Air Quality Construction Permit

Permit Number: 03-A-1030-S2

Plant Number: 98-01-006

Company: Trustile Doors of Iowa

Contact Person:
Todd Piper
VP of Manufacturing Operations

(641) 423-0444
todd.piper@trustile.com

100 Enterprise Drive
Northwood, IA 50459

Responsible Party:
Todd Piper
VP of Manufacturing Operations

Permitted Equipment

Emission Point ID: 4

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
4	Spray Booth 4	4.7 Gal/hr	Dry Filters (CE 4)

Equipment Location: 100 Enterprise Drive
Northwood, IA 50459

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
18-144	Update VOC and HAP Limits, Update NESHAP Applicability	No	5/16/18

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	NA	NA	0.01 gr/scf	567 IAC 23.4(13)
Opacity	NA	NA	40%[3, 4]	567 IAC 23.3(2)"d"
(Single HAP)	NA	9.0[5]	NA	Area Source
(Total HAP)	NA	24.0[5]	NA	Area Source

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] The emission limit is based on a six (6) minute average.
[4] An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[5] Established in Project Number 18-144 in order for the facility to become an area source of HAP for the purposes of NESHAP. This limit applies to all non-combustion sources at this facility. The applicable compliance demonstration is specified in Condition 5.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Material Tracking[1]	Rolling 12-Month	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
VOC	Material Tracking[1]	Rolling 12-Month	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	Material Tracking[2]	Rolling 12-Month	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] See Condition 5.A. of the permit for the required recordkeeping requirements.
[2] See Condition 5.B. of the permit for the required recordkeeping requirements.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

2. Compliance Demonstration(s) (Continued)

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	30.4
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	34
Exhaust Temperature (°F)	Ambient
Exhaust Flowrate (scfm)	23,000

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):
This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
This facility is of the source category for Subpart QQQQ (*National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products*; 40 CFR §63.4680 – §63.4781). However, this emission unit is not subject because the facility is an area source of HAP at this time. Subpart QQQQ is only applicable to major sources of HAP.
This facility is of the source category for Subpart HHHHHH (*National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*; 40 CFR §63.11169 – §63.11180). However, this emission unit is not subject because the facility does not apply any coating to any metal or plastic surface. Per 40 CFR §63.11170, the facility is not subject to the Subpart.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. Spray Booth 1 (EU 1), Spray Booth 2 (EU 2), Spray Booth 3 (EU 3), Spray Booth 4 (EU 4), and Spray Booth 5 (EU 5) shall not use more than 16,000 gallons of surface coating materials (stain, primer, sealer, solvent, etc) per rolling 12-month period. The VOC content of any surface coating material used in these spray booths (EU 1, 2, 3, 4, and 5) shall not exceed 10.0 pounds per gallon. The solids content of any surface coating material used in these spray booths (EU 1, 2, 3, 4, and 5) shall not exceed 27.7 pounds per gallon. The owner or operator shall:
   a. Retain the Safety Data Sheets (SDS) of any surface coating material used in these spray booths (EU 1, 2, 3, 4, and 5);
   b. On a monthly basis, record the total amount of surface coating materials, in gallons, used in these spray booths (EU 1, 2, 3, 4, and 5) during the previous month; and
   c. On a monthly basis, calculate and record the rolling 12-month total amount of surface coating materials, in gallons, used in these spray booths (EU 1, 2, 3, 4, and 5).

B. The owner or operator shall not emit more than 9.0 tons of single HAP from all non-combustion sources at this facility per rolling 12-month period. The owner or operator shall not emit more than 24.0 tons of total HAP from all non-combustion sources at this facility per rolling 12-month period. The owner or operator shall maintain daily records of the total amount of surface coating materials, adhesives, and putties used in the spray booths (EU 1, 2, 3, 4, and 5), adhesive application process (EU 14), and putty application process (EU 15). For the purposes of calculating emissions, all HAP may be considered emitted on the day the materials are delivered to the facility or to the production line. On a monthly basis, the owner or operator shall:
   a. Record the total amount of surface coating materials, adhesives, and putties used in the spray booths (EU 1, 2, 3, 4, and 5), adhesive application process (EU 14), and putty application process (EU 15) during the previous month;
   b. Record the single HAP content of each surface material, adhesive, and putty used;
   c. Calculate and record the single HAP and total HAP emissions, in tons, from the spray booths (EU 1, 2, 3, 4, and 5), adhesive application process (EU 14), and putty application process (EU 15) during the previous month. Assume that 100% of the HAP content in each material is emitted;
   d. Calculate and record the single HAP and total HAP emissions, in tons, from any other non-combustion sources at this facility during the previous month; and
   e. Calculate and record the rolling 12-month single HAP and total HAP emissions, in tons, from the spray booths (EU 1, 2, 3, 4, and 5), adhesive application process (EU 14), putty application process (EU 15), and any other non-combustion emission sources at this facility.

      If the rolling 12-month total amount of single HAP emissions from all non-combustion sources, including the spray booths, adhesive application, and putty application, exceeds 7.2 tons, the owner or operator shall track single HAP emissions on a daily basis. On a daily basis, the owner or operator shall calculate the 365-day total amount of single HAP emissions from these emission units. This calculation must be done each day until the 365-day total amount of single HAP emissions from these emission units are less than 7.2 tons. Calculations may then be performed on a monthly basis as long as the total amount of single HAP emissions is below 7.2 tons.

      If the rolling 12-month total amount of total HAP emissions from all non-combustion sources, including the spray booths, adhesive application, and putty application, exceeds 19.2 tons, the owner or operator shall track total HAP emissions on a daily basis. On a daily basis, the owner or operator shall calculate the 365-day total amount of total HAP emissions from these emission units. This calculation must be done each day until the 365-day total amount of total HAP emissions from these emission units are less than 19.2 tons. Calculations may then be performed on a monthly basis as long as the total amount of total HAP emissions is below 19.2 tons.

C. The owner or operator shall maintain the Dry Filters (CE 4) according to the facility's maintenance schedule. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Dry Filters (CE 4). This log shall include, but is not necessarily limited to:
   a. The date and time any inspection and/or maintenance was performed on the Dry Filters (CE 4);
   b. Any issues identified during the inspection and the date each issue was resolved;
   c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
   d. Identification of the staff member performing the maintenance or inspection.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:

(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or

(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:

The owner or operator shall amend this permit or amendment prior to startup of the equipment if:

(1) Any changes are made to the final plans and specifications submitted for the proposed project; or

(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:

The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:

(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or

(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.
B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

12. Notification, Reporting, and Recordkeeping (Continued)

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th St. Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 2 2300 15th St. SW Mason City, IA 50401 Telephone: (641) 424-4073 Fax: (641) 424-9342

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
03-A-1030	03-431	Original Permit	9/8/03	No
03-A-1030-S1	04-283	Changing Stack Discharge Characteristics	5/27/04	No

END OF PERMIT