



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: April 6, 2010

RE: Geocel Corp / 039-28991-00605

FROM: Matthew Stuckey, Branch 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, 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  
FN-REGIS.dot 1/2/08



# 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](http://www.idem.IN.gov)

## REGISTRATION OFFICE OF AIR QUALITY

**Geocel Corporation**  
**2504 Marina Drive and 2500 Marina Drive**  
**Elkhart, IN 46514**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration 039-26703-00605	
Issued by: <i>Original Signed By:</i> Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 21, 2008
Registration Revision No: 039-28991-00605	
Issued By:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: April 6, 2010

## SECTION A

## SOURCE SUMMARY

This registration 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 Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

---

The Registrant owns and operates a stationary sealant, caulk, and adhesive manufacturing plant.

Source Address:	2504 Marina Drive, Elkhart, Indiana 46514; and 2500 Marina Drive, Elkhart, Indiana 46514
Mailing Address:	2504 Marina Drive, Elkhart, Indiana 46514
SIC Code:	2891
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

---

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

#### Main Production Building

(a) Pigmenting operations as follows:

- (1) One (1) open-top mixing tank, constructed after 1975 and before 1982, identified as P1, used for the solvent-based pigmenting process, with emissions exhausting to the atmosphere, a total maximum throughput of 1,631 pounds of material per batch, and a processing time of one batch per hour.
- (2) One (1) open-top mixing tank, constructed after 1975 and before 1982, identified as P2, used for both solvent based or water-based pigmenting processes, with emissions exhausting to the atmosphere, a total maximum throughput of 2,000 pounds of material per batch, and a processing time of three batches per day.
- (3) One (1) open-top mixing bucket (5-gallon pail), identified as P3, constructed in 2007, used for the solvent-based and latex-based pigmenting process, utilizing no control devices, and exhausting within the building.
- (4) One (1) pigmenting mixing bucket (5-gallon pail), identified as P4, approved for construction in 2010, used for mixing water-based or solvent-based pigments, utilizing no control devices, and exhausting within the building.

(b) Six (6) solvent mixing tanks equipped with tight fitting lids, equipped with six (6) condensers to capture solvent, using closed loop piping to return the solvent to the mixing tanks for reuse. All six (6) solvent mixing tanks exhaust to a condenser (C1 through C5 and C7). Condensers C1 through C5 and condenser C7 exhaust to one (1) final condenser, C8. The condensers are considered an integral part of the process.

- (1) One (1) solvent mixing tank identified as E1, installed in 1978, with a capacity of 1,000 gallons, equipped with a condenser C1.
- (2) One (1) solvent mixing tank identified as E2, installed on 3/1/2003, with a capacity of 1,900 gallons, equipped with a condenser C2.

- (3) One (1) solvent mixing tank identified as E3, installed on 4/1/2005, with a capacity of 570 gallons, equipped with a condenser C3.
- (4) One (1) solvent mixing tank identified as E4, installed in 1990, with a capacity of 400 gallons, equipped with a condenser C4.
- (5) One (1) solvent mixing tank identified as E5, installed in 1982, with a capacity of 400 gallons, equipped with a condenser C5.
- (6) One (1) solvent mixing tank identified as E7, installed in 1990, with a capacity of 1,000 gallons, equipped with a condenser C7.
- (c) Cleaning operations for the solvent mixing tank as follows: cleaners and solvents having a vapor pressure less than two kilo Pascals (2.0 kPa) at thirty-eight degrees Centigrade (38°C) and less than seven-tenths kilo Pascals (0.7 kPa) at twenty degrees Centigrade (20°C) where the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) consecutive month period.
- (d) Blended product holding tanks as follows: twelve (12) storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
- (e) Finished product packaging area where final water-based and solvent-based finished products (sealants, caulks, adhesives, and solvents) are mechanically inserted into small cartridges, tubes, cans, pails, or other small containers for staging and/or shipping.
- (f) Five (5) maintenance parts washers, constructed around 1994, with a maximum throughput of twenty-five (25) gallons of solvent per month, and using solvents that contain less than 5% by weight halogenated HAPs.
- (g) Two (2) perchloroethylene storage tanks identified as Perchloroethylene-1 and Perchloroethylene-2, constructed after 1975 and before 1982, with a maximum storage capacity of 5,000 gallons (668.4 cubic feet), and an annual throughput rate of 112,274 gallons of perchloroethylene per year.
- (h) Two (2) plasticizer storage tanks identified as Plasticizer-1 and Plasticizer-1, constructed after 1975 and before 1982, with a maximum storage capacity of 5,000 gallons (668.4 cubic feet), and an annual throughput rate of 112,274 gallons of plasticizer raw material per year.
- (i) One (1) aromatic fluid storage tank identified as Aromatic 100-1, constructed after 1975 and before 1982, with a maximum storage capacity of 4,000 gallons (534.72 cubic feet), and an annual throughput rate of 89,800 gallons of Aromatic 100 fluid per year.
- (j) One (1) aromatic fluid storage tank identified as Aromatic 100-2, constructed after 1975 and before 1982, with a maximum storage capacity of 4,000 gallons (534.72 cubic feet), and an annual throughput rate of 89,800 gallons of Aromatic 100 fluid per year.
- (k) One (1) 490-gallon latex compounder, identified as E6, with a maximum capacity of 1,215 pounds per batch, processing a maximum of two (2) batches per day, constructed in 2007, with emissions controlled by condenser C6.
- (l) One (1) 90-gallob latex compounder, identified as E8, with a maximum batch capacity of 244 pounds per batch, processing a maximum of two-tenths (0.2) batches per day, constructed in 2007, utilizing no control devices.

- (m) One (1) reactives compounder identified as E9, with a maximum capacity of 100 gallons, constructed in 2007, using only non-VOC and non-HAP materials, with emissions controlled by condenser C9, and exhausting within the building.
- (n) One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.

#### Urethane Sealant Manufacturing Building

- (a) One (1) 200-gallon mixer, identified as M1, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.
- (b) One (1) 100-gallon mixer, identified as M2, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.
- (c) One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of Mineral Spirits per month.
- (d) One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.

## SECTION B

## GENERAL CONDITIONS

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

---

Terms in this registration 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 Effective Date of Registration [IC 13-15-5-3]

---

Pursuant to IC 13-15-5-3, this registration 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.

### B.3 Registration Revocation [326 IAC 2-1.1-9]

---

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM, the fact that continuance of this registration is not consistent with purposes of this article.

### B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

---

- (a) All terms and conditions of permits established prior to Registration No. 039-26703-00605 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 registration.

### B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

---

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (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 registration.
- (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, IN 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.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

---

Pursuant to 326 IAC 2-5.5-6(a), 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.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

---

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**C.1 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:

- 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.2 Fugitive Dust Emissions [326 IAC 6-4]**

---

The Registrant 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).

