



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 20, 2009

RE: General Cable Industries, Inc. / 053-28045-00001

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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.dot12/03/07



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**Minor Source Operating Permit
OFFICE OF AIR QUALITY**

**General Cable Industries, Inc.
440 East 8th Street
Marion, Indiana 46953**

(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.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

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 MSOP under 326 IAC 2-6.1.

Operation Permit No.: M053-28045-00001	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: April 20, 2009 Expiration Date: April 20, 2014

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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 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary cable manufacturing plant.

Source Address:	440 East 8th Street, Marion, Indiana 46953
Mailing Address:	440 East 8th Street, Marion, Indiana 46953
General Source Phone Number:	(765) 664-2321
SIC Code:	3357; 3471; 3356; 3499
County Location:	Grant
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

This stationary cable manufacturing plant consists of the following emission units and pollution control devices:

- (a) One (1) natural gas fired boiler (ID# B1), constructed in 1952, with a maximum heat input capacity of 48.0 million Btu per hour (MMBtu/hr), with no emission controls, and exhausting through stack SS-1.
- (b) One (1) North Lead line (ID #5), constructed in 1967, with a maximum capacity to extrude 3.3 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5), then exhausting to general ventilation. The North lead line includes an adhesive application pot, a lead pot, a dross pot, two (2) polymer extruders, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the South Lead Line (ID #6). Stack SS-50 is shared with the South Lead Line (ID #6).
- (c) One (1) South Lead Line (ID #6), constructed in 1967, with a maximum capacity to extrude 2.1 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5), then exhausting to general ventilation. The South lead line includes an adhesive application pot, a lead pot, a dross pot, a polymer extruder, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the North Lead line (ID #5). Stack SS-50 is shared with the North Lead line (ID #5).
- (d) One (1) Lead stripper operation (ID #8), constructed in 1986, with a maximum capacity to strip 18.0 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#8), then exhausting to general ventilation (GV).

- (e) No. 8 Rewind Line (ID# 9a), constructed in 1967, with a maximum capacity of 2,628 tons of wire per year, with no emission controls and exhausting to general ventilation (GV). This line is equipped with three (3) organic solvent wash pots which exhaust without control through stack ID# SS-51.
- (f) Two (2) Stranding Lines, identified as 37 & 61, constructed in 1967, each with a maximum capacity of 8760 tons of wire per year, with no emission controls, and exhausting to general ventilation (GV).
- (g) Five (5) Continuous Vulcanization (CV) Lines (ID# CV-1 - CV-5), with no emission controls, and exhausting to general ventilation (GV). CV-1, CV-2, CV-4 and CV-5 were constructed in 1967; CV-3 was constructed in 1997. Each of these lines is equipped with an insulation shield extruder, strand shield extruder, and a main extruder. The maximum yearly polymer extrusion capacity (tons/yr) of each line is as follows: CV-1=1949.4; CV-2=1,163.6; CV-3=846.3; CV-4=1,327.3; and CV-5=1,144.6.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M053-28045-00001, 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

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

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

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

B.7 Duty to Provide Information

- (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 an "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 Certification

- (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.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The notification 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.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (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 or ninety (90) days after initial start-up, whichever is later, 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 PMP 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (b) A copy of the PMP 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 PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP do not require the certification by an "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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M053-28045-00001 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.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (1) Submitted at least one hundred twenty (120) days 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 2-6.1 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.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][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 permitted 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ.
- (b) 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.19 Credible Evidence [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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

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]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 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 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 an "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 an "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.9 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 2-6.1-5(a)(2)]

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 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.12 Instrument Specifications [326 IAC 2-1.1-11]

- (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

C.13 Response to Excursions or Exceedances

- (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; and/or
 - (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.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (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 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (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 or ninety (90) days of initial start-up, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) 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.
- (c) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are 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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Boiler

- (a) One (1) natural gas fired boiler (ID# B1), constructed in 1952, with a maximum heat input capacity of 48.0 million Btu per hour (MMBtu/hr), with no emission controls, and exhausting through stack SS-1.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the boiler, identified as #B1, shall be limited to 0.8 lbs PM/MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

C = 50 u/m³

Pt = emission rate limit (lbs/MMBtu)

Q = total source heat input capacity (MMBtu/hr) = 48 MMBtu/hr.

N = number of stacks = 1.

a = plume rise factor (0.67)

h = stack height (ft)

Pursuant to 326 IAC 6-2-3 (d) (Particulate Emission Limitations for Sources of Indirect Heating); emission limitations for facilities specified in 326 IAC 6-2-1(b)), PM from boiler #B1, shall in no case exceed 0.8 pounds of particulate matter per million British thermal units (lb PM/MMBtu) heat input.

There are no Compliance Monitoring or Record Keeping Requirements for this emission unit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Manufacturing Operations

- (b) One (1) North Lead line (ID #5), constructed in 1967, with a maximum capacity to extrude 3.3 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5), then exhausting to general ventilation. The North lead line includes an adhesive application pot, a lead pot, a dross pot, two (2) polymer extruders, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the South Lead Line (ID #6). Stack SS-50 is shared with the South Lead Line (ID #6).
- (c) One (1) South Lead Line (ID #6), constructed in 1967, with a maximum capacity to extrude 2.1 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5), then exhausting to general ventilation. The South lead line includes an adhesive application pot, a lead pot, a dross pot, a polymer extruder, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the North Lead line (ID #5). Stack SS-50 is shared with the North Lead line (ID #5).
- (d) One (1) Lead stripper operation (ID #8), constructed in 1986, with a maximum capacity to strip 18.0 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#8), then exhausting to general ventilation (GV).
- (e) No. 8 Rewind Line (ID# 9a), constructed in 1967, with a maximum capacity of 2,628 tons of wire per year, with no emission controls and exhausting to general ventilation (GV). This line is equipped with three (3) organic solvent wash pots which exhaust without control through stack ID# SS-51.
- (f) Two (2) Stranding Lines, identified as 37 & 61, constructed in 1967, each with a maximum capacity of 8760 tons of wire per year, with no emission controls, and exhausting to general ventilation (GV).
- (g) Five (5) Continuous Vulcanization (CV) Lines (ID# CV-1 - CV-5), with no emission controls, and exhausting to general ventilation (GV). CV-1, CV-2, CV-4 and CV-5 were constructed in 1967; CV-3 was constructed in 1997. Each of these lines is equipped with an insulation shield extruder, strand shield extruder, and a main extruder. The maximum yearly polymer extrusion capacity (tons/yr) of each line is as follows: CV-1=1949.4; CV-2=1,163.6; CV-3=846.3; CV-4=1,327.3; and CV-5=1,144.6.

