INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 4, 2006

RE: General Electric Company dba LNP Engineering / 005-23292-00049

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

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FN-REGIS.dot 03/23/06

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December 4, 2006

Mr. John A. Curvey
General Electric Company dba LNP Engineering Plastics
945 S. Marr Road
Columbus, Indiana 47201

Re: Revised Registered Construction and Operation Status, 005-23292-00049

Dear Mr. Curvey:

The application from General Electric Company dba LNP Engineering Plastics received on June 27, 2006, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following fiber filled plastics manufacturing plant, located at 945 S. Marr Road, Columbus, Indiana 47201, are classified as registered:

(a) Four (4) long fiber filled extruded thermoplastic manufacturing lines, including:

(1) Line 71, constructed in 1994 and modified in 2006, having a maximum production rate of 1,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(2) Line 72, constructed in 1995, having a maximum production rate of 1,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(3) Line 73, constructed in 1998, having a maximum production rate of 2,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(4) Line 74, constructed in 2000, having a maximum throughput of 1,700 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(b) Six (6) short fiber filled extruded thermoplastic manufacturing lines, including:

(1) Line 81, constructed in 1989, having a maximum production rate of 2,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(2) Line 82, constructed in 1989, having a maximum production rate of 2,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(3) Line 84, constructed in 2002, having a maximum production rate of 200 pounds per hour, with emissions of particulate matter controlled using a dust collector.

(4) Line 90, constructed in January 2003, having a maximum production rate of 1,800 pounds per hour, with emissions of particulate matter controlled by a dust collector.

(5) Line 91, constructed in 1994, having a maximum production rate of 2,000 pounds per hour, with emissions of particulate matter controlled by a dust collector.

(6) Line 92, constructed in 1999, having a maximum production rate of 3,000 pounds of product per hour, with emissions of particulate matter controlled by a dust collector.

(c) Pneumatic conveyance systems used to transfer raw material, intermediates, and finished products between silos, storage bins and hoppers. Each system uses a series of cyclones, filters and dust collectors, which collect the transferred material and in some cases, prevent dust from entering the vacuum pumps.

(d) One (1) color pigment blending room, constructed in 2002, having a maximum production rate of 237 pounds per hour. Emissions of particulate matter are controlled using a dust collector.

(e) One (1) molding room, constructed in 1994, consisting of two (2) molding units, identified as QC1 and QC2. Each molding unit has a maximum throughput of 1.5 pounds of product per hour.

(f) One (1) research and development line, constructed in 1998, consisting of a feeder, hopper, extruder, die block, cooling bath, pelletizer, and molder, with a maximum production capacity of 300 pounds of product per hour. Emissions from these units are exhausted at stacks RD1 and RD2.

(g) One (1) natural gas fired makeup air unit with a maximum heat input capacity of 1.458 MMBtu per hour for the long-fiber product research and development lab constructed in January 2003.

(h) Two (2) natural gas-fired pyrolysis cleaning ovens, identified as Units G1, and F, having a maximum heat input capacity of 0.37 and 1.5 MMBtu per hour, respectively. These ovens were constructed in 1994 and 1997, respectively.

(i) Natural gas-fired heaters having a combined heat input capacity of 28.08 MMBtu per hour.

(j) A cold cleaner used to perform non-halogenated organic solvent degreasing (mineral spirits) of parts in the maintenance shop that does not exceed 145 gallons per 12 months and that is not subject to 326 IAC 20-6. The cold cleaner is an offline system, batch type, which uses a cold spray, and is equipped with drain and remote reservoir with insignificant exposure to outside air.

(k) One (1) R&D coextrusion line (identified as RD3), constructed in 2004, with a maximum production rate of 300 pounds of product per hour.

(l) One (1) natural gas-fired rooftop unit, constructed in 2004, with a maximum heat input capacity of 0.80 MMBtu per hour, for the Gate 1 Office Area.

(m) One (1) central vacuum system, constructed in 2004, consisting of two units (identified as CV1 and CV2). CV1 consists of a turbine providing vacuum suction through a vessel containing cartridge filters. CV2 consists of a turbine providing vacuum suction through an initial hopper for removal of pellets and a second hopper containing a bag filter.

(n) One (1) natural gas-fired pyrolysis cleaning oven (identified as Unit G3), constructed in 2004, having a maximum heat input capacity of 0.55 MMBtu per hour. Emissions from this oven are exhausted to the atmosphere through stack G3.

The following conditions shall be applicable:

(a) 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:

(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 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.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the short fiber filled extruded thermoplastic manufacturing line shall not exceed 5.38 pounds per hour.

