NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Minor Source Operating Permit (MSOP)

for Highland Ridge RV, Inc. in LaGrange County

MSOP Renewal No.: M087-41983-00679

The Indiana Department of Environmental Management (IDEM) has received an application from Highland Ridge RV, Inc. located at 3195 North State Road 5, Shipshewana, IN 46565 for a renewal of its MSOP issued on February 20, 2015. If approved by IDEM’s Office of Air Quality (OAQ), this proposed renewal would allow Highland Ridge RV, Inc. to continue to operate its existing source.

This draft permit does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM’s preliminary findings are available at:

Shipshewana Branch Public Library
250 Depot Street,
Shipshewana, IN 46565-0636

and

IDEM Northern Regional Office
300 North Dr. Martin Luther King Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC). Please go to http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will
make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M087-41983-00679 in all correspondence.

Comments should be sent to:

Daria Antipova  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCI 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for Daria Antipova or (317) 234-3429  
Or dial directly: (317) 234-3429  
Fax: (317) 232-6749 attn: Daria Antipova  
E-mail: dantipov@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens’ Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Daria Antipova of my staff at the above address.

Brian Williams, Section Chief  
Permits Branch  
Office of Air Quality
Minor Source Operating Permit Renewal

OFFICE OF AIR QUALITY

Highland Ridge RV, Inc.
3195 N State Road 5
Shipshewana, Indiana 46565

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

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

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

<table>
<thead>
<tr>
<th>Operation Permit No.: M087-41983-00679</th>
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<tbody>
<tr>
<td>Master Agency Interest ID: 40054</td>
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</table>

<table>
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<tr>
<th>Issued by:</th>
<th>Issuance Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Williams, Section Chief</td>
<td></td>
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<tr>
<td>Permits Branch</td>
<td></td>
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<tr>
<td>Office of Air Quality</td>
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<tr>
<th>Expiration Date:</th>
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SECTION A  SOURCE SUMMARY

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

A.1  General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>3195 N State Road 5, Shipshewana, Indiana 46565</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>(574) 825-0513</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>3792 (Travel Trailers and Campers)</td>
</tr>
<tr>
<td>County Location:</td>
<td>LaGrange</td>
</tr>
<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
</tr>
<tr>
<td>Source Status:</td>
<td>Minor Source Operating Permit Program, Minor Source, under PSD and Emission Offset Rules, Minor Source, Section 112 of the Clean Air Act, Not 1 of 28 Source Categories</td>
</tr>
</tbody>
</table>

A.2  Emission Units and Pollution Control Equipment Summary

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

(a)  One (1) fabrication facility, identified as Line 1, constructed in 2015, with a nominal capacity of 4.0 recreational travel trailer per hour, consisting of the following operations:

(1)  Two (2) laminators for RV roof, sidewall, and floor panels, identified as Laminators 1 & 2, constructed in 2015, utilizing no control, exhausting within the building, and consisting of flow coating and hand application of coatings.

(2)  One (1) final finish operation, identified as Line 1 Final Finish, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(3)  One (1) assembly operation, identified as Line 1 Assembly, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(b)  One (1) woodworking operation facility, identified as the Mill Shop, constructed in 2019, with no particulate controls, exhausting within the building, and consisting of:

(1)  One (1) woodworking operation, identified as WW-1, constructed in 2015, and relocated from the former Plant 2 in 2019, with no particulate controls, and consisting of:

(A)  Five (5) chop saws, identified as 1CS4 through 1CS8;

(B)  One (1) band saw, identified as 1BS1; and

(C)  Six (6) hand routers, identified as 1HR1 through 1HR6.
(2) One (1) chop saw, identified as CS9, constructed in 2015, and relocated from the former Plant 2 in 2019.

(3) One (1) natural gas-fired Thermocycler, identified as H22, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

c) One (1) material cutting and welding facility, identified as the Metal Shop, constructed in 2019, utilizing no control, exhausting within the building, and consisting of:

(1) One (1) material cutting operation, identified as MC1, constructed in 2015, and relocated from the former Plant 2 in 2019, and consisting of:

(A) Three (3) aluminum chop saws, identified as CS2 and CS4; and

(B) One (1) PVC chop saw, identified as CS1.

(2) One (1) welding operation, constructed in 2015, using less than six hundred twenty-five (625) pounds of weld wire per day, utilizing no control, and consisting of:

(A) Seven (7) metal inert gas (MIG) welding stations, identified as MIG1-MIG7, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.

(3) One (1) metal inert gas (MIG) welding station, identified as MIG11, constructed in 2016, and relocated from the former Plant 2 in 2019, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.

(4) One (1) natural gas-fired Thermocycler, identified as H21, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Five (5) natural gas-fired space heaters, identified as H1-H5, constructed in 2015, each rated at 0.464 million British thermal units per hour (MMBtu/hr).

(2) Five (5) natural gas-fired Thermocyclers in the lamination building, identified as H12 - H16, constructed in 2016, with a maximum heat input capacity of 0.464 million British thermal units per hour (MMBtu/hr), each.

e) One (1) fabrication facility, identified as Line 3, with a nominal capacity of 4.0 recreational travel trailers per hour, consisting of the following operations:

(1) One (1) final finish operation, identified as Line 3 Final Finish, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(2) One (1) assembly operation, identified as Line 3 Assembly, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(3) One (1) welding operation, identified as Line 3 Welding, constructed in 2016,
using less than six hundred twenty-five (625) pounds of weld wire per day, utilizing no control, exhausting within the building, and consisting of:

(A) Three (3) metal inert gas (MIG) welding stations, identified as MIG8-MIG10, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.

(f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Four (4) natural gas-fired Thermocyclers, identified as H17-H20, constructed in 2016, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr), each.

(g) Paved and unpaved roads and parking lots with public access.
SECTION B  GENERAL CONDITIONS

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

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

(a) This permit, M087-41983-00679, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

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

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

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

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

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

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

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

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M087-41983-00679 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee’s right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

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

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

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

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

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

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

B.18 Credible Evidence [326 IAC 1-1-6]

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

Entire Source

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

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

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

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

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.
C.6 Fugitive Dust Emissions [326 IAC 6-4]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

1. When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
2. If there is a change in the following:
   (A) Asbestos removal or demolition start date;
   (B) Removal or demolition contractor; or
   (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the
demolition or renovation will occur for the presence of asbestos pursuant to
40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to
thoroughly inspect the affected portion of the facility for the presence of asbestos. The
requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing  [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided
elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days
prior to the actual test date.

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

Compliance Requirements  [326 IAC 2-1.1-11]

C.9 Compliance Requirements  [326 IAC 2-1.1-11]

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

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

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

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

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

(a) When required by any condition of this permit, an analog instrument used to measure a
parameter related to the operation of an air pollution control device shall have a scale
such that the expected maximum reading for the normal range shall be no less than
twenty percent (20%) of full scale. The analog instrument shall be capable of measuring
values outside of the normal range.
(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that
does not meet the above specifications provided the Permittee can demonstrate that an
alternative instrument specification will adequately ensure compliance with permit
conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an
exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions
unit (including any control device and associated capture system) to its normal or usual
manner of operation as expeditiously as practicable in accordance with good air pollution
control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or
malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of
operation.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance
Testing, of this permit exceed the level specified in any condition of this permit, the
Permittee shall submit a description of its response actions to IDEM, OAQ, no later than
seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty
(180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ
that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may
extend the retesting deadline.
(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

C.14 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.

(c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

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

(c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(a) One (1) fabrication facility, identified as Line 1, constructed in 2015, with a nominal capacity of 4.0 recreational travel trailer per hour, consisting of the following operations:

(1) Two (2) laminators for RV roof, sidewall, and floor panels, identified as Laminators 1 & 2, constructed in 2015, utilizing no control, exhausting within the building, and consisting of flow coating and hand application of coatings.

(2) One (1) final finish operation, identified as Line 1 Final Finish, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(3) One (1) assembly operation, identified as Line 1 Assembly, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Five (5) natural gas-fired space heaters, identified as H1-H5, constructed in 2015, each rated at 0.464 million British thermal units per hour (MMBtu/hr).

(2) Five (5) natural gas-fired Thermocyclers in the lamination building, identified as H12-H16, constructed in 2016, with a maximum heat input capacity of 0.464 million British thermal units per hour (MMBtu/hr), each.

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

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

D.1.1 Best Available Control Technology (BACT) Minor Limit - VOC [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the fabrication facility, identified as Line 1, shall be limited as follows:

(a) The total VOC input to Line 1, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period shall render the requirements of 326 IAC 8-1-6 not applicable to Line 1.

D.1.2 Particulate Emissions Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from each space heater and Thermocycler shall be limited to 0.6 pounds per MMBtu heat input.
D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Volatile Organic Compounds [326 IAC 8-1-2] [326 IAC 8-1-4]

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

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

D.1.5 Record Keeping Requirement

(a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

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

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

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

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

(3) Total VOC usage for each month and each compliance period.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.1.6 Reporting Requirement

A quarterly report of the VOC input and a quarterly summary of the information to document the compliance status with D.1.1(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b)(3) One (1) natural gas-fired Thermocycler, identified as H22, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

(c)(4) One (1) natural gas-fired Thermocycler, identified as H21, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

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

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

D.2.1 Particulate Emissions Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from each Thermocycler shall be limited to 0.6 pounds per MMBtu heat input.
SECTION D.3  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) One (1) fabrication facility, identified as Line 3, with a nominal capacity of 4.0 recreational travel trailers per hour, consisting of the following operations:

(1) One (1) final finish operation, identified as Line 3 Final Finish, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(2) One (1) assembly operation, identified as Line 3 Assembly, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Four (4) natural gas-fired Thermocyclers, identified as H17-H20, constructed in 2016, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr), each.

