glycol Ether
	I1	T8929	5,000	1.43	10%	0.925	Unknown	6% Glycol Ether
	M1	T22710	5,000	1.43	10%	-	-	-
	M2	T8930	5,000	1.43	10%	0.925	5.00%	-
	M3	T8930	5,000	1.43	10%	0.925	5.00%	-
	M4	T8937/401A	5,000	1.43	10%	0.93	0.00%	-
	H1	Blachford 701	5,000	1.43	10%	0.95	10.00%	-
	Samp Dip	T8910	5,000	1.43	10%	0.92	Unknown	-
	Niehoff Dip	T8910	5,000	1.43	10%	0.92	Unknown	-

Number of Quench tanks	5	
Number of DipTanks	9	
Tanks Size	5000	gallons
Drawing Fluid per tank	10%	
Water per tank	90%	
Max. Drip Pump Rate	1.4285714	gal/day each tank
Fluid Specific Gravity	0.95	
VOC in the Dip Fluid	10%	
HAP in the Dip Fluid	6%	glycol ethers
VOC in the Quench Fluid	7%	
HAP in the Quench Fluid	0%	

Potential to Emit VOC from the drawing fluid
(Initial tank makeup of draw fluid + drip pump rate)*(VOC content)

1.33	Dip Changeouts per year per system
3	Quench Changeouts per year per system
5,985	Gallons of initial makeup drawing fluid per year for the Dip Tanks
7,500	Gallons of initial makeup drawing fluid per year for the Quench Tanks
4,693	Gallons added from the drip pump per year to Dip Tanks
2,607	Gallons added from the drip pump per year to Quench Tanks
18.80	lbs of fluid per hour
14,065.6	lb/year VOC
7.0	tons/year VOC
5,076.0	lb/year HAP (glycol ether)
2.5	tons/year HAP (glycol ether)

Notes

1. The drawing systems changeout every 8 months or 1.33 times per year.
2. The quench systems changeout every 4 months or 3 times per year.
3. The quantity of VOCs and HAPs are over-estimated because they are based on the worse case VOC content of 10% for the dip system and 7% for the quench and worse case HAP content of 6% Glycol Ethers for the dip system, and assumes that 100% of the VOCs and HAPs added to the tanks are evaporated.
4. The pumps add approximately 10 gallons per week or 1.43 gallons/day on each system.
5. T8653 product - Textile Lube contains (20% Toluene and 60% Hexane), it is sprayed on wire before being coiled for electroplating. Potential emissions are computed on the basis of equipment utilization rates.

2005 Throughput (Estmiated for Wire Drawing) (Gallons)	T Number	Utilization Factor	Density (lb/gal)	VOC (lb/gal)	Toluene %	Hexane %	VOC Emissions (tons)	PTE VOC (tons)	Toluene (tons)	PTE Toluene (tons)	Hexane (tons)	PTE Hexane (tons)	Total PTE HAPS (tons)
733	T8653	1.94	6.7	5.49	20%	40%	2.013	3.90	0.491	0.951	0.983	1.902	2.853

Utilization Factor (provided by Ruth Gray, Industrial Engineer for Wire Mill)

2005 equipment utilization =	62%
Utilization Factor =	1.94

Appendix A: Emissions Calculations

Copper Wire Braiding

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

Description:

Copper wire braiding is a process in which a subunit (jacketed conductor) is passed through a machine with rotating bobbins of fine gauge copper strands. Upon passing the rotating bobbins, a fine web-like insulation of fine gauge copper strands have been placed around the subunit to prevent interference during transmission. This process utilizes 0.62 gallons per hour of lubricating oil during a tape application, which emits 14.7 tons per year of VOC