## SECTION D.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

Main Production Building

(a) Pigmenting operations as follows:

- (1) One (1) open-top mixing tank, constructed after 1975 and before 1982, identified as P1, used for the solvent-based pigmenting process, with emissions exhausting to the atmosphere, a total maximum throughput of 1,631 pounds of material per batch, and a processing time of one batch per hour.
- (2) One (1) open-top mixing tank, constructed after 1975 and before 1982, identified as P2, used for both solvent based or water-based pigmenting processes, with emissions exhausting to the atmosphere, a total maximum throughput of 2,000 pounds of material per batch, and a processing time of three batches per day.
- (3) One (1) open-top mixing bucket (5-gallon pail), identified as P3, constructed in 2007, used for the solvent-based and latex-based pigmenting process, utilizing no control devices, and exhausting within the building.
- (4) One (1) pigmenting mixing bucket (5-gallon pail), identified as P4, approved for construction in 2010, used for mixing water-based or solvent-based pigments, utilizing no control devices, and exhausting within the building.

(b) Six (6) solvent mixing tanks equipped with tight fitting lids, equipped with six (6) condensers to capture solvent, using closed loop piping to return the solvent to the mixing tanks for reuse. All six (6) solvent mixing tanks exhaust to a condenser (C1 through C5 and C7). Condensers C1 through C5 and condenser C7 exhaust to one (1) final condenser, C8. The condensers are considered an integral part of the process (see Air Pollution Control Justification as an Integral Part of the Process section below).

- (1) One (1) solvent mixing tank identified as E1, installed in 1978, with a capacity of 1,000 gallons, equipped with a condenser C1.
- (2) One (1) solvent mixing tank identified as E2, installed on 3/1/2003, with a capacity of 1,900 gallons, equipped with a condenser C2.
- (3) One (1) solvent mixing tank identified as E3, installed on 4/1/2005, with a capacity of 570 gallons, equipped with a condenser C3.
- (4) One (1) solvent mixing tank identified as E4, installed in 1990, with a capacity of 400 gallons, equipped with a condenser C4.
- (5) One (1) solvent mixing tank identified as E5, installed in 1982, with a capacity of 400 gallons, equipped with a condenser C5.
- (6) One (1) solvent mixing tank identified as E7, installed in 1990, with a capacity of 1,000 gallons, equipped with a condenser C7.

(c) Cleaning operations for the solvent mixing tank as follows: cleaners and solvents having a vapor pressure less than two kilo Pascals (2.0 kPa) at thirty-eight degrees Centigrade (38°C) and less than seven-tenths kilo Pascals (0.7 kPa) at twenty degrees Centigrade (20°C) where the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-

five (145) gallons per twelve (12) consecutive month period.

- (d) Blended product holding tanks as follows: twelve (12) storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.
- (e) Finished product packaging area where final water-based and solvent-based finished products (sealants, caulks, adhesives, and solvents) are mechanically inserted into small cartridges, tubes, cans, pails, or other small containers for staging and/or shipping.
- (f) Five (5) maintenance parts washers, constructed around 1994, each with a maximum throughput of twenty-five (25) gallons of solvent per month, and using solvents that contain less than 5% by weight halogenated HAPs.
- (g) Two (2) perchloroethylene storage tanks identified as Perchloroethylene-1 and Perchloroethylene-2, constructed after 1975 and before 1982, each with a maximum storage capacity of 5,000 gallons (668.4 cubic feet), and an annual throughput rate of 112,274 gallons of perchloroethylene per year.
- (h) Two (2) plasticizer storage tanks identified as Plasticizer-1 and Plasticizer-2, constructed after 1975 and before 1982, each with a maximum storage capacity of 5,000 gallons (668.4 cubic feet), and an annual throughput rate of 112,274 gallons of plasticizer raw material per year.
- (i) One (1) aromatic fluid storage tank identified as Aromatic 100-1, constructed after 1975 and before 1982, with a maximum storage capacity of 4,000 gallons (534.72 cubic feet), and an annual throughput rate of 89,800 gallons of Aromatic 100 fluid per year.
- (j) One (1) aromatic fluid storage tank identified as Aromatic 100-2, constructed after 1975 and before 1982, with a maximum storage capacity of 4,000 gallons (534.72 cubic feet), and an annual throughput rate of 89,800 gallons of Aromatic 100 fluid per year.
- (k) One (1) 490-gallon latex compounder, identified as E6, with a maximum capacity of 1,215 pounds per batch, processing a maximum of two (2) batches per day, constructed in 2007, with emissions controlled by condenser C6.
- (l) One (1) 90-gallon latex compounder, identified as E8, with a maximum batch capacity of 244 pounds per batch, processing a maximum of two-tenths (0.2) batches per day, constructed in 2007, utilizing no control devices.
- (m) One (1) reactives compounder identified as E9, with a maximum capacity of 100 gallons, constructed in 2007, using only non-VOC and non-HAP materials, with emissions controlled by condenser C9, and exhausting within the building.
- (n) One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

**D.1.1 Cold Cleaners [326 IAC 8-3-2]**

---

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, 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.

**Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**D.1.2 Condensers**

---

Pursuant to 326 IAC 2-5.5, the condensers shall operate at all time when one or more solvent mixing tanks are in operation.

## SECTION D.2

## OPERATION CONDITIONS

### Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

Urethane Sealant Manufacturing Building

- (a) One (1) 200-gallon mixer, identified as M1, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.
- (b) One (1) 100-gallon mixer, identified as M2, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.
- (c) One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of Mineral Spirits per month.
- (d) One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.2.1 Cold Cleaners [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, 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.

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

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Geocel Corporation
<b>Address(es):</b>	2504 Marina Drive and 2500 Marina Drive
<b>City:</b>	Elkhart, Indiana 46514
<b>Registration No.:</b>	039-26703-00605

I hereby certify that Geocel Corporation is :

still in operation.

I hereby certify that Geocel Corporation is :

no longer in operation.

in compliance with the requirements of Registration No. 039-26703-00605.

not in compliance with the requirements of Registration No. 039-26703-00605.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Phone Number:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

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

Technical Support Document (TSD) for a Registration Revision

<b>Source Description and Location</b>
--

<b>Source Name:</b>	<b>Geocel Corporation</b>
<b>Source Location:</b>	<b>2504 Marina Drive, Elkhart, IN 46514; and 2500 Marina Drive, Elkhart, IN 46514</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>2891</b>
<b>Registration No.:</b>	<b>039-26703-00605</b>
<b>Registration Issuance Date:</b>	<b>August 21, 2008</b>
<b>Registration Revision No.:</b>	<b>039-28991-00605</b>
<b>Permit Reviewer:</b>	<b>Jason R. Krawczyk</b>

On February 19, 2010, the Office of Air Quality (OAQ) received an application from Geocel Corporation related to a modification to an existing stationary sealant, caulk, and adhesive manufacturing plant.

<b>Source Definition</b>
--------------------------

This source consists of the following plant:

- (a) The Main Production Building is located at 2504 Marina Drive, Elkhart, IN 46514.

The source is adding the following plant:

- (a) The Urethane Sealant Manufacturing Building is located at 2500 Marina Drive, Elkhart, IN 46514.

In order to consider both plants as one single source, all three of the following criteria must be met:

- (1) The plants must have common ownership/control;
- (2) The plants must have the same SIC code; and
- (3) The plants must be located on contiguous or adjacent properties.