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

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

D.3.1 Best Available Control Technology (BACT) Minor Limit - VOC [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the fabrication facility, identified as Line 3, shall be limited as follows:

(a) The total VOC input to Line 3, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit shall limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period from Line 3 and shall render the requirements of 326 IAC 8-1-6 not applicable to Line 3.

D.3.2 Particulate Emissions Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from each Thermocycler shall be limited to 0.6 pounds per MMBtu heat input.

D.3.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.
Compliance Determination Requirements [326 IAC 2-6.1-5(a)(2)]

D.3.4 Volatile Organic Compounds [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC usage limitations in Condition D.3.1(a) for Line 3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.3.5 Record Keeping Requirement

(a) To document the compliance status with Condition D.3.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.3.1(a). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

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

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

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

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

(3) Total VOC usage for each month and each compliance period.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.3.6 Reporting Requirement

A quarterly report of the VOC input and a quarterly summary of the information to document the compliance status with D.3.1(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.
Indiana Department of Environmental Management  
Office of Air Quality  
Compliance and Enforcement Branch  

Quarterly Report

Source Name: Highland Ridge RV, Inc.  
Source Address: 3195 N State Road 5, Shipshewana, Indiana 46565  
MSOP Permit No.: M087-41983-00679  
Facility: Fabrication Facility, identified as Line 1.  
Parameter: Voc input  
Limit: The total Voc input to Line 1, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

<table>
<thead>
<tr>
<th>Month</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 1 + Column 2</th>
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<tr>
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<td>Voc input (tons)</td>
<td>Voc input (tons)</td>
<td>Voc input (tons)</td>
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<td></td>
<td>This Month</td>
<td>Previous 11 Months</td>
<td>12 Month Total</td>
</tr>
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</table>

Form Completed by: ____________________________________________________________
Title / Position: ___________________________________________________________
Date: ___________________________________________________________________
Phone: ___________________________________________________________________
Indiana Department of Environmental Management  
Office of Air Quality  
Compliance and Enforcement Branch  
Quarterly Report

Source Name: Highland Ridge RV, Inc.  
Source Address: 3195 N State Road 5, Shipshewana, Indiana 46565  
MSOP Permit No.: M087-41983-00679  
Facility: Fabrication Facility, identified as Line 3.  
Parameter: VOC input  
Limit: The total VOC input to Line 3, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: ________________  YEAR: ________________

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<tr>
<th>Month</th>
<th>Column 1 VOC input (tons)</th>
<th>Column 2 VOC input (tons)</th>
<th>Column 1 + Column 2 VOC input (tons)</th>
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<td>This Month</td>
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<tr>
<td>Previous 11 Months</td>
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<td>12 Month Total</td>
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</tbody>
</table>

Form Completed by: ____________________________________________________________
Title / Position: ____________________________________________________________
Date: ____________________________________________________________________
Phone: ___________________________________________________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION

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

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Highland Ridge RV, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Address:</td>
<td>3195 N State Road 5</td>
</tr>
<tr>
<td>City:</td>
<td>Shipshewana, Indiana 46565</td>
</tr>
<tr>
<td>Phone #:</td>
<td>(574) 825-0513</td>
</tr>
<tr>
<td>MSOP #:</td>
<td>M087-41983-00679</td>
</tr>
</tbody>
</table>

I hereby certify that Highland Ridge RV, Inc. is:  
☐ still in operation.  
☐ no longer in operation.

I hereby certify that Highland Ridge RV, Inc. is:  
☐ in compliance with the requirements of MSOP M087-41983-00679.  
☐ not in compliance with the requirements of MSOP M087-41983-00679.

<table>
<thead>
<tr>
<th>Authorized Individual (typed):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

Noncompliance:

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


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

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

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

COMPANY:_________________________________________________________PHONE NO. (      )___________________
LOCATION: (CITY AND COUNTY)_________________________________________________________________________
PERMIT NO. ________________ AFS PLANT ID: ________________ AFS POINT ID: ________________ INSP:__________
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:________________________________________
___________________________________________________________________________________________________
DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____    _________________________________________ AM / PM
ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _______________________________________

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE______/______/ 20____   _______________ AM/PM

TYPE OF POLLUTANTS EMITTED:   TSP,  PM-10,  SO2,  VOC,  OTHER:________________________________________
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _______________________________________
MEASURES TAKEN TO MINIMIZE EMISSIONS:______________________________________________________________
___________________________________________________________________________________________________
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:
CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:
INTERIM CONTROL MEASURES: (IF APPLICABLE)
___________________________________________________________________________________________________
___________________________________________________________________________________________________
MALFUNCTION REPORTED BY:__________________________________TITLE:___________________________
(SIGNATURE IF FAXED)
MALFUNCTION RECORDED BY:_______________________DATE:__________________TIME:__________________

*SEE PAGE 2

PAGE 1 OF 2
Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 “Malfunction” definition

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

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

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

________________________________________________________________________
________________________________________________________________________
Indiana Department of Environmental Management  
Office of Air Quality  

Technical Support Document (TSD) for a Renewal Minor Source Operating Permit (MSOP)

<table>
<thead>
<tr>
<th>Source Description and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source Name:</strong> Highland Ridge RV, Inc.</td>
</tr>
<tr>
<td><strong>Source Location:</strong> 3195 N State Road 5, Shipshewana, IN 46565</td>
</tr>
<tr>
<td><strong>County:</strong> LaGrange</td>
</tr>
<tr>
<td><strong>SIC Code:</strong> 3792 (Travel Trailers and Campers)</td>
</tr>
<tr>
<td><strong>Permit Renewal No.:</strong> M087-41983-00679</td>
</tr>
<tr>
<td><strong>Permit Reviewer:</strong> Daria Antipova</td>
</tr>
</tbody>
</table>

On September 27, 2019 Highland Ridge RV, Inc. submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Highland Ridge RV, Inc. relating to the operation of a stationary recreational travel trailer assembly plant. Highland Ridge RV, Inc. was issued its first MSOP (M087-34865-00679) on February 20, 2015.

<table>
<thead>
<tr>
<th>Source Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland Ridge RV previously operated two travel trailer manufacturing operations at separate locations in Shipshewana, Indiana 46565, identified as follows:</td>
</tr>
<tr>
<td>(a) Plant 1 at 3195 North State Road 5, and</td>
</tr>
<tr>
<td>(b) Plant 2 at 0925 North State Road 5.</td>
</tr>
</tbody>
</table>

IDEM, OAQ previously examined these plants based on the three criteria source determination process and made the conclusion that these plants were part of the same source. The term "source" is defined at 326 IAC 1-2-73. This determination was initially made under MSOP No. M087-34865-00679, issued on February 20, 2015.

Due to the changes in ownership and an adjustment to the manufacturing process, Highland Ridge RV has eliminated the Plant 2 manufacturing operations located at 925 North State Road 5 location. The former Plant 2 site is no longer affiliated with Highland Ridge RV. There are no activities at that site affiliated with the Highland Ridge RV manufacturing operations conducted at the Plant 1 site. Therefore, Plant 1 and Plant 2 no longer are one source as defined in 326 IAC 1-2-73.

<table>
<thead>
<tr>
<th>Existing Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>The source was issued MSOP Renewal No. M087-34865-00679 on February 20, 2015. The source has since received the following approval:</td>
</tr>
<tr>
<td>Significant Permit Revision No. 087-36623-00679 on April 1, 2016.</td>
</tr>
</tbody>
</table>

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.
Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) fabrication facility, identified as Line 1, constructed in 2015, with a nominal capacity of 4.0 recreational travel trailer per hour, consisting of the following operations:

(1) Two (2) laminators for RV roof, sidewall, and floor panels, identified as Laminators 1 & 2, constructed in 2015, utilizing no control, exhausting within the building, and consisting of flow coating and hand application of coatings.

(2) One (1) final finish operation, identified as Line 1 Final Finish, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(3) One (1) assembly operation, identified as Line 1 Assembly, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(b) One (1) woodworking operation facility, identified as the Mill Shop, constructed in 2019, with no particulate controls, exhausting within the building, and consisting of:

(1) One (1) woodworking operation, identified as WW-1, constructed in 2015, and relocated from the former Plant 2 in 2019, with no particulate controls, and consisting of:

(A) Five (5) chop saws, identified as 1CS4 through 1CS8;

(B) One (1) band saw, identified as 1BS1; and

(C) Six (6) hand routers, identified as 1HR1 through 1HR6.

(2) One (1) chop saw, identified as CS9, constructed in 2015, and relocated from the former Plant 2 in 2019.

(3) One (1) natural gas-fired Thermocycler, identified as H22, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

(c) One (1) material cutting and welding facility, identified as the Metal Shop, constructed in 2019, utilizing no control, exhausting within the building, and consisting of:

(1) One (1) material cutting operation, identified as MC1, constructed in 2015, and relocated from the former Plant 2 in 2019, and consisting of:

(A) Three (3) aluminum chop saws, identified as CS2 and CS4; and

(B) One (1) PVC chop saw, identified as CS1.