								Potential to Emit After Controls								
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)	Toluene (TPY)	Hexane (TPY)
Copper Wire Braiding Lube Oil	See Notes	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	14.7101	0.0000	10.7713	3.590	7.181
	0.61	PM-10	-	-	-	0.00%	0.00%									
	gal/yr	SO2	-	-	-	0.00%	0.00%									
T8653		NOx	-	-	-	0.00%	0.00%									
Density = 6.7 lb/gal		VOC	See Notes		See Notes	0.00%	0.00%									
VOC = 5.49 lb/gal = 82%		CO	-	-	-	0.00%	0.00%									
		HAPs	See Notes		See Notes	0.00%	0.00%									

Notes:

1. Estimates are from T8653 product - Textile Lube
2. HAPs are estimated by MSDS (20% Toluene and 40% Hexane)
3. The maximum throughput is 1,467 gallons * 3.65 = 5,355 gallons/yr (5,355 gal per yr/8,760 hours per year = 0.61 gal/hr)
4. The emissions are based on 2005 actual purchases and a utilization factor for the braiders.
   T8653 is used for both copper wire braiding and wire drawing. 2,200 gallons of T8653 was purchased in 2005, it is estimated that 2/3 of the usage is for copper wire braiding and 1/3 is used for wire drawing. T8653 emissions are separated on both the copper wire braiding calculations and wire drawing calculations.

2005 Throughput (Estmiated for Copper Wire Braiding) (Gallons)	T Number	Utilization Factor	Density (lb/gal)	VOC (lb/gal)	Toluene %	Hexane %	VOC Emissions (tons)	PTE VOC (tons)	Toluene (tons)	PTE Toluene (tons)	Hexane (tons)	PTE Hexane (tons)	Total PTE HAPS (tons)
1,467	T8653	3.65	6.7	5.49	20%	40%	4.026	14.71	0.983	3.590	1.965	7.181	10.771

2005 average braider machine utilization by work center

work center	PE #	net factored machine capacity weekly*	average output weekly	average machine utilization weekly	
111400	16ww 306	3855	2945	76%	
111401	16ww 306	3855	75	2%	
111406	16ww hi spd	2142	630	29%	
111407	16ww bed hi spd	2142	249	12%	
111409	16cc spirka	1428	769	54%	
111410	16cc spirka	1570	9	1%	
111440	airgap	988	83	8%	
112400	16ww	6854	2170	32%	
112401	16ww	6711	3331	50%	
112409	16cc spirka	286	209	73%	
113400	16ww	1713	1231	72%	
113420	24ww	3141	898	29%	
113421	24ww	3141	928	30%	
113427	24cc spirka	537	133	25%	
113440	twinner braider	286	50	17%	
114400	16ww 306	4569	1747	38%	
121400	16ww	3360	843	25%	
121420	24ww	714	258	36%	
121427	24cc spirka	142	10	7%	
123400	16ww 306	5491	1838	33%	
123401	16ww 306	8568	4144	48%	
123404	16ww 308	269	8	3%	
123420	24ww 305	537	107	20%	
123421	24ww 305	205	81	40%	
123427	24cc spirka	126	15	12%	
126404	16wd glass	706	87	12%	
126424	24ww glass	706	37	5%	
127400	16ww 306	1176	301	26%	
127404	16ww 308	1764	377	21%	
127420	24ww 305	588	46	8%	
128400	16ww 306	1713	649	38%	
128406	16ww el	1428	413	29%	
128409	16cc spirka	428	71	17%	
128420	24ww	218	66	30%	
128427	24cc spirka	428	54	13%	
128440	airgap	143	2	1%	
129400	16cc spirka	1570	330	21%	
129420	2.02 ww	428	97	23%	
		73926	25291	**3.65**	**utilization factor (with 20% added back)**

Notes:

* Net Factored Machine Capacity (weekly) is based on the maximum machine capacity with 20% downtime factored in.

