

DEC 17 2009

BEFORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

ENTERED DIRECTOR'S JOURNAL

In the Matter of:

Emery Oleochemicals LLC
4900 Este Avenue
Cincinnati, Ohio 45232-1419

Director's Final Findings

and Orders
I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

PREAMBLE

It is agreed by the parties hereto as follows:

By: *Janet Kasser* Date: 12-17-09

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Emery Oleochemicals LLC ("Respondent"), previously Cognis Oleochemicals, LLC, pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§ 3704.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of the Respondent or of the facility (as hereinafter defined) shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in OAC Chapter 3704 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA makes the following findings of fact:

1. Respondent owns and operates a chemical manufacturing plant located at 4900 Este Avenue, in Cincinnati (Hamilton County), Ohio, that is defined as a "facility" in OAC Rule 3745-31-01(OO). In November 2008 through a name change only sale the former Cognis Corporation (Cognis) finalized sale of its interest. The name change to Emery Oleochemicals LLC became effective on May 15, 2009. The facility is classified as a "major source" for Title V and the Prevention of Significant Deterioration/New Source Review ("PSD/NSR") regulations in Ohio Administrative Code ("OAC") Chapters 3745-77 and 3745-31, respectively. At this facility, azelaic and pelargonic acids are produced in two similar, but separate, processes referred to as ozonolysis process II (building 60) and ozonolysis III (building 68). The ozonolysis processes consist of ozone generators,

reactors, running tanks, stills, extractors, and vacuum systems, and are collectively identified by Ohio EPA as emissions units P010 and P017 for building 60 and 68, respectively. Each emissions unit previously employed a packed tower scrubber and a catalytic oxidizer in series for the control of organic compound emissions. Currently, the organic compound emissions are being controlled by regenerative thermal oxidizers ("RTOs"). Respondent also operates a 38.2 million Btu per hour ("MMBtu/hr") coal/fuel oil-fired boiler, whose particulate emissions are controlled with a baghouse, which is identified by Ohio EPA as emissions unit B028.

2. The emissions units identified in Finding 1 emit, in part, volatile organic compounds ("VOCs") and hazardous air pollutants ("HAPs"), as defined in OAC Rules 3745-21-01(B)(14) and 3745-77-01(V), respectively, and/or particulate emissions ("PE"), particulate matter ("PM"), and particulate matter with an aerodynamic diameter of 10 microns or less ("PM₁₀"), which are defined as "air pollutants" or "air contaminants" in OAC Rule 3745-15-01(C). Additionally, these emissions units are "air contaminant sources" as defined in OAC Rules 3745-31-01(I) and 3745-15-01(C) and (W).

3. Unless otherwise exempt from the rule, OAC Rule 3745-21-13 requires, in part, any group 1 reactor or distillation unit in a synthetic organic chemical manufacturing industry ("SOCMI") chemical process unit, located in Hamilton County, to reduce VOC emissions vented to a control device by at least 98 percent or emit VOC at a concentration less than twenty parts per million by volume ("ppm_v"). Existing group 1 reactors or distillation units process vents that were controlled by combustion control devices prior to May 27, 2005, did not have to comply with this limitation provided the existing combustion control devices reduced VOC emissions by at least 90 percent and were not capable of reliably reducing VOC emissions to meet the more stringent limitation (i.e., 98 percent). Existing reactors and distillation units located in Hamilton County were required to comply with the applicable VOC limitation by May 27, 2006 and to demonstrate compliance 90 days thereafter. Emissions units P010 and P017 contain reactors and distillation units defined as group 1 and are subject to all the applicable requirements specified in OAC Rule 3745-21-13. OAC Rule 3745-21-13 was adopted under the authority of ORC Chapter 3704.

4. OAC Rule 3745-31-05(C) states, in part, that the Director of Ohio EPA may impose special terms and conditions in a PTI as are appropriate or necessary to ensure compliance with applicable laws and to ensure adequate protection of the environment.

5. OAC Rule 3745-77-02(B) states, in part, that major sources are subject to the permitting requirements of OAC Chapter 3745-77 (i.e., Title V).

6. OAC Rule 3745-77-07(A)(1) requires, in part, that a Title V permit include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance. OAC Rule 3745-77-07(A)(3) requires, in part, that a Title V permit contain emission monitoring and analysis procedures or test methods sufficient to yield reliable

representative data to determine the source's compliance with the permit and applicable emission limitations.