(2) One (1) welding operation, constructed in 2015, using less than six hundred twenty-five (625) pounds of weld wire per day, utilizing no control, and consisting of:

(A) Seven (7) metal inert gas (MIG) welding stations, identified as MIG1-MIG7, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.
(3) One (1) metal inert gas (MIG) welding station, identified as MIG11, constructed in 2016, and relocated from the former Plant 2 in 2019, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.

(4) One (1) natural gas-fired Thermocycler, identified as H21, constructed in 2019, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr).

(d) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Five (5) natural gas-fired space heaters, identified as H1-H5, constructed in 2015, each rated at 0.464 million British thermal units per hour (MMBtu/hr).

(2) Five (5) natural gas-fired Thermocyclers in the lamination building, identified as H12 - H16, constructed in 2016, with a maximum heat input capacity of 0.464 million British thermal units per hour (MMBtu/hr), each.

(e) One (1) fabrication facility, identified as Line 3, with a nominal capacity of 4.0 recreational travel trailers per hour, consisting of the following operations:

(1) One (1) final finish operation, identified as Line 3 Final Finish, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings.

(2) One (1) assembly operation, identified as Line 3 Assembly, constructed in 2016, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(3) One (1) welding operation, identified as Line 3 Welding, constructed in 2016, using less than six hundred twenty-five (625) pounds of weld wire per day, utilizing no control, exhausting within the building, and consisting of:

(A) Three (3) metal inert gas (MIG) welding stations, identified as MIG8-MIG10, nominally rated for a maximum capacity of 3.5 pounds electrode per day, each.

(f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Four (4) natural gas-fired Thermocyclers, identified as H17-H20, constructed in 2016, with a maximum heat input capacity of 0.55 million British thermal units per hour (MMBtu/hr), each.

(g) Paved and unpaved roads and parking lots with public access.

| Emission Units and Pollution Control Equipment Removed From the Source |

The source has removed the following emission units:

(a) One (1) fabrication facility, identified as Line 2, constructed in 2015, with a nominal capacity of 0.5 recreational travel trailer per hour, consisting of the following operations:

(1) One (1) final finish operation, identified as Line 2 Final Finish, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings.
(2) One (1) assembly operation, identified as Line 2 Assembly, constructed in 2015, utilizing no control, exhausting within the building, and consisting of hand application of coatings and use of hand-held aerosol canisters.

(b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, utilizing no control, exhausting outdoors, and consisting of:

(1) Three (3) natural gas-fired radiant tube heaters, identified as H7-H9, constructed in 2015, each rated at 0.120 million British thermal units per hour (MMBtu/hr);

(2) Two (2) natural gas-fired radiant tube heaters, identified as H11 and H12, constructed in 2015, each rated at 0.080 million British thermal units per hour (MMBtu/hr); and

(3) One (1) natural gas-fired Thermocycler, identified as H6, constructed in 2015, rated at 0.464 million British thermal units per hour (MMBtu/hr).

(c) One (1) woodworking operation, identified as WW-2, constructed in 2015, with no particulate controls, exhausting within the building, and consisting of:

(1) Six (6) chop saws, identified as 2CS1 through 2CS6;

(2) One (1) band saw, identified as 2BS1;

(3) Two (2) table saws, identified as 2TS1 and 2TS2; and

(4) One (1) radial arm saw, identified as 2RS1.

(d) Paved and unpaved roads and parking lots with public access.

### Enforcement Issue

There are no enforcement actions pending.

### Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

### County Attainment Status

The source is located in LaGrange County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.¹</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 5, 2005, for the annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Cannot be classified or better than national standards.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011.</td>
</tr>
</tbody>
</table>

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
(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. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM$_{2.5}$
LaGrange County has been classified as attainment for PM$_{2.5}$. Therefore, direct PM$_{2.5}$, SO$_2$, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of criteria pollutants and hazardous air pollutants (HAP) are counted toward the determination of MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.
Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

<table>
<thead>
<tr>
<th>Unrestricted Potential Emissions (ton/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$^1$</td>
</tr>
<tr>
<td>3.62</td>
</tr>
</tbody>
</table>

Title V Major Source Thresholds

<table>
<thead>
<tr>
<th>Total PTE of Entire Source Excluding Fugitive Emissions*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$^1$</td>
</tr>
<tr>
<td>4.07</td>
</tr>
</tbody>
</table>

Total PTE of Entire Source Including Source-Wide Fugitives*

<table>
<thead>
<tr>
<th>MSOP Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
</tr>
</tbody>
</table>

1Under the Part 70 Permit program (40 CFR 70), PM$_{10}$ and PM$_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."
2PM$_{2.5}$ listed is direct PM$_{2.5}$.
3Single highest source-wide HAP is Hexane.
*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, VOC is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.
Potential to Emit After Issuance

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)</th>
<th>Uncontrolled/Unlimited</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM1, PM10, PM2.5, SO2, NOx, VOC, CO, Single HAP, Total HAPs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total PTE of Entire Source Excluding Fugitive Emissions*</th>
<th>3.62</th>
<th>3.82</th>
<th>3.82</th>
<th>0.02</th>
<th>3.41</th>
<th>56.41</th>
<th>2.86</th>
<th>5.24</th>
<th>13.23</th>
</tr>
</thead>
</table>

**Title V Major Source Thresholds**

- PM1: 100
- PM10: 100
- PM2.5: 100
- SO2: 100
- NOx: 100
- VOC: 100
- CO: 10
- Total: 25

**Total PTE of Entire Source Including Source-Wide Fugitives***

<table>
<thead>
<tr>
<th>NA</th>
<th>3.92</th>
<th>3.84</th>
<th>0.02</th>
<th>3.41</th>
<th>56.41</th>
<th>2.86</th>
<th>5.24</th>
<th>13.23</th>
</tr>
</thead>
</table>

**MSOP Thresholds**

- PM1: 25
- PM10: 25
- PM2.5: 25
- SO2: 25
- NOx: 25
- VOC: < 100
- CO: < 10
- Total: < 25

**PSD Major Source Thresholds**

- PM1: 250
- PM10: 250
- PM2.5: 250
- SO2: 250
- NOx: 250
- VOC: 250
- CO: 250
- Total: -

*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant."

2PM2.5 listed is direct PM2.5.

3Single highest source-wide HAP is Hexane.

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

Federal Rule Applicability

Federal rule applicability for this source has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM and 326 IAC 12, are not included for this proposed revision, since the source is not an automobile or light truck assembly plant.

(b) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit.

**National Emission Standards for Hazardous Air Pollutants (NESHAP):**

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63.800, Subpart JJ and 326 IAC 20-14, are not included for this proposed revision because the source does not manufacture wood furniture or wood furniture components, and the source is not a major source of HAP emissions.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63.3080, Subpart III and 326 IAC 20-85, are not included for this proposed revision because the source does not apply.
topcoats to new automobile or light truck bodies or body parts, and the source is not a major source of HAP emissions.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM, and 326 IAC 20-80, are not included for this permit because the source is not a major source of HAP emissions.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, 40 CFR 63.4480, Subpart PPPP, and 326 IAC 20-81, are not included for this permit because the source is not a major source of HAP emissions.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, because Line 3 will not perform spray application of surface coatings to assembled motor vehicles or mobile equipment.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63.11514, Subpart XXXXXX, because the Line 3 welding processes are not one of the source categories listed in Table 1 to Subpart XXXXXX of Part 63.

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

Compliance Assurance Monitoring (CAM):

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

State Rule Applicability - Entire Source

State rule applicability for this source has been reviewed as follows:

326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Potential to Emit After Issuance section of this document.

326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the Potential to Emit After Issuance section of this document.

This new source is not a major stationary source, under PSD (326 IAC 2-2), because:

(1) The potential to emit all PSD regulated pollutants, excluding GHGs, are less than two hundred fifty (250) tons per year;
(2) This source is not one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to this source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that
was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1)

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
The source is subject to the requirements of 326 IAC 6-4, because the paved and unpaved roads have the potential to emit fugitive particulate emissions. 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source (located in LaGrange County) is located in one of the counties listed in 326 IAC 6.5, but is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. The source-wide unlimited PTE of PM is less of than 10 tons per year; therefore, the source-wide actual emissions of PM are less than 10 tons per year. This source is not subject to the requirements of 326 IAC 6.5 because the source-wide PTE of PM is less than 100 tons per year and source-wide actual emissions of PM are less than 10 tons per year.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in LaGrange County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply, since this unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

<table>
<thead>
<tr>
<th>State Rule Applicability – Individual Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabrication Facility (Line 1)</td>
</tr>
</tbody>
</table>

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(7), 326 IAC 6-3-1(b)(8), and 326 IAC 6-3-1(b)(12), Line 1 is exempt from the requirements of 326 IAC 6-3-2 because the surface coating activities of this facility utilize only brush,
hand-held aerosol canisters and flow coating application techniques, which does not generate particulate matter emissions.

326 IAC 8-1-6 (General Reduction Requirements for New Facilities)
Line 1 is not subject to 326 IAC 20-48, 326 IAC 20-56, or any other rule under Article 8 and its unlimited VOC potential emissions are greater than twenty-five (25) tons per year. However, the source has elected to limit the VOC potential emissions from Line 1 to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

In order to render the requirements of 326 IAC 8-1-6 not applicable, the fabrication facility shall be limited as follows:

(1) The total VOC input to Line 1, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period.