(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 2-6.1-5(a)(1)]

D.2.1 Particulate Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions (PM) shall be limited as shown in the table that follows:

Emission Unit (Control)	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
North Lead Line, ID: #5 (CC#5)	3.3	9.12
South Lead Line, ID: #6 (CC#5)	2.1	6.74
Lead Stripper, ID: #8 (CC#8)	18.0	28.4
CV-1	0.22	1.50
CV-2	0.13	1.06
CV-3	0.10	0.86
CV-4	0.15	1.16
CV-5	0.13	1.05

The pound per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 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

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the North Lead line (#5), the South Lead line (#6), and the Lead Stripper (#8).

There are no Compliance Monitoring or Record Keeping Requirements for these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION**

Source Name: General Cable Industries, Inc.
Source Address: 440 East 8th Street, Marion, Indiana 46953
Mailing Address: 440 East 8th Street, Marion, Indiana 46953
MSOP No.: 053-28045-00001

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 AND ENFORCEMENT BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	General Cable Industries, Inc.
Address:	440 East 8th Street
City:	Marion, Indiana 46953
Phone #:	(765) 664-2321
MSOP #:	M053-28045-00001

I hereby certify that General Cable Industries, Inc. is:	<input type="checkbox"/> still in operation.
	<input type="checkbox"/> no longer in operation.
I hereby certify that General Cable Industries, Inc. is :	<input type="checkbox"/> in compliance with the requirements of MSOP M053-28045-00001.
	<input type="checkbox"/> not in compliance with the requirements of MSOP M053-28045-00001.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER: (317) 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? _____, 25 TONS/YEAR SULFUR DIOXIDE ? _____, 25 TONS/YEAR NITROGEN OXIDES? _____, 25 TONS/YEAR VOC ? _____, 25 TONS/YEAR HYDROGEN SULFIDE ? _____, 25 TONS/YEAR TOTAL REDUCED SULFUR ? _____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? _____, 25 TONS/YEAR FLUORIDES ? _____, 100 TONS/YEAR CARBON MONOXIDE ? _____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? _____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? _____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? _____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? _____, EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL * SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document (ATSD) for a
Minor Source Operating Permit (MSOP)**

Source Background and Description

Source Name:	General Cable Industries, Inc.
Source Location:	440 East 8th Street, Marion, Indiana 46953
County:	Grant
SIC Code:	3357; 3356; 3087; 3471
Permit No.:	053-28045-00001
Permit Reviewer:	Sandra Carr

On March 15, 2009, the Office of Air Quality (OAQ) had a notice published in Marion Chronicle Tribune, Marion, Indiana, stating that General Cable Industries, Inc. had applied to transition from a FESOP to a Minor Source Operating Permit (MSOP) for their stationary cable manufacturing plant. The notice also stated that the OAQ proposed to issue a Minor Source Operating Permit (MSOP) 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.

Comments and Responses

On March 16, 2009, Valerian Simianu of M3V submitted comments to IDEM, OAQ on the draft Minor Source Operating Permit (MSOP) for General Cable Industries, Inc.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

There is no CC#6. Please change the control unit ID from CC#6 to CC#5 throughout the permit and the TSD.

Response to Comment 1:

IDEM agrees with the recommended changes, since no CC#6 exists.

The permit has been revised and the name of the control unit CC#5 has been revised in Section A.2(c), and Conditions D.2(c) and D.2.1. No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

A.2 Emission Units and Pollution Control Equipment Summary

...
(c) One (1) South Lead Line (ID #6), constructed in 1967, with a maximum capacity to extrude 2.1 tons of lead per hour, with particulate emissions controlled by a HEPA multi-

cartridge filter (ID CC#5 ~~6~~), then exhausting to general ventilation. ...

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Manufacturing Operations

- ...
- (c) One (1) South Lead Line (ID #6), constructed in 1967, with a maximum capacity to extrude 2.1 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5 ~~6~~), then exhausting to general ventilation.
- ...

D.2.1 Particulate Limitations [326 IAC 6-3-2]

Emission Unit (Control)	Process Weight Rate (tons/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
North Lead Line, ID: #5 (CC#5)	3.3	9.12
South Lead Line, ID: #6 (CC#5 6)	2.1	6.74
Lead Stripper, ID: #8 (CC#8)	18.0	28.4
CV-1	0.22	1.50
CV-2	0.13	1.06
CV-3	0.10	0.86
CV-4	0.15	1.16
CV-5	0.13	1.05

Comment 2:

The stack identified as SS-64 is no longer in service. Emission units previously exhausting to this stack were removed or now exhaust to general ventilation. Please change the description of the No. 8 Rewind line throughout the permit and the TSD to show it exhausts to general ventilation.

Response to Comment 2:

IDEM agrees with the recommended changes, since the correct process description is required.

The permit has been revised and the description of the No. 8 Rewind line has been revised in Section A.2(e), and Condition D.2(e). No changes have been made to the TSD for the reasons cited in Response to Comment 1.

A.2 Emission Units and Pollution Control Equipment Summary

- ...
- (e) No. 8 Rewind Line (ID# 9a), constructed in 1967, with a maximum capacity of 2,628 tons of wire per year, with no emission controls and exhausting ~~through stack SS-64 to~~ **general ventilation (GV)**. This line is equipped with three (3) organic solvent wash pots which exhaust without control through stack ID# SS-51.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Manufacturing Operations

- (e) No. 8 Rewind Line (ID# 9a), constructed in 1967, with a maximum capacity of 2,628 tons of wire per year, with no emission controls and exhausting through ~~stack SS-64~~ to **general ventilation (GV)**. This line is equipped with three (3) organic solvent wash pots which exhaust without control through stack ID# SS-51.
- ...

Comment 3:

The strand shield extruder & a main extruder on the two (2) Stranding Lines, identified as 37 & 61, have been removed. Please change the description of the Stranding Lines, identified as 37 & 61, throughout the permit and the TSD to show the strand shield extruder and a main extruder are no longer a part of this line.

Response to Comment 3:

IDEM agrees with the recommended changes, since the correct process description is required.

The permit has been revised and the description of the Stranding Lines, identified as 37 & 61, has been revised in Condition A.2(f), and Sections D.2(f). No changes have been made to the TSD for the reasons cited in Response to Comment 1

A.2 Emission Units and Pollution Control Equipment Summary

- ...
- (f) Two (2) Stranding Lines, identified as 37 & 61, constructed in 1967, each with a maximum capacity of 8760 tons of wire per year, with no emission controls, and exhausting to general ventilation (GV). ~~Each of these lines is equipped with a strand shield extruder and a main extruder.~~
- ...

