

Synthetic Minor Determination and/or Netting Determination

Permit To Install: "05-14415"

A. Source Description:

Norcold, Inc. manufactures refrigeration units for recreational vehicles. Norcold uses polyurethane foam lines to produce the thermal insulation within the refrigeration units.

This PTI is based on the maximum potential usage of polyurethane foaming material if the maximum possible number of guns are used on each line. These maximums will allow Norcold to employ a varying number of spray guns within a given line, without triggering the requirements for a new PTI. This PTI is also to allow for more operational flexibility on the use of multiple blowing agents. At present, Norcold employs chlorodifluoromethane (R-22) as its blowing agent. Due to the nature of their production, helogenated hydrocarbons are needed to produce their desired product. By Jan. 2010, the use of R-22 is to be phased throughout the US, as required by the US EPA. Norcold is presently testing replacement helogenated hydrocarbons and their feasibility.

Based on previous review and chemical understanding of helogenated hydrocarbons, the use of add-on controls are not possible. Incineration of helogenated hydrocarbons would produce dioxins, while the amount of air needed to properly vent the facility and the non-reactiveness of helogenated hydrocarbons make the use of carbon adsorption not cost effective. To assure that the emissions are minimized at this facility, there is a maximum annual polyurethane foam usage limitation not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined. This usage rate limits the overall facility OC emissions to 168.3 tons per rolling 12-month period and assure the facility does not constitute a major facility for PSD.

B. Facility Emissions and Attainment Status;

Norcold is currently a Title V facility with synthetic minor facility for PSD. This PTI will maintain the overall OC limit of 168.3 that was established in PTI 05-13209. The modification of these emissions units will not increase annual facility-wide OC emissions.

Norcold, Inc. is located at 600 S. Kuther Street, Sidney, Ohio, Shelby County. At this time, Shelby County is designated attainment for all criteria pollutants.

C. Source Emissions

These polyurethane foam lines are used to create a rigid foam insulation material within refrigeration units. To insulate the final product, Norcold sprays two part urethane through dispensing guns utilizing an organic compound blowing agent, with an nitrogen purge. The urethane materials cure into insulating foam and release Organic Compound (OC) emissions into the work space which is then vented to the ambient air.

The seven non-insignificant emissions units at this facility are:

P007: 2-Part Polyurethane Spray foam Refrigerator Production line, previously covered under PTI 05-9501 that was issued on May 16, 2003. The previous daily OC emission limitation was 213 lbs, this modification will increase the daily allowable potential to 307 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

P008: 2 Part Polyurethane Spray foam Refrigerator Production line, previously covered under PTI 05-9501 that was issued on May 16, 2003. The previous daily OC emission limitation was 266.4 lbs, this modification will reduce the daily allowable potential to 225 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

P009: 2 Part Polyurethane Spray foam Refrigerator Components Production line, previously covered under PTI 05-9501 that was issued on May 16, 2003. The previous daily OC emission limitation was 60.4 lbs, this modification will increase the daily allowable potential to 82 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

P011: 2 Part Polyurethane Spray foam Refrigerator Production line, previously covered under PTI 05-9501 that was issued on May 16, 2003. The previous daily OC emission limitation was 703.2 lbs, this modification will increase the daily allowable potential to 1,042 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed

1,978 tons.

P013: 2 Part Polyurethane Spray foam Sample or Refrigerator Component Production line, previously covered under PTI 05-11441 that was issued on July 3, 2001. The previous daily OC emission limitation was 188.4 lbs, this modification will decrease the daily allowable potential to 133 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

P014: 2 Part Polyurethane Spray foam Refrigerator Production line, previously covered under PTI 05-14402 that was issued on Feb. 27, 2007. The previous daily OC emission limitation was 327 lbs, this modification will increase the daily allowable potential to 362 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

P016: 2 Part Polyurethane Spray foam Refrigerator door Production line, previously covered under PTI 05-13209 that was issued on June 10, 2004. The previous daily OC emission potential was 293 lbs, this modification will increase the daily potential to 378 lbs. The overall facility rolling 12-month OC emissions will still be limited to 168.3 tons, based on a rolling 12-month combined polyurethane foam usage limitation not to exceed 1,978 tons.

D. Conclusion

This Synthetic Minor PTI is to adjust the potential hours OC emissions for each emissions unit to its true maximum potential, based on the maximum guns that can be used per emissions unit, and to allow more flexibility in the type of blowing agents employed. In the past, short term potentials were not based on the maximum number of guns that could be used and the permits limited the blowing agent to specifically R-22. These operational flexibilities will assist this facility by allowing quick operational modifications due to customer and operational demands, without needing future PTI modifications. In this PTI the facility has requested to maintain its current Federally Enforceable rolling 12-month facility-wide usage limitations, which will maintain this facility below PSD major source thresholds.