The particulate emission limitations were calculated as follows:

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

(c) Each of the pyrolysis cleaning ovens (identified as units G1, G3, and F) has a maximum solid waste capacity of less than 100 pounds per hour. Pursuant to 326 IAC 4-2 (Incinerators), each of these three incinerator units shall:

(1) Consist of primary and secondary chambers or the equivalent;

(2) Be equipped with a primary burner unless burning wood products;

(3) Comply with 326 IAC 5-1 and 326 IAC 2;

(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in 326 IAC 4-2-2(c); and

(5) Not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.

(6) If any of the requirements of (d)(1) through (d)(5) above are not met, the Permittee shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

The Permittee operating the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

(d) Pursuant to 326 IAC 9-1-2 (Carbon Monoxide Emission Limits), the Permittee shall not operate the pyrolysis cleaning ovens (identified as units G1, G3, and F) unless the waste gas stream is burned in one of the following:

(1) Direct-flame afterburner; or

(2) Secondary chamber.

(e) Pursuant to 326 IAC 8-3-1 (Organic Solvent Degreasing Operations), the cold cleaning degreaser is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations), because it was constructed in 1998, after the applicability date of January 1, 1980. Pursuant to this rule, the Permittee shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the cleaner;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label summarizing the operation requirements;

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

This registration is a revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

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

no later than March 1 of each year, with the annual notice being submitted in the format attached.

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

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Ms. Tracy DeHaven Parham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7901 to speak directly to Ms. Parham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204, or call (800) 451-6027, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

ERG/TDP

cc: File – Bartholomew County
Bartholomew County Health Department
Air Compliance – Vaugh Ison
Permit Tracking
Compliance Data Section

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**General Electric Company dba LNP Engineering Plastics**
Address:	**945 S. Marr Road**
City:	**Columbus, Indiana 47201**
Authorized individual:	**John Curvey**
Phone #:	**(812) 372-9197**
Registration #:	**005-23292-00049**

I hereby certify that General Electric Company dba LNP Engineering Plastics, is still in operation and is in compliance with the requirements of Registration No. 005-23292-00049.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registration Revision

Source Background and Description

Source Name:	General Electric Company dba LNP Engineering Plastics
Source Location:	965 S. Marr Road, Columbus, Indiana 47201
County:	Bartholomew
SIC Code:	3087
Registration No.:	005-23292-00049
Permit Reviewer:	ERG/TDP

The Office of Air Quality (OAQ) has reviewed an application from General Electric Company dba LNP Engineering Plastics relating to the modification of a stationary fiber filled plastics manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

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

(a) Four (4) long fiber filled extruded thermoplastic manufacturing lines, including:

(1) Line 71, constructed in 1994 and modified in 2006, having a maximum production rate of 1,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(2) Line 72, constructed in 1995, having a maximum production rate of 1,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(3) Line 73, constructed in 1998, having a maximum production rate of 2,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(4) Line 74, constructed in 2000, having a maximum throughput of 1,700 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

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(2) Line 82, constructed in 1989, having a maximum production rate of 2,000 pounds of product per hour, with emissions of particulate matter controlled using a dust collector.

(3) Line 84, constructed in 2002, having a maximum production rate of 200 pounds per hour, with emissions of particulate matter controlled using a dust collector.

(4) Line 90, constructed in January 2003, having a maximum production rate of 1,800 pounds per hour, with emissions of particulate matter controlled by a dust collector.

(5) Line 91, constructed in 1994, having a maximum production rate of 2,000 pounds per hour, with emissions of particulate matter controlled by a dust collector.

(6) Line 92, constructed in 1999, having a maximum production rate of 3,000 pounds of product per hour, with emissions of particulate matter controlled by a dust collector.

(c) Pneumatic conveyance systems used to transfer raw material, intermediates, and finished products between silos, storage bins and hoppers. Each system uses a series of cyclones, filters and dust collectors, which collect the transferred material and in some cases, prevent dust from entering the vacuum pumps.

(d) One (1) color pigment blending room, constructed in 2002, having a maximum production rate of 237 pounds per hour. Emissions of particulate matter are controlled using a dust collector.

(e) One (1) molding room, constructed in 1994, consisting of two (2) molding units, identified as QC1 and QC2. Each molding unit has a maximum throughput of 1.5 pounds of product per hour.

(f) One (1) research and development line, constructed in 1998, consisting of a feeder, hopper, extruder, die block, cooling bath, pelletizer, and molder, with a maximum production capacity of 300 pounds of product per hour. Emissions from these units are exhausted at stacks RD1 and RD2.

(g) One (1) natural gas fired makeup air unit with a maximum heat input capacity of 1.458 MMBtu per hour for the long-fiber product research and development lab constructed in January 2003.