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Manufacturing Operations

- (f) Two (2) Stranding Lines, identified as 37 & 61, constructed in 1967, each with a maximum capacity of 8760 tons of wire per year, with no emission controls, and exhausting to general ventilation (GV). ~~Each of these lines is equipped with a strand shield extruder and a main extruder.~~
- ...

Comment 4:

Please revise the table in the "PTE of the Entire Source After Issuance of the MSOP" section of the TSD to make the following changes:

- (1) There are no VOC or HAP emissions from the Lead Stripper (#8). The VOC and HAP shown should be attributed to the Lead Lines (#5 & #6)
- (2) The Lead Lines should show they exhaust to CC#5 and stack SS-50.

- (3) Please change the calculations in Appendix A to reflect the changes described in item #1 & #2.

Response to Comment 4:

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Although no changes were made to the TSD a corrected table is shown here:

Process/Emission Unit (Control)	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)								
	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	Total HAP	Worst Single HAP
Boiler ⁽¹⁾ (#B1)	0.39	1.57	1.57	0.12	20.61	1.13	17.31	0.39	0.37 (Hexane)
Lead Lines ⁽²⁾ (CC#5, SS-50 CC#6)	36.09	36.09	36.09	negl.	negl.	8.48 4.24	negl.	3.14 4.57	2.33 1.55 (Toluene)
Lead Stripper ⁽²⁾ (CC#8)	13.32	13.32	13.32	negl.	negl.	0 4.24	negl.	0 4.57	0 4.55 (Toluene)
Extrusion	1.56	1.56	1.56	negl.	negl.	0.82	negl.	6.93	6.93 (Acetophenone)
Total PTE of Entire Source	51.37	52.54	52.54	0.12	20.61	10.44	17.31	10.61	
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM ₁₀), not particulate matter (PM), is considered as a "regulated air pollutant".									

No changes to the permit language were made as a result of this comment, however, even though the changes do not affect the PTE of the source or any limits, revised spreadsheets are attached for clarity. See Appendix A.1.

Comment 5:

Please change the TSD to show that 326 IAC 8-1-6 does not apply to the Lead Stripper (#8) because the Stripper does not emit VOC.

Response to Comment 5:

Although this comment is correct, since 326 IAC 8-1-6 did not apply to the Lead Stripper (#8) in either case, no change will be made to the TSD (see Response to Comment 4).

No changes were made as a result of this comment.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as strikeouts and new language **bolded**.

- (a) Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

**Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251**

**Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251**

IDEM Contact

- (a) Questions regarding this proposed FESOP Renewal can be directed to Sandra Carr at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5372 or toll free at 1-800-451-6027 extension 45372.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A.1: Corrected Emissions Summary

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity			
Pollutant	Lead Lines North & South	Lead Stripper	TOTAL**
PM	36.09	13.32	49.42
PM ₁₀	36.09	13.32	49.42
PM _{2.5}	36.09	13.32	49.42
SO ₂	0.00	0.00	0.00
NOx	0.00	0.00	0.00
VOC	8.48	negl.	8.48
CO	0.00	0.00	0.00
total HAPs	0.02	0.02	2.51
worst case single HAP	2.48 (Toluene)	0.02 (Lead)	

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

Appendix A.1: Emission Calculations
Lead Lines

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Cair
Date: December 5, 2008

Lead Lines

Facility Description	Control Device	Control Efficiency (%)	Max. Capacity (tons/hr)	Stack ID	Max. Production (tons/yr)
(a) North Lead Line (ID #5)	CC#5	95.00%	3.3	SS-50 *	28,908
(b) South Lead Line (ID #6)	CC#5	95.00%	2.1	SS-50 **	18,396

Emissions

Pollutant	North Lead Line (#5)			South Lead Line (#6)			Total Uncontrolled Emissions (ton/yr)	Total Controlled Emissions (ton/yr)
	Emission Factor (lb/ton)	Uncontrolled Emissions (ton/yr)	Controlled Emissions (ton/yr)	Emission Factor (lb/ton)	Uncontrolled Emissions (ton/yr)	Controlled Emissions (ton/yr)		
PM	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
PM ₁₀	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
PM _{2.5}	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
Lead (Pb)	0.0102	0.15	0.01	0.0008	0.01	0.00	0.15	0.01
VOC **		5.65			2.83		8.48	8.48

Notes: 1) PM and PM₁₀ emission factors for Lead lines are based on the stack test performed on September 1995 at this facility, because no testing for these pollutants was conducted in 2000 or later.
2) Lead (Pb) emission factors for Lead lines are based on the stack test performed on August 23, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.

* Emissions from the organic solvent wash pot & the adhesive application pot exhaust to SS-50; all other emission points on the North lead line exhaust to the HEPA cartridge (CC#5) and are then vented indoors.

** Emissions from the organic solvent wash pot & the adhesive application pot exhaust to SS-50; all other emission points on the South lead line exhaust to the HEPA cartridge (CC#6) and are then vented indoors.

Methodology:

Potential Emissions tons/yr = Emission factor (lb/ton) x maximum capacity (tons/hr) / 2000 lb/ton x 8760 hrs/yr
VOC emissions from the organic solvent wash pot & the adhesive application pot are assumed to be 100%.

326 IAC 6-3-2

Emission Unit	Process Weight Rate (tons/hr) P	Uncontrolled PM Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
North Lead Line, ID: #5 (CC#5)	3.3	5.04	9.12
South Lead Line, ID: #6 (CC#6)	2.1	3.20	6.74

Compliance Determination:

PM Emissions (lb/hr)

5.04 Since 5.04 is less than 9.12, #5 is able to comply.
3.20 Since 3.20 is less than 6.74, #6 is able to comply.

The #5 and #6 lead lines are able to comply with the requirements of 326 IAC 6-3-2 without the use of a control device.

Methodology:

E = 4.10 P^{0.67}

where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

Appendix A.1: Emission Calculations
Lead Stripper

Company Name: General Cable Industries, Inc.
 Address City IN Zip: 440 East 8th Street, Marion, IN 46953
 MSOP No.: 053-28045-00001
 Reviewer: Sandra Carr
 Date: December 5, 2008

Lead Lines

Facility Description	Control Device	Control Efficiency (%)	Max. Capacity (tons/hr)	Stack ID	Max. Amount Stripped (tons/yr)
One (1) lead stripper (ID # 8)	CC#8	95.00%	18	N/A *	78.84

Emissions

Pollutant	Emission Factor (lb/ton)	Stripper		Total Uncontrolled Emissions (ton/yr)	Total Controlled Emissions (ton/yr)
		Uncontrolled Emissions (ton/yr)	Controlled Emissions (ton/yr)		
PM	0.169	13.32	1.33	13.32	1.33
PM ₁₀	0.169	13.32	1.33	13.32	1.33
PM _{2.5}	0.169	13.32	1.33	13.32	1.33
HAP (Pb)	0.00029	0.02	0.0023	0.02	0.002
VOC **	n/a	negl.	negl.	negl.	negl.

