

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

**Dover Chemical Corporation
3676 Davis Road NW
Dover, Ohio 44622**

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**Director's Final Findings
and Orders**

PREAMBLE

It is agreed by the parties hereto as follows:

Ohio EPA AUG 4 '17
Entered Directors Journal

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Dover Chemical Corporation ("Respondent") 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 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 ORC Chapter 3704 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA ("Director") makes the following findings. These Findings are those of the Director. Nothing stated in these Findings is, or shall be construed as, an admission by Respondent:

1. Respondent operates an organic chemical manufacturing plant ("the facility") located at 3676 Davis Road NW, Dover, Tuscarawas County, Ohio (facility ID: 0679010132). This facility is a Title V source.

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.

By: _____

Kelley M. M...

Date: _____

8-4-17

2. The following emission units ("EUs") at the facility are the subject of these Orders and are subject to Ohio EPA rules and regulations:

EUs ID	Company Description	Date Installed	Date(s) Modified
P002	Chlorinated Products 1C	01/01/1949	NA
P005	Air Stripper and associated treatment facilities	05/01/1987	NA
P006	Phosphites	01/01/1986	1996, 2005, 2007, 2009, 20011 and 01/01/15
P007	Baerlocher Operations	06/01/1989	NA
P011	Nonylphenol Production	05/01/1996	2011 and 01/01/15
P015	Chlorinated Products 1P	01/01/1974	NA
P016	Solvent 9228 Process	01/01/1995	2008 and 2011
P018	PCP/DCP process	01/01/1998	12/01/2013
P019	Phenol Recovery Process	01/01/1998	NA
P020	Functional Additives	01/01/1994	NA
P901	Chlorinated Products Grinding	12/31/1974	NA
P914	Solid Stearates	02/1/2001	NA
P917	Solvent 9228 Solids Blending	01/01/2007	2014 - 2017
J001	Loading Rack serving P018 and P011	05/01/1996	NA
J002	Loading Rack Serving P015 and P006	Requested	NA

3. EU P002 consists of reactors, acid scrubbers, process tanks, evaporators, condensers, vaporizers, Chlorez® storage tanks, hydrochloric acid storage tanks, and chlorine railcars. At this process, hydrocarbons (C20 to C30+ or paraffin) react with chlorine gas to produce chlorinated products (i.e. Chlorez®). A mixture of chloroform ("CHCl3") and carbon tetrachloride ("CCl4") are used as the carrier solvent for Chlorez® production. Both CHCl3 and CCl4 are classified as Hazardous Air Pollutants ("HAPs").

4. EU P005 consist of five (5) production wells which supply water for the facility's non-contact cooling water system. The once pass-through cooling water system and storm water are routed to the primary and secondary basin prior to passing through the air stripper and then being discharged at the facility's outfall station.

5. EU P015 consists of reactors, storage tanks and processes which convert chlorine and hydrocarbons (C14+ olefin or paraffin) into chlorinated products (i.e., Paroil). The process is routed to the acid fume scrubber and bleach tower scrubber. Hydrogen chloride and bleach are by-products of the process.

6. EU P901 is the Chlorez finishing process which consists of material handling equipment which receives molten liquid Chlorez from EU P002. The molten Chlorez is cooled on pneumatic conveyors, processed via a hammermill and packaged in the bagging unit.

7. EU P002 has four emissions stacks identified as: Acid fume scrubber stack, Bleach tower stack, Edwards stack, and Nash stack. The Acid fume scrubber stack and Bleach tower stack are shared emissions points for both EUs P002 and P015.

8. OAC Rule 3745-31-02 prohibits a person from allowing the installation or modification of an air contaminant source without first applying for and obtaining a permit to install ("PTI"), except as otherwise provided by rule or law.

9. ORC § 3704.05(C) prohibits any person who is a holder of a permit issued by the Director pursuant to ORC § 3704.03 from violating any of its terms and conditions.

10. ORC § 3704.05(G) prohibits a person from violating any order, rule, or determination of the Director that was issued, adopted, or made under ORC Chapter 3704.

11. OAC Rule 3745-15-07, in part, specifies that the emission of any air contaminant or combinations of air contaminants in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property is deemed to be an air pollution nuisance. Furthermore, this rule prohibits any person from causing, permitting or maintaining an air pollution nuisance.