(h) Two (2) natural gas-fired pyrolysis cleaning ovens, identified as Units G1 and F, having a maximum heat input capacity of 0.37 and 1.5 MMBtu per hour, respectively. These ovens were constructed in 1994 and 1997, respectively.

(i) Natural gas-fired heaters having a combined heat input capacity of 28.08 MMBtu per hour.

(j) A cold cleaner used to perform non-halogenated organic solvent degreasing (mineral spirits) of parts in the maintenance shop that does not exceed 145 gallons per 12 months and that is not subject to 326 IAC 20-6. The cold cleaner is an offline system, batch type, which uses a cold spray, and is equipped with drain and remote reservoir with insignificant exposure to outside air.

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(l) One (1) natural gas-fired rooftop unit, constructed in 2004, with a maximum heat input capacity of 0.80 MMBtu per hour, for the Gate 1 Office Area.

(m) One (1) central vacuum system, constructed in 2004, consisting of two units (identified as CV1 and CV2). CV1 consists of a turbine providing vacuum suction through a vessel containing cartridge filters. CV2 consists of a turbine providing vacuum suction through an initial hopper for removal of pellets and a second hopper containing a bag filter.

(n) One (1) natural gas-fired pyrolysis cleaning oven (identified as Unit G3), constructed in 2004, having a maximum heat input capacity of 0.55 MMBtu per hour. Emissions from this oven are exhausted to the atmosphere through stack G3.

Existing Approvals

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

(a) Registration Revision 005-19868-00049, issued November 4, 2004;

(b) Registration 005-18797-00049, issued May 28, 2004;

(c) Registration Revision 005-17886-00049, issued October 8, 2003;

(d) Registration 005-17704-00049, issued August 5, 2003; and

(e) Registration Revision 005-17886-00049, issued July 3, 2003.

Justification for the Revision

The Registration is being modified through a Registration Revision. This revision is being performed pursuant to 326 IAC 2-5.5-6(g), based on new applicability requirements to previously registered equipment.

New Emission Units

The source is modifying the existing pultrusion Line 71 by adding the following units:

(a) Vacuum receivers A1 through A4, 9, 10, and 11,

(b) Feeders A1 through A7 and 9 through 13,

(c) Feed hopper,

(d) Elutriator, pelletron, and

(5) Surge bin. This will replace the current storage bin, mixer, feeder hopper, and feeder.

Additionally, new equipment is being added to existing pultrusion Line 71 (see above). In addition, the potential to emit of the new equipment is below the exemption thresholds of 326 IAC 2-1.1-3. Additionally, the existing pyrolysis cleaning ovens are subject to 326 IAC 9-1-2, Carbon Monoxide Emission Limits, the requirements of which are being incorporated into this registration. The fluidized bed cleaning system, identified as G2, has been removed from this source.

Air Pollution Control Justification as an Integral Part of the Process

The company submitted the following justification for R005-19868-00049, issued November 4, 2004, and approved by IDEM, such that the cyclone and filter be considered as an integral part of the pneumatic conveyance system:

The vacuum receivers 1-4 and 9-11 are part of the pneumatic conveying system used to move pellets and powders from the storage areas to the processing lines. The nature of this operation is such that equipment typically viewed as air pollution control equipment is, for these operations, necessary to the proper functioning of the equipment, and therefore integral to the process units.

The pneumatic transfer system works using a vacuum pump, which pulls air through the storage bin and associated conduits to a cyclone and filter, which are arranged in series. The cyclone is used to collect the transferred material, while the filter protects the vacuum pump from damage by fine particles that may be entrained in the air stream. Since the cyclone and filter make the transfer of the material possible and protect the vacuum pump from damage, they are considered integral to the process.

The cost of replacing the vacuum pump is $1115. Without the vacuum pump filter in place, the pump would clog with fines and fail in approximately 48 hours, and material could not be pneumatically conveyed to the processing lines. Repeated replacement of the pump would create significant costs for the company.

IDEM, OAQ has evaluated these justifications, and agreed that the air pollution control equipment described above should be considered as an integral part of the pneumatic conveyance systems. Therefore, the permitting level will continue to be determined using the potential to emit after the air pollution control equipment. Operating conditions in the proposed permit will specify that this air pollution control equipment shall operate at all times when the vacuum receivers 1-4 and 9-11 are in operation.

The company has submitted the following justification such that the dust collector be considered as an integral part of the Catch Pan to the Elutriator and the Pelletron/Chute:

The Catch Pan to the Elutriator is a pneumatic conveying process that reduces fines produced in the cutting/pelletizing process prior to sending the resin pellets to customers. Pellets are pneumatically transferred from the Catch Pan to the Elutriator, striking a diverter plate inside the Elutriator, separating loose glass and fines from the pellets. The dust collector separates fines from the pellets prior to the pellets being fed into the Pelletron. The Pelletron also removes fines from the pellets. The pellets are gravity fed through an air stream, and the dust collector separates and removes additional fines from the pellets.