Source-wide Uncontrolled Pb Emissions (ton/yr)	Source-wide Controlled Pb Emissions (ton/yr)
0.18	0.01

- Notes: 1) PM and PM₁₀ emission factors for Lead lines are based on the stack test performed on September 1995 at this facility, because no testing for these pollutants was conducted in 2000 or later.
 2) Lead (Pb) emission factors for Lead lines are based on the stack test performed on August 23, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.
 3) Lead (Pb) emission factor for Lead stripper is based on the stack test performed on November 9, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.
 VOC emissions from the lead stripper do not contain any other HAP; lead is the only HAP that is emitted.
 ** Emissions from the solvent wash pot exhaust to SS-52; all other emission points on the lead stripper line exhaust to the HEPA cartridge (CC#8) and are then vented indoors.

Methodology:

Potential Emissions tons/yr = Emission factor (lb/ton) x maximum capacity (tons/hr) / 2000 lb/ton x 8760 hrs/yr

326 IAC 6-3-2

Emission Unit (Control)	Process Weight Rate (tons/hr) P	Uncontrolled PM Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
Lead Stripper, ID: #8 (CC#8)	18	3.04	28.43

Compliance Determination:

PM Emissions (lb/hr)

3.04

Since 3.04 is less than 28.43, #8 is able to comply.

Methodology:

E = 4.10 P^{0.57} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

The #8 lead stripper is able to comply with the requirements of **326 IAC 6-3-2 without the use of a control device.**

**Appendix A.1: Emission Calculations
HAP Emission Calculations**

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

UNCONTROLLED POTENTIAL EMISSIONS

Facility / Operatioin	Lead Stripper tons/yr	Lead Lines tons/yr	Total tons/yr
HAP Pollutant			
Acetohpenone	0.00	0.00	0.00
Antimony	0.00	0.00	0.00
Arsenic	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00
Cadmium	0.00	0.00	0.00
Chromium	0.00	0.00	0.00
Carbon tetrachloride	0.00	0.00	0.00
Chloroform	0.00	0.00	0.00
Dichlorobenzene	0.00	0.00	0.00
Ethyl benzene	0.00	0.00	0.00
Ethylene thiourea	0.00	0.00	0.00
Formaldehyde	0.00	0.00	0.00
Glycol Ethers	0.00	0.00	0.00
Hexane	0.00	0.00	0.00
Isophorone	0.00	0.00	0.00
Lead	0.02	0.15	0.18
Manganese	0.00	0.00	0.00
Mercury	0.00	0.00	0.00
Methanol	0.00	0.00	0.00
Methyl ethyl ketone (MEK)	0.00	0.00	0.00
Nickel	0.00	0.00	0.00
Toluene	0.00	2.33	2.33
Vinyl Acetate	0.00	0.00	0.00
Xylene	0.00	0.00	0.00
Total HAPs (tons/yr)	0.02	2.48	2.51

Highest Individual HAP = Lead Toluene

Methodology

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a FESOP Transitioning to a Minor Source Operating Permit (MSOP)

Source Description and Location

Source Name: General Cable Industries, Inc.
Source Location: 440 East 8th Street, Marion, Indiana 46953
County: Grant
SIC Code: 3357; 3356; 3087; 3471
Operation Permit No.: 053-28045-00001
Permit Reviewer: Sandra Carr

On October 23, 2008, the Office of Air Quality (OAQ) has received an application from General Cable Industries, Inc. related to the transition from a FESOP to a MSOP.

Existing Approvals

The source has been operating under FESOP No. 053-14834-00001, issued on October 14, 2004.

Due to this application, the source is transitioning from a FESOP to a MSOP.

County Attainment Status

The source is located in Grant County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

(Air Pollution Control Board; 326 IAC 1-4-28; filed Dec 26, 2007, 1:43 p.m.: 20080123-IR-326070308FRA)

- (a) **Ozone Standards**
 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 and NOx emissions are considered when evaluating the rule applicability relating to ozone. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Grant County has been classified as attainment for PM_{2.5}. On May 8, 2008, the U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions, and the effective date of these rules was July 15, 2008. Indiana has three years from

the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.

- (c) Other Criteria Pollutants
Grant County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, NO_x, VOC, and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by General Cable Industries, Inc. on October 23, 2008, relating to the transition from a FESOP to a MSOP. The source has made several operational changes including removal of Boiler #B-2, No. 2 fuel oil is no longer used as back-up fuel for Boiler #B-1, the low voltage compounding line was removed, VOC and HAP containing solvents were replaced with low or non-VOC/HAP solvents, and high efficiency HEPA cartridge filters were installed to replace the baghouses on the North Lead Line (#5), the South Lead Line (#6), and the Lead stripper (#8).

The source consists of the following permitted emission unit(s):

- (a) One (1) natural gas-fired boiler (ID# B1), constructed in 1952, with a maximum heat input capacity of 48.0 million Btu per hour (MMBtu/hr), with no emission controls, and exhausting through stack SS-1.
- (b) One (1) North Lead line (ID #5), constructed in 1967, with a maximum capacity to extrude 3.3 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#5), then exhausting to general ventilation. The North lead line includes an adhesive application pot, a lead pot, a dross pot, two (2) polymer extruders, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the South Lead Line (ID #6). Stack SS-50 is shared with the South Lead Line (ID #6).
- (c) One (1) South Lead Line (ID #6), constructed in 1967, with a maximum capacity to extrude 2.1 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#6), then exhausting to general ventilation. The South lead line includes an adhesive application pot, a lead pot, a dross pot, a polymer extruder, and a lead press extruder and has a maximum capacity to extrude 1,613.8 tons of polymers per year. The adhesive application pot exhausts without control through stack SS-50. The HEPA multi-cartridge filter (ID CC#5) is voluntary and is shared with the North Lead line (ID #5). Stack SS-50 is shared with the North Lead line (ID #5).
- (d) One (1) Lead stripper operation (ID #8), constructed in 1986, with a maximum capacity to strip 18.0 tons of lead per hour, with particulate emissions controlled by a HEPA multi-cartridge filter (ID CC#8), then exhausting to general ventilation (GV).