7. ORC § 3704.05(C) prohibits any person from violating any terms or conditions of any permit issued by the Director of Ohio EPA.

8. ORC § 3704.05(G) prohibits any person from violating any order, rule or determination of the Director of Ohio EPA issued, adopted, or made under the authority of ORC Chapter 3704.

9. ORC § 3704.05(J)(2) prohibits, in part, any person from violating any applicable requirement of a Title V permit or any permit condition, except for an emergency as defined in 40 CFR 70.6(g).

Failure to comply with the requirements of OAC Rule 3745-21-13

10. On May 10, 2006, Respondent requested the May 27, 2006, compliance deadline contained in OAC Rule 3745-21-13 be extended until September 30, 2007, for the applicable emissions units associated with the ozone oxidation processes. The extension was needed to determine applicability and to evaluate and identify the most effective compliance options. USEPA's Miscellaneous Organic National Emission Standards for Hazardous Air Pollutants ("MON") regulation promulgated on November 10, 2003 contained similar emission control requirements; however, the regulation did not require compliance until May 10, 2008 (i.e., allowing 4 1/2 years for sources to achieve compliance). Respondent stated that the emissions units associated with the ozone oxidation processes had control devices that meet the 90 percent control efficiency option specified in OAC Rule 3745-21-13 for existing combustion control devices; however, because the packed tower scrubbers are not combustion control devices, the existing control devices did not qualify for this control option.

11. On or around September 2007, Respondent shut down emissions units P010 and P017 to replace the existing catalytic incinerators with new RTOs. On January 23 and 24, 2008, Respondent conducted stack tests for emissions units P010 and P017 which demonstrated compliance with OAC Rule 3745-21-13. Respondent failed to comply with the applicable requirements specified in OAC Rule 3745-21-13 within the required time frame, in violation of ORC § 3704.05(G). Respondent violated the requirements of OAC Rule 3745-21-13 from May 27, 2006 (the rule compliance deadline) until January 24, 2008 when compliance was finally demonstrated.

Failure to comply with PTI and Title V Permit OC emission limitations

12. From January 23, 2002 to December 21, 2006, Respondent conducted several stack tests that demonstrated that emissions units P010 and P017 were not complying with the OC emission limitations contained in PTI # 14-04576 and the Title V permit. Respondent made modifications to the control devices to try to bring the emissions

units into compliance with the OC emission limitations and agreed to conduct quarterly compliance testing until the installation of the new RTOs scheduled for the third quarter of 2007.

13. On May 8, 2007, Ohio EPA issued revisions to PTI # 14-04576 that required emissions units P010 and P017 to operate the primary and secondary control devices in series. Additionally, the permit limited the short term OC emissions to 2.59 and 2.54 lbs/hr for emissions units P010 and P017, respectively.

14. On June 5 and 6, 2007, Respondent conducted quarterly compliance tests for emissions units P010 and P017. The test results showed that emissions unit P010 was in compliance. However, Respondent failed to demonstrate that emissions unit P017 was in compliance with the OC emission limitation contained in PTI # 14-04576 and Respondent's Title V operating permit, in violation ORC § 3704.05(C) and J(2) (specific measured OC values are identified in the following table). On August 7, 2007, Hamilton County Department of Environmental Services ("HCDES"), Ohio EPA's contractual representative in Hamilton County, sent Respondent a notice of violation ("NOV") for the failed stack test.

Results of Compliance Demonstrations				
Date	Emissions Unit	Measured OC Lb/Hr	Allowable OC Lb/Hr	Passed/Failed
June 5, 2007	P010	1.48	2.59	Passed
June 6, 2007	P017	6.08	2.54	Failed
Sept. 6, 2007	P010	2.93	2.59	Failed
Sept. 7, 2007	P017	2.61	2.54	Failed
Jan. 23, 2008 [#]	P010	0.102	2.59	Passed
Jan. 24, 2008 [#]	P017	0.062	2.54	Passed

[#] Compliance demonstration with the emissions generated by emissions units P010 and P017 being controlled by the new RTOs.

15. On September 6 and 7, 2007, Respondent conducted another compliance test for emissions units P010 and P017. The test results indicated that both emissions units were not complying with the OC emission limitations contained in PTI # 14-04576 and Respondent's Title V operating permit, in violation ORC § 3704.05(C) and J(2) (specific measured OC values are contained in Finding 14's table).