The installation costs of the Catch Pan to the Elutriator is $4000, and the cost of the Pelletron/Chute with dust collector is $50,500. Without the dust collector in place on the Catch Pan to the Elutriator and Pelletron/Chute, approximately one lot of pellets per week would be returned due to customer complaints and a need to clean the product. The average lot size is 15,000 lbs, at a cost of $6.13/lb. The approximate direct loss from the returned product would be $91,950 per week.

IDEM, OAQ has evaluated these justifications and agreed that the dust collector will be considered an integral part of the Catch Pan to the Elutriator and Pelletron/Chute. Therefore, the permitting level will be determined using the potential to emit after the dust collector. Operating conditions in the proposed permit will specify that this dust collector shall operate at all times when the Catch Pan to Elutriator and Pelletron/Chute are in operation.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
L1	Line 71-Long Fiber Pultrusion Line	58.5	1	2,000	120
L2	Line 72 – Die Block	58	1.2	5,500	110
L3	Line 73 – Pultrusion Line	58	2	10,000	110
L4	Line 74 – Long Fiber Pultrusion Line	45	2	9,000	110

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
A	Line 81 – Extruder	30	1.2	3,500	Between 70 and 90
B	Line 82 – Extruder	30	1.2	3,500	Between 70 and 90
M	Line 84 – Extruder	40	1	4,000	150
N	Line 84-Vaccuum Pump Exhaust	30	0.17	50	110
TO	Line 90	30	1.5	9,000	110
T1	Line 91-Twin Screw Compounding	58.5	1.5	3,500	120
G1	Pyrolysis Cleaning Oven	NA	NA	NA	NA
T2	Line 92 – Twin Screw Compounding	58	1.5	7,000	110
F	Pyrolysis Cleaning Oven	25	1	1,200	100
G3	Pyrolysis Cleaning Oven	NA	NA	NA	NA
AA	Exhaust Fan for Quality Control Molding Machines	40	1.5	1,600	110
RD1	R & D Extruder	50	2	4,000	110
RD2	R & D Molder	50	1.3	800	110
RD3	R & D Coextrusion Line	30	2	8,000	110
AB	Ventilation for Toll Cleaning Area	12	1	500	Ambient

Recommendation

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

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

An application for the purposes of this review was received on June 27, 2006, with additional information received on August 17, 2006.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 3.)

Potential to Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	18.4
PM-10	18.4
SO_2	0.09
VOC	14.0
CO	12.5
NO_x	14.8

HAPs	Potential To Emit* (tons/year)
Acetaldehyde	0.0052
Acrolein	0.0006
Acrylic Acid	0.0052
Benzene	0.0003
Dichlorobenzene	0.0002
Formaldehyde	0.0164

HAPs	Potential To Emit* (tons/year)
Hexane	0.2539
Methyl Ethyl Ketone	0.0026
Propionaldehyde	0.0013
Toluene	0.0005
Lead	0.0001
Cadmium	0.0002
Chromium	0.0002
Manganese	0.0001
Nickel	0.0003
Worst Single HAP	0.25
Combined HAP	0.29

*The potential to emit of HAPs is from natural gas combustion sources and from resin extrusion, pultrusion, and molding sources (assuming polypropylene as primary resin). See previous registrations for detailed emission calclations.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, SO_2, VOC, CO, and NOx are less than twenty-five (25) tons per year. The potential to emit of PM, PM10, and VOC are greater than five (5) tons per year and the potential to emit of NOx is greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Bartholomew County.

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

Note: On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

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

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) emissions 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. Bartholomew 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. See the State Rule Applicability for the source section.

(c) Bartholomew County has been classified as attainment or unclassifiable in Indiana for SO_2, NO_2, PM-10, CO, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	18.6
PM-10	18.6
SO_2	0.09
VOC	14.0
CO	12.5
NO_x	14.8
Single HAP	0.25
Combination HAPs	0.29

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

(b) These emissions were based on the registration application submitted by the source.

Proposed Modification

PTE from the proposed modification (based on 8760 hours of operation per year at rated capacity including enforceable emission control and production limit where applicable):

Pollutant	PM (ton/yr)	PM-10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	0.56	0.56	--	0.65	--	--
PSD or Offset Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 005-23292-00049, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source and the potential to emit calculations (see Appendix A) for the proposed modification.

Federal Rule Applicability

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD are not included in the registration for the natural gas-fired heaters and ovens. This source is not a major source of hazardous air pollutants.