- (e) No. 8 Rewind Line (ID# 9a), constructed in 1967, with a maximum capacity of 2,628 tons of wire per year, with no emission controls and exhausting through stack SS-64. This line is equipped with three (3) organic solvent wash pots which exhaust without control through stack ID# SS-51.
- (f) Two (2) Stranding Lines, identified as 37 & 61, constructed in 1967, each with a maximum capacity of 8760 tons of wire per year, with no emission controls, and exhausting to general ventilation (GV). Each of these lines is equipped with a strand shield extruder and a main extruder.
- (g) Five (5) Continuous Vulcanization (CV) Lines (ID# CV-1 - CV-5), with no emission controls, and exhausting to general ventilation (GV). CV-1, CV-2, CV-4 and CV-5 were constructed in 1967; CV-3 was constructed in 1997. Each of these lines is equipped with an insulation shield extruder, strand shield extruder, and a main extruder. The maximum yearly polymer extrusion capacity (tons/yr) of each line is as follows: CV-1=1949.4; CV-2=1,163.6; CV-3=846.3; CV-4=1,327.3; and CV-5=1,144.6.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	51.37
PM ₁₀ ⁽¹⁾	52.54
PM _{2.5} ⁽²⁾	52.54
SO ₂	0.12
NO _x	20.61
VOC	10.44
CO	17.31

- (1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀), not particulate matter (PM), is considered as a "regulated air pollutant".
- (2) On May 8, 2008, the U.S. EPA directed the State of Indiana to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions until 326 IAC 2-2 is revised.

HAP	Potential To Emit (tons/year)
Acetophenone	5.17
Hexane	0.37
Lead	0.26
Toluene	1.55
TOTAL HAP	10.61

Only worst case HAP and Lead emissions are listed.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀ and PM_{2.5} are each less than one hundred (100) tons per year but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAP is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

PTE of the Entire Source After Issuance of the MSOP

The table below summarizes the potential to emit of the entire source after issuance of this MSOP, reflecting all limits, of the emission units.

Process/Emission Unit (Control)	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)								
	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	VOC	CO	Total HAP	Worst Single HAP
Boiler ⁽¹⁾ (#B1)	0.39	1.57	1.57	0.12	20.61	1.13	17.31	0.39	0.37 (Hexane)
Lead Lines ⁽²⁾ (CC#5, CC#6)	36.09	36.09	36.09	negl.	negl.	4.24	negl.	1.57	1.55 (Toluene)
Lead Stripper ⁽²⁾ (CC#8)	13.32	13.32	13.32	negl.	negl.	4.24	negl.	1.57	1.55 (Toluene)
Extrusion	1.56	1.56	1.56	negl.	negl.	0.82	negl.	6.93	6.93 (Acetophenone)
Total PTE of Entire Source	51.37	52.54	52.54	0.12	20.61	10.44	17.31	10.61	
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM ₁₀), not particulate matter (PM), is considered as a "regulated air pollutant".									

- (1) Boiler ID # B1 uses natural gas as the only fuel.
 (2) This is the PTE PM, PM₁₀ & PM_{2.5} for these production lines. Controlled emissions are lower.

MSOP Status [326 IAC 2-6]

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source is less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAP, as defined in 40 CFR 63.41, therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-6 (MSOP).

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(40 CFR Part 60.40b, Subpart Db-Small Industrial-Commercial-Institutional Steam Generating Units

The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40b, Subpart Db (326 IAC 12), are not included in the permit, since the boiler, identified as ID# B1, rated at 48 MMBtu per hour, and constructed in 1952, was constructed prior to the rule applicability date of June 19, 1984.

(40 CFR Part 60.40c, Subpart Dc-Small Industrial-Commercial-Institutional Steam Generating Units

The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c, Subpart Dc (326 IAC 12), are not included in the permit, since the boiler, identified as ID# B1, rated at 48 MMBtu per hour, and constructed in 1952, was constructed prior to the rule applicability date of June 9, 1989.

There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR Part 63.460, Subpart T - Halogenated Solvent Cleaning

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63.460, Subpart T (326 IAC 20-6-1), apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than five (5) percent by weight, as a cleaning and/or drying agent. The requirements of this subpart are not included in the permit, since the cold cleaner degreaser uses a non-halogenated solvent and the source is not a major source of HAP.

40 CFR Part 63.11514, Subpart XXXXXX - Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

The requirements of this National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories are applicable to metal fabricating and finishing operations in any one of the nine fabrication and finishing area source categories listed in Table 1, which use materials that contain or have the potential to emit metal fabrication or finishing Hazardous Air Pollutants (MFHAP). Pursuant 40 CFR Part 63.11522, *metal fabricating and finishing operations* means dry abrasive blasting, dry grinding or polishing, machining, spray painting, welding and/or the use of *metal fabrication or finishing HAP (MFHAP)*. MFHAP are the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. [See Attachment B for a copy of 40 CFR Part 63.11514, Subpart XXXXXX]

General Cable Industries is primarily engaged in manufacturing insulated electronic cables, made from purchased nonferrous wire which is not a source category listed in Table 1. This source operates under the SIC code 3357 which is not one of the applicable codes as listed by the EPA. Although the source uses lead to insulate specialized cables during heat treating, the lead is removed and recycled. In addition, the source does not perform metal fabricating and finishing operations.

There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) **326 IAC 1-6-3 (Preventive Maintenance Plan)**
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.
- (b) **326 IAC 2-2 (Prevention of Significant Deterioration(PSD))**
This source is not a major stationary source under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than two hundred fifty (250) tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**
The emission of any single HAP is less than ten (10) tons per year and the combined emissions of any combination of HAP is less than twenty-five (25) tons per year. Therefore, this source is considered an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (d) **326 IAC 2-6-1 (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, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year. However, pursuant to 326 IAC 2-6-1(b), all sources permitted by the department are subject to 326 IAC 2-6-5 of this rule which states that the department may request emissions and emission-related information about any regulated air pollutant as defined at 326 IAC 2-7-1(31) from any permitted source when needed for air quality planning, air quality modeling, or state implementation plan development.
- (e) **326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))**
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (f) **326 IAC 5-1 (Opacity Limitations)**
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) 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.
 - (2) 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.
- (g) **326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)**
The one (1) natural gas fired boiler (ID #B1), with a maximum capacity of 48 MMBtu/hr and constructed in 1952, is subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, particulate emissions from indirect heating facilities constructed prior to September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

- C = 50 u/m³
Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr)
N = number of stacks
a = plume rise factor (0.67)
h = stack height in feet. If a number of stacks of different heights exist, average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emission rate as follows:

$$h = \frac{\sum_{i=1}^N H_i \times pa_i \times Q}{\sum_{i=1}^N pa_i \times Q}$$

where:

- Pa = the actual controlled emissions rate in lb/MMBtu using the emission factor from AP-42 or stack test data. Stacks constructed after January 1, 1971, shall be credited with GEP stack height only. GEP stack height shall be calculated as specified in 326 IAC 1-7.