These plants are located on contiguous properties, have the same SIC codes of 2891 and are under common control, therefore they will be considered one (1) source, as defined by 326 IAC 2-7-1(22).

<b>Existing Approvals</b>
---------------------------

The source was issued Registration No. 039-26703-00605 on August 21, 2008. The source has since received no other approvals.

**County Attainment Status**

The source is located in Elkhart County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X\*. The 1-hour standard was revoked effective June 15, 2005.  
 Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(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. Elkhart 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) PM2.5

Elkhart County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 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 PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

Elkhart County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

**Status of the Existing Source**

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Perchloro-ethylene
Main Production Bldg.									
Pigmenting Process (solvent-based)	0.11	0.11	0.11	-	-	0.10	-	1.27	1.26
Pigmenting Process (water-based)	0.02	0.02	0.02	-	-	0.02		0.25	0.25
Solvent Mixing Tanks	-	-	-	-	-	2.82	-	5.31	5.22
Tank Cleaning	-	-	-	-	-	0.53	-	0.02	-
Product Holding Tanks	-	-	-	-	-	2.74	-	2.50	1.00
Solvent Packaging	-	-	-	-	-	2.74	-	2.50	1.00
Product Packaging	-	-	-	-	-	2.74	-	2.50	1.00
Parts Washers	-	-	-	-	-	5.37	-	0.13	0.01
Storage Tanks	-	-	-	-	-	0.01	-	0.11	0.11
Latex Compounding	-	-	-	-	-	0.62	-	0.62	-
<b>Total PTE of Entire Source</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>-</b>	<b>-</b>	<b>17.69</b>	<b>-</b>	<b>15.22</b>	<b>9.86</b>
Exemptions Levels	5	5	5	10	10	10	25	25	10
Registration Levels	25	25	25	25	25	25	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 (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  This PTE is based on the Registration 039-26703-00605, issued on August 21, 2008.									

**Description of Proposed Revision**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Geocel Corporation on February 19, 2010, relating to:

- 1) The addition of an additional plant that will operate under the existing Registration. The existing plant will be identified as Main Production Building and the new plant will be identified as Urethane Sealant Manufacturing Building.
- 2) The addition of one (1) 200-gallon mixer, one (1) 100-gallon mixer, and an electric drier to the Urethane Sealant Manufacturing Building as part of its Urethane Sealant production process.
- 3) The addition, to the Main Production Building, of a previously unidentified 5-gallon open top mixing bucket identified as P3, installed in 2007, utilizing no control devices, and exhausting within the building.
- 4) The addition, to the Main Production Building, of a previously unidentified 90-gallon latex compounder identified as E8, installed in 2007, utilizing no control devices, and exhausting within the building.
- 5) The construction and operation of a new 5-gallon pigmenting mixing bucket identified as P4, to be installed in the Main Production Building, utilizing no control devices, and exhausting within the building.
- 6) One of the existing parts washers will be moved from the Main Production Building to the Urethane Sealant Building. Additionally, the source will no longer using SC-100 in this parts washer, it will now be using Mineral Spirits.

- 7) The emission unit description for the open-top mixing tank used for solvent based pigmenting in Section A.2(a)(1) has been identified as P1 and its maximum throughput has been revised to adequately reflect its capability and processing time.
- 8) The emission unit description for the pigmenting operation in Section A.2(a)(2) has been identified as P2 and revised to reflect that it is capable of processing both water-based and solvent-based pigments.
- 9) The emission unit description of Section A.2(e) has been revised to a more appropriate description of the operation.
- 10) The emission unit description of Section A.2(k) for Latex Compounder E6 has been revised to indicate it has a 490 gallon capacity.
- 11) A reactives compounder that was identified in the Technical Support Document of Registration 039-26703-00605, but that was not included in the Registration since it does not use VOC or HAP materials, is being added to the emission unit summary to avoid confusion during inspections.
- 12) The source has requested that the existing Main Production Building basic maintenance area that includes basic maintenance-related activities such as welding, grinding, and sawing and cutting operations be added to the emission unit summary. A similar area will be added in the Urethane Sealant Manufacturing Building and the source would like this included in the emission unit summary as well.

The following is a list of the new emission units and pollution control devices:

#### Main Production Building

- (a) One (1) open-top mixing bucket (5-gallon pail), identified as P3, constructed in 2007, used for the solvent-based and latex-based pigmenting process, utilizing no control devices, and exhausting within the building.
- (b) One (1) 90-gallon latex compounder, identified as E8, with a maximum batch capacity of 244 pounds per batch, processing a maximum of two-tenths (0.2) batches per day, constructed in 2007, utilizing no control devices.
- (c) One (1) pigmenting mixing bucket (5-gallon pail), identified as P4, approved for construction in 2010, used for mixing water-based or solvent-based pigments, utilizing no control devices, and exhausting within the building.

#### Urethane Sealant Manufacturing Building

- (a) One (1) 200-gallon mixer, identified as M1, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.
- (b) One (1) 100-gallon mixer, identified as M2, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.

Notes: The pigmenting mixing bucket (5-gallon pail) identified as P-4, may be located at either the Main Production Building or the Urethane Sealant Manufacturing Building.

<b>Enforcement Issues</b>
---------------------------

There are no pending enforcement actions related to this revision.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

Note: PTE is based on the number of batches per day at 365 days a year, instead of 8760 hours per year.

**Permit Level Determination – Registration Revision**

The following table is used to determine the appropriate permit level under 326 IAC 2-5.5-6. This table reflects the PTE before controls of the proposed revision.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Perchloro-ethylene
<b>Main Production Bldg.</b>									
Pigmenting Process (solvent-based)	-	-	-	-	-	-	-	-	-
Pigmenting Process (water-based)	-	-	-	-	-	-	-	-	-
Solvent Mixing Tanks	-	-	-	-	-	-	-	-	-
Tank Cleaning	-	-	-	-	-	-	-	-	-
Product Holding Tanks <sup>(a)</sup>	-	-	-	-	-	(2.73)	-	(2.39)	(0.89)
Solvent Packaging <sup>(b)</sup>	-	-	-	-	-	(2.74)	-	(2.50)	(1.00)
Product Packaging <sup>(b)</sup>	-	-	-	-	-	-	-	-	-
Parts Washers <sup>(c)</sup>	-	-	-	-	-	(0.34)	-	(0.12)	-
Storage Tanks	-	-	-	-	-	-	-	-	-
Latex Compounding	-	-	-	-	-	-	-	-	-
<b>Urethane Sealant Manufacturing Bldg.</b>									
Urethane Sealant Production (M-1 & M-2)	2.56	2.56	2.56	-	-	7.35	-	0.06	-
Parts Washer <sup>(c)</sup>	-	-	-	-	-	0.32	-	0.01	-
<b>Total PTE of Proposed Revision</b>	<b>2.56</b>	<b>2.56</b>	<b>2.56</b>	<b>-</b>	<b>-</b>	<b>1.86</b>	<b>-</b>	<b>(4.94)</b>	<b>(1.89)</b>

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 (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

(a) Originally, the product holding tanks emissions were not calculated and set equal to 15 lbs per day for VOC emissions, 1 ton per year for a single HAP, and 2.5 tons per year for combined HAPs. Upon further evaluation and as a worst case scenario, these emissions are now being set equal to those of the storage tanks which hold pure solvents, whose emissions were calculated using EPA's Tanks software.