Appendix A: Emissions Calculations

Fiberglass Braiding

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls						
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)
Fiberglass Braiding Dust Collector 06	9,000	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	3.3789	3.3789	0.0000	0.0000	0.0000	0.0000	0.0000
	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
		NOx	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	-	-	-	-	-							

Appendix A: Emissions Calculations

Vulcanizing

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls								
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)	Toluene (TPY)	Hexane (TPY)
Vulcanizing - Rubber Extrusion	2,439	PM	1.51E-08	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%	0.0002	0.0002	0.0000	0.0000	0.3750	0.0000	0.2019	0.0096	0.0090
	lb/hr	PM-10	1.51E-08	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									
Compound #9		SO2	-	-	-	0.00%	0.00%									
		NOx	-	-	-	0.00%	0.00%									
		VOC	0.0000351	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									
		CO	-	-	-	0.00%	0.00%									
		HAPs	0.0000189	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									
		Tolune	8.95E-07	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									
		MEK	1.15E-07	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									
		Hexane	8.38E-07	lb/lb	AP-42 DRAFT Table 4.12-6	0.00%	0.00%									

Notes:

1. There are 6 vulcanizing lines that each operate at 406.5 lb/hour. Total for all six = 2,439 lb/hr (Derek Janquart, Belden Wire)
2. Assumed PM-10 emission are equal to PM emissions.
3. Emission factors were taken from the Draft AP-42 Table 4.12-6, EXTRUD2.wpd for Compound #9, a peroixde cured EPDM rubber, which is the most similar to Belden's process. (Ray Mauger, Belden)

Appendix A: Emissions Calculations

Extruding

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls						
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)
Extrusion Process	20,500	PM	30.9	lb/MMlb	Technical Paper (3)	0.00%	0.00%	2.7745	2.7745	0.0000	0.0000	3.1696	0.0000	0.0090
	lb/hr	PM-10	30.9	lb/MMlb	Engineering Estimate	0.00%	0.00%							
		SO2	-	-		0.00%	0.00%							
		NOx	-	-		0.00%	0.00%							
		VOC	35.3	lb/MMlb	Technical Paper (3)	0.00%	0.00%							
		CO	-	-		0.00%	0.00%							
		HAPs	0.1	lb/MMlb	Technical Paper(3)	0.00%	0.00%							

Notes:

1. There are 41 extruders that each operate at 500 lbs/hour. Total for all 41 = 20,500 lb/hr (Derek Janquart, Belden Wire)
2. Assumed PM-10 emission are equal to PM emissions.
3. Emissions are based on Table 7 in the technical paper by Barlow, Contos, Holdren, Garrison, Harris and Janke titled "Development of Emission Factors for Polyethylene Processing", Journal of the Air & Waste Management Association, Volume 46, June 1996, p569-580.
4. The formaldehyde emission factor has been listed as the HAPs, it was the only HAP for reference in the journal article.

Appendix A: Emissions Calculations

PVC Resin - Dust Collectors

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls						
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)
Dust Collector 01	702	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	0.2636	0.2636	0.0000	0.0000	0.0000	0.0000	0.0264
Resin Ground Silo	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
		NOx	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	0.001	gr/dscf	Engineering Estimate	-	-							
Dust Collector 02	702	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	0.2636	0.2636	0.0000	0.0000	0.0000	0.0000	0.0264
Rooftop Silo	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
		NOx	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	0.001	gr/dscf	Engineering Estimate	-	-							
Dust Collector 03	3,000	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	1.1263	1.1263	0.0000	0.0000	0.0000	0.0000	0.1126
Cyclone & Dust Collector	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		NOx	-	-	-	0.00%	0.00%							
		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	0.001	gr/dscf	Engineering Estimate	-	-							
Dust Collector 04	1,000	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	0.3754	0.3754	0.0000	0.0000	0.0000	0.0000	0.0375
Littleford	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		NOx	-	-	-	0.00%	0.00%							
		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	0.001	gr/dscf	Engineering Estimate	-	-							
Dust Collector 05	3,000	PM	0.01	gr/dscf	Manufacturer's Guarantee	-	-	1.1263	1.1263	0.0000	0.0000	0.0000	0.0000	0.1126
Rooftop Baghouse	dscf/min	PM-10	0.01	gr/dscf	Manufacturer's Guarantee	-	-							
		SO2	-	-	-	0.00%	0.00%							
7,000 grains = 1 pound		NOx	-	-	-	0.00%	0.00%							
		VOC	-	-	-	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	0.001	gr/dscf	Engineering Estimate	-	-							
Total Emissions								**3.16**	**3.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.32**