12. Certain emissions units at the facility are subject to the National Emissions Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (40 CFR Part 63, Subpart FFFF). These Standards will be incorporated as applicable requirements in the Title V permit for EUs P002, P005, P015 and P901. 40 CFR Part 63, Subpart FFFF became effective in July of 2006. Respondent was required to comply with 40 CFR Part 63, Subpart FFFF no later than May 10, 2008. As a result of the failure to submit a complete Title V permit application and comply with 40 CFR Part 63, Subpart FFFF, Ohio EPA sent proposed Findings and Orders to Respondent in September of 2016.

13. 40 CFR Part 63, Subpart FFFF requires, in part, the owner or operator of an affected facility to either:

- a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by more than 98 percent by weight by venting emissions from a sufficient number of the vents through one or

more closed-vent systems to any combination of control devices except a flare; or

- b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥ 95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, or comply with the requirements of subpart WW of this part for any process tank; or
- c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤ 20 ppmv as TOC or total organic HAP. For all other batch process vents within the process, reduce collective organic HAP emissions as specified in item 8.a and/or item 8.b above.

14. On December 21, 2011, Respondent submitted a Title V application for the facility that included emissions units EUs P011, P015, P016, P017, P018 and P019. Since this submittal, Ohio EPA has been working with Respondent to receive all the necessary, accurate and complete information to process Respondent's Title V permit. To date, Respondent has not submitted all the necessary information in order for Ohio EPA to finalize the Title V permit. In addition, Respondent modified and operated EUs P011, P015 and P018 prior to the issuance of Chapter 31 modification PTIs and installed and operated EUs P016, P019 and P917 prior to the issuance of installation PTIs.

15. On December 18, 2014, Ohio EPA Southeast District Office ("SEDO") conducted an inspection of the facility and discovered deficiencies in the reporting, monitoring and recordkeeping requirements for EUs P005, P007, and P917 (formerly P017). Specifically, for several months there were inaccurate daily operation logs for the carbon absorber control equipment at EU P007 and Respondent failed to maintain an operations log of daily visible emissions checks for EU P917 for several months. In addition to these deficiencies, from January of 2015 until January of 2016, Respondent either failed to submit or failed to timely submit quarterly deviation reports and monthly reports for EU P005. The untimely monthly reports for EU P005 were belated due to the timing of Respondent's receipt of analytical reports reflecting the results of laboratory analysis of P005 samples. Respondent has submitted all EU P005 monthly reports via Air Services as of August 21, 2016. Ohio EPA further acknowledges that Respondent requested authorization to submit EU P005 monthly emissions reports at the end of the month during which Respondent receives the laboratory analytical reports. Ohio EPA

has agreed to update the permit to allow monthly reports to be submitted by the 30th of each month.

16. On January 13, 2015, Ohio EPA received Respondent's December 2014 monthly report required by PTI # 06-1939. PTI # 06-1939 issued on August 5, 1987, requires that VOC emissions from EU P005 not exceed 126.0 pounds per day ("lbs/day"). The report indicated that the VOC emissions from December 15, 2014 to December 21, 2014 ranged from 724.1 lbs/day to 737.2 lbs/day with a monthly average of 176.54 lbs/day. The calculated total amount of VOC that was released during that period was 5,472.8 pounds. Respondent stated that the violation occurred due to a single, unintended release of high-VOC wastewater into the wastewater system that feeds EU P005 (this VOC-contaminated wastewater is normally shipped offsite for treatment). Respondent stated that the results of the analysis of a sample of EU P005 emissions taken at the time of this unintended release event were extrapolated to a full week, causing the emissions to appear excessive for the entire week.

17. On November 14, 2016, Respondent submitted an updated PTI application for EUs P002, P015 and P901. On November 28, 2016, SEDO requested the 1995 and 2014 stack test data referenced in the application. On December 27, 2016, SEDO requested an explanation for the emissions factors used in the November 2016 application. Respondent explained that the application referenced Chem Cad data and stack test data from 1995 and 2014 as the source of emission factors from the Chlorez® process. SEDO requested the 1995 stack test data be provided.

18. On November 14, 2016, Respondent submitted a partial PTI application for EUs P015, P002 and P901. Ohio EPA has requested additional information in order to process this application.

19. On December 9, 2016, Respondent submitted a partial PTI application for EU P011. Ohio EPA has requested additional information in order to process this application.

20. On December 21, 2016, Respondent submitted a draft "Risk Evaluation General Work Plan EU P005 (Air Stripper & Associated Treatment Facility)". Ohio EPA requested revisions to the plan to include fugitive emissions from the entire treatment system that composed EU P005.