(b) Originally the Solvent Packaging and Product Packaging emissions were not calculated and separately assumed to be less than 15 lbs per day for VOC emissions, 1 ton per year for a single HAP, and 2.5 tons per year for combined HAPs. The final product packaging for both solvents and other products occurs in the same area and should therefore not be double counted. The emissions have been combined under the heading "Final Product Packaging" and conservatively estimated at 15 lbs per day for VOC emissions, 1 ton per year for a single HAP and 2.5 tons per year for combined HAPs.

(c) One of the existing Main Production Building parts washers is being transferred to the Urethane Sealant Manufacturing Building and will be using Mineral Spirits instead of SC-100.

This Registration is being revised through a Registration Revision pursuant to 326 IAC 2-5.5.6(g), because the revision involves changes, which are not described in 326 IAC 2-5.5.6(d) (Registration Notice-Only Changes).

**PTE of the Entire Source After Issuance of the Registration Revision**

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

Process/ Emission Unit	Potential To Emit of the Entire Source with Revision (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Perchloro-ethylene
<b>Main Production Bldg.</b>									
Pigmenting Process (solvent-based) <b>(P1)</b>	0.11	0.11	0.11	-	-	0.10	-	1.27	1.26
Pigmenting Process (water-based) <b>(P2)</b>	0.02	0.02	0.02	-	-	0.02	-	0.25	0.25
Solvent Mixing Tanks	-	-	-	-	-	2.82	-	5.31	5.22
Tank Cleaning	-	-	-	-	-	0.53	-	0.02	-
Product Holding Tanks	-	-	-	-	-	<del>2.74</del> <b>0.01</b>	-	<del>2.50</del> <b>0.11</b>	<del>1.00</del> <b>0.11</b>
<del>Solvent Packaging</del>	-	-	-	-	-	<del>2.74</del>	-	<del>2.50</del>	<del>1.00</del>
<b>Final</b> Product Packaging	-	-	-	-	-	2.74	-	2.50	1.00
Parts Washers						<del>5.37</del> <b>5.03</b>	-	<del>0.13</del> <b>0.01</b>	0.01
Storage Tanks	-	-	-	-	-	0.01	-	0.11	0.11
Latex Compounding	-	-	-	-	-	0.62	-	0.62	-
<b>Urethane Sealant Manufacturing Bldg.</b>									
<b>Urethane Sealant Production (M1 &amp; M2)</b>	<b>2.56</b>	<b>2.56</b>	<b>2.56</b>	-	-	<b>7.25</b>	-	<b>0.06</b>	-
<b>Parts Washer</b>	-	-	-	-	-	<b>0.32</b>	-	<b>0.01</b>	-
Total PTE of Entire Source	<del>0.13</del> <b>2.69</b>	<del>0.13</del> <b>2.69</b>	<del>0.13</del> <b>2.69</b>	-	-	<del>17.69</del> <b>19.54</b>	-	<del>15.22</del> <b>10.29</b>	<del>9.86</del> <b>7.98</b>
Exemptions Levels	5	5	5	10	10	10	25	25	10
Registration Levels	25	25	25	25	25	25	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 (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									
**Emissions from the open top 5-gallon mixing buckets P3 and P4 are assumed to be negligible and are therefore not included in the Emissions Summary.									

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance (tons/year)								
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Perchloro-ethylene
<b>Main Production Bldg.</b>									
Pigmenting Process (solvent-based) (P1)	0.11	0.11	0.11	-	-	0.10	-	1.27	1.26
Pigmenting Process (water-based) (P2)	0.02	0.02	0.02	-	-	0.02	-	0.25	0.25
Solvent Mixing Tanks	-	-	-	-	-	2.82	-	5.31	5.22
Tank Cleaning	-	-	-	-	-	0.53	-	0.02	-
Product Holding Tanks	-	-	-	-	-	0.01	-	0.11	0.11
Final Product Packaging	-	-	-	-	-	2.74	-	2.50	1.00
Parts Washers	-	-	-	-	-	5.03	-	0.01	0.01
Storage Tanks	-	-	-	-	-	0.01	-	0.11	0.11
Latex Compounding	-	-	-	-	-	0.62	-	0.62	-
<b>Urethane Sealant Manufacturing Bldg.</b>									
Urethane Sealant Production (M1 & M2)	2.56	2.56	2.56	-	-	7.25	-	0.06	-
Parts Washer	-	-	-	-	-	0.32	-	0.01	-
<b>Total PTE of Entire Source</b>	<b>2.69</b>	<b>2.69</b>	<b>2.69</b>	<b>-</b>	<b>-</b>	<b>19.54</b>	<b>-</b>	<b>10.29</b>	<b>7.98</b>
Exemptions Levels	5	5	5	10	10	10	25	25	10
Registration Levels	25	25	25	25	25	25	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 (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

- (a) This revision will not change the registration status of the source, because the uncontrolled/unlimited potential to emit of VOC from the entire source will still be within the ranges listed in 326 IAC 2-5.5-1(b)(1) and the PTE of all other regulated criteria pollutants will still be less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source will still be subject to the provisions of 326 IAC 2-5.5 (Registrations).
- (b) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be 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.

**Federal Rule Applicability Determination**

The federal rules applicable to the existing emission units at this source will not change as a result of this revision.

The federal rule applicability for this revision is as follows:

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Flexible Vinyl and Urethane Coating and Printing, 40 CFR 60, Subpart FFF (326 IAC 12), are not included for this proposed revision, since this source does not operate a rotogravure printing line used to print or coat flexible vinyl or urethane products. This source produces urethane sealants.

- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Miscellaneous Coating Manufacturing, 40 CFR 63.7980, Subpart HHHHH (326 IAC 20-88), are not included for this revision, since this source is not located at, nor considered a part of a major source of hazardous air pollutants (HAP) emissions.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources, 40 CFR 63.11494, Subpart VVVVVV, are not included for this revision, since the source does not process, produce, or use any of the HAPs listed in Table 1 to this subpart in concentrations greater than 0.1 percent for the listed carcinogens or greater than 1.0 percent for the listed noncarcinogens.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Area Sources: Chemical Preparations Industry, 40 CFR 63.11579, Subpart BBBB, are not included in this revision, since this source does not operate a chemical preparations facility as defined in §63.11588. This source does not have any chemical preparation operations in target HAP (chromium, lead, manganese, and nickel) service.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

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

<b>State Rule Applicability Determination</b>
---

The state rules applicable to the existing emission units at this source will not change as a result of this revision.

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-5.5 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 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.
- (e) 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.

### Main Production Building

#### Latex Compounder (E8)

- (f) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from the latex compounder identified as E8 is less than twenty-five (25) tons per year.