Notes:

1. HAP emissions are in the form of Animony Compounds and include only 10% of the product resin;
therefore, the grains per standard cubic foot rate for HAPs has been adjusted to include only 10%.
2. The flow rates for Dust Collector 01 & 02 of 702 scf/min were from the orginal minor source permit application submitted December 27, 1999.
3. The flow rate of the Littleford Dust Collector 04 of 1,000 scf/min was provided by Chad Braunecker (11/16/2005).

Appendix A: Emissions Calculations

Lacquer

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

								Potential to Emit After Controls							
Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)	Toluene (TPY)
Lacquer - T945	7.50	PM	0.1	lb/lb	Engineering Estimate	0.00%	0.00%	0.3285	0.3285	0.0000	0.0000	29.5212	0.0000	9.8550	9.855
	lb/hr	PM-10	0.1	lb/lb	Engineering Estimate	0.00%	0.00%								
Specific Gravity = 0.9 (7.5 lb/gal)		SO2	-	-	-	0.00%	0.00%								
		NOx	-	-	-	0.00%	0.00%								
HAPs		VOC	0.90	1lb/lb	MSDS	0.00%	0.00%								
30% by weight Toluene		CO	-	-	-	0.00%	0.00%								
		HAPs	0.30	1lb/lb	MSDS	0.00%	0.00%								

Notes

1. Lacquer MSDS include T945 and T912, Scholle Corporation.
2. Specific gravity of T945 is 0.9 = 0.9*8.34 lb/gal = 7.5 lb/gal Density.
3. VOCs are 6.74 lb/gal = 6.74/7.5 = 90% VOC.
4. HAPs are 30% by weight Toluene.
5. Engineering estimate assumes 10% by weight of the lacquer is solid if 90% is VOC. This is a conservative estimate.
6. Assume a 90% of the lacquer is sprayed on the part and 10% is overspray for calculating particulate emissions.
7. The throughput rate of 7.5 lb/hour is based on 60 ft/min and 1 gallon/hour maximum capacity. (provided by Belden engineers 12/05).

Appendix A: Emissions Calculations

Armor Cable Line

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)
Armor Cable Line	423	PM	-	-	-	0.00%	0.00%	0.0000	0.0000	0.0000	0.0000	1.6744	0.0000	0.0000
	gal/yr	PM-10	-	-	-	0.00%	0.00%							
		SO2	-	-	-	0.00%	0.00%							
		NOx	-	-	-	0.00%	0.00%							
		VOC	100%	Percentage	MSDS	0.00%	0.00%							
		CO	-	-	-	0.00%	0.00%							
		HAPs	-	-	-	-	-							

Notes

1. The maximum capacity is based on tank-make up.
2. Tank make-up is based on similar operations at a Belden Wire & Cable Co. located in Canada.
3. The product used for the tank make-up is comprised of 100% volatiles.
4. There are no HAPs associated with the product.