16. In a letter dated October 4, 2007, Respondent informed HCDES of the September 2007 test results and that it shut down emissions units P010 and P017 to install

the new RTOs. On January 10, 2008, Respondent notified HCDES that emissions units P010 and P017 recommenced operation on November 12, 2007.

17. On December 28, 2007, HCDES sent a NOV to Respondent for the failed performance tests. The NOV also stated that the installation of the RTOs was acceptable as a compliance plan.

18. On January 23 and 24, 2008, Respondent performed stack tests for emissions units P010 and P017. The measured emission rates demonstrated that emissions units P010 and P017 were complying with the OC emission limitations specified in the Title V permit and PTI # 14-04576 and all other applicable requirements.

19. Respondent's failure to comply with the OC emission limitations specified in PTI # 14-04576 and the Title V operating permit for emissions units P010 and P017 were in violation of ORC § 3704.05(C) and (J)(2). Emissions units P010 and P017 violated the OC emission limitations from September 6, 2007 and June 6, 2007 (the date of the first failed compliance tests after the compliance demonstration required by the December 29, 2006, Director's Final Findings and Orders), respectively, until January 23 and 24, 2008 (the date compliance was demonstrated), respectively, excluding the time the emissions units did not operate for the installation of the RTOs. Emissions units P010 and P017 also violated OAC Rule 3745-21-13 from May 27, 2006 until January 23 and 24, 2008.

Failure to comply with PTI and Title V Permit PE limitation

20. On January 20, 1981, Ohio EPA issued PTI # 14-312 to Respondent authorizing the installation of emissions unit B028 (i.e., boiler # 2). The PTI limited emissions unit B028's PE to 0.06 pound per million Btu ("lb/MM Btu") of actual heat input. Respondent's Title V permit, issued on October 22, 2007, required that emission testing be conducted on emissions unit B028 to demonstrate compliance with the 0.06 lb/MMBtu PE limitation.

21. On May 14, 2008, Respondent conducted the compliance test for emissions unit B028. The compliance test measured the average PE rate at 0.716 lb/MMBtu, an exceedance of the 0.06 lb/MM Btu limitation specified in Respondent's Title V permit and PTI. This exceedance was a violation of ORC § 3704.05(C) and (J)(2). On June 30, 2008, HCDES sent Respondent a NOV letter for the failure to comply with the terms and conditions of Respondent's Title V permit and PTI and requested Respondent submit a plan to bring emissions unit B028 into compliance ("compliance plan").

22. On July 17, 2008, Respondent replied to the June 30, 2008, NOV. The reply stated that on July 9, 2008, Respondent switched from using coal to number 4 fuel oil to lower the PE.

23. On July 11, 2008, Respondent retested emissions unit B028 while burning fuel oil. The PE were measured at 0.09 lb/MM Btu demonstrating that the boiler was still

operating out of compliance. On August 27, 2008, HCDES sent Respondent a NOV letter requesting the submittal of another compliance plan to bring the boiler into compliance.

24. On September 12, 2008, Respondent replied to the August 27, 2008, NOV.

25. On August 15, 2008, Respondent retested emissions unit B028. The results (i.e., 0.011 lb of PE/MM Btu) indicated that emissions unit B028 was in compliance with the PE limitation. Respondent failed to comply with the PE limitation specified in the Respondent's Title V permit and PTI, from May 14, 2008 (the date of the first failed stack test) until August 15, 2008 (the date compliance was demonstrated), excluding approximately one month while the boiler was shut down for repairs and maintenance, in violation of ORC § 3704.05(C) and (J)(2).

26. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and the benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Respondent shall pay the amount of one hundred forty-three thousand and five hundred dollars (\$143,500) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Within fourteen (14) days after the effective date of these Orders, payment to Ohio EPA shall be made by an official check made payable to "Treasurer, State of Ohio" for twenty-eight thousand and seven hundred dollars (\$28,700) of the civil penalty amount. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying Respondent, to:

Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

2. In lieu of paying twenty-eight thousand and seven hundred dollars (\$28,700) of the remaining civil penalty amount, Respondent shall, within fourteen (14) days of the effective date of these Orders, fund a Supplemental Environmental Project ("SEP") by making a contribution in the amount of \$28,700 to the Ohio EPA's Clean Diesel School Bus Program Fund (Fund 5CD0). Respondent shall tender an official check made payable to "Treasurer, State of Ohio" for \$28,700. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying the Respondent and Fund 5CD0, to the above-stated address.

