Iowa Department of Natural Resources
Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 22.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. HNI Corporation – North Campus, located at 3000 Hwy 61 North; 2900 Hwy 22; 3000 University Avenue; 505 Ford Avenue, Muscatine, Iowa 52761 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Brad Hufford.

2. HNI Corporation – North Campus is a Wood and Metal Office Furniture Manufacturing facility. This facility consists of 72 emission units with potential emissions of:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Abbreviation</th>
<th>Potential Emissions (Tons per Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (≤ 2.5 μm)</td>
<td>PM2.5</td>
<td>22.09</td>
</tr>
<tr>
<td>Particulate Matter (≤ 10 μm)</td>
<td>PM10</td>
<td>123.81</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>PM</td>
<td>123.81</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>SO2</td>
<td>0.17</td>
</tr>
<tr>
<td>Nitrogen Oxides</td>
<td>NOx</td>
<td>22.66</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>VOC</td>
<td>241.15</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>CO</td>
<td>16.03</td>
</tr>
<tr>
<td>Lead</td>
<td>Lead</td>
<td>0</td>
</tr>
<tr>
<td>Hazardous Air Pollutants <em>(1)</em></td>
<td>HAP</td>
<td>90.41</td>
</tr>
</tbody>
</table>

*(1)* May include the following: Cumene, ethyl benzene, hexane, methanol, methyl isobutyl ketone, 4,4-methylenediphenyl diisocyanate, toluene, vinyl acetate, & xylenes.

3. HNI Corporation – North Campus submitted a Title V Operating Permit renewal application on December 17, 2021 and any additional information describing the facility on May 2, 2022. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 22.107.

4. DNR has complied with the procedures set forth in 567 IAC 22.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.
DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from July 21, 2022 through August 20, 2022. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Zane Peters at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.

2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Zane Peters at the DNR address shown below.

3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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Des Moines, Iowa 50319-0034
Phone: (515) 725-9531
E-mail: zane.peters@dnr.iowa.gov

DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 20-35, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.

2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.

3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 20-35.

4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.

5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.
Title V Application Review Notes

Applicant: HNI Corporation – North Campus
SIC Codes: 2521; 2522
City: Muscatine
County: Muscatine
EIQ#: 92-2535
Facility#: 70-01-050
Permit #: 03-TV-032R2
Reviewer: Zane Peters
Date: 7/14/22

Facility Identification

<table>
<thead>
<tr>
<th>Facility Name: HNI Corporation – North Campus</th>
<th>Facility Locations: 3000 Hwy 61 N, 2900 Hwy 22, 3000 University Ave, 505 Ford Ave Muscatine, Iowa 52761</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Official: Ryan Donner</td>
<td>Phone: 563-299-7694</td>
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</table>

Background

HNI Corporation – North Campus has applied for a renewal of their Title V Operating Permit for their office furniture manufacturing facility located in Muscatine. The original renewal application was received on 12/17/21. The facility currently consists of 72 significant emission units and 52 insignificant emission units.

Four sites HON Allsteel (70-01-050; 92-2535), HON Geneva Annex (70-01-073; 92-6972), HON Geneva Plant (70-01-051; 92-2534), and HON Tech Center (70-01-078) were consolidated into one source subject to Title V and now use one facility number (70-01-050) and one EIQ number (92-2535). The Allsteel facility manufacturers metal furniture and wood furniture. Geneva, at this time, manufactures metal furniture, but will manufacture wood furniture. University Avenue makes seats that are used in the manufacture of metal furniture.