(b) The requirements of 40 CFR 63, Subpart U (63.480 through 63.507) NESHAP Emission: Group I Polymers and Resins (326 IAC 20-19-1) are not included in this registration. This source is not a major source of HAPs.

(c) The requirements of 40 CFR 63, Subpart W (63.520 through 63.529) NESHAPs: Group II Polymers and Resins, Epoxy Resins Production and Non-Nylon Polyamides Production (326 IAC 20-20-1) are not included in this registration, This source is not a major source of HAPs.

(d) The requirements of 40 CFR 63, Subpart OOO (63.1400 through 63.1419) NESHAPs: Group III Polymers and Resins (326 IAC 20-58-1) are not included in this registration. This source is not a major source of HAPs.

(e) The requirements of 40 CFR 63, Subpart JJJ (63.1310 through 63.1335) NESHAP Emissions: Group IV Polymers and Resins (326 IAC 20-21-1) are not included in this registration. The source is not a major source of HAPs and only performs finishing processes (blending, additives introduction, curing, extruding, pultruding, annealing, cooling and drying, pelletizing of thermoplastic resins), which are specifically exempt from the requirements of this rule under 40 CFR 63.1310(d).

(f) The requirements of 40 CFR 63, Subpart WWWW (63.5780 through 63.5935) - NESHAPs: Reinforced Plastic Composites Production (326 IAC 20-25-1) are not included in this registration. This source is not a major source of HAPs and does not manufacture reinforced plastic composites.

(g) The requirements of 40 CFR 63, Subpart J (63.210 through 63.217) - NESHAPs: Polyvinyl Chloride and Copolymers Production (326 IAC 20-69-1) are not included in this registration. This source is not a PVC plant (i.e., is not a plant where vinyl chloride alone or in combination with other materials is polymerized, and is not a major source of HAPs.

(h) The requirements of 40 CFR 63, Subpart YY (63.1100 through 63.1114) - NESHAPs for Source Categories: Generic Maximum Achievable Control Technology Standards (326 IAC 20-44-1) are not included in this registration. This source is not a major source of HAPs.

(i) The requirements of 40 CFR 63, Subpart III (63.1290 through 63.1309) - NESHAPs: Flexible Polyurethane Foam Production (326 IAC 20-22-1) are not included in this registration. This source is not a major source of HAPs.

(j) The requirements of 40 CFR 63, Subpart MMMMM (63.8780 through 63.8830) - NESHAPs: Flexible Polyurethane Foam Fabrication Operation (326 IAC 20-66-1) are not included in this registration. This source is not a major source of HAPs.

(k) The following NESHAPs are not included in this registration. This source is not a major source of HAPs and this source primarily engages in manufacturing of fiber-filled plastic pellets through processing of purchased resins under SIC Code 3087, and does not manufacture chemicals:

(1) 40 CFR 63, Subpart F (63.100 through 63.107), NESHAPs From the Synthetic Organic Chemical Manufacturing Industry (326 IAC 20-11-1);

(2) 40 CFR 63, Subpart G (63.110 through 63.153), NESHAPs From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (326 IAC 20-11-1);

(3) 40 CFR 63, Subpart H (63.160 through 63.183), NESHAPs: Organic Hazardous Air Pollutants for Equipment Leaks (326 IAC 20-11-1); and

(4) 40 CFR 63, Subpart I (63.190 through 63.193), NESHAPs: Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (326 IAC 20-12-1).

(l) The requirements of 40 CFR 63, Subpart EEE (63.1200 through 63.1214), NESHAPs from Hazardous Waste Combustors (326 IAC 20-28-1) are not included in this registration. The natural gas-fired ovens are not considered hazardous waste incinerators and the source is not a major source of HAPs.

(m) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 20 and 40 CFR Parts 61 and 63) included for this registration.

(n) The requirements of 40 CFR 60, Subpart DDD (60.560 through 60.566), Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry (326 IAC 12) are not included in this registration. The source primarily engages in manufacturing of reinforced plastic composites (glass fiber filled) through compounding of purchased resins under SIC Code 3087, and does not manufacture synthetic resins through chemical processes (e.g., SIC Codes 2821 and 2824).

(o) The requirements of 40 CFR 60 Subpart E (60.50 through 60.54), Standards of Performance for Incinerators (326 IAC 12) are not included in this registration. The natural gas-fired ovens have charging rates less than fifty (50) tons per day and they do not burn refuse consisting of more than 50 percent municipal type waste (household, commercial/retail, and/or institutional waste).