For boiler ID #B-1, constructed before 1972; Q = 48.0 MMBtu/hr.
Pt = (50*0.67*36)/(76.5*48.0^{0.75}*1^{0.25}) = 0.86 lbs PM/MMBtu

Compliance calculations:

$$(0.39 \text{ tons PM/yr}) * (\text{hr}/48.0 \text{ MMBtu}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.00186 \text{ lbs PM/MMBtu}$$

Actual emission rate for boiler #B-1 is 0.00186 lbs PM/MMBtu, which is less than allowable 0.86 lbs PM/MMBtu limit, therefore the boiler will be able to comply with the requirements of 326 IAC 6-2-3 without the use of a control device.

- (h) 326 IAC 6-3-2 (Process Operations)
- (a) The 37 & 61 Stranding Lines are not subject to the requirements of 326 IAC 6-3-2 because these operations do not emit particulates.
- (b) The particulate matter (PM) emissions from the following processes shall be limited by the equation shown below:

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
P = process weight rate in tons per hour

Emission Unit (Control)	Process Weight Rate (tons/hr)	Uncontrolled PM Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
***North Lead Line, ID: #5 (CC#5)	3.3	5.04	9.12
***South Lead Line, ID: #6 (CC#6)	2.1	3.20	6.74
***Lead Stripper, ID: #8 (CC#8)	18.0	3.04	28.4
CV-1	0.22	0.11	1.50
CV-2	0.13	0.06	1.06
CV-3	0.10	0.05	0.86
CV-4	0.15	0.07	1.16
CV-5	0.13	0.06	1.05

***Based on the calculations, baghouses are not required in order to comply.

- (i) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
 Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (j) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
 The one (1) natural gas-fired boiler (ID # B-1) uses only natural gas as fuel. Therefore boiler #B1 is not subject to 326 IAC 7-1.1.
- (k) 326 IAC 8-1-6 (General Reduction Requirements)
 This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of twenty-five (25) tons per year or more, and are not otherwise regulated by other provisions of Article 8.
 - (1) The operations including North and South Lead lines (#5 and #6), one (1) No. 8 Rewind Line (#9a), four (4) CV lines (CV-1, CV-2, CV-4, and CV-5) and two (2) Stranding lines (37 & 61), were constructed prior to rule applicability date of January 1, 1980, therefore, rule 326 IAC 8-1-6 does not apply to these operations.
 - (2) The Lead Stripper (ID # 8) was constructed in 1986 and it has potential VOC emissions of less than twenty-five (25) tons per year (see Appendix A). Therefore, the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 (General Reduction Requirements) are not applicable to the Lead stripper (ID # 8).
 - (3) One (1) CV line (CV-3) was constructed in 1997 and has potential VOC emissions of less than twenty-five (25) tons per year (see Appendix A). Therefore, the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 (General Reduction Requirements) are not applicable to the one (1) CV line (CV-3).
- (l) 326 IAC 8-2 (Surface Coating Emission Limitations)
 Pursuant to 326 IAC 8-2-1 (Applicability), this rule applies to surface coating operations, constructed after July 1, 1990, located in any county, and which have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls.

- (1) The operations, including North and South Lead lines (#5 and #6), one (1) Lead stripper (#8), one (1) No. 8 Rewind Line (#9a), four (4) CV lines (CV-1, CV-2, CV-4, and CV-5) and two (2) Stranding lines (37 & 61), were constructed prior to rule applicability date of July 1, 1990, therefore, rule 326 IAC 8-2 does not apply to these operations.
 - (2) One (1) CV line (CV-3) was constructed in 1997; it has potential VOC emissions of less than fifteen (15) pounds of VOC per day before add-on controls. Therefore, 326 IAC 8-2 is not applicable to the one (1) CV line (CV-3).
- (m) 326 IAC 8-2-4 (Coil Coating Operations)
This rule applies to owners or operators of coil coating lines. This operation is the coating of any flat metal sheets or strips that come in rolls or coils. General Cable does not coat any flat metal sheets or strips and is therefore not subject to 326 IAC 8-2-4.
- (n) 326 IAC 8-2-8 (Magnet Wire Coating Operations)
This rule applies to owners or operators of magnetic wire coating ovens. This operation is the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery. General Cable does not own or operate a magnetic wire coating oven, nor does it apply varnish or enamel to aluminum or copper wire. Therefore, this source is not subject to 326 IAC 8-2-8.
- (o) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
Pursuant to 326 IAC 8-2-9(a)(5), provisions of 326 IAC 8-2-9 (Miscellaneous metal coating operations) apply to surface coating of metal parts or products categorized under the Standard Industrial Classification Code (SIC) of the major groups #33, #34, #35, #36, #37, #38, and #39. Therefore,
- (1) Although the SIC code for this source is 3357, the operations, including North and South Lead lines (#5 and #6), one (1) Lead stripper (#8), one (1) No. 8 Rewind Line (#9a), four (4) CV lines (CV-1, CV-2, CV-4, and CV-5) and two (2) Stranding lines (37 & 61), were constructed prior to rule applicability date of July 1, 1990, therefore, the rules under 326 IAC 8-2 do not apply to these operations.
 - (2) Although the SIC code for this source is 3357, pursuant to 326 IAC 8-2-1, rule 326 IAC 8-2-9 is not applicable to the one (1) CV line (CV-3) because the actual VOC emission rate is less than 15 pounds per day. Therefore, the rules under 326 IAC 8-2 do not apply to these CV operations. (See part (L)(2) under "State Rule Applicability Determination".)
- (p) 326 IAC 8-6 (Organic Solvent Emission Limitations)
This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to facilities commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of one hundred (100) tons per year or more, and not regulated by any other provision of Article 8. This source is located in Grant County and, has potential VOC emissions of less than one hundred (100) tons per year; therefore, 326 IAC 8-6 does not apply to this source.
- There are no other 326 IAC 8 Rules that are applicable to this cable manufacturing plant.
- (q) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

This source performed compliance testing during August and November of 1999. The stack test results showed that General Cable was able to comply with Pb and PM limitations without the use of controls. Since no new emission units have been added to this plant, no additional testing is included by condition of this permit. The use of emission factors based on previous test results plus particulate emitting activities with emissions below the related allowable particulate matter emission limits satisfies OAQ testing requirements.