Compliance with this limit shall limit the potential to emit VOC from Line 1 to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 8-1-6 (General Reduction Requirements for New Facilities) not applicable.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The fabrication facility, constructed after 1990, is not subject to 326 IAC 8-2-9 because the PTE VOC is less than fifteen (15) lb/day when coating metal. Therefore, the requirements of 326 IAC 8-2-9 do not apply.

326 IAC 8-22 (Miscellaneous Industrial Adhesives)
The fabrication facility is considered an industrial adhesive application process. The fabrication facility has actual VOC emissions of greater than three (3) tons per twelve (12) month period before add-on controls; however, this facility is not located in Lake or Porter County. Therefore, the requirements of 326 IAC 8-22 do not apply.

Fabrication Facility (Line 3)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
IDEM, OAQ has determined that application of SP90 Big Sticky adhesive in RV assembly operations at this source when using non-atomizing spray guns does not generate particulate emissions. Therefore, 326 IAC 6-3-2 is not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(15), 326 IAC 6-3 is not applicable to the RV assembly and final finish operation because the surface coating manufacturing processes, not otherwise exempted by 326 IAC 6-3-1(b)(5) through (8), use less than five (5) gallons per day.

326 IAC 8-1-6 (General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from Line 3 is greater than twenty-five (25) tons per year. However, the source shall limit the potential VOC emissions from Line 3 to less than twenty-five (25) tons per year. Therefore, the proposed revision is not subject to the requirements of 326 IAC 8-1-6.

In order to render the requirements of 326 IAC 8-1-6 not applicable, Line 3 shall be limited as follows:

(1) The total VOC input to Line 3, including coatings, dilution solvents, and cleaning solvents, shall be less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits shall limit the potential to emit VOC from Line 3 to less than twenty-five (25) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.
326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
The fabrication facility, constructed after 1990, is not subject to 326 IAC 8-2-9 because the PTE VOC is less than fifteen (15) lb/day when coating metal. Therefore, the requirements of 326 IAC 8-2-9 do not apply.

326 IAC 8-22 (Miscellaneous Industrial Adhesives)
The fabrication facility is considered an industrial adhesive application process. The fabrication facility has actual VOC emissions of greater than three (3) tons per twelve (12) month period before add-on controls; however, this facility is not located in Lake or Porter County. Therefore, the requirements of 326 IAC 8-22 do not apply.

Woodworking Operation WW-1

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), WW-1 is exempt from the requirements of 326 IAC 6-3-2 because the potential particulate emissions from the woodworking operation are less than five hundred fifty-one thousandths (0.551) pound per hour.

Material Cutting

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the PVC and aluminum chop saws are exempt from the requirements of 326 IAC 6-3-2 because the potential particulate emissions from each operation are less than five hundred fifty-one thousandths (0.551) pound per hour.

Welding

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(9), the welding operations are exempt from the requirements of 326 IAC 6-3-2 because each welding station uses less than six hundred twenty-five (625) pounds of rod or wire per day.

Natural Gas Combustion Sources

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

\[ Pt = \frac{1.09}{Q^{0.26}} \]

Where:

\( Pt \) = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu).

\( Q \) = Total source maximum operating capacity rating in MMBtu/hr heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Pursuant to 326 IAC 6-2-4(a), for \( Q \) less than 10 MMBtu/hr, Pt shall not exceed 0.6 lb/MMBtu.
<table>
<thead>
<tr>
<th>Facility</th>
<th>Construction Date (Removal Date)</th>
<th>Operating Capacity (MMBtu/hr)</th>
<th>Q (MMBtu/hr)</th>
<th>Calculated Pt (lb/MMBtu)</th>
<th>Particulate Limitation, (Pt) (lb/MMBtu)</th>
<th>PM PTE based on AP-42 (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1 Thermocyclers (H1-H5)</td>
<td>2015</td>
<td>5 x 0.464</td>
<td>3.30</td>
<td>0.80, each</td>
<td>0.6, each</td>
<td>0.002, each</td>
</tr>
<tr>
<td>Lamination Thermocyclers (H12-H16)</td>
<td>2016</td>
<td>5 x 0.464</td>
<td>7.82</td>
<td>0.64, each</td>
<td>0.6, each</td>
<td>0.002, each</td>
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<tr>
<td>Line 3 Thermocyclers (H17-H20)</td>
<td>2016</td>
<td>4 x 0.55</td>
<td></td>
<td></td>
<td>0.6, each</td>
<td>0.002, each</td>
</tr>
<tr>
<td>Plant 2 thermocycler (H6)</td>
<td>2018</td>
<td>0.464</td>
<td>3.30</td>
<td>0.80</td>
<td>0.6</td>
<td>0.002</td>
</tr>
<tr>
<td>Plant 2 radiant tube heaters (H7-H9)</td>
<td>2018</td>
<td>3 x 0.120</td>
<td>3.30</td>
<td>0.80</td>
<td>0.6</td>
<td>0.002</td>
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<tr>
<td>Plant 2 radiant tube heaters (H10-H11)</td>
<td>2018</td>
<td>2 x 0.08</td>
<td>3.30</td>
<td>0.80</td>
<td>0.6</td>
<td>0.002</td>
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<tr>
<td>Mill Shop Thermocycler (H21)</td>
<td>2019</td>
<td>0.55</td>
<td>7.94</td>
<td>0.64</td>
<td>0.6</td>
<td>0.002</td>
</tr>
<tr>
<td>Metal Shop Thermocycler (H22)</td>
<td>2019</td>
<td>0.55</td>
<td>7.94</td>
<td>0.64</td>
<td>0.6</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations: Applicability)
The requirements of 326 IAC 7-1.1 are not applicable to this source because the natural gas-fired thermocyclers have potential emissions less than twenty-five (25) tons per year and actual emissions of less than ten (10) pounds per hour.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the facility, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-1-1 (Nitrogen Oxides Control)
The combustion units are not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because the natural gas fired space heaters and the natural gas fired thermocyclers have potential to emit NOx less than forty (40) tons per year.

Compliance Determination and Monitoring Requirements

(a) The compliance determination requirements applicable to this proposed revision are as follows:

(1) Compliance with the VOC usage limitations for Line 1 and 3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer.
However, IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) There are no compliance monitoring requirements applicable to this permit.

(c) There are no testing requirements applicable to this permit.

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 September 27, 2019.

The operation of this stationary recreational travel trailer assembly plant shall be subject to the conditions of the attached proposed MSOP Renewal No. M087-41983-00679.

The staff recommends to the Commissioner that the MSOP Renewal be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Daria Antipova, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 234-3429 or (800) 451-6027, and ask for Daria Antipova or (317) 234-3429.

(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 Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.
Appendix A: Emission Calculations  
PTE Summary

**Company Name:** Highland Ridge RV, Inc.  
**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565  
**Permit No.:** M087-41983-00679  
**Permit Reviewer:** Daria Antipova

### Uncontrolled Potential to Emit (tons/yr)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Worst Case Single HAP (Hexane)</th>
<th>Total HAPs</th>
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</thead>
<tbody>
<tr>
<td>Lamination</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
<td>0.00</td>
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<td>1.61</td>
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<td>-</td>
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<td>0.04</td>
<td>0.04</td>
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<td>Natural Gas Combustion</td>
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<td>0.26</td>
<td>0.02</td>
<td>3.41</td>
<td>0.19</td>
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<tr>
<td><strong>Total</strong></td>
<td>4.07</td>
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<td>56.41</td>
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</table>

*PM₂.₅ listed is direct PM₂.₅

### Potential to Emit After Issuance (tons/yr)

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Worst Case Single HAP (Hexane)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
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<td>Lamination</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>&lt; 25</td>
<td>-</td>
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<tr>
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<td>1.53</td>
<td>1.53</td>
<td>-</td>
<td>-</td>
<td>&lt; 25</td>
<td>-</td>
<td>4.14</td>
<td>9.02</td>
</tr>
<tr>
<td>Line 1 Final Finish</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Line 3 Assembly</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>-</td>
<td>-</td>
<td>&lt; 25</td>
<td>-</td>
<td>1.03</td>
<td>4.14</td>
</tr>
<tr>
<td>Line 3 Final Finish</td>
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<tr>
<td>Woodworking &amp; Material Cutting (WW &amp; MC)</td>
<td>1.61</td>
<td>1.61</td>
<td>1.61</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Metal Shop (Welding)</td>
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<tr>
<td>Natural Gas Combustion</td>
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<td>0.26</td>
<td>0.02</td>
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<td>2.86</td>
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<td>0.06</td>
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<td>Unpaved Roads</td>
<td>0.23</td>
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<td>0.01</td>
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<td>Paved Roads</td>
<td>0.21</td>
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<td>0.01</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>4.03</td>
<td>3.88</td>
<td>3.80</td>
<td>0.02</td>
<td>3.41</td>
<td>50.19</td>
<td>2.86</td>
<td>5.24</td>
<td>13.22</td>
</tr>
</tbody>
</table>

*PM₂.₅ listed is direct PM₂.₅
### Potential VOC, HAP, and Particulate Emissions from Surface Coating Operations