(p) The requirements of the following New Source Performance Standards (NSPS) are not included in this registration, because, the natural gas-fired ovens are not considered municipal waste combustors or hospital/medical/infectious waste incinerators:

(1) 40 CFR 60 Subpart Ea (60.50a through 60.59a), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after December 20, 1989 and on or before September 20, 1994 (326 IAC 12)

(2) 40 CFR 60 Subpart Eb (60.50b through 60.59b), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994, or for Which Modification or Reconstruction is commenced after June 19, 1996 (326 IAC 12)

(3) 40 CFR 60 Subpart Ec (60.50c through 60.58c), Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced after January 20, 1996 (326 IAC 12)

(4) 40 CFR 60 Subpart AAAA (60.1000 through 60.1465), Standards of Performance for Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001 (326 IAC 12)

(q) The three (3) natural gas-fired pyrolysis cleaning ovens (G1, G3, and F) are exempt from the requirements of 40 CFR 60 Subpart CCCC (60.2000 through 60.2265), Standards of Performance for Commercial and Industrial Solid Waste Incinerations Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced on or After June 1, 2001 (326 IAC 12), because these units are considered parts reclamation units (40 CFR 60.2020(k)).

(s) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this registration.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Bartholomew County, it is not required to have an operating permit under 326 IAC 2-7, (Part 70 Permit Program), and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 2-2 (Prevention of Significant Deterioration)

LNP Engineering Plastics, Inc. was a minor source under PSD when it was constructed in 1994 and is not in one (1) of the twenty-eight (28) source categories. The source was modified numerous times between 1994 and 2004, none of which triggered PSD. The source submitted an application on June 27, 2006 requesting a modification of the existing pultrusion Line 71 and the removal of the fluidized bed cleaning system G2. After this modification, the potential to emit of each criteria pollutant from the entire source remains less than 250 tons per year. Therefore, this source is not subject to the requirements of 326 IAC 2-2.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

The operation of the fiber filled plastic pellet manufacturing plant will emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability – Individual Facilities

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the short fiber filled extruded thermoplastic manufacturing line (Line 92), shall not exceed the 5.38 pounds per hour.

The particulate emission limitation as calculated as follows:

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

(b) The molders QC-1 and QC-2, the central vacuum systems CV1 and CV2, the long fiber-filled thermoplastic manufacturing lines (Lines 71, 72, 73, and 74), the short fiber-filled thermoplastic manufacturing lines (Lines 81, 82, 83, 84, 90, and 91), color pigment blending room, pneumatic conveyance systems, and two (2) research and development lines are not subject to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the manufacturing processes have a potential to emit of less than 0.551 lb/hour particulate matter, shall each not exceed the particulate allowable emission of 0.551 pounds per hour.

326 IAC 4-2 (Incinerators)

The pyrolysis cleaning ovens (identified as units G1, G3, and F) are subject to the requirements of 326 IAC 4-2 because these types of units are considered as incinerators. Pursuant to 326 IAC 4-2 (Incinerators), the pyrolysis cleaning ovens shall:

(1) Consist of primary and secondary chambers or the equivalent;

(2) Be equipped with a primary burner unless burning wood products;

(3) Comply with 326 IAC 5-1 and 326 IAC 2;

(4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in 326 IAC 4-2-2(c); and

(5) Not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.

(6) If any of the requirements of 326 IAC 4-2-2(a)(1) through 326 IAC 4-2-2(a)(5) above are not met, the Permittee shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

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

All facilities constructed after January 1, 1980, the applicability date for this rule, have potential VOC emissions less than twenty-five (25) tons per year. Therefore, this source is not subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-1 (Organic Solvent Degreasing Operations), the cold cleaning degreaser is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations), because it was constructed in 1998, after the applicability date of January 1, 1980. Pursuant to this rule, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The degreasing operation is not subject to the requirements of 326 IAC 8-3-5 because the degreaser has a remote solvent reservoir.

326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)

The natural gas-fired heaters and ovens are not subject to the rule 326 IAC 7-1 because the potential and the actual emissions are less than 25 tons per year and 10 pounds per hour respectively.

326 IAC 9-1-2 (Carbon Monoxide Emission Limits)

The pyrolysis cleaning ovens (identified as units G1, G3, and F) are subject to 326 IAC 9-1-2 (Carbon Monoxide Emission Limits) because these units are stationary sources of carbon monoxide (CO) constructed after March 21, 1972, and subject to the requirements of 326 IAC 9-1-2(a)(3).

Pursuant to 326 IAC 9-1-2 (Carbon Monoxide Emission Limits), the Permittee shall not operate the pyrolysis cleaning ovens (identified as units G1, G3, and F) unless the waste gas stream is burned in one of the following:

(a) Direct-flame afterburner; or

(b) Secondary chamber.

Conclusion

The operation of this fiber filled plastics manufacturing operation shall be subject to the conditions of the Revised Registration 005-23292-000049.