### Urethane Sealant Manufacturing Building

#### Mixers (M1 and M2)

- (g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(14), the urethane sealant mixing tanks are exempt from the requirements of 326 IAC 6-3, because they have potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.
- (h) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions, from each of the urethane sealant mixing tanks M1 and M2, is less than twenty-five (25) tons per year.

#### Parts Washer

- (i) The parts washer that is being moved from the Main Production Building to the Urethane Sealant Manufacturing Building shall continue to comply with 326 IAC 8-3-2 (Cold Cleaner Operations).

<b>Proposed Changes</b>
-------------------------

- (a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

...

#### A.1 General Information

The Registrant owns and operates a stationary sealant, caulk, and adhesive manufacturing plant.

Source Address:

2504 Marina Drive, Elkhart, Indiana 46514; **and**  
**2500 Marina Drive, Elkhart, Indiana 46514**

Mailing Address: 2504 Marina Drive, Elkhart, Indiana 46514  
...

## A.2 Emission Units and Pollution Control Equipment Summary

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

### Main Production Building

(a) Pigmenting operations as follows:

- (1) One (1) open-top mixing tank, constructed after 1975 and before 1982, **identified as P1**, used for the solvent-based pigmenting process, with emissions exhausting to the atmosphere, a total maximum throughput of ~~4,635~~ **1,631** pounds of material per batch, and a processing time of ~~two~~ **one** batches per hour.
- (2) One (1) open-top mixing tank, constructed after 1975 and before 1982, **identified as P2**, used for **both solvent based or the** water-based pigmenting processes, with emissions exhausting to the atmosphere, a total maximum throughput of 2,000 pounds of material per batch, and a processing time of three batches per day.
- (3) **One (1) open-top mixing bucket (5-gallon pail), identified as P3, constructed in 2007, used for the solvent-based and latex-based pigmenting process, utilizing no control devices, and exhausting within the building.**
- (4) **One (1) pigmenting mixing bucket (5-gallon pail), identified as P4, approved for construction in 2010, used for mixing water-based or solvent-based pigments, utilizing no control devices, and exhausting within the building.**

(b) Six (6) solvent mixing tanks equipped with tight fitting lids, equipped with six (6) condensers to capture solvent, using closed loop piping to return the solvent to the mixing tanks for reuse. All six (6) solvent mixing tanks exhaust to a condenser (C1 through C5 and C7). Condensers C1 through C5 and condenser C7 exhaust to one (1) final condenser, C8. The condensers are considered an integral part of the process (~~see Air Pollution Control Justification as an Integral Part of the Process section below~~).

...

(e) ~~One (1) solvent packaging area and one (1) final product packaging and shipping area where finished product (sealants, caulks, and solvents) are mechanically inserted into small cartridges, tubes, cans, or pails.~~ **Finished product packaging area where final water-based and solvent-based finished products (sealants, caulks, adhesives, and solvents) are mechanically inserted into small cartridges, tubes, cans, pails, or other small containers for staging and/or shipping.**

...

(k) One (1) **490-gallon** latex compounder, identified as E6, with a maximum capacity of 1,215 pounds per batch, processing a maximum of two (2) batches per day, constructed in 2007, with emissions controlled by condenser C6.

(l) **One (1) 90-gallon latex compounder, identified as E8, with a maximum batch capacity of 244 pounds per batch, processing a maximum of two-tenths (0.2) batches per day, constructed in 2007, utilizing no control devices.**

(m) **One (1) reactives compounder identified as E9, with a maximum capacity of 100 gallons, constructed in 2007, using only non-VOC and non-HAP materials, with emissions controlled by condenser C9, and exhausting within the building.**

- (n) **One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.**
- ~~(l) One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of SC-100 solvent per month~~

#### Urethane Sealant Manufacturing Building

- (a) **One (1) 200-gallon mixer, identified as M1, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.**
- (b) **One (1) 100-gallon mixer, identified as M2, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.**
- (c) **One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of Mineral Spirits per month.**
- (d) **One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.**

...

#### SECTION D.1

#### OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

##### Main Production Building

- (a) Pigmenting operations as follows:
  - (1) One (1) open-top mixing tank, constructed after 1975 and before 1982, **identified as P1**, used for the solvent-based pigmenting process, with emissions exhausting to the atmosphere, a total maximum throughput of ~~4,635~~ **1,631** pounds of material per batch, and a processing time of ~~two~~ **one** batches per hour.
  - (2) One (1) open-top mixing tank, constructed after 1975 and before 1982, **identified as P2**, used for **both solvent based or the** water-based pigmenting processes, with emissions exhausting to the atmosphere, a total maximum throughput of 2,000 pounds of material per batch, and a processing time of three batches per day.
  - (3) **One (1) open-top mixing bucket (5-gallon pail), identified as P3, constructed in 2007, used for the solvent-based and latex-based pigmenting process, utilizing no control devices, and exhausting within the building.**
  - (4) **One (1) pigmenting mixing bucket (5-gallon pail), identified as P4, approved for construction in 2010, used for mixing water-based or solvent-based pigments, utilizing no control devices, and exhausting within the building.**
- (b) Six (6) solvent mixing tanks equipped with tight fitting lids, equipped with six (6) condensers to capture solvent, using closed loop piping to return the solvent to the mixing tanks for reuse. All six (6) solvent mixing tanks exhaust to a condenser (C1 through C5 and C7). Condensers C1 through C5 and condenser C7 exhaust to one (1) final condenser, C8. The condensers are considered an integral part of the process (~~see Air Pollution Control Justification as an Integral Part of the Process section below~~).

- ...
- (e) ~~One (1) solvent packaging area and one (1) final product packaging and shipping area where finished product (sealants, caulks, and solvents) are mechanically inserted into small cartridges, tubes, cans, or pails.~~ **Finished product packaging area where final water-based and solvent-based finished products (sealants, caulks, adhesives, and solvents) are mechanically inserted into small cartridges, tubes, cans, pails, or other small containers for staging and/or shipping.**
  - ...
  - (k) One (1) **490-gallon** latex compounder, identified as E6, with a maximum capacity of 1,215 pounds per batch, processing a maximum of two (2) batches per day, constructed in 2007, with emissions controlled by condenser C6.
  - (l) **One (1) 90-gallon latex compounder, identified as E8, with a maximum batch capacity of 244 pounds per batch, processing a maximum of two-tenths (0.2) batches per day, constructed in 2007, utilizing no control devices.**
  - (m) **One (1) reactives compounder identified as E9, with a maximum capacity of 100 gallons, constructed in 2007, using only non-VOC and non-HAP materials, with emissions controlled by condenser C9, and exhausting within the building.**
  - (n) **One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.**
  - ~~(l) One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of SC 100 solvent per month~~
- (The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

...

#### D.1.32 Condensers

Pursuant to 326 IAC 2-5.5, the condensers (**considered an integral part of the process**) shall operate at all time when one or more solvent mixing tanks are in operation.

...

### SECTION D.2 OPERATION CONDITIONS

- Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:
- Urethane Sealant Manufacturing Building**
- (a) **One (1) 200-gallon mixer, identified as M1, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.**
  - (b) **One (1) 100-gallon mixer, identified as M2, approved for construction in 2010, using a dust collection system as particulate control, and exhausting within the building.**
  - (c) **One (1) maintenance parts washer, constructed in 2008, with a maximum throughput of eight (8) gallons of Mineral Spirits per month.**
  - (d) **One basic maintenance area that includes basic maintenance-related items such as welding, grinding, and sawing and cutting operations.**

**(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

**D.2.1 Cold Cleaners [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, 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.