**Lamination 1 and Lamination 2**

**Company Name:** Highland Ridge RV, Inc.

**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565

**Permit No.:** M087-41983-00679

**Permit Reviewer:** Daria Antipova

#### Lamination 1 and Lamination 2 Emissions Calculations

<table>
<thead>
<tr>
<th>Process</th>
<th>Manufacturer</th>
<th>Density (Lb/Gal)</th>
<th>Weight % of Acetone &amp; Organics</th>
<th>Weight % of Water &amp; Exempt</th>
<th>Volume % of Acetone &amp; Organics</th>
<th>Weight % of Non-Volatile (solids)</th>
<th>Volume % of Water &amp; Exempt</th>
<th>PTE VOC per gallon of coating</th>
<th>PTE VOC/PM10/PM2.5 Rate (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Forbo Adhesives</td>
<td>5.01</td>
<td>10.00%</td>
<td>0.00%</td>
<td>10.01%</td>
<td>0.00%</td>
<td>89.99%</td>
<td>0.286</td>
<td>1.28</td>
</tr>
<tr>
<td>L2</td>
<td>Forbo Adhesives</td>
<td>5.01</td>
<td>10.00%</td>
<td>0.00%</td>
<td>10.01%</td>
<td>0.00%</td>
<td>89.99%</td>
<td>0.286</td>
<td>1.28</td>
</tr>
<tr>
<td>L1 and L2 Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. Because the VOC component is a highly reactive compound and the coating is enclosed between layers of material, VOC emissions are considered equal to HAP emissions.
2. MDI = Methylene diphenyl diisocyanate, CAS No. 504.49-71
3. Calculated MDI/HAP emissions based on Center for the Polyurethanes Industry methodology cited below.

**Methodology Reference:**


**METHODOLOGY:**

For MDI in a lamination process, the following formula is used to estimate the potential MDI evaporative loss:

\[
W = 25.4 \times V_P^{\text{MDI}} \times \frac{M_W}{T_{\text{proc}}} \times u^{0.78} \times S_A \times t_{TF} \times K_{\text{MDI}}
\]

Where:
- \( W \) = Evaporative Losses, g/day
- \( V_P^{\text{MDI}} \) = MDI Vapor Pressure at process temperature, atm
- \( M_W \) = Molecular Weight, g/g-mole
- \( T_{\text{proc}} \) = Process Temperature (Kelvin)
- \( u \) = Airflow speed, m/s
- \( S_A \) = Exposed Surface Area, m²/day (worst case)
- \( t_{TF} \) = Tack Free Time, sec
- \( K_{\text{MDI}} \) = Vapor Pressure Adjustment Factor for Polyisocyanate Concentration

**Example Calculation:**

- \( V_P^{\text{MDI}} \) = 1.346E-08 atm
- \( M_W \) = 250.26 g/g-mole
- \( T_{\text{proc}} \) = 298 K
- \( u \) = 0.51 m/s
- \( S_A \) = 260 ft²/day
- \( t_{TF} \) = 5.00 sec
- \( K_{\text{MDI}} \) = 0.19

\[
W = 9.51 \times 10^{-5} \text{ g/day} = 3.96 \times 10^{-6} \text{ g/hr}
\]

**PTE = 8.74E-09 3.83E-08 lb/hr**

---

**Potential PM/PM10/PM2.5 Emissions:**

- **Lamination 1 and Lamination 2**: 4.63E-03 1.95E-02 lb/hr
### 1. VOC and PM/PM10/PM2.5

#### Line 1

| Process | Manufacturer | Product Number | Description | Density (Lb/Gal) | Weight % Solids | Weight % Water | Weight % Solvent | Weight % Grease | Maximum 10% (units/hr) | Maximum 20% (units/hr) | Maximum 30% (units/hr) | Maximum 40% (units/hr) | Maximum 50% (units/hr) | Maximum 60% (units/hr) | Maximum 70% (units/hr) | Maximum 80% (units/hr) | Maximum 90% (units/hr) | Maximum 100% (units/hr) | Hexane Emissions (ton/year) | TCE Emissions (ton/year) | MC Emissions (ton/year) | Xylene Emissions (ton/year) | Total HAP Emissions (ton/year) |
|---------|--------------|----------------|-------------|-----------------|----------------|--------------|----------------|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|------------------|------------------|------------------|
| Assembly | Sta'Put SP80 | Sta'Put Aerosol Adhesive | 7.89 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 70.30% | 27.70% | 42.60% | 20.19% | 41.93% | 0.0747 | 4.00 | 7.17 | 3.25 | 2.59 | 0.77 | 18.57 | 3.39 | 0 | 6.18 | manual | 100% | Wood/Plastic |
| Assembly | Sta'Put SP80 | Sta'Put Aerosol Adhesive | 7.89 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 32.50% | 3.00% | 29.50% | 3.57% | 56.20% | 0.1630 | 4.00 | 15.65 | 2.20 | 2.20 | 1.44 | 34.48 | 6.29 | 0 | 3.14 | manual | 100% | Wood/Plastic |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 32.50% | 3.00% | 29.50% | 3.57% | 56.20% | 0.1630 | 4.00 | 15.65 | 2.20 | 2.20 | 1.44 | 34.48 | 6.29 | 0 | 3.14 | manual | 100% | Wood/Plastic |
| Assembly | Sta'Put SP80 | Sta'Put Aerosol Adhesive | 7.89 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 32.50% | 3.00% | 29.50% | 3.57% | 56.20% | 0.1630 | 4.00 | 15.65 | 2.20 | 2.20 | 1.44 | 34.48 | 6.29 | 0 | 3.14 | manual | 100% | Wood/Plastic |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 32.50% | 3.00% | 29.50% | 3.57% | 56.20% | 0.1630 | 4.00 | 15.65 | 2.20 | 2.20 | 1.44 | 34.48 | 6.29 | 0 | 3.14 | manual | 100% | Wood/Plastic |
| Assembly | Sta'Put SP80 | Sta'Put Aerosol Adhesive | 7.89 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Assembly | Sta'Put SP90 | Sta'Put Big Sticky | 6.08 | 32.50% | 3.00% | 29.50% | 3.57% | 56.20% | 0.1630 | 4.00 | 15.65 | 2.20 | 2.20 | 1.44 | 34.48 | 6.29 | 0 | 3.14 | manual | 100% | Wood/Plastic |

**Notes:**
1. Manual application methods include dip, roll, flow (including tubing and caulking gun type applications), brush, and wipe coatings.
2. Hexane, TCE, and MC are exempt under 326 IAC 6-3-1(b)(5)-(8).
3. Weight % Solids value is based on Method 24 VOC content from SDS.
4. MDI content of polyurethane products was multiplied by 0.3 to determine the worst case PTE.

### 2. HAZARDOUS AIR POLLUTANTS

#### Line 1

<table>
<thead>
<tr>
<th>Process</th>
<th>Manufacturer</th>
<th>Product Number</th>
<th>Description</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Solids</th>
<th>Weight % Water</th>
<th>Weight % Solvent</th>
<th>Weight % Grease</th>
<th>Hexane Emissions (ton/year)</th>
<th>TCE Emissions (ton/year)</th>
<th>MC Emissions (ton/year)</th>
<th>Xylene Emissions (ton/year)</th>
<th>Total HAP Emissions (ton/year)</th>
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<tr>
<td>Assembly</td>
<td>Sta'Put SP80</td>
<td>Sta'Put Aerosol Adhesive</td>
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<td>0.04</td>
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<td>Assembly</td>
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<td>Sta'Put Aerosol Adhesive</td>
<td>7.89</td>
<td>0.04</td>
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**Notes:**
1. MDI - Methylene diphenyl diisocyanate (CAS 9016-87-9)
2. Perc - perchloroethylene (tetrachloroethene)
3. MC - methyl chloride (chloromethane)
4. At least 60 weight percent of the system, excluding water and non-volatile solids such as fillers, react during the process. Therefore, the MDI content of polyurethane products was multiplied by 0.3 to determine the worst case PTE.

### Appendix A: Emissions Calculations

**Potential VOC, HAPs, and Particulate Emissions from Surface Coating Operations**

**Line 1 Assembly**

**Company Name:** Highland Ridge RV, Inc.
**Source Address:** 1305 North State Road 3, Shipshewana, IN 46575
**Permit No.:** M087-41983-00679
**Permit Reviewer:** Dana Antionpo

---
### Appendix A: Emissions Calculations

#### Potential VOC, HAPs, and Particulate Emissions from Surface Coating Operations

**Line 1 Final Finish**

**Company Name:** Highland Ridge RV, Inc.

**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565

**Permit No.:** M007-41983-0679

**Permit Reviewer:** Daria Antipova

---

#### Line 1 Final Finish US Polychemical Aqueous Cleaner

- **Manufacturer:** US Polychemical
- **Description:** Aqueous Cleaner
- **Density:** 8.60 lb/gal
- **Weight % Volatile (H2O & Organics):** 100.00%
- **Weight % Organics:** 98.28%
- **Weight % Water & Exempt:** 1.72%
- **Volume % Water & Exempt:** 0.00%
- **Volume % Non-Volatiles (solids):** 1.70%
- **Gal of Mat. (gallons/unit):** 1.15E-04
- **Maximum (units/hour):** 4.00
- **Gallons of Coating per Day (gal/day):** 1.10E-02
- **Pounds VOC per gallon of coating less water:** 0.15
- **Pounds VOC per gallon of coating:** 0.15
- **PTE VOC (lb/hr):** 6.8E-05
- **PTE VOC (lb/day):** 1.63E-03
- **PTE VOC (ton/yr):** 2.98E-04
- **Transfer Efficiency:** 80%