Appendix A: Emissions Calculations

Wire Printing

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

2005 Throughput (Gallons)	T Number	Utilization Factor	Density (lb/gal)	VOC (lb/gal)	MIBK %	Xylene %	Toluene %	Hexane %	Glycol Ether %	VOC Emissions (tons)	PTE VOC (tons)	MIBK (tons)	PTE MIBK (tons)	Xylene (tons)	PTE Xylene (tons)	Toluene (tons)	PTE Toluene (tons)	Hexane (tons)	PTE Hexane (tons)	
InkJet																				
3	T22719 010	2.46	7.0	6.30	-	-				0.009	0.02									
73	T22719 006	2.46	7.1	6.50	-	-				0.237	0.58									
18	T22719 003	2.46	7.4	6.10	-	-				0.055	0.14									
101	T22741 003	2.46	7.4	5.80	-	-				0.293	0.72									
101	T22711 006	2.46	7.1	6.56	-	-				0.331	0.82									**Total HAPs**
101	Bright White	2.46	8.8	5.50	-	-				0.278	0.68									
										Total	**2.96**									**0.000**
Ringband Printing																				
206	T935	4.85	7.9	7.04	15.0%	-				0.725	3.52	0.122	0.593							
531	T991	4.85	8.33	6.53	10.0%	-	60.0%			1.734	8.41	0.221	1.072			1.327	6.433			
2	T15628 004	4.85	8.3	7.22	20.0%	-				0.007	0.04	0.002	0.008							
28	T15628 009	4.85	8.8	7.30	20.0%	5.0%				0.102	0.50	0.025	0.119	0.006	0.030					
2	T15628 007	4.85	8.4	7.14	20.0%	-				0.007	0.03	0.002	0.008							
14	T15628 002	4.85	8.2	7.05	20.0%	-				0.049	0.24	0.011	0.056							
8	T15628 003	4.85	8.2	6.97	20.0%	5.0%				0.028	0.14	0.007	0.032	0.002	0.008					
5	T15628 008	4.85	8.6	7.31	20.0%	-				0.018	0.09	0.004	0.021							
6	T15628 005	4.85	8.3	7.22	20.0%	-				0.022	0.11	0.005	0.024							
5	T15628 001	4.85	8.2	7.13	20.0%	5.0%				0.018	0.09	0.004	0.020	0.001	0.005					
12	T15628 006	4.85	8.7	6.60	20.0%	5.0%				0.040	0.19	0.010	0.051	0.003	0.013					
16	T15628 010	4.85	8.1	6.97	20.0%	5.0%				0.056	0.27	0.013	0.063	0.003	0.016					**Total HAPs**
										Total	**13.60**		**2.07**		**0.07**		**6.43**			**8.571**
Contact Printing																				
193	T903	2.46	9.1	7.73	-	-				0.746	1.84									
42	T918	2.46	9.1	7.80	6.3%	-				0.164	0.40	0.012	0.030							
122	T993	2.46	8.3	7.77	-	-				0.474	1.17									
0	T946 009	2.46	7.9	N/A	-	-				0.000	0.00									**Total HAPs**
										Total	**3.41**		**0.03**							**0.030**

The utilization factor for ringband printing is 2/3 of the utilization factor from extrusion (inkjet and contact) and 1/3 of the factor from the lacquer tower.

Extrusion Utilization Rate Calculations for Wire Printing Emissions
2005 average extrusion machine utilization by work center

work center	PE #	net factored machine capacity weekly*	average output weekly	average machine utilization weekly	
111210	43	134	41	31%	
111221	17	139	37	27%	
111222	18	151	76	50%	
111224	25	143	51	36%	
112224	3	134	87	65%	
112250	34	151	109	72%	
113221	13	163	39	24%	
113222	32	133	109	82%	
113227	23	128	56	44%	
113251	21	150	71	47%	
114221	8	143	77	54%	
114232	41	143	49	34%	
114221	44	143	45	31%	
121224	19	143	91	64%	
121207	15 / 24	302	185	61%	two extruders under one workcenter
121208	26	118	67	57%	
123205	11	134	75	56%	
123207	2	134	89	66%	
123211	42	109	60	55%	
123224	29	134	76	57%	
123230	33	134	71	53%	
123231	5	134	68	51%	
123252	35	126	76	60%	
125207	30	134	94	70%	
125221	14	143	108	76%	
125227	16	131	86	66%	
126240	CV1	118	20	17%	
126241	CV2	118	87	74%	
126242	CV4	118	39	33%	
126247	CV5	118	43	36%	
127240	CV3	118	74	63%	
127241	CV8	118	56	47%	
128284	305	143	42	29%	
128286	313	126	79	63%	
128289	312	118	17	14%	
128291	308	126	54	43%	
128293	315	118	20	17%	
129203	310	118	57	48%	
129280	314	143	61	43%	
129282	304	143	82	57%	
129283	311	118	73	62%	
129285	303	126	90	71%	
129290	307	126	79	63%	
	Totals	**5,844**	**2,966**	**40.60%**	**Utilization Factor with the 20% added back** **2.463**