...

- (b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strike through~~ text and new language appears as **bold** text:

- (1) IDEM's Compliance Branch has been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to "Compliance Branch" have been changed to "Compliance and Enforcement Branch". The permit has been revised as follows:

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

(2) IDEM has revised the Annual Notification form as follows:

Company Name:	Geocel Corporation
Address(s):	2504 Marina Drive <b>and 2500 Marina Drive</b>
City:	Elkhart, Indiana 46514
Registration No.:	039-26703-00605

I hereby certify that ~~company name~~ **Geocel Corporation** is :

still in operation.

I hereby certify that ~~company name~~ **Geocel Corporation** is :

no longer in operation.

in compliance with the requirements of Registration No. 039-26703-00605.

not in compliance with the requirements of Registration No. 039-26703-00605.

### 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 February 19, 2010.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed Registration Revision No. 039-28991-00605. The staff recommends to the Commissioner that this Registration Revision be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jason R. Krawczyk 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) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.
- (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](http://www.idem.in.gov)

**Appendix A: Emission Calculations  
Emissions Summary**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Revision No: 039-28991-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

**Unlimited Potential to Emit (tons/yr)**

Emission Unit	PM	PM10	PM2.5	SO <sub>2</sub>	VOC	CO	NOx	Single HAP (Perchloroethylene)	Combined HAPs
<b>Main Production Building</b>									
Mixing Tank P1	0.11	0.11	0.11	-	0.10	-	-	1.26	1.27
Mixing Tank P2	0.02	0.02	0.02	-	0.02	-	-	0.25	0.25
Latex Compounding (E6 & E8)	-	-	-	-	0.62	-	-	-	0.62
Solvent Mixing Tanks (E1 -E5, E7)	-	-	-	-	2.82	-	-	5.22	5.31
Tank Cleaning	-	-	-	-	0.53	-	-	0.00	0.02
Parts Washers	-	-	-	-	5.03	-	-	0.01	0.01
Storage Tanks	-	-	-	-	0.01	-	-	0.11	0.11
Product Holding Tanks*	-	-	-	-	0.01	-	-	0.11	0.11
Finished Product Packaging**	-	-	-	-	2.74	-	-	1.00	2.50
<b>Urethane Sealant Manufacturing Bldg.</b>									
Urethane Sealant Production (M1 & M2)	2.56	2.56	2.56	-	7.35	-	-	-	0.06
Parts Washer	-	-	-	-	0.32	-	-	-	0.01
<b>Total</b>	<b>2.69</b>	<b>2.69</b>	<b>2.69</b>	<b>0.00</b>	<b>19.54</b>	<b>0.00</b>	<b>0.00</b>	<b>7.98</b>	<b>10.29</b>

**Note:**

\*As a worst case scenario, potentials to emit from the product holding tanks are assumed to be equal to potential emissions from the storage tanks which hold pure solvents.

\*\*The finished product packaging area consists of water-based and solvent-based finished products being mechanically inserted into small cartridges, tubes, cans, pails and other small containers. Due to the consistency of the final products, there are no particulate emissions expected from product packaging. It is assumed that the packaging area will not emit more than 15 lbs/day (or 2.74 tons/yr) of VOC, 1.00 ton/yr of a single HAP, and 2.50 tons per year of combined HAPs.

**Appendix A: Emission Calculations  
Particulate, VOC, and HAP Emissions from Tank P1**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Revision No: 039-28991-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

**Main Production Building**

**VOC/HAPs from Open-Top Mixing Tank P1**

Material	Material Usage (lbs/batch)	Maximum Total Material Loss (lbs/batch)*	Quantity Released (lbs/batch)	Processing Time (batches/day)	Weight % VOC	Weight % Xylene	Weight % Cumene	Weight % Perchloroethylene	PTE VOC (tons/yr)	PTE Xylene (tons/yr)	PTE Cumene (tons/yr)	PTE Perchloroethylene (tons/yr)
SC-100 Solvent	62.13	0.50	0.04	15.0	100%	2.20%	1.10%	0.00%	0.10	0.00	0.00	0.00
Perchloroethylene	761.91		0.46	15.0	0.00%	0.00%	0.00%	99.9%	0.00	0.00	0.00	1.26
<b>Total</b>	<b>824</b>							<b>Total</b>	<b>0.10</b>	<b>0.00</b>	<b>0.00</b>	<b>1.26</b>

**Note:**

The pigment mixing process consists of mixing SC-100 solvent and Perchloroethylene with various aqueous pigment pastes, which contain no VOCs or HAPs. The amount of SC-100 or Perchloroethylene used depends on the recipe for the pigmented product. The amounts shown above are for TP Almond and represent the worst case recipe for VOC and for HAP.

\*The maximum total material loss per batch was determined using a mass balance approach. The weigh scale used did not detect any material loss. The weigh scale is accurate to 0.50 pounds; therefore, it is assumed that 0.50 pounds of the pigmented product are lost per batch. This assumption has been used for this operation since the initial review and permitting of this source on September 1, 2004.

Perchloroethylene is considered non-VOC as listed in the definition of VOC.

PTE is based on batches per day, not 8,760 hours per year.

**Methodology:**

Quantity Released (lbs/batch) = Material Usage (lbs/batch) / Total Material Usage (lbs/batch) x Maximum Total Material Loss (lbs/batch)

PTE VOC (tons/yr) = Quantity Released (lbs/batch) x Processing Time (batches/day) x Weight % VOC x 365 days/yr x 1 ton/2,000 lbs

PTE HAP (tons/yr) = Quantity Released (lbs/batch) x Processing Time (batches/day) x Weight % HAP x 365 days/yr x 1 ton/2,000 lbs

**Particulate Emissions from Open-Top Mixing Tank P-1**

Amount of Pigment in Blend (lbs/batch)	Processing Time (batches/day)	PM/PM10/PM2.5 Emission Factor (lbs/ton pigment)	PTE PM/PM10/PM2.5 (tons/yr)
4.00	15.0	20.0	0.11

**Note:**

Assume PM = PM10 = PM2.5.

Emission factor is from AP-42, Chapter 6.4, Table 6.4-1 [5/83; reformatted 1/95].