3. A copy of each of the above checks shall be sent to James A. Orlemann, Assistant Chief, SIP Development and Enforcement, or his successor, at the following address:

Ohio EPA
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049

4. Should Respondent fail to fund the SEP within the required time frame set forth in Order 2, Respondent shall immediately pay to Ohio EPA \$28,700 of the civil penalty in accordance with the procedures in Order 1.

5. In lieu of paying eighty-six thousand and one hundred dollars (\$86,100) of the remaining civil penalty amount, and as a penalty credit project to benefit the public residing in the vicinity of Respondent's facility, Respondent shall install and operate an odor emission control system for tank vent emissions from Respondent's Southeast Tank Farm ("SETF"). Specifically, Respondent shall duct the emissions from (1) the six tanks that are used primarily for intermediate storage of pressure split tallow fatty acids ("PFA") and are identified by Ohio EPA as part of emissions unit P004 (High Pressure Splitters 2-6) and (2) the one tank used as a stormwater retention tank, to a new vent collection system header that will route the emissions to either a biofilter or a venturi scrubber for control. The odor emission control system shall be installed and brought into operation in accordance with the following schedule:

- a. Submit detailed plans of the odor emission control system, including the selection of the control equipment, and a PTI modification application for emissions unit P004 that includes the odor emission control system, by no later than **March 1, 2010**;
- b. Issue purchase orders or award contracts for the odor emission control system by no later than **July 1, 2010**;
- c. Initiate construction or installation of the odor emission control system by no later than **October 1, 2010**; and
- d. Complete construction or installation of the odor emission control system and begin operation by no later than **December 31, 2010**.

6. The odor emission control system shall be designed to handle flow rates from the tank vents, including those from situations where steam is blown into the tanks to clear lines of PFA for stock changes and process shutdowns.

7. Respondent shall expend at least \$340,000 for the total cost of the odor emission control system, and shall keep records of all expenditures. Within thirty (30) days

after the deadline in milestone 5.d or within thirty (30) days after the installation and beginning operation of the system, whichever is earlier, Respondent shall submit documentation of expenditure of at least \$340,000 on the odor emission control system.

8. Respondent shall submit progress reports to Ohio EPA and HCDES within thirty (30) days after each of the above milestone dates in Order 5 or within thirty (30) days after completion of the milestone, whichever is earlier. The reports shall indicate whether the milestone was completed, the date completed, and, if not completed, the anticipated completion date and reason(s) for the failure to achieve the completion date.

9. Respondent shall operate and maintain the odor emission control system in a manner that achieves maximum effectiveness for odor emission reduction. Operating parameter monitoring, record-keeping, reporting and testing requirements for the biofilter or venturi scrubber that are critical to maintain good operation and maintenance shall be specified in the terms and conditions of an Ohio EPA PTI modification for emissions unit P004.

VI. TERMINATION

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's Division of Air Pollution Control acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be signed by a responsible official of Respondent and shall be submitted to Ohio EPA. For purposes of these Orders, a responsible official is a principal executive officer of at least the level of vice president or his duty authorized representative.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's facility.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, State and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

Except as otherwise provided in these Orders, all documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Hamilton County Department of Environmental Services
Air Quality Programs
250 William Howard Taft Road
Cincinnati, Ohio 45219-2660
Attention: Kerri Castlen

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attention: Thomas Kalman, Manager, Enforcement Section

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for the Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XIII. EFFECTIVE DATE

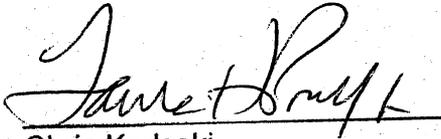
The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

ORDERED AND AGREED:

Ohio Environmental Protection Agency

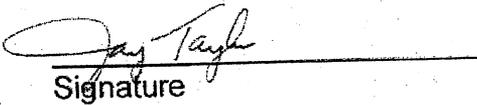


Chris Korleski
Director

12-16-09
Date

AGREED:

Emery Oleochemicals LLC


Signature

12-14-2009
Date

Jay Taylor
Printed or Typed Name

General Manager
Title