State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
HAMILTON COUNTY

Street Address:
50 West Town Street, Suite 700
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05851
Fac ID: 1431074118
DATE: 1/10/2008

Twin Rivers Technologies
Mike Glinski
780 Washington Street
Quincy, MA 02169

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **HCDES**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 1/10/2008**
Terms and Conditions **Effective Date: 1/10/2008**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-05851

Application Number:	14-05851
Facility ID:	1431074118
Permit Fee:	**$0**
Name of Facility:	Twin Rivers Technologies
Person to Contact:	Mike Glinski
Address:	780 Washington Street Quincy, MA 02169

Location of proposed air contaminant source(s) [emissions unit(s)]:
4700 Este Avenue
Cincinnati, **Ohio**

Description of proposed emissions unit(s):
Oleochemical Process Modification.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install 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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install 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.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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.

15. 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 this Permit to Install.

B. 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

Pollutant	Tons Per Year
OC	6.66

Modification Issued: 1/10/2008

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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 - (J001) - Methanol Load Out

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-35-07(B)(1) Voluntary Limitations to Avoid Title V Permit Requirements	See term A.2.a.
OAC rule 3745-31-05(A)(3)	Organic Compound (OC) emissions shall not exceed 3.0 pounds per hour * and 0.75 ton per year. See term B.1. * The hourly emission limitation is based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation.
OAC rule 3745-21-07(E)	Exempt, See term A.2.c.

2. Additional Terms and Conditions

2.a The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P004 (Oleochemical Process), J001 (Methanol Loadout), fat traps, fugitive leaks, all miscellaneous tanks, sumps and small air contaminant sources shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, including HAP acid mists. Compliance with the above limitations shall be based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with these limitations upon issuance of this permit.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, the use of submerged fill, compliance with the operating limitation specified in this permit and compliance with the

facility-wide HAP emission limitations.

2.c This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 500 hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the operating hours for each month.

2. The permittee shall collect and record the following information each month:

   a. the company identification of each liquid organic material employed in this emissions unit; and

   b. a record of each liquid organic material employed in this emissions unit indicating whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C)(5).

3. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.a:

   a. the company identification of each organic material containing a HAP(s) employed in this emissions unit;

   b. the number of pounds of organic material employed;

   c. the individual Hazardous Air Pollutant (HAP) content for each HAP for each material employed in pounds of individual HAP per pound of material;

   d. the total combined HAP content of each material employed in pounds of combined HAPs per pound of material;

   e. the total individual HAP emissions for each HAP from all materials employed in

pounds or tons per month. This calculation shall be based on the emissions calculation methodology submitted in permit-to-install application number 14-05851 submitted on June 1, 2006;

f. the total combined HAP emissions from all materials employed in pounds or tons per month. This calculation shall be based on the emissions calculation methodology submitted in permit to install application number 14-05851 submitted on June 1, 2006;

g. the updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and

h. the updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Hamilton County Department of Environmental Services. This information does not have to be kept on a individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall submit annual reports which identify all exceedances of the hours of operation limitation identified in term B.1. The reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 of each year. If no exceedances occurred, the permittee shall state so in the report.

2. Prior to employing any photochemically reactive material in this emissions unit the permittee shall provide written notification to the Hamilton County Department of Environmental Services. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, and the maximum amount to be used, in pounds per hour, and pounds per day.

3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations set forth in term A.2.a. The reports shall be submitted to the Hamilton County Department of Environmental Services by January 31, April 30, July 31 and October 31 of each year and shall cover the previous

three calendar months (October through December, January through March, April through June and July through September, respectively.)

If no exceedances occurred, the permittee shall state so in the report.

4. Deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

a. Emission Limitations:
Organic compound (OC) emissions shall not exceed 3.0 pounds per hour and 0.75 ton per year.

Applicable Compliance Method:
Compliance with the pounds per hour and tons per year OC emissions limitations in section A.1 shall be demonstrated by calculations using the emission factors from US EPA AP-42 Fifth Edition, Chapter 5.2, (Draft section, June 1999) and the permittee-provided production data contained in PTI application number 14-05851, as submitted on June 1, 2006.

b. Emission Limitations:
The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P004 (Oleochemical Process), J001 (Methanol Loadout), fat traps, fugitive leaks, all miscellaneous tanks, sumps and small air contaminant sources shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, including HAP acid mists.

Applicable Compliance Method:
Compliance with the HAP emission limitations in term A.2.a shall be demonstrated by the record keeping in term C.3.