**Methodology**

PTE PM/PM10 (tons/yr) = Amount of Pigment in Blend (lbs/batch) x Processing Time (batches/day) x 1 ton/2,000 lbs x Emission Factor (lbs/ton pigment) x 365 days/yr x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
Particulate, VOC, and HAP Emissions from Tank P2**

**Company Name: Geocel Corporation  
Address: 2504 Marina Drive, Elkhart, IN 46514  
2500 Marina Drive, Elkhart, IN 46514  
Registration: 039-26703-00605  
Revision No: 039-28991-00605  
Reviewer: Jason R. Krawczyk  
Date: March 22, 2010**

**Main Production Building**

**VOC/HAPs from Open-Top Mixing Tank P2**

Material	Material Usage (lbs/batch)	Maximum Total Material Loss (lbs/batch)*	Quantity Released (lbs/batch)	Processing Time (batches/day)	Weight % VOC	Weight % Xylene	Weight % Cumene	Weight % Perchloroethylene	PTE VOC (tons/yr)	PTE Xylene (tons/yr)	PTE Cumene (tons/yr)	PTE Perchloroethylene (tons/yr)
SC-100 Solvent	62.13	0.50	0.04	3.0	100%	2.20%	1.10%	0.00%	0.02	0.00	0.00	0.00
Perchloroethylene	761.91		0.46	3.0	0.00%	0.00%	0.00%	99.9%	0.00	0.00	0.00	0.25
<b>Total</b>	<b>824</b>							<b>Total</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.25</b>

**Note:**

In this water-based pigment mixing process, water and pigment are added to the material coming out of the compounder. The material already contains SC-100 and Perchloroethylene (see Quantity of Material in Blend above). The amounts shown above are for TP Almond and represent the worst case recipe for VOC and for HAP.

\*The maximum total material loss per batch was determined using a mass balance approach. The weigh scale used did not detect any material loss. The weigh scale is accurate to 0.50 pounds; therefore, it is assumed that 0.50 pounds of the pigmented product are lost per batch. This assumption has been used for this operation since the initial review and permitting of this source on September 1, 2004.

Perchloroethylene is considered non-VOC as listed in the definition of VOC.

PTE is based on batches per day, not 8,760 hours per year.

**Methodology:**

Quantity Released (lbs/batch) = Material Usage (lbs/batch) / Total Material Usage (lbs/batch) x Maximum Total Material Loss (lbs/batch)

PTE VOC (tons/yr) = Quantity Released (lbs/batch) x Processing Time (batches/day) x Weight % VOC x 365 days/yr x 1 ton/2,000 lbs

PTE HAP (tons/yr) = Quantity Released (lbs/batch) x Processing Time (batches/day) x Weight % HAP x 365 days/yr x 1 ton/2,000 lbs

**Particulate Emissions from Open-Top Mixing Tank P-2**

Amount of Pigment in Blend (lbs/batch)	Processing Time (batches/day)	PM/PM10/PM2.5 Emission Factor (lbs/ton pigment)	PTE PM/PM10/PM2.5 (tons/yr)
4.00	3.0	20.0	0.02

**Note:**

Assume PM = PM10 = PM2.5.

Emission factor is from AP-42, Chapter 6.4, Table 6.4-1 [5/83; reformatted 1/95].

**Methodology**

PTE PM/PM10 (tons/yr) = Amount of Pigment in Blend (lbs/batch) x Processing Time (batches/day) x 1 ton/2,000 lbs x Emission Factor (lbs/ton pigment) x 365 days/yr x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Latex Compounds**

**Company Name: Geocel Corporation  
Address: 2504 Marina Drive, Elkhart, IN 46514  
2500 Marina Drive, Elkhart, IN 46514  
Registration: 039-26703-00605  
Revision No: 039-28991-00605  
Reviewer: Jason R. Krawczyk  
Date: March 22, 2010**

**Main Production Building**

Material	Material Usage (lbs/batch)	Processing Time (batches/day)	Weight % VOC	Weight % Vinyl Acetate	Weight % Acetaldehyde	Weight % Acrylonitrile	PTE VOC (tons/yr)	PTE Vinyl Acetate (tons/yr)	PTE Acetaldehyde (tons/yr)	PTE Acrylonitrile (tons/yr)
Latex Compounder E6										
Latex 123	1,215	2.00	0.001%	0.00%	0.00%	0.001%	0.00	0.00	0.00	0.00
Latex 367	1,215	2.00	0.14%	0.10%	0.04%	0.00%	0.62	0.44	0.18	0.00
Latex Compounder E8										
Latex 123	224	0.20	0.001%	0.00%	0.00%	0.001%	0.00	0.00	0.00	0.00
Latex 367	224	0.20	0.14%	0.10%	0.04%	0.00%	0.01	0.01	0.00	0.00
<b>Worst-case PTE</b>							<b>0.62</b>	<b>0.44</b>	<b>0.18</b>	<b>0.00</b>

<b>Single HAP</b>	<b>0.44</b>	<b>Acetate</b>
<b>Combined HAPs</b>	<b>0.62</b>	

**Note:**

As a worst-case scenario, it is assumed that the entire batch consists of a latex material.

**Methodology:**

PTE VOC/HAP (tons/yr) = Material Usage (lbs/batch) x Processing Time (batches/day) x Weight % VOC or HAP x 365 days/yr x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Solvent Compounding Mixing Tanks**

**Company Name: Geocel Corporation  
Address: 2504 Marina Drive, Elkhart, IN 46514  
2500 Marina Drive, Elkhart, IN 46514  
Registration: 039-26703-00605  
Revision No: 039-28991-00605  
Reviewer: Jason R. Krawczyk  
Date: March 22, 2010**

**Main Production Building**

Actual measured quantity of solvent captured in the final condenser:	5.2 gal/week
Actual weeks of operation:	50 weeks/yr
Actual hours of operation:	2942 hrs/yr
Conservative estimate of control efficiency of final condenser:	50.0 %
Estimated actual amount of solvent emitted from final condenser:	260 gal/yr
Potential amount of solvent emitted from final condenser:	774 gal/yr

Material	Density (lbs/gal)	Weight % VOC	Weight % Xylene	Weight % Cumene	Weight % Perchloroethylene	PTE VOC (tons/yr)	PTE Xylene (tons/yr)	PTE Cumene (tons/yr)	PTE Perchloroethylene (tons/yr)
SC-100 Solvent	7.29	100%	2.20%	1.10%	0.00%	2.82	0.06	0.03	0.00
Perchloroethylene	13.5	0.00%	0.00%	0.00%	99.9%	0.00	0.00	0.00	5.22
<b>Total</b>						<b>2.82</b>	<b>0.06</b>	<b>0.03</b>	<b>5.22</b>

**Note:**

The source has five (5) solvent mixing tanks with closed loop solvent piping. These tanks all exhaust through a final condenser.

The actual measured quantity of solvent captured in the final condenser, actual weeks of operation, actual hours of operation, and conservative estimate of the control efficiency of the condenser are reported by the source.

The actual measured quantity of solvent captured assumes the condensers are integral to the solvent mixing process.