The combined of rolling, 12-month material usage limitation, monthly-average OC content limitation, combined rolling 12-month OC emission limitation, a daily maximum potential OC emission limitation for each emissions unit, monthly record keeping requirement, and quarterly deviation reporting requirement shall ensure that this emissions unit is maintained in compliance with all applicable emission limitations.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: DRAFT PERMIT TO INSTALL

SHELBY COUNTY

Application No: 05-14415

Fac ID: 0575010146

| | |
|---|------------------------------|
| Y | TOXIC REVIEW |
| | PSD |
| Y | SYNTHETIC MINOR |
| | CEMS |
| | MACT |
| | NSPS |
| | NESHAPS |
| | NETTING |
| | MAJOR NON-ATTAINMENT |
| | MODELING SUBMITTED |
| | GASOLINE DISPENSING FACILITY |

DATE: 6/28/2007

Norcold, Inc
Adam Link
600 South Kuther Road
Sidney, OH 45365-8840

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

SHELBY COUNTY

**PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL 05-14415 FOR AN AIR CONTAMINANT SOURCE
FOR Norcold, Inc**

On 6/28/2007 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Norcold, Inc**, located at **600 S Kuther Rd, Sidney, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 05-14415:

Modification of existing Special Terms and Conditions language that limits blowing agent to R22 to allow for production modification for all emissions units at the facility.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Jeff Hines, Ohio EPA, Southwest District Office, 401 East Fifth Street, Dayton, OH 45402-2911
[(937)285-6357]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 05-14415

Application Number: 05-14415
Facility ID: 0575010146
Permit Fee: **To be entered upon final issuance**
Name of Facility: Norcold, Inc
Person to Contact: Adam Link
Address: 600 South Kuther Road
Sidney, OH 45365-8840

Location of proposed air contaminant source(s) [emissions unit(s)]:
**600 S Kuther Rd
Sidney, Ohio**

Description of proposed emissions unit(s):
Modification of existing Special Terms and Conditions language that limits blowing agent to R22 to allow for production modification for all emissions units at the facility.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| OC | 168.3 |

Norcold, Inc

PTI Application: 05-14415

Issued: To be entered upon final issuance

Facility ID: 0575010146

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Norcold, Inc

PTI Application: 05-14415

Issued: To be entered upon final issuance

Facility ID: 0575010146

Emissions Unit ID: P007

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P007) - 2-Part Polyurethane Spray foam Refrigerator Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|---|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 307 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 307 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1,978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

307 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 150 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

Norcold, Inc

PTI Application: 05-14415

Issued: To be entered upon final issuance

Facility ID: 0575010146

Emissions Unit ID: P007

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

PTI Application: 05-14415

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Facility ID: 0575010146

Emissions Unit ID: P007

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P007) - 2-Part Polyurethane Spray foam Refrigerator Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate

TLV (mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 1.84 E-4

Predicted In-Stack Concentration (ug/m3): 4.8 E-6

MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Norcold, Inc

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Emissions Unit ID: P007

None

Norcold, Inc

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Facility ID: 0575010146

Emissions Unit ID: P008

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P008) - 2 Part Polyurethane Spray foam Refrigerator Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|---|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 225 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 225 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

225 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 110 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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Emissions Unit ID: P008

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

PTI Application: 05-14415

Issued: To be entered upon final issuance

Facility ID: 0575010146

Emissions Unit ID: P008

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P008) - 2 Part Polyurethane Spray foam Refrigerator Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate

TLV (mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 1.35 E-4

Predicted In-Stack Concentration (ug/m3): 3.5 E-6

MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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Norcold, Inc

PTI Application: 05-14415

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Facility ID: 0575010146

Emissions Unit ID: P008

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P009) - 2 Part Polyurethane Spray foam Refrigerator Components Production Line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|---|
| OAC rule 3745-31-05(A)(3) | <p>Organic compound (OC) emissions shall not exceed 82 lbs/day.</p> <p>The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.</p> <p>The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C).</p> |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 82 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

82 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 40 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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Emissions Unit ID: P009

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

PTI Application: 05-14415

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Facility ID: 0575010146

Emissions Unit ID: P009

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P009) - 2 Part Polyurethane Spray foam Refrigerator Components Production Line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate

TLV (mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 4.9 E-5

Predicted In-Stack Concentration (ug/m3): 1.3 E-6

MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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Facility ID: 0575010146

Emissions Unit ID: P009

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P011) - 2 Part Polyurethane Spray foam Refrigerator Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|--|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 1042 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 1042 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

1042 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 510 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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Emissions Unit ID: P011

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

PTI Application: 05-14415

Issued: To be entered upon final issuance

Facility ID: 0575010146

Emissions Unit ID: P011

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P011) - 2 Part Polyurethane Spray foam Refrigerater Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate
 TLV (mg/m3): 0.05
 Maximum Hourly Emission Rate (lbs/hr): 6.24 E-4
 Predicted In-Stack Concentration (ug/m3): 1.6 E-5
 MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Norcold, Inc

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Facility ID: 0575010146

Emissions Unit ID: P011

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P013) - 2 Part Polyurethane Spray foam Sample or Refrigerator Component Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|---|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 133 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 133 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

133 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 65 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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Emissions Unit ID: P013