Lacquer Utilization Rate Calculations

Lacquer Tower Rate
60 ft/min
31,536,000 ft/year

Lacquer Tower Rate in 2005
3,278,615 ft/year

Utilization Rate

Percentage	Factor
10.40%	**9.62**

Notes:
1. The extrusion utilization factor will be used for the ink jet and contact printing calculations.
2. The extrusion utilization factor will be will also be used for 2/3 of the ringband printing calculations (1/3 from the lacquer utilization factor)

* Net Factored Machine Capacity (weekly) is based on the maximum machine capacity with 20% downtime factored in.

Appendix A: Emissions Calculations

Wire Drawing

Company Name: Belden Wire & Cable Company

Address City IN Zip: 350 NW N Street, Richmond, IN 47374

Plt ID: 177-00003

Reviewer: Surya Ramaswamy / EVP

Emission Unit	Maximum Capacity	Pollutant	Emission Factor	Units	Source of EF	Capture Eff.	Control Eff.	PM (TPY)	PM-10 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	HAPs (TPY)	MIBK (TPY)	Toluene (TPY)	Xylene (TPY)
Ink Jet Printing		PM	-	-	-	-	-	0.0000	0.0000	0.0000	0.0000	2.9634	0.0000	0.0000	0.0000	0.0000	0.0000
35 Ink Jet Printers		PM-10	-	-	-	-	-										
		SO2	-	-	-	0.00%	0.00%										
		NOx	-	-	-	0.00%	0.00%										
		VOC	See Notes	-	See Notes	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	-	-	-	0.00%	0.00%										
Contact Printing		PM	-	-	-	-	-	0.0000	0.0000	0.0000	0.0000	3.4069	0.0000	0.0297	0.0297	0.0000	0.0000
20 Contact Wheel Printers		PM-10	-	-	-	-	-										
		SO2	-	-	-	0.00%	0.00%										
		NOx	-	-	-	0.00%	0.00%										
		VOC	See Notes	-	See Notes	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	See Notes	-	See Notes	0.00%	0.00%										
		MIBK	See Notes	-	See Notes	0.00%	0.00%										
Ringband Printing		PM	-	-	-	-	-	0.0000	0.0000	0.0000	0.0000	13.6030	0.0000	8.5709	2.0664	6.4334	0.0711
15 Ringband Printers		PM-10	-	-	-	-	-										
with recycle and collection		SO2	-	-	-	0.00%	0.00%										
		NOx	-	-	-	0.00%	0.00%										
		VOC	See Notes	-	See Notes	0.00%	0.00%										
		CO	-	-	-	0.00%	0.00%										
		HAPs	See Notes	-	See Notes	0.00%	0.00%										
		MIBK	See Notes	-	See Notes	0.00%	0.00%										
		Toluene	See Notes	-	See Notes	0.00%	0.00%										
Total Emissions								**0.00**	**0.00**	**0.00**	**0.00**	**19.97**	**0.00**	**8.60**	**2.10**	**6.43**	**0.07**

Notes

1. There are no particulate emissions from contact printing. Ringband printing contains negligible overspray due to recycle and collection of any overspray.
   Ink jet printing contains negligible overspray because the wire is larger than the printing area and would collect any overspray.
2. Although there are 35 ink jet printers, only 16 ink jet printers can operate at any one time.
3. The wire printing calculations are calculated based on utilization rates for extrusion and lacquer. The details of these estimates can be found on the wire printing support worksheet.