**Methodology**

Actual amount of solvent emitted (gal/yr) = Actual measured quantity of solvent captured in the final condenser (gal/week) x Actual weeks of operation (weeks/yr)

Potential amount of solvent emitted (gal/yr) = Actual amount of solvent emitted (gal/yr) / Actual hours of operation (hrs/yr) x 8,760 hrs/yr

PTE VOC (tons/yr) = Potential amount of solvent emitted (gal/yr) x Density (lbs/gal) x Weight % VOC x 1 ton/2,000 lbs

PTE HAP (tons/yr) = Potential amount of solvent emitted (gal/yr) x Density (lbs/gal) x Weight % HAP x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Storage Tanks**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Revision No: 039-28991-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

**Main Production Building**

Tank ID	PTE VOC (tons/yr)	PTE Xylene (tons/yr)	PTE Perchloroethylene (tons/yr)	PTE Total HAPs (tons/yr)
Perchloroethylene-1	0.00	0.00	0.06	0.06
Perchloroethylene-2	0.00	0.00	0.06	0.06
Aromatic 100-1	2.91E-03	3.00E-04	0.00	3.00E-04
Aromatic 100-2	2.91E-03	3.00E-04	0.00	3.00E-04
<b>Worst-Case PTE:</b>	<b>0.01</b>	<b>0.00</b>	<b>0.11</b>	<b>0.11</b>

**Note:**

The potential emissions reported above were provided by the source and were calculated using TANKS 4.0.9d.

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Cleaning of Solvent Mixing Tanks**

**Company Name: Geocel Corporation  
Address: 2504 Marina Drive, Elkhart, IN 46514  
2500 Marina Drive, Elkhart, IN 46514  
Registration: 039-26703-00605  
Revision No: 039-28991-00605  
Reviewer: Jason R. Krawczyk  
Date: March 22, 2010**

**Main Production Building**

**Tanks E-1 through E-5, and E-7**

Material	Density (lbs/gal)	Maximum Usage (gal/yr)	Weight % VOC	Weight % Xylene	Weight % Cumene	PTE VOC (tons/yr)	PTE Xylene (tons/yr)	PTE Cumene (tons/yr)
SC-100 Solvent	7.29	145	100%	2.20%	1.10%	0.53	0.01	0.01

**Note:**

As a worst-case scenario, the calculations above assume a solvent usage rate of 145 gallons per year for the solvent mixing tank cleaning process. The source reuses the solvent used for cleaning and expects to use less than 145 gallons per year.

**Methodology**

PTE VOC/HAP (tons/yr) = Density (lbs/gal) x Maximum Usage (gal/yr) x Weight % VOC or HAP x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Parts Washers**

**Company Name: Geocel Corporation  
Address: 2504 Marina Drive, Elkhart, IN 46514  
2500 Marina Drive, Elkhart, IN 46514  
Registration: 039-26703-00605  
Revision No: 039-28991-00605  
Reviewer: Jason R. Krawczyk  
Date: March 22, 2010**

**Main Production Building**

**Parts Washers (5)**

Material	Density (lbs/gal)	Maximum Usage (gal/yr)	Weight % VOC	Weight % Perchloroethylene	Weight % Ethyl Benzene	Weight % 1,2,4-Trimethylbenzene	PTE VOC (tons/yr)	PTE Perchloroethylene (tons/yr)	PTE Ethyl Benzene (tons/yr)	PTE 1,2,4-Trimethylbenzene (tons/yr)	PTE Total HAPs (tons/yr)
Safety-Kleen Solvent 105	6.70	1500	100%	0.20%	0.00%	0.00%	5.03	0.01	0.00	0.00	0.01
<b>Worst-case PTE</b>							<b>5.03</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>

**Methodology**

PTE VOC/HAP (tons/yr) = Density (lbs/gal) x Maximum Usage (gal/yr) x Weight % VOC or HAP x 1 ton/2,000 lbs

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Urethane Production**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Revision No: 039-28991-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

**Urethane Sealant Manufacturing Building**

**Mixing Tanks (M-1 and M-2)**

Material	Density (lbs/gal)	Maximum Usage (gals/yr)	Weight % VOC	Weight % Methanol	PTE VOC (tons/yr)	PTE Methanol (tons/yr)
Jeffcat DMDEE Catalyst	8.84	850.0	76%	0.00%	2.86	0.00
Silquest A-187 Silane	8.92	850.0	100%	0.20%	3.75	0.01
Silquest A-1120 Silane	8.59	850.0	20.00%	1.50%	0.75	0.06
<b>Total PTE:</b>					<b>7.35</b>	<b>0.06</b>

**Note:**

Material Usage Rate Based on Assumption each component makes up 1% of total urethane sealant manufactured at the facility.

**Methodology:**

PTE HAP (tons/yr) = Density (lbs/gal) x Maximum Usage (gals/yr) x Weight % VOC or HAP x (1 ton/2,000 lbs)

**Appendix A: Emission Calculations  
Particulate Emissions from Urethane Production**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

Emission Unit	Processing Time (batches/day)	Maximum Capacity Dry Raw Materials (lbs/batch)	Emission Factor (lb/ton)	Uncontrolled PTE PM/PM10/PM2.5	
				(lb/hr)	(ton/yr)
Mixer M1	1.5	802	20	0.50	2.20
Mixer M2	0.5	401	20	0.08	0.37
<b>Total PTE:</b>				<b>0.58</b>	<b>2.56</b>

**Note:**

Emission Factor from AP-42 Chapter 6.4, Table 6.4-1

**Methodology:**

Uncontrolled PTE = Processing Time (batches/day) \* Maximum Capacity Dry Raw Materials (lbs/batch) \* Emission Factor (lb/ton) / 2,000 lbs / 24 hrs.

**Appendix A: Emission Calculations  
VOC and HAP Emissions from Parts Washer**

**Company Name: Geocel Corporation**  
**Address: 2504 Marina Drive, Elkhart, IN 46514**  
**2500 Marina Drive, Elkhart, IN 46514**  
**Registration: 039-26703-00605**  
**Revision No: 039-28991-00605**  
**Reviewer: Jason R. Krawczyk**  
**Date: March 22, 2010**

**Urethane Sealant Manufacturing Building**

**Parts Washer (1)**

Material	Density (lbs/gal)	Maximum Usage (gal/yr)	Weight % VOC	Weight % Ethyl Benzene	Weight % 1,2,4-Trimethylbenzene	PTE VOC (tons/yr)	PTE Ethyl Benzene (tons/yr)	PTE 1,2,4-Trimethylbenzene (tons/yr)	PTE Total HAPs (tons/yr)
1339 Naphtha (Mineral Spirits)	6.64	96.0	100%	0.10%	3.00%	0.32	0.00	0.01	0.01
<b>Worst-case PTE</b>						<b>0.32</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>

**Methodology**

PTE VOC/HAP (tons/yr) = Density (lbs/gal) x Maximum Usage (gal/yr) x Weight % VOC or HAP x 1 ton/2,000 lbs



# 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](http://www.idem.IN.gov)

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Kerman Peterson  
Geocel Corporation  
2504 Marina Drive  
Elkhart, IN 46515

**DATE:** April 6, 2010

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Registration  
039-28991-00605

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Joseph VanCamp, Cornerstone Environmental, Consultant  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	DPABST 4/6/2010 Geocel Corp 039-28991-00605 (Final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Kerman Peterson Geocel Corp 2504 Marina Dr Elkhart IN 46515 (Source CAATS) (CONFIRM DELIVERY)									
2		Elkhart County Health Department Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)									
3		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)									
4		Mr. Joseph VanCamp Cornerstone Environmental, Health & Safety, Inc. 8907 Gerig Road Leo IN 45765-9679 (Consultant)									
5		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)									
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--