Appendix A: Emission Calculations
Summary Emissions

Company Name: General Electric Company dba LNP Engineering Plastics
Address: 945 S. Marr Road, Columbus, Indiana 47201
Registration: 005-23292-00049
Reviewer: ERG/TDP
Date: 08/10/06

PRE-MODIFICATION POTENTIAL TO EMIT OF LINE 71

Line 71	Type of Material Handled	Throughput (lbs/hr)	Emission Factor (lbs/ton of Material) (1)(2)	PTE of PM/PM10 (tons/yr)	Integral Control Device (3)
Storage Bin	Resin Pellets	650	0.014	9.96E-06	yes
Mixer	Resin Pellets	650	0.014	0.02	no
Feeder	Resin Pellets	650	0.014	0.02	no
Feeder Hopper	Resin Pellets	650	0.014	0.02	no
Classifier	Finished Product	1000	0.014	0.03	no
Catch Pan to Storage Bin	Finished Product	1000	0.014	1.53E-05	yes
Feed Out	Finished Product	1000	0.014	0.03	no
			Total PTE PM/PM10:	**0.12**	

POST-MODIFICATION POTENTIAL TO EMIT OF LINE 71

Line 71	Type of Material Handled	Throughput (lbs/hr)	Emission Factor (lbs/ton of Material) (1)(2)	PTE of PM/PM10 (tons/yr)	Integral Control Device (3)
Vacuum Receiver A1	Resin Pellets	150	0.014	4.59E-03	yes
Vacuum Receiver A2	Resin Pellets	40	0.014	1.23E-03	yes
Vacuum Receiver A3	Resin Pellets	30	0.014	9.19E-04	yes
Vacuum Receiver A4	Resin Pellets	10	0.014	3.06E-04	yes
Feeder A1	Resin Pellets	150	0.014	4.60E-03	no
Feeder A2	Resin Pellets	40	0.014	1.23E-03	no
Feeder A3	Resin Pellets	30	0.014	9.20E-04	no
Feeder A4	Resin Pellets	10	0.014	3.07E-04	no
Feeder A5	Powder	5	0.19	2.08E-03	no
Feeder A6	Powder	5	0.19	2.08E-03	no
Feeder A7	Powder	10	0.19	4.16E-03	no
Feed Hopper	Resin Pellets	230	0.014	7.05E-03	no
	Powder	20	0.19	8.32E-03	no
Vacuum Receiver 9	Resin Pellets	260	0.014	7.96E-03	yes
Vacuum Receiver 10	Resin Pellets	50	0.014	1.53E-03	yes
Vacuum Receiver 11	Resin Pellets	40	0.014	1.23E-03	yes
Feeder 9	Resin Pellets	260	0.014	7.97E-03	no
Feeder 10	Resin Pellets	50	0.014	1.53E-03	no
Feeder 11	Resin Pellets	40	0.014	1.23E-03	no
Feeder 12	Powder	100	0.19	4.16E-02	no
Feeder 13	Powder	50	0.19	2.08E-02	no
Feed Hopper	Resin Pellets	350	0.014	1.07E-02	no
	Powder	150	0.19	6.24E-02	no
Classifier	Resin Pellets	1,000	0.014	3.07E-02	no
Catch Pan to Elutriator	Resin Pellets	1,000	0.014	3.07E-05	yes
Pelletron/chute	Resin Pellets	1,000	0.014	3.07E-05	yes
Surge Bin	Resin Pellets	1,000	0.014	3.07E-02	no
Feed Out	Resin Pellets	1,000	0.014	3.07E-02	no
			Total PTE PM/PM10:	**0.29**	

CHANGE IN PTE OF PM/PM10: 0.17

(1) The emission factor for pellet conveyance is based on baghouse collection data provided by the Permittee that showed 0.05 lbs of particulate material is collected from the transfer of 6,928.5 pounds of pellets (or 0.014 lbs of particulate per ton of material processed) using the pneumatic conveyance system. Note that the 0.014 lb/ton emission factor has been used to calculate PTE for pneumatic and gravity transfer of pellets. The Permittee believes the emission factor for the gravity transfer of pellets would be less than the 0.014 lbs/ton emission factor calculated for pneumatic transfer. However, the Permittee was not able to provide the necessary collection data to calculate an emission factor for the gravity transfer of pellets. IDEM, OAQ has therefore used the emission factor of 0.014 lbs/ton to calculate PTE for both pneumatic and gravity transfer of pellets.

(2) The emission factors for gravity transfer are from R005-19868-00049. The emission factor for the gravity transfer of powder is based on the emission factor for urea bagging found in AP-42, Chapter 8.2, Table 8.2-1 (7/93). The source proposed this emission factor because the fine (dusty) materials are similar in composition to urea. This represents a worst-case scenario and will overestimate particulate emissions since some of the additives/powder are less dusty than urea.