The emission unit ID numbers include a code to denote which portion of the HNI – North Campus the equipment is located:

105 = HNI Technologies (505 Ford Avenue)
107 = HNI Information Technologies (3000 Hwy 61 N)
100, 200, 201, 202, 203 = Allsteel location (3000 Hwy 61 N)
251 = Geneva Plant location (2900 Hwy 22)
252 = Geneva Annex location (3000 University Avenue)
**Title V Applicability**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Major for Title V?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>☑️</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>☐</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>☐</td>
</tr>
<tr>
<td>VOC</td>
<td>☑️</td>
</tr>
<tr>
<td>CO</td>
<td>☐</td>
</tr>
<tr>
<td>Lead</td>
<td>☐</td>
</tr>
<tr>
<td>Individual HAP</td>
<td>☑️</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>☑️</td>
</tr>
</tbody>
</table>

**Program Applicability**

- **PSD:** The facility is a Synthetic Minor for PSD
  - VOC limit is 240.0 tons in any rolling 12 month period and applies to all emissions unit at the North Campus excluding fuel combustion sources, storage tanks, and stationary and portable IC engines. Limit established so that the facility is a minor source for PSD
- **Part 61 NESHAP:** No
- **NSPS:** No
- **Major Source of HAPs:** Yes
- **Part 63 NESHAP:** Yes
  - 40 CFR 63 Subpart JJ - NESHAP for Wood Furniture Manufacturing Operations
  - 40 CFR 63 Subpart RRRR – NESHAP for Surface Coating of Metal Furniture
  - 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines
  - 40 CFR 63 Subpart DDDD – NESHAP for Plywood and Composite Wood Products
  - 40 CFR 63 Subpart DDDDD - NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters
- **Acid Rain:** No
- **Stratospheric Ozone Protection:** No
- **Prevention of Accidental Releases:** No
- **State Implementation Plan:** This facility is included as a background source for modeling purposes in the PM2.5 SIP revision for Muscatine but was **not** included in the PM2.5 control strategy for Muscatine. Since the facility did not contribute to the monitored PM2.5 violations in Muscatine, the exceedances of the PM2.5 NAAQS that were predicted (modeled) at receptors around the facility were subsequently addressed through permitting rather than as part of the SIP revision control strategy.
**General Facility Notes**

- The facility stopped using liquid paint in 2016. At this time, all surface coating is powder coating.
- The 2243 powder coat line was moved to HNI Progress Park location in 2017. Progress Park location is not part of this Title V source. The removed 2243 line includes construction permits 99-A-741-S1, 06-A-026-S1, 06-A-025-S1, 06-A-024-S1 which should be rescinded.
- The facility has had numerous versions of equipment identification naming schemes. The emission point and emission unit IDs have changed so frequently that the DNR construction permit number has become the essential identifier to clearly distinguish the emission points.
- Emission Unit 201.3744.MFPCO.1 and 201.3744.DPH.1 both exhaust through two emission points: 3744.MFPCO.1.EP.1 (permit 16-A-191-S2) and 3744.MFPCO.1.EP.2 (permit 16-A-257-S2). At the time of the 2021 application, these permits were going to be rescinded as part of IDNR project 21-394. The requirement to rescind the permit was included in Section 5.A in permits 21-A-366, 21-A-367, 21-A-368, 21-A-369. However, instead of rescinding these permits, IDNR project 22-062 issued modified permits 21-A-366-S1, 21-A-367-S1, 21-A-368-S1, 21-A-369-S1.

**NSPS Evaluation**

- Subpart EE – Surface Coating of Metal Furniture. The emission units at this facility were evaluated for NSPS Subpart EE applicability. These emission units are not subject to Subpart EE at this time. Subpart EE does not apply to powder coating operations (including cure ovens), pretreatment, or dry off ovens after parts washers.
- Subpart Kb – Volatile Organic Liquid Storage Vessels. The tanks at this facility were evaluated for Subpart Kb applicability. Based on tank capacity and vapor pressure, these tanks are not subject to this subpart. The tanks are considered insignificant activities within the Title V permit.
- Subpart IIII – Stationary Compression Ignition Internal Combustion Engines. The compression engines at this facility were evaluated for Subpart IIII applicability. Based on construction date and manufacture dates, these engines are not subject to Subpart IIII.