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

PTI Application: 05-14415

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Facility ID: 0575010146

Emissions Unit ID: P013

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P013) - 2 Part Polyurethane Spray foam Sample or Refrigerator Component Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate
 TLV (mg/m3): 0.05
 Maximum Hourly Emission Rate (lbs/hr): 8.0 E-5
 Predicted In-Stack Concentration (ug/m3): 2.1 E-6
 MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Norcold, Inc

PTI Application: 05-14415

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Facility ID: 0575010146

Emissions Unit ID: P013

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P014) - 2 Part Polyurethane Spray foam Refrigerator Production Line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|---|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 362 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 362 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

362 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 177 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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Emissions Unit ID: P014

EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

Norcold, Inc

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Facility ID: 0575010146

Emissions Unit ID: P014

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P014) - 2 Part Polyurethane Spray foam Refrigerator Production Line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate

TLV (mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 2.17 E-4

Predicted In-Stack Concentration (ug/m3): 5.7 E-6

MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Norcold, Inc

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Facility ID: 0575010146

Emissions Unit ID: P014

None

Norcold, Inc

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Facility ID: 0575010146

Emissions Unit ID: P016

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P016) - 2 Part Polyurethane Spray foam Refrigerator door Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| OAC rule 3745-31-05(A)(3) | Organic compound (OC) emissions shall not exceed 378 lbs/day. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited. The requirements of this rule also include compliance with the requirements in OAC rule 3745-21-07(G) and 3745-31-05(C). |
| OAC rule 3745-31-05(C) Synthetic Minor to avoid PSD Thresholds | OC emissions shall not exceed 168.3 tons per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined. |
| OAC rule 3745-21-07(G)(2) | The PRM and/or OC limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3). |

2. Additional Terms and Conditions

- 2.a The OC emission limitations of 378 lbs/day is established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. The maximum annual polyurethane foam usage shall not exceed 1,978 tons per rolling, 12-month summation for emissions unit P007, P008, P009, P011, P013, P014, and P016, combined.

The permittee has sufficient existing records to demonstrate compliance with this limitation during the first twelve months after issuance of this permit.

2. The OC content in the polyurethane foam employed shall not exceed 18.5%, by weight, as a monthly-weighted average.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P007, P008, P009, P011, P013, P014, and P016, combined:
 - a. the name and identification number of each polyurethane foam material employed;
 - b. the amount of each polyurethane material employed, in tons;
 - c. the total amount of all polyurethane material employed, in tons;
 - d. the rolling, 12-month summation of all polyurethane materials employed, in tons;
 - e. the OC content, by weight, of each polyurethane material employed;
 - f. the total amount of OC materials employed, i.e., sum of (b)(e) for each polyurethane materials employed;
 - g. the monthly-weighted average OC content of the polyurethane materials employed, i.e., (f)/(c);
 - h. the OC emissions, i.e., (c)(g)(0.46*); and
 - i. the rolling, 12-month summation of OC emissions.

* 0.46 = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995"

2. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the name and identification number of each polyurethane foam material employed; and
 - b. whether or not the material contains photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:

- a. all exceedances of the rolling, 12-month polyurethane foam usage limitation of 1978 tons; and
- b. all exceedances of the rolling, 12-month OC emission limitation of 168.3 tons for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

These quarterly deviation reports are due by the dates specified in Part I - General Terms and Conditions A.1.

- 2. The permittee shall notify the Director, in writing, of any monthly record showing an exceedance of the monthly-average OC content limitation of 18.5%, by weight. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the exceedance occurred.
- 3. The permittee shall notify the Director, in writing, of any monthly record showing the use of noncompliant materials, i.e., photochemically reactive materials. The notification shall include a copy of such record and shall be sent to Ohio EPA, Southwest District Office within 30 days following the end of the calendar month during which the noncompliance occurred.

V. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

378 pounds OC per day

Applicable Compliance Method:

Compliance with the hourly OC limitations may be determined by using the following calculation:

$$E = \{[(U) \times (\%OC)] \times (EF)\} \times 24$$

where,

E = OC emissions, in pounds per day;

U = usage of all materials employed, in pounds (maximum usage 185 lbs/hr);

%OC = the allowable volume weighted average percent OC content within all material employed, by weight (maximum 18.50%); and

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EF = loss factor derived by the permittee based on information found in the document titled "HCFC Emission Reporting Guidelines Notebook from the Society of the Plastics Industry, Inc., 1995", (0.46).

b. Emission Limitation:

168.3 tons of OC per rolling, 12-month summation for emissions units P007, P008, P009, P011, P013, P014, and P016, combined.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Sections A.III.1.i. of these T&C's.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials employed.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - (P016) - 2 Part Polyurethane Spray foam Refrigerator door Production line

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|-------------------------------|---|
| OAC rule 3745-114-01 | Ohio Toxic Policy |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted Maximum in-stack concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results for the "worst case" pollutant(s):

Pollutant: 4,4 Diphenylmethane Diisocyanate
 TLV (mg/m3): 0.05
 Maximum Hourly Emission Rate (lbs/hr): 2.36 E-4
 Predicted In-Stack Concentration (ug/m3): 5.9 E-6
 MAGLC (ug/m3): 1.19

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines

that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None