**Notes:**
1. Manual application methods include dip, roll, flow (including tube and caulking gun-type applications), brush, and wipe coatings

**METHODOLOGY**

- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics) / (Volume % solids)
- **PTE VOC** (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr)
- **PTE VOC** (ton/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **PTE PM/PM10/PM2.5** (ton/yr) = (units/hour) * (gallons/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) *(1 ton/2000 lbs)

---

#### Line 1 Final Finish PPG Lacquer Thinner

- **Density:** 7.20 lb/gal
- **Weight % Volatile (H2O & Organics):** 100.00%
- **Weight % Organics:** 30.00%
- **Weight % Water & Exempt:** 70.00%
- **Volume % Water & Exempt:** 35.94%
- **Volume % Non-Volatiles (solids):** 28.00%
- **Gal of Mat. (gallons/unit):** 2.30E-04
- **Maximum (units/hour):** 4.00
- **Gallons of Coating per Day (gal/day):** 2.21E-02
- **Pounds VOC per gallon of coating less water:** 7.93
- **Pounds VOC per gallon of coating:** 5.08
- **PTE VOC (lb/hr):** 6.8E-03
- **PTE VOC (lb/day):** 1.12E-01
- **PTE VOC (ton/yr):** 2.06E-02

**Notes:**
1. Manual application methods include dip, roll, flow (including tube and caulking gun-type applications), brush, and wipe coatings

**METHODOLOGY**

- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics) / (Volume % solids)
- **PTE VOC** (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * (24 hr/day)

---

#### Line 1 Final Finish TCI Acetone

- **Density:** 6.59 lb/gal
- **Weight % Volatile (H2O & Organics):** 100.00%
- **Weight % Organics:** 100.00%
- **Weight % Water & Exempt:** 0%
- **Volume % Water & Exempt:** 100.00%
- **Volume % Non-Volatiles (solids):** 2.30E-03
- **Gal of Mat. (gallons/unit):** 4.00
- **Maximum (units/hour):** 2.21E-01
- **Gallons of Coating per Day (gal/day):** 0

**Notes:**
1. Manual application methods include dip, roll, flow (including tube and caulking gun-type applications), brush, and wipe coatings

**METHODOLOGY**

- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics) / (Volume % solids)
- **PTE VOC** (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * (24 hr/day)

---

#### Line 1 Potential to Emit

<table>
<thead>
<tr>
<th>Process Description</th>
<th>Density (lb/gal)</th>
<th>Weight % Non-Volatiles (solids)</th>
<th>Maximum (gallons/unit)</th>
<th>Weight % VOC</th>
<th>Weight % Formaldehyde</th>
<th>Weight % Toluene</th>
<th>Weight % Xylene</th>
<th>PTE VOC (ton/yr)</th>
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<tbody>
<tr>
<td>US Polychemical Aqueous Cleaner</td>
<td>8.60</td>
<td>1.72%</td>
<td>1.15E-04</td>
<td>0%</td>
<td>0%</td>
<td>1.70%</td>
<td>0%</td>
<td>1.63E-03</td>
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<tr>
<td>PPG Lacquer Thinner</td>
<td>7.20</td>
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<td>4.00</td>
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<td>TCI Acetone</td>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>2.06E-02</td>
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</table>

**Notes:**
1. EB - ethylbenzene

**METHODOLOGY**

- **HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs**

---

**Potential to Emit**

<table>
<thead>
<tr>
<th>Process Description</th>
<th>Density (lb/gal)</th>
<th>Weight % Non-Volatiles (solids)</th>
<th>Maximum (gallons/unit)</th>
<th>Weight % VOC</th>
<th>Weight % Formaldehyde</th>
<th>Weight % Toluene</th>
<th>Weight % Xylene</th>
<th>PTE VOC (ton/yr)</th>
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<tbody>
<tr>
<td>US Polychemical Aqueous Cleaner</td>
<td>8.60</td>
<td>1.72%</td>
<td>1.15E-04</td>
<td>0%</td>
<td>0%</td>
<td>1.70%</td>
<td>0%</td>
<td>1.63E-03</td>
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</tbody>
</table>

**Notes:**
- Manual application methods include dip, roll, flow (including tube and caulking gun-type applications), brush, and wipe coatings

**METHODOLOGY**

- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics) / (Volume % solids)
- **PTE VOC** (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * (24 hr/day)

---

## Hazardous Air Pollutants

### Line 1 Final Finish US Polychemical Aqueous Cleaner

- **Density:** 8.60 lb/gal
- **Gallons of Material (gallons/unit):** 1.15E-04
- **Weight % EB:** 4.00%
- **Weight % Formaldehyde:** 0%
- **Weight % Toluene:** 1.00%
- **Weight % Xylene:** 0%

<table>
<thead>
<tr>
<th>Process Description</th>
<th>Density (lb/gal)</th>
<th>EB Emissions (tons/yr)</th>
<th>Formaldehyde Emissions (tons/yr)</th>
<th>Toluene Emissions (tons/yr)</th>
<th>Xylene Emissions (tons/yr)</th>
<th>Total HAP Emissions (tons/yr)</th>
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<tbody>
<tr>
<td>US Polychemical Aqueous Cleaner</td>
<td>8.60</td>
<td>1.63E-03</td>
<td>2.75E-04</td>
<td>1.72E-04</td>
<td>1.73E-04</td>
<td>2.93E-05</td>
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</table>

**Notes:**
- EB - ethylbenzene

**METHODOLOGY**

- **HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs**

---

**Uncontrolled Potential Emissions**

<table>
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<tr>
<th>Process Description</th>
<th>Density (lb/gal)</th>
<th>EB Emissions (tons/yr)</th>
<th>Formaldehyde Emissions (tons/yr)</th>
<th>Toluene Emissions (tons/yr)</th>
<th>Xylene Emissions (tons/yr)</th>
<th>Total HAP Emissions (tons/yr)</th>
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<tbody>
<tr>
<td>US Polychemical Aqueous Cleaner</td>
<td>8.60</td>
<td>1.63E-03</td>
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**Notes:**
- EB - ethylbenzene

**METHODOLOGY**

- **HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gallons/unit) * Maximum (units/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs**
## 1. VOC and PM/PF/PM10 Emissions

<table>
<thead>
<tr>
<th>Process</th>
<th>Manufacturer</th>
<th>Product Number</th>
<th>Description</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Solids (gal/unit)</th>
<th>Maximum (units/hr)</th>
<th>Gal of Material (gal/unit)</th>
<th>VOC Emissions (ton/yr)</th>
<th>PM/PM10/P M2.5 (ton/yr)</th>
<th>Total RSP Emissions (ton/yr)</th>
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<td>2301</td>
<td>San Purpose</td>
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<td>Geacel</td>
<td>6100</td>
<td>Acrylic Cure GF</td>
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<td>SP50</td>
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</tbody>
</table>

### METHODOLOGY

1. **MDI** - Methylene diphenyl diisocyanate, CAS No. 9016-87-9
2. **Perc** - Perchloroethylene (tetrachloroethene)
3. **VOC** and **PM/PM10/PM2.5**
4. **HAP**

Notes:
- **Total Uncontrolled Potential HAP Emissions**
- **Notes**
- **Appendix A: Emissions Calculations**
- **Potential VOC, HAPs, and Particulate Emissions from Surface Coating Operations**

---

**Company Name:** Highland Ridge RV, Inc.  
**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565  
**Permit No.:** M087-41983-00679  
**Permit Reviewer:** Dana Antipova  
**Page 5 of 11, TSD App. A**
### 1. VOC and PM/PM10/PM2.5

<table>
<thead>
<tr>
<th>Process</th>
<th>Manufacturer</th>
<th>Description</th>
<th>Density (Lb/Gal)</th>
<th>Gallons of Material (gal/unit)</th>
<th>Maximum Weight %</th>
<th>Weight % Volatiles (H20 &amp; Organics)</th>
<th>Weight % Water &amp; Exempt</th>
<th>Weight % Organics</th>
<th>Volume % Water &amp; Exempt</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Rate of Application (unit/hr)</th>
<th>Transfer Efficiency (See Note Below)</th>
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<tr>
<td>Final Finish</td>
<td>US Polychemical</td>
<td>Aqueous Cleaner</td>
<td>8.60</td>
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### 2. Hazardous Air Pollutants

<table>
<thead>
<tr>
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<th>Manufacturer</th>
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<th>Density (Lb/Gal)</th>
<th>Gallons of Material (gal/unit)</th>
<th>Maximum Weight %</th>
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<th>Weight % Formaldehyde</th>
<th>Weight % Toluene</th>
<th>Weight % Xylene</th>
<th>Ethyl Benzene Emissions (ton/yr)</th>
<th>Formaldehyde Emissions (ton/yr)</th>
<th>Toluene Emissions (ton/yr)</th>
<th>Xylene Emissions (ton/yr)</th>
<th>Total HAP Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Finish</td>
<td>US Polychemical</td>
<td>Aqueous Cleaner</td>
<td>8.60</td>
<td>1.15E-04</td>
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<td>0%</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Uncontrolled Potential Emissions**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.93E-04</td>
<td>2.75E-04</td>
<td>4.95E-04</td>
<td>2.91E-04</td>
</tr>
</tbody>
</table>
Appendix A: Emissions Calculations