**NESHAP Evaluation**

- Subpart RRRR – Surface Coating of Metal Furniture. This subpart applies to the coating operations for metal furniture, storage and mix rooms. Coating operations for this regulation includes parts washers and solvents used for cleaning equipment. The affected source for this subpart is the collection of all equipment used for the surface coating of metal furniture. This includes: 1) All coating operations as defined in §63.4981; 2) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; 3) All manual and automated equipment and containers and all pumps and piping within the affected source used for conveying coatings, thinners, and cleaning materials; and 4) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation. Powder coating lines remain regulated by this standard. In accordance with §63.4882, Subpart RRRR does not apply to a dry off oven used after a parts washer.
• Subpart DDDD – Plywood and Composite Wood Products. This rule applies to operations at the University Avenue site, which takes sawdust and wood particles, dries them, and then makes composite wood products by mixing the wood with a resin. The facility is subject to this regulation, but it appears that the specific operations are not subject to an emission limit or work practice requirement.

• Subpart JJ – Wood Furniture Manufacturing Operation. Facility does not surface coat wood, but it does perform gluing and does use cleaning solvents. The facility believed that it qualified as an incidental wood furniture manufacturer. However, per guidance from EPA Region 7, the facility does not qualify as an incidental wood furniture manufacture because the amount of adhesives (any kind) exceeds 100 gallons per month. Facility is subject to work practice requirements only because no contact adhesives are used.

• Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters. The facility has several process heaters that are subject to this regulation. The State of Iowa has not yet adopted this regulation. Most of these units are exempt from construction permits as they are less than 10 MMBTU/hr design rate.

• Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines. This facility has two engines subject to this regulation. Both of these engines are considered existing compression ignition emergency engines less than 500 brake horsepower according to documentation submitted by the facility.

Periodic Monitoring

• EP 1300.DCW.1.EP.1 is a Woodworking Operations and Scrap Grinder emission unit with a Fabric Filter Baghouse (1300.DCW.1.BGH) to control emissions. The submitted CAM calculations indicate that a CAM plan will be required for this emission unit to ensure control of PM and PM$_{10}$ emissions. However, at this time the Department does not require CAM plans for internally vented sources, so an Agency O&M Plan will be utilized at this time. See appendix B for the plan details.

• EP 1300.DCW.2.EP.1 is a Woodworking Operations emission unit with a Fabric Filter Baghouse (1300.DCW.2.BGH) to control emissions. The submitted CAM calculations indicate that a CAM plan will be required for this emission unit to ensure control of PM and PM$_{10}$ emissions. However, at this time the Department does not require CAM plans for internally vented sources, so an Agency O&M Plan will be utilized at this time. See appendix B for the plan details.

• EP 1237.DCW.1.IV.1 is a Woodworking Operations emission unit with a Fabric Filter Baghouse (1237.DCW.1.BGH) to control emissions. The submitted CAM calculations indicate that a CAM plan will be required for this emission unit to ensure control of PM and PM$_{10}$ emissions. However, at this time the Department does not require CAM plans for internally vented sources, so an Agency O&M Plan will be utilized at this time. See appendix B for the plan details.
Changes to the Title V Permit Since the Last Issuance

General Changes

- Permit number updated (pp. 1, 4, 9, 14, footer)
- Permitting dates updated (pp. 1, 9, footer)
- Responsible Official and Permit Contact information updated (pp. 1)
- Supervisor of Air Operating Permits changed to Marnie Stein (pp. 1)
- Facility Description and Equipment List & Insignificant Activities updated to include the most recent information (pp. 4-8)
- Plant-Wide Conditions – Particulate Matter limit language updated to the most recent version (pp. 9)

Emission Point Specific Changes

- EP 1243.MFPCO.1.EP1 – PM$_{2.5}$ emission limit modified (pp. 59-63)
- EPs 243.MFPT.1.EP.1 & 1243.MFPT.1.EP.2 – PM$_{2.5}$ emission limits modified (pp. 64-68)
- EP 2640.DCW.1.EP.1 – Pressure drop range modified (pp. 121-125)

Other Notes

- A majority of this permit was reorganized and reformatted to include the most current language and standardized permit format utilized by the Operating Permits Section.
- The powder coating booths, although exempt from construction permitting, were included in the Significant Units section of the permit because they are subject to 40 CFR 63 Subpart RRRR