- (a) VOC and HAP compliance testing is not required of this source since the material usage and related VOC and volatile organic HAP emissions assume an emission factor of 2,000 pounds of pollutant emitted per ton of pollutant input to the manufacturing operations.
- (b) There are no other testing requirements applicable to this source for the purposes of this MSOP.
- (c) IDEM determined that no monitoring was needed for the cartridge filters on the lead lines (#5, #6) and lead stripper (#8) since all three were able to comply without the use of control devices.
- (d) There are no other compliance determination and monitoring requirements applicable to this source for the purposes of this MSOP.

Air Quality Impacts from Minor Sources

Modeling Overview

Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has conducted a modeling analysis of the Limited Potential to Emit (PTE) criteria pollutants from this proposed source to estimate whether the Limited PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

Modeling Results

The modeling results indicate that the Limited PTE criteria pollutants from this source will not exceed the National Ambient Air Quality Standards (NAAQS).

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on October 23, 2008.

The operation of this source shall be subject to the conditions of the attached MSOP No. 053-28045-00001. The staff recommends to the Commissioner that this MSOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Sandra Carr at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5372 or toll free at 1-800-451-6027 extension 4-5372
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations Summary

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity					
Pollutant	Boiler #B1 Natural gas combustion	Lead Lines North & South	Lead Stripper	Extrusion	TOTAL**
PM	0.39	36.09	13.32	1.56	51.37
PM ₁₀	1.57	36.09	13.32	1.56	52.54
PM _{2.5}	1.57	36.09	13.32	1.56	52.54
SO ₂	0.12	0.00	0.00	0.00	0.12
NOx	20.61	0.00	0.00	0.00	20.61
VOC	1.13	4.24	4.24	0.82	10.44
CO	17.31	0.00	0.00	0.00	17.31
total HAPs	0.39	1.57	1.57	6.93	10.61
worst case single HAP	0.37 (hexane)	1.55 (Toluene)	1.55 (Toluene)	6.93 (Acetophenone)	

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

Appendix A: VOC Fugitive Emission Extrusion

Company Name: General Cable Industries, Inc.
 Address City IN Zip: 440 East 8th Street, Marion, IN 46953
 MSOP No.: 053-28045-00001
 Reviewer: Sandra Carr
 Date: December 5, 2008

PTE from Polymer Extrusion

Process	Max. Throughput (tons/yr)	General Ventilation (GV)		General Ventilation (GV)		General Ventilation (GV)	
		PM Emission Factor (lb/ton)	PM Emissions (ton/yr)	VOC Emission Factor (lb/ton)	VOC Emissions (ton/yr)	Acetophenone EF (lb/ton)	Acetophenone Emissions (ton/yr)
CV-1	1,949.4	0.4844	0.47	0.2563	0.25	0.001078	2.10
CV-2	1,163.6	0.4844	0.28	0.2563	0.15	0.001078	1.25
CV-3	846.3	0.4844	0.20	0.2563	0.11	0.001078	0.91
CV-4	1,327.3	0.4844	0.32	0.2563	0.17	0.001078	1.43
CV-5	1,144.6	0.4844	0.28	0.2563	0.15	0.001078	1.23
TOTAL =			1.56		0.82		6.93

Emissions are the result of extrusion of a polymer coating over copper wire which has been prepared by the stranding and rewind lines.
 CV = Continuous vulcanization.

METHODOLOGY

Acetophenone Emission Factor was provided by source.
 PM and VOC Emission Factors are from "Development of Emission Factors for Polyethylene Processing," Journal of the Air and Waste Management Association, Volume 46, June 1996.

Compliance Determination: 326 IAC 8-2

Process	VOC		VOC (lb/day)
	Emissions (ton/yr)	(lb/hr)	
CV-1	0.25	0.11	1.37
CV-2	0.15	0.06	0.82
CV-4	0.17	0.07	0.93
CV-5	0.15	0.06	0.80

326 IAC 6-3-2

Emission Unit	Process Weight Rate (tons/hr) P	Uncontrolled PM Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
CV-1	0.22	0.11	1.50
CV-2	0.13	0.06	1.06
CV-3	0.10	0.05	0.86
CV-4	0.15	0.07	1.16
CV-5	0.13	0.06	1.05

Compliance Determination: 326 IAC 6-3-2

PM Emissions (lb/hr)

CV-1: Since 0.11 is less than 1.50, CV-1 is able to comply.
 CV-2: Since 0.06 is less than 1.06, CV-2 is able to comply.
 CV-3: Since 0.05 is less than 0.86, CV-3 is able to comply.
 CV-4: Since 0.07 is less than 1.16, CV-4 is able to comply.
 CV-5: Since 0.06 is less than 1.05, CV-5 is able to comply.

The CV lines are able to comply with the requirements of 326 IAC 6-3-2 without the use of a control device.

Methodology:

$E = 4.10 P^{0.87}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

Appendix A: Emission Calculations
Lead Lines

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Lead Lines

Facility Description	Control Device	Control Efficiency (%)	Max. Capacity (tons/hr)	Stack ID	Max. Production (tons/yr)
(a) North Lead Line (ID #5)	CC#5	95.00%	3.3	SS-50 *	28,908
(b) South Lead Line (ID #6)	CC#6	95.00%	2.1	SS-50 **	18,396

Emissions

Pollutant	North Lead Line (#5)			South Lead Line (#6)			Total Uncontrolled Emissions (ton/yr)	Total Controlled Emissions (ton/yr)
	Emission Factor (lb/ton)	Uncontrolled Emissions (ton/yr)	Controlled Emissions (ton/yr)	Emission Factor (lb/ton)	Uncontrolled Emissions (ton/yr)	Controlled Emissions (ton/yr)		
PM	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
PM ₁₀	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
PM _{2.5}	1.526	22.06	1.10	1.526	14.04	0.70	36.09	1.80
Lead (Pb)	0.0102	0.15	0.01	0.0008	0.01	0.00	0.15	0.01
VOC **		2.70			1.54		4.24	4.24

- Notes: 1) PM and PM₁₀ emission factors for Lead lines are based on the stack test performed on September 1995 at this facility, because no testing for these pollutants was conducted in 2000 or later.
 2) Lead (Pb) emission factors for Lead lines are based on the stack test performed on August 23, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.
 * Emissions from the organic solvent wash pot & the adhesive application pot exhaust to SS-50; all other emission points on the North lead line exhaust to the HEPA cartridge (CC#5) and are then vented indoors.
 ** Emissions from the organic solvent wash pot & the adhesive application pot exhaust to SS-50; all other emission points on the South lead line exhaust to the HEPA cartridge (CC#6) and are then vented indoors.