Process Particulate Emissions

Particulate Emissions from Material Cutting (MC-1) and Woodworking Operation (WW-1)

<table>
<thead>
<tr>
<th>Material Cutting (MC-1)</th>
<th>Woodworking (WW1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name:</strong> Highland Ridge RV, Inc.</td>
<td></td>
</tr>
<tr>
<td><strong>Source Address:</strong> 3195 North State Road 5, Shipshewana, IN 46565</td>
<td></td>
</tr>
<tr>
<td><strong>Permit No.:</strong> M087-41983-00679</td>
<td></td>
</tr>
<tr>
<td><strong>Permit Reviewer:</strong> Daria Antipova</td>
<td></td>
</tr>
</tbody>
</table>

### Material Cutting (MC-1)

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>Cuts/HR</th>
<th>Diameter/Pipe</th>
<th>Pi</th>
<th>Thick/Pipe Wall</th>
<th>Width/Bt</th>
<th>Density/Lb/Feet^3</th>
<th>Loss</th>
<th>Conversion Factor</th>
<th>Emissions/Lb/HR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Chop Saws CS1</td>
<td>10.00</td>
<td>4.000 in</td>
<td>3.14</td>
<td>0.1250</td>
<td>0.125</td>
<td>1,728</td>
<td>87.71</td>
<td>0.10</td>
<td>1.96</td>
</tr>
<tr>
<td>Aluminum Chop Saws CS2-4</td>
<td>15.00</td>
<td>4.00</td>
<td>0.125</td>
<td>0.125</td>
<td>0.9375</td>
<td>1,728</td>
<td>168.43</td>
<td>0.09</td>
<td>0.94</td>
</tr>
<tr>
<td>Chop Saws CS4-9</td>
<td>20.00</td>
<td>1.50</td>
<td>1.50</td>
<td>0.125</td>
<td>5.625</td>
<td>1,728</td>
<td>40.00</td>
<td>0.13</td>
<td>5.63</td>
</tr>
<tr>
<td>Band Saw BS1</td>
<td>10.00</td>
<td>4</td>
<td>2.5</td>
<td>2.50</td>
<td>1.10</td>
<td>1,728</td>
<td>40.00</td>
<td>0.03</td>
<td>1.10</td>
</tr>
<tr>
<td>Hand Routers HR1-6</td>
<td>120.00</td>
<td>0.125</td>
<td>0.06</td>
<td>0.94</td>
<td>0.02</td>
<td>1,728</td>
<td>40.00</td>
<td>1.61</td>
<td></td>
</tr>
</tbody>
</table>

Total Emissions Estimate = 0.37 lb/hr
Total Uncontrolled PM Emissions = 1.61 tons/year
### Appendix A: Emissions Calculations

#### Welding

**Company Name:** Highland Ridge RV, Inc.
**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565
**Permit No.:** M087-41983-00679
**Permit Reviewer:** Daria Antipova

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>Number of Stations</th>
<th>Max. electrode consumption per station (lb/day)</th>
<th>Total Pounds of Electrode per day</th>
<th>EMISSION FACTORS(^1) (lb pollutant/lb electrode)</th>
<th>EMISSIONS (lbs/hr)</th>
<th>HAPS (lbs/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELDING</td>
<td></td>
<td></td>
<td></td>
<td>PM/PM10/PM2.5 &lt;br&gt;Mn  &lt;br&gt;Ni  &lt;br&gt;Co  &lt;br&gt;Cr</td>
<td>PM/PM10/PM2.5 &lt;br&gt;Mn  &lt;br&gt;Ni  &lt;br&gt;Co  &lt;br&gt;Cr</td>
<td>PM/PM10/PM2.5 &lt;br&gt;Mn  &lt;br&gt;Ni  &lt;br&gt;Co  &lt;br&gt;Cr</td>
</tr>
<tr>
<td>Metal Inert Gas (MIG)(E70S) &lt;br&gt;(Weld Shop)</td>
<td>11</td>
<td>3.50</td>
<td>38.50</td>
<td>5.20E-03 &lt;br&gt;3.18E-04 &lt;br&gt;1.00E-06 &lt;br&gt;1.00E-06</td>
<td>8.34E-03 &lt;br&gt;5.10E-04 &lt;br&gt;1.60E-06 &lt;br&gt;1.60E-06</td>
<td>5.15E-04</td>
</tr>
</tbody>
</table>

#### Emission Totals

<table>
<thead>
<tr>
<th>Potential to Emit (lb/hr)</th>
<th>Metal Shop</th>
<th>8.34E-03 &lt;br&gt;5.10E-04 &lt;br&gt;1.60E-06 &lt;br&gt;1.60E-06 &lt;br&gt;1.60E-06 &lt;br&gt;5.15E-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential to Emit (lb/day)</td>
<td>Metal Shop</td>
<td>0.20 &lt;br&gt;1.22E-02 &lt;br&gt;3.85E-05 &lt;br&gt;3.85E-05 &lt;br&gt;3.85E-05 &lt;br&gt;1.24E-02</td>
</tr>
<tr>
<td>Potential to Emit (tons/yr)</td>
<td>Metal Shop</td>
<td>3.65E-02 &lt;br&gt;2.23E-03 &lt;br&gt;7.03E-06 &lt;br&gt;7.03E-06 &lt;br&gt;7.03E-06 &lt;br&gt;2.26E-03</td>
</tr>
</tbody>
</table>

**Notes:**
1. Emission Factors from AP-42 Tables 12.19-1 and 12.19-2, GMAW with E70S electrode (SCC 3-09-052-54)

**Methodology**

Emissions (lb/hr) = Number of Stations x Max. Electrode Consumption per Station (lb/day) x Emission Factor (lb pollutant/lb electrode) / 24 (hr/day)

Potential to Emit (lb/hr) = Emissions (lb/hr)

PTE (lb/day) = PTE (lb/hr) x 24 (hr/day)

PTE (tons/yr) = PTE (lb/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)
Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/hr = 100

Company Name: Highland Ridge RV, Inc.
Source Address: 3195 North State Road 5, Shipshewana, IN 46565
Permit No.: M087-41983-00679
Permit Reviewer: Daria Antipova

Heat Input Capacity (MMBTU/hr)

<table>
<thead>
<tr>
<th>Description</th>
<th>ID</th>
<th>Number</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1 Thermocyclers</td>
<td>H1-H5</td>
<td>5</td>
<td>0.464</td>
<td>2.32</td>
</tr>
<tr>
<td>Lamination Thermocyclers</td>
<td>H2-H6</td>
<td>5</td>
<td>0.464</td>
<td>2.32</td>
</tr>
<tr>
<td>Line 2 Thermocyclers</td>
<td>H7-H10</td>
<td>4</td>
<td>0.560</td>
<td>2.24</td>
</tr>
<tr>
<td>Mill Shop Thermocycler</td>
<td>H11</td>
<td>1</td>
<td>0.550</td>
<td>0.55</td>
</tr>
<tr>
<td>Metal Shop Thermocycler</td>
<td>H12</td>
<td>1</td>
<td>0.550</td>
<td>0.55</td>
</tr>
<tr>
<td>Total of all units</td>
<td></td>
<td></td>
<td></td>
<td>7.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>PM*</th>
<th>PM10*</th>
<th>Direct PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 emission factor is filterable and condensable PM2.5 combined. <strong>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>1.9</td>
<td>7.6</td>
<td>7.6</td>
<td>0.6</td>
<td>100</td>
<td>5.5</td>
<td>84</td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>0.06</td>
<td>0.26</td>
<td>0.26</td>
<td>0.02</td>
<td>3.41</td>
<td>0.19</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

Emission Factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-0

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

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF) / 2,000 lb/ton

HAPs Calculations

**HAPs - Organics**

Emission Factor in lb/MMCF

<table>
<thead>
<tr>
<th>Benzene</th>
<th>2.1E-03</th>
<th>Dimethyl Benzene</th>
<th>5.7E-02</th>
<th>Hexane</th>
<th>1.8E-00</th>
<th>Toluene</th>
<th>3.4E-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>7.16E-05</td>
<td>4.09E-05</td>
<td>2.56E-03</td>
<td>6.14E-02</td>
<td>1.16E-04</td>
<td>6.42E-02</td>
<td></td>
</tr>
</tbody>
</table>

**HAPs - Metals**

Emission Factor in lb/MMCF

<table>
<thead>
<tr>
<th>Lead</th>
<th>6.0E-04</th>
<th>Cadmium</th>
<th>1.1E-03</th>
<th>Chromium</th>
<th>1.4E-03</th>
<th>Manganese</th>
<th>3.8E-04</th>
<th>Nickel</th>
<th>2.1E-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>1.70E-05</td>
<td>3.79E-05</td>
<td>4.77E-05</td>
<td>1.30E-05</td>
<td>7.16E-05</td>
<td>1.87E-04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total HAPs = 6.43E-02

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.
Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Line 1, Line 3, and Mill Shop

Company Name: Highland Ridge RV, Inc.
Source Address: 3150 North State Road 5, Shipshewana, IN 46565
Permit No.: M087-41983-00679
Permit Reviewer: Daria Antipova