(3) The control efficiency of the integral control devices for vacuum receivers A1, A2, A3, A4, 9, 10, and 11, which use a cyclone and vacuum filter, are 95% and 99.9%, respectively. The control efficiency of the integral control device for the catch pan and pelletron, a dust collector, is 99.9%

Methodology:

PTE of PM/PM10 (tons/yr) = Throughput (lbs/hr) * 8760 hrs/yr * 1ton/2000lbs * Emission Factor (lb/ton) * 1 ton/2000 lbs

Controlled PTE of PM/PM10 from vacuum receivers (tons/yr) = PTE of PM/PM10 (tons/yr) * (1 - Control Efficiency of Cyclone %)
* (1 - Control Efficiency of Vacuum Filter %)

Controlled PTE of PM/PM10 from catchpan and pelletron (tons/yr) = PTE of PM/PM10 (tons/yr) * (1- Control Efficiency of Dust Collector %)

Appendix A: Emission Calculations
Summary Emissions

Company Name: General Electric Company dba LNP Engineering Plastics
Address: 945 S. Marr Road, Columbus, Indiana 47201
Registration: 005-23292-00049
Reviewer: ERG/TDP
Date: 08/10/06

PRE-MODIFICATION POTENTIAL TO EMIT OF VOC FROM LINE 71

Material	VOC Emission Factor (lb/ton)[1]	Maximum Throughput (lbs/hr)	PTE of VOC (tons/yr)
Resin Pellets	0.404	700	0.62

POST-MODIFICATION POTENTIAL TO EMIT OF VOC FROM LINE 71

Material	VOC Emission Factor (lb/ton)[1]	Maximum Throughput (lbs/hr)	PTE of VOC (tons/yr)
Powder	1.00	20	0.04
Resin Pellets	0.404	680	0.60
			0.65
	CHANGE IN PTE OF VOC:		**0.03**

[1] Emission factors are from the Journal of the Air & Waste Management Association; January 1999 Volume 49.

Methodology
PTE of VOC (tons/yr) = (Maximum Throughput (lbs/hr) * 1ton/2000lbs) *VOC Emission Factor (lb/ton) * 8760 hrs/year * 1 ton/2000 lbs

Appendix A: Emission Calculations
Summary Emissions

Company Name: General Electric Company dba LNP Engineering Plastics
Address: 945 S. Marr Road, Columbus, Indiana 47201
Registration: 005-23292-00049
Reviewer: ERG/TDP
Date: 08/10/06

PRE-MODIFICATION POTENTIAL TO EMIT OF CRITERIA POLLUTANTS IN TONS PER YEAR

Emission Units	PM	PM10	SO_2	NO_x	VOC	CO
Existing Units						
Polymer melting Processes	16.1	16.1			11.6	
PRE-MOD PTE FROM LINE 71:	0.12	0.12			0.62	
Pyrolysis Ovens (G1 and F)	0.06	0.06	0.005	0.8	0.05	0.7
Degreaser					0.49	
Heaters and Ovens	1.04	1.04	0.082	13.7	0.76	11.5
Coextrusion Line	0.10	0.10			0.46	
Fluidized bed cleaning system	0.01	0.01	0.001	0.1	0.01	0.1
Roof top unit	0.003	0.003	0.0002	0.04	0.002	0.03
Central vacuum system	0.45	0.45				
Pyrolysis Oven (G3)	0.02	0.02	0.001	0.2	0.01	0.2
TOTAL from the entire source	**17.9**	**17.9**	**0.09**	**14.9**	**14.0**	**12.5**

POST-MODIFICATION POTENTIAL TO EMIT OF CRITERIA POLLUTANTS IN TONS PER YEAR

Emission Units	PM	PM10	SO_2	NO_x	VOC	CO
Existing Units						
Polymer melting Processes	16.4	16.4			11.6	
POST-MOD PTE FROM LINE 71:	0.29	0.29			0.65	
Pyrolysis Ovens (G1 and F)	0.06	0.06	0.005	0.8	0.05	0.7
Degreaser					0.49	
Heaters and Ovens	1.04	1.04	0.082	13.7	0.76	11.5
Coextrusion Line	0.10	0.10			0.46	
Fluidized bed cleaning system	--	--	--	--	--	--
Roof top unit	0.003	0.003	0.0002	0.04	0.002	0.03
Central vacuum system	0.45	0.45				
Pyrolysis Oven (G3)	0.02	0.02	0.001	0.2	0.01	0.2
TOTAL from the entire source	**18.4**	**18.4**	**0.09**	**14.8**	**14.0**	**12.5**