2. Compliance with the operating hours limitation in term B.1 shall be demonstrated by the record keeping in term C.1.

3. Compliance with OAC rule 3745-21-07 shall be demonstrated by the record keeping in term C.2.

F. Miscellaneous Requirements

1. The terms and conditions of this air permit to install shall supersede the terms and conditions in air permit-to-install number 14-04993 issued August 16, 2000, for emissions unit J001.

2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to

install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.

3. The following terms and conditions of air permit-to-install number 14-05851 are federally enforceable: A, B, C, D and E.

Modification Issued: 1/10/2008

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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 - (P004) - Oleochemical Process - Modification

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-35-07(B)(1) Synthetic Minor to Avoid Title V Permit Requirements	See term A.2.b.
OAC rule 3745-31-05(A)(3)	Organic Compound (OC) emissions shall not exceed 1.35 pounds per hour* and 5.91 tons per year including emissions from natural gas combustion. See terms A.2.a, B.1 and B.2. * The hourly emission limitation is based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation.
OAC rule 3745-21-07(G)	Exempt, See term A.2.d.

2. Additional Terms and Conditions

2.a All the organic compound emissions from this emissions unit shall be vented to a packed bed scrubber at all times followed by a thermal oxidizer under certain operating scenarios as listed in term B.2.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P004 (Oleochemical Process), J001 (Methanol Loadout), fat traps, fugitive leaks, all miscellaneous tanks, sumps and small air contaminant sources shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, including HAP acid mists. Compliance with the above limitations shall be based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with these limitations upon issuance of this permit.

2.c Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a packed bed scrubber, thermal oxidizer, compliance with the emission limitations and compliance with the facility-wide HAP emissions limitations.

2.d This emissions unit currently does not employ any photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5). It is, therefore, exempt from all emission limitations and control requirements contained in OAC rule 3745-21-07(G).

B. Operational Restrictions

1. All organic compound emissions from this emissions unit shall be vented to only a packed bed scrubber during the following plant operating scenarios:

   a. esters production without liquid olean production;

   b. esters production with hourly average liquid olean production less than 30,000 lbs/hour; and

   c. hourly average liquid olean production less than 30,000 lbs/hr without esters production.

2. All organic compound emissions from this emissions unit shall be vented to a thermal oxidizer following the packed bed scrubber during the following plant operating scenarios:

   a. esters production with hourly average liquid olean production greater than 30,000 lbs/hr; and

   b. hourly average liquid olean production, alone, greater than 30,000 lbs/hr.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the static pressure drop across the scrubber and the scrubber water flow rate during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer''s recommendations, instructions, and operating manual(s). The permittee shall record the static pressure drop across the

scrubber and the scrubber water flow rate on a daily basis.

Whenever the monitored value for the static pressure drop across the scrubber and the scrubber water flow rate deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began

and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the static pressure drop across the scrubber and the scrubber water flow rate readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable static pressure drop across the packed be scrubber is at least **0.05** inches of water, but not greater than 2 inches of water. The acceptable scrubber water flow rate is at least 8 gallons per minute or greater.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future organic compound emission tests that demonstrate compliance with the allowable organic compound emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature within the thermal incinerator during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer''s recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature within the thermal incinerator on continuous basis.

   Whenever the monitored value for the combustion temperature within the thermal

incinerator deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature within the thermal incinerator immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the average combustion temperature within the thermal incinerator for any 3-hour block of time when the emissions unit is in operation shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

The range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future organic compound emission tests that demonstrate compliance with the allowable organic compound emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

3. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.b:

   a. the company identification of each organic material containing a HAP(s) employed in this emissions unit;

b. the number of pounds of organic material employed;

c. the individual Hazardous Air Pollutant (HAP) content for each HAP for each material employed in pounds of individual HAP per pound of material;

d. the total combined HAP content of each material employed in pounds of combined HAPs per pound of material;

e. the total individual HAP emissions for each HAP from all materials employed in pounds or tons per month. This calculation shall be based on the emissions calculation methodology submitted in permit-to-install application number 14-05851 submitted on June 1, 2006;

f. the total combined HAP emissions from all materials employed in pounds or tons per month. This calculation shall be based on the emissions calculation methodology submitted in permit to install application number 14-05851 submitted on June 1, 2006;

g. the updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and

h. the updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Hamilton County Department of Environmental Services. This information does not have to be kept on a individual emissions unit basis.