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (miles/day)</th>
<th>Maximum one-way distance (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering Mill Shop) (one-way trip)</td>
<td>5.0</td>
<td>1.0</td>
<td>5.0</td>
<td>25.0</td>
<td>300.0</td>
<td>100</td>
<td>0.019</td>
</tr>
<tr>
<td>Vehicle (leaving Mill Shop) (one-way trip)</td>
<td>5.0</td>
<td>1.0</td>
<td>5.0</td>
<td>25.0</td>
<td>300.0</td>
<td>100</td>
<td>0.019</td>
</tr>
</tbody>
</table>

Average Vehicle Weight Per Trip = 60.0 tons/trip
Average Miles Per Trip = 0.02 miles/trip

Unmitigated Emission Factor, \( Ef = k \cdot (s/12)^a \cdot (W/3)^b \) (Equation 1a from AP-42 13.2.2)

where:
- \( k = 4.9 \) lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
- \( s = 4.8 \) % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
- \( a = 0.7 \) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)
- \( W = 60.0 \) tons = average vehicle weight (provided by source)
- \( b = 0.45 \) = constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, \( E_{ext} = \frac{E \cdot (365 - P)/365}{P} \) (Equation 2 from AP-42 13.2.2)

where \( P = 120 \) days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (tons/yr)</th>
<th>Mitigated PTE of PM10 (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (tons/yr)</th>
<th>Controlled PTE of PM (tons/yr)</th>
<th>Controlled PTE of PM10 (tons/yr)</th>
<th>Controlled PTE of PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>0.12</td>
<td>0.03</td>
<td>0.00</td>
<td>0.12</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>0.12</td>
<td>0.03</td>
<td>0.00</td>
<td>0.12</td>
<td>0.03</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Totals: 0.23 0.06 0.01 0.23 0.06 0.01

Methodology

- **Total Weight driven per day (ton/day)** = \( \frac{\text{Maximum Weight Loaded (tons/trip)}}{\text{Maximum trips per day (trip/day)}} \)
- **Maximum one-way distance (mi/trip)** = \( \frac{\text{Maximum one-way distance (feet/trip)}}{5280 \text{ ft/mile}} \)
- **Average Miles Per Trip (miles/trip)** = \( \frac{\text{Maximum trips per year (trip/day)}}{\text{SUM}[\text{Maximum Weight driven per day (ton/day)}]} \)

Unmitigated PTE (tons/yr) = \( \text{Maximum one-way miles (miles/yr)} \cdot (\text{Unmitigated Emission Factor (lb/mile)}) \cdot (\text{ton/2000 lbs}) \)
Mitigated PTE (tons/yr) = \( \text{Mitigated Emission Factor (lb/mile)} \cdot (\text{ton/2000 lbs}) \)
Controlled PTE (tons/yr) = \( \text{Mitigated PTE (tons/yr)} \cdot (1 - \text{Dust Control Efficiency}) \)
### Appendix A: Emissions Calculations

#### Fugitive Dust Emissions - Paved Roads

### Line 1 & Line 3

**Company Name:** Highland Ridge RV, Inc.

**Source Address:** 3195 North State Road 5, Shipshewana, IN 46565

**Permit No.:** M087-41983-00679

**Permit Reviewer:** Daria Antipova

### Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

### Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering Line 1) (one-way)</td>
<td>6.0</td>
<td>1.0</td>
<td>5.0</td>
<td>15.0</td>
<td>75.0</td>
<td>300</td>
</tr>
<tr>
<td>Vehicle (leaving Line 1) (one-way)</td>
<td>5.0</td>
<td>1.0</td>
<td>5.0</td>
<td>15.0</td>
<td>75.0</td>
<td>300</td>
</tr>
<tr>
<td>Vehicle (entering Line 3) (one-way)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>15.0</td>
<td>45.0</td>
<td>300</td>
</tr>
<tr>
<td>Vehicle (leaving Line 3) (one-way)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>15.0</td>
<td>45.0</td>
<td>300</td>
</tr>
</tbody>
</table>

**Total:** 16.0

**Average Vehicle Weight Per Trip:** 15.0 tons/trip

**Average Miles Per Trip:** 0.06 miles/trip

**Unmitigated Emission Factor, $E_f = [k \times (sL)^{0.91} \times (W)^{1.02}]$**

- **$k = 1.10 \times 10^{-2}$**
- **$2.20 \times 10^{-3}$**
- **$5.40 \times 10^{-4}$**

- **$W = 15.0$ tons**
- **$sL = 9.7$ g/m²**

- **PM = Particulate Matter**
- **PM10 = Particulate Matter (<10 um)**
- **PM2.5 = Particulate Matter (<2.5 um)**

**Mitigated Emission Factor, $E_{ext} = E_f \times \left[1 - \frac{p}{4N}\right]$**

- **$p = 120$ days of rain greater than or equal to 0.01 inches**
- **$N = 365$ days per year**

**Mitigated Emission Factor, $E_{ext} = 1.377$ lb/mile**

### Process

#### Mitigated PTE of PM

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (tons/yr)</th>
<th>Mitigated PTE of PM10 (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (tons/yr)</th>
<th>Controlled PTE of PM (tons/yr)</th>
<th>Controlled PTE of PM10 (tons/yr)</th>
<th>Controlled PTE of PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering Line 1) (one-way)</td>
<td>6.55E-02</td>
<td>1.31E-02</td>
<td>3.22E-03</td>
<td>6.55E-02</td>
<td>1.31E-02</td>
<td>3.22E-03</td>
</tr>
<tr>
<td>Vehicle (leaving Line 1) (one-way)</td>
<td>6.55E-02</td>
<td>1.31E-02</td>
<td>3.22E-03</td>
<td>6.55E-02</td>
<td>1.31E-02</td>
<td>3.22E-03</td>
</tr>
<tr>
<td>Vehicle (entering Line 3) (one-way)</td>
<td>3.93E-02</td>
<td>7.86E-03</td>
<td>1.93E-03</td>
<td>3.93E-02</td>
<td>7.86E-03</td>
<td>1.93E-03</td>
</tr>
<tr>
<td>Vehicle (leaving Line 3) (one-way)</td>
<td>3.93E-02</td>
<td>7.86E-03</td>
<td>1.93E-03</td>
<td>3.93E-02</td>
<td>7.86E-03</td>
<td>1.93E-03</td>
</tr>
<tr>
<td>Total of existing facilities</td>
<td>7.86E-02</td>
<td>1.57E-02</td>
<td>3.66E-03</td>
<td>7.86E-02</td>
<td>1.57E-02</td>
<td>3.66E-03</td>
</tr>
<tr>
<td>Total of new facilities</td>
<td>7.86E-02</td>
<td>1.57E-02</td>
<td>3.66E-03</td>
<td>7.86E-02</td>
<td>1.57E-02</td>
<td>3.66E-03</td>
</tr>
<tr>
<td>Total of all facilities</td>
<td>0.131</td>
<td>2.62E-02</td>
<td>6.43E-03</td>
<td>0.131</td>
<td>2.62E-02</td>
<td>6.43E-03</td>
</tr>
</tbody>
</table>

**Total Weight driven per day (ton/day)** = $\text{Maximum Weight Loaded (tons/trip)} \times \text{Maximum trips per day (trip/day)}$

**Maximum one-way distance (miles/trip)** = $\frac{\text{Maximum one-way distance (feet/trip)}}{5280 \text{ ft/mile}}$

**Average Vehicle Weight Per Trip (ton/trip)** = $\frac{\text{Total Weight driven per day (ton/day)}}{\text{Maximum trips per day (trip/day)}}$

**Average Miles Per Trip (miles/trip)** = $\frac{\text{Maximum one-way miles (miles/day)}}{\text{Maximum trips per year (trip/day)}}$

**Unmitigated PTE (tons/yr)** = $\text{Maximum one-way miles (miles/year)} \times \text{Unmitigated Emission Factor (lb/mile)} \times (\text{ton}/2000 \text{ lbs})$

**Mitigated PTE (tons/yr)** = $\text{Mitigated PTE (tons/year)} \times (\text{ton}/2000 \text{ lbs})$

**Controlled PTE (tons/yr)** = $\text{Mitigated PTE (tons/yr)} \times (\text{1 - Dust Control Efficiency})$
November 12, 2019

Ted Buchanan
Highland Ridge RV Inc
903 S Main St
Middlebury, IN 46540

Re: Public Notice
Highland Ridge RV
Permit Level: MSOP Renewal
Permit Number: 087-41983-00679

Dear Ted Buchanan:

Enclosed is a copy of your draft MSOP Renewal, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Shipshewana Branch Public Library, 250 Depot Street in Shipshewana IN 46565. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Daria Antipova, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-3429 or dial (317) 234-3429.

Sincerely,

L. Pogost

L. Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
November 12, 2019

To: Shipshewana Branch Public Library 250 Depot Street Shipshewana IN 46565 (Library)

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Highland Ridge RV
Permit Number: 087-41983-00679

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

November 12, 2019
Highland Ridge RV
087-41983-00679

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure
PN AAA Cover Letter 4/12/2019
# Mail Code 61-53

**Name and address of Sender**

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<th>Handing Charges</th>
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<td>Mr. Roger Schneider The Goshen News 114 S. Main St Goshen IN 46526 (Affected Party)</td>
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# Mail Code 61-53

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