Methodology:

Potential Emissions tons/yr = Emission factor (lb/ton) x maximum capacity (tons/hr) / 2000 lb/ton x 8760 hrs/yr
 VOC emissions from the organic solvent wash pot & the adhesive application pot are assumed to be 100%.

326 IAC 6-3-2

Emission Unit	Process Weight Rate (tons/hr) P	Uncontrolled PM Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
North Lead Line, ID: #5 (CC#5)	3.3	5.04	9.12
South Lead Line, ID: #6 (CC#6)	2.1	3.20	6.74

Compliance Determination:

PM Emissions (lb/hr)

5.04	Since 5.04 is less than 9.12, #5 is able to comply.
3.20	Since 3.20 is less than 6.74, #6 is able to comply.

The #5 and #6 lead lines are able to comply with the requirements of 326 IAC 6-3-2 without the use of a control device.

Methodology:

E = 4.10 P^{0.87} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

Appendix A: Emission Calculations
Lead Stripper

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Lead Lines

Facility Description	Control Device	Control Efficiency (%)	Max. Capacity (tons/hr)	Stack ID	Max. Amount Stripped (tons/yr)
One (1) lead stripper (ID #8)	CC#8	95.00%	18	N/A *	78.84
Solvent Wash Pot	none	0.00%	*	SS-52	

Emissions

Pollutant	Stripper		Total Uncontrolled Emissions (ton/yr)	Total Controlled Emissions (ton/yr)
	Emission Factor (lb/ton)	Uncontrolled Emissions (ton/yr)		
PM	0.169	13.32	13.32	1.33
PM ₁₀	0.169	13.32	13.32	1.33
PM _{2.5}	0.169	13.32	13.32	1.33
HAP (Pb)	0.00029	0.02	0.023	0.002
VOC **	n/a	n/a	4.24	4.24

Source-wide Uncontrolled Pb Emissions (ton/yr)	Source-wide Controlled Pb Emissions (ton/yr)
0.18	0.01

- Notes:**
- 1) PM and PM₁₀ emission factors for Lead lines are based on the stack test performed on September 1995 at this facility, because no testing for these pollutants was conducted in 2000 or later.
 - 2) Lead (Pb) emission factors for Lead lines are based on the stack test performed on August 23, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.
 - 3) Lead (Pb) emission factor for Lead stripper is based on the stack test performed on November 9, 1999 at this facility, because no testing for this pollutant was conducted in 2004 or later.
- VOC emissions from the lead stripper do not contain any other HAP; lead is the only HAP that is emitted.
** Emissions from the solvent wash pot exhaust to SS-52; all other emission points on the lead stripper line exhaust to the HEPA cartridge (CC#8) and are then vented indoors.

Methodology:

Potential Emissions tons/yr = Emission factor (lb/ton) x maximum capacity (tons/hr) / 2000 lb/ton x 8760 hrs/yr

326 IAC 6-3-2

Emission Unit (Control)	Process Weight Rate (tons/hr) P	Uncontrolled Emissions (lbs/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lbs/hr)
Lead Stripper, ID: #8 (CC#8)	18	3.04	28.43

Compliance Determination:

PM Emissions (lb/hr)

3.04

Since 3.04 is less than 28.43, #8 is able to comply.

The #8 lead stripper is able to comply with the requirements of **326 IAC 6-3-2 without the use of a control device.**

Methodology:

E = 4.10 P^{0.57} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

UNCONTROLLED POTENTIAL EMISSIONS

Facility / Operatioin	Boiler #1	Lead Stripper	Lead Lines	Extrusion	Total
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
HAP Pollutant					
Acetohpene	0.00	0.00	0.00	6.93	6.93
Antimony	0.00	0.00	0.00	0.00	0.00
Arsenic	0.00	0.00	0.00	0.00	0.00
Benzene	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00
Cadmium	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.00	0.00	0.00
Carbon tetrachloride	0.00	0.00	0.00	0.00	0.00
Chloroform	0.00	0.00	0.00	0.00	0.00
Dichlorobenzene	0.00	0.00	0.00	0.00	0.00
Ethyl benzene	0.00	0.00	0.00	0.00	0.00
Ethylene thiourea	0.00	0.00	0.00	0.00	0.00
Formaldehyde	0.02	0.00	0.00	0.00	0.02
Glycol Ethers	0.00	0.00	0.00	0.00	0.00
Hexane	0.37	0.00	0.00	0.00	0.37
Isophorone	0.00	0.00	0.00	0.00	0.00
Lead	0.00	0.02	0.15	0.00	0.18
Manganese	0.00	0.00	0.00	0.00	0.00
Mercury	0.00	0.00	0.00	0.00	0.00
Methanol	0.00	0.00	0.00	0.00	0.00
Methyl ethyl ketone (MEK)	0.00	0.00	0.00	0.00	0.00
Nickel	0.00	0.00	0.00	0.00	0.00
Toluene	0.00	1.55	1.55	0.00	3.10
Vinyl Acetate	0.00	0.00	0.00	0.00	0.00
Xylene	0.00	0.00	0.00	0.00	0.00
Total HAPs (tons/yr)	0.40	1.57	1.70	6.93	10.61

Highest Individual HAP = Hexane Toluene Toluene Acetophenone

Methodology

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Boiler 1

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Boiler #B1

Heat Input Capacity
 MMBtu/hr
 48.0

Potential Throughput
 MMCF/yr
 412.2

	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} ***	SO ₂	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.39	1.57	1.57	0.12	20.61	1.13	17.31

NOTE: Boiler #B1 uses natural gas as the only fuel.
 *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
 *** In 2008 the EPA directed states to use PM₁₀ as a surrogate for PM_{2.5}.

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/1,020 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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 100
HAPs Emissions

Company Name: General Cable Industries, Inc.
Address City IN Zip: 440 East 8th Street, Marion, IN 46953
MSOP No.: 053-28045-00001
Reviewer: Sandra Carr
Date: December 5, 2008

Boiler #B1

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	0.0004	0.0002	0.0155	0.3710	0.001

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	0.0001	0.0002	0.0003	0.0001	0.0004

Methodology is the same as page 1.

Highest Single HAP = 0.37 (Hexane)
Total HAP = 0.39

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