4. The permittee shall collect and record the following information each day:

a. the operating scenario and control device being utilized;

b. the average hourly liquid olean production rate;

c. the time and date the thermal oxidizer was brought online; and

d. the time and date the thermal oxidizer was taken offline.

5. The permittee shall collect and record the following information each month:

a. the company identification of each liquid organic material employed in this emissions unit; and

b. a record of each liquid organic material employed in this emissions unit indicating whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C)(5).

6. The permit to install for emissions unit P004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust systems, 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 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

Emissions Unit ID: **P004**

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methanol (CAS 67-56-1)

TLV (ug/m^3):262

Maximum Hourly Emission Rate (lbs/hr): 1.24 lbs methanol/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1813

MAGLC (ug/m^3): 6240

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the static pressure drop across the scrubber and the scrubber water flow rate were outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the static pressure drop across the scrubber and the scrubber water flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal incinerator was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper

records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

3. Prior to employing any photochemically reactive material in this emissions unit, the permittee shall provide written notification to the appropriate Ohio EPA field office. Such notification shall include information sufficient to determine compliance with the emission limits and/or control requirements specified in OAC rule 3745-21-07(G). This notification, at a minimum, shall include the company identification of the new material to be employed, the solvent composition of the material, and the maximum amount to be used, in pounds per hour, and pounds per day.

4. The permittee shall submit quarterly reports that indicate any time the average hourly liquid olean production was above 30,000 lbs/hour and the thermal oxidizer was not brought on line. This notification shall include the date and time of the occurrence along with the total time the process ran above 30,000 lbs/hour without the thermal oxidizer. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

5. Deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emissions limitations in section A of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitations:
   Organic Compound (OC) emissions shall not exceed 1.35 pounds per hour* and 5.91 tons per year including emissions from natural gas combustion.

   Applicable Compliance Methods:
   Compliance with the lbs of OC/hr emission limitation was demonstrated through mass emission testing conducted on February 15, 2000. The average emission rate recorded during the emission test was 0.73 lb of OC/hr.

   If required, the permittee shall demonstrate compliance with this mass emission

limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 to determine the hourly mass emission rate.

The hourly mass emission rate shall be multiplied by the maximum hours of operation per year and then divided by 2000 to determine the TPY emission rate.

b. Emission Limitations:
The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P004 (Oleochemical Process), J001 (Methanol Loadout), fat traps, fugitive leaks, all miscellaneous tanks, sumps and small air contaminant sources shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, including HAP acid mists. Compliance with the above limitations shall be based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the HAP emission limitations in term A.2.b shall be demonstrated by the record keeping in term C.3.

2. Compliance with OAC rule 3745-21-07 shall be demonstrated by the record keeping in term C.5.

3. Compliance with the limitation in term A.2.a shall be demonstrated by the record keeping in term C.4.

F. Miscellaneous Requirements

1. The terms and conditions of this air permit to install shall supercede the terms and conditions of air permit to install number 14-04063 issued December 6, 2001 and permit to install 14-05851 issued November 16, 2006, for emission unit P004.

2. The following terms and conditions of air permit-to-install number 14-05851 are federally enforceable: A, B, C.1 - C.5, D and E.

NEW SOURCE REVIEW FORM B

PTI Number: 14-05851 Facility ID: 1431074118

FACILITY NAME Twin Rivers Technologies

FACILITY DESCRIPTION Oleochemical Process Modification CITY/TWP Cincinnati

Emissions Unit ID: **P004**

SIC CODE 2079 SCC CODE 30299999 EMISSIONS UNIT ID J001

EMISSIONS UNIT DESCRIPTION Methanol Load Out Modification

DATE INSTALLED 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	nonattainment	3.0 lbs/hr	0.75	3.0 lbs/hr	0.75
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
NA

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

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NEW SOURCE REVIEW FORM B

PTI Number: 14-05851 Facility ID: 1431074118

FACILITY NAME Twin Rivers Technologies

FACILITY DESCRIPTION Oleochemical Process Modification CITY/TWP Cincinnati

Emissions Unit ID: **P004**

SIC CODE 2079 SCC CODE 30299999 EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION Oleochemical Process Modification

DATE INSTALLED 1995

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	nonattainment	1.35	5.97	1.35	5.97
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
the use of a packed bed scrubber, thermal oxidizer, compliance with the emissions limitations and compliance with the facility-wide HAPs emissions limitations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: Methanol