Printing MSDS

Product Name	Manufacturer	T Number	Density (lb/gal)	VOC (lb/gal)	HAPs Total (lb/gal)	MIBK %	Xylene %	Toluene %	Copper %	Lead %	Chromium %
InkJet											
BKG1551 Printing Ink	Gem	T22719 010	7.0	6.30	0.0	-	-	-	-	-	-
BLG1666 Printing Ink	Gem	T22719 006	7.1	6.50	0.0	-	-	-	-	-	-
ORG2563 Printing Ink	Gem	T22719 003	7.4	6.10	0.0	-	-	-	-	-	-
ORG1663 Printing Ink	Gem	T22741 003	7.4	5.80	0.0	-	-	-	-	-	-
IRG1666BL Printing Ink	Gem	T22711 006	7.1	6.56	0.0	-	-	-	-	-	-
ICG-4260WT Bright White Ink	Gem	NA	8.8	5.50	0.0	-	-	-	-	-	-
Ringband Printing											
M-213 Lead Free Yellow	Mathers	T935	7.9	N/A	1.19	15.0%	-	-	-	-	-
BESB-00 Black Non Conduct	Sensient Imaging	T991	N/A	6.53	3.92	10.0%	-	50.0%	20.0%	-	-
7700 YL Yellow Marking Ink	Gem	T15628 004	8.3	7.22	1.66	20.0%	-	-	-	-	-
7700 WT White Marking Ink	Gem	T15628 009	8.8	7.30	2.20	20.0%	5.0%	-	-	-	-
7700 VI Violet Marking Ink	Gem	T15628 007	8.4	7.14	1.68	20.0%	-	-	-	-	-
7700 RD Red Marking Ink	Gem	T15628 002	8.2	7.05	1.64	20.0%	-	-	-	-	-
7700 OR Orange Marking Ink	Gem	T15628 003	8.2	6.97	2.05	20.0%	5.0%	-	-	-	-
7700 GY Gray Marking Ink	Gem	T15628 008	8.6	7.31	1.72	20.0%	-	-	-	-	-
7700 GN Green Marking Ink	Gem	T15628 005	8.3	7.22	1.66	20.0%	-	-	-	-	-
7700 BR Brown Marking Ink	Gem	T15628 001	8.2	7.13	2.05	20.0%	5.0%	-	-	-	-
7700 BL Blue Marking Ink	Gem	T15628 006	8.7	6.60	2.18	20.0%	5.0%	-	-	-	-
7700 BK Black Marking Ink	Gem	T15628 010	8.1	6.97	2.03	20.0%	5.0%	-	-	-	-
Contact Printing											
413.403 Type U Hi-Speed Orange	Gem	T903	9.1	7.73	0.00	-	-	-	-	10.1%	2.3%
518 Brown CV Hi-Speed Brown	Gem	T918	9.1	7.80	0.57	6.3%	-	-	-	3.0%	0.7%
M-1267 MHP Lead Free Red	Mathers	T993	8.3	N/A	0.00	-	-	-	-	-	-
M-300 Extender	Mathers	T946 009	7.9	N/A	0.00	-	-	-	-	-	-

Copper, Chromium and Lead are metals in the inks that will not be emitted as air pollutants.

Appendix A: Emissions Calculations
Plastic Grinding
Company Name: Belden Wire & Cable Company
Address City IN Zip: 350 NW N Street, Richmond, IN 47374
Plt ID: 177-00003
Reviewer: Surya Ramaswamy / EVP

		Particulate Matter			
Equipment	Maximum Rate lbs/hr	Emission Factor lbs/MMlbs	Potential lbs/hr	Potential tons/yr	Allowable lbs/hr
		lbs/ton			
Grinder	1000	0.35	0.18	0.77	1.15

State Potential Emissions

Emission Factors for grinding are from FIRE Version 6.22 for log sawing (SCC# 3-07-008-02).