21. On January 30, 2017, Respondent submitted a partial application for EU P006. Ohio EPA has requested additional information in order to process this application.

22. On January 30, 2017, Respondent submitted a "Modified Risk Evaluation General Work Plan P005 (Air Stripper & Associated Treatment Facility, PTI 1939)" via

email to Ohio EPA. The plan outlines how air dispersion modeling will be performed for both stack and fugitive emissions of VOCs, HAPs and TACs emissions from the facility's use of contaminated groundwater. Respondent stated that it has "preliminarily ascertained that carbon tetrachloride, a TAC, has been removed from the production wells in a quantity greater than 1 ton per year ("tpy")" and "for any [TACs] that exceed the Ohio EPA air toxics modeling threshold [of 1 tpy]... a modeling protocol will be submitted to the Ohio EPA for approval".

23. On February 15, 2017, Respondent submitted an application for EU P016.

24. On February 24, 2017, Respondent submitted revisions to the "Modified Risk Evaluation General Work Plan P005 (Air Stripper & Associated Treatment Facility, PTI 06-1939). Ohio EPA approved this plan on March 1, 2017 (the "Modified EU P005 Work Plan").

25. On February 13 and 27, 2017, Respondent submitted stack test data from 1997/1998 which reported CHCl_3 and CCl_4 emissions from the bleach tower, acid fume scrubber and LUWA building. Because the stack tests were conducted under unknown operating parameters, Respondent stated that new stack tests would be conducted.

26. On March 15, 2017, Respondent submitted an application for EU P007 Solid Stearates Unit.

27. On March 15, 2017, Respondent submitted Modeling Protocol for EU P005, in accordance with the Modified EU P005 Work Plan. Ohio EPA approved this Modeling Protocol on March 20, 2017.

28. On April 3, 2017, Respondent submitted updated stack and fugitive emissions calculations for EU P005 based on current groundwater monitoring data, in accordance with the Modified EU P005 Work Plan.

29. On April 27, 2017, SEDO received Respondent's 2016 fee emissions report. The reported stack emissions included 338.53 tons of CHCl_3 and 252.44 tons of CCl_4 from EU P002. These emissions were much higher than the historically reported emissions for EU P002. In comparison, the reported stack emissions from EU P002 in 2015 were 3.04 tons of CHCl_3 and 1.03 tons of CCl_4 . As a result, Ohio EPA requested that Respondent perform air dispersion modeling of these sources.

30. On May 1, 2017, Respondent submitted a draft report summarizing the results of updated air dispersion modeling for VOC, HAP and TAC emissions from EU P005 that addresses both stack and fugitive emissions, in accordance with the Modified EU P005 Work Plan.

31. ORC § 3704.05(L) provides that the Director shall implement, through Title V permits, applicable requirements of section 112 of the federal Clean Air Act, including its implementing regulations at 40 C.F.R. Part 63, Subparts F, G, and H (the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (the "HON")), 40 C.F.R. Part 63, Subpart FFFF (the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (the "MON")), 40 C.F.R. Part 63, Subpart NNNNN (the National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production)(the "HCL NESHAP"), 40 C.F.R. Part 63, Subpart DDDDD (the "Boiler MACT"), 40 C.F.R. Part 63 Subpart GGGGG (National Emission Standard for Hazardous Air Pollutants: Site Remediation), 40 C.F.R. Part 60 Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006), 40 C.F.R. Part 60 Subpart VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006), 40 C.F.R. Part 60 Subpart NNN (Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations), 40 C.F.R. Part 60 Subpart RRR (Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes) and any other federal rules that are deemed to be applicable.

32. On May 4, 2017 Respondent submitted a draft compliance plan including a summary table of 40 C.F.R. Part 60 and 63 applicability determination. The table shows the list of EUs subject to 40 C.F.R. 40 C.F.R Part 60 and Part 63, the applicable subpart, the pollutants controlled, the proposed control equipment, the status of installation, and the proposed date of installation for the ones not installed yet.

33. From May 16 to 19, 2017, Respondent conducted emissions performance testing on EUs P011, P007, P006, P016 and P018.

34. From May 10 to 22, 2017, Respondent conducted emissions performance tests for CHCl₃ and CCl₄ emissions from the four stacks serving EU P002. A draft of the results was received by SEDO on May 22, 2017. The following table shows the emission rate for CHCl₃ and CCl₄ from each of the four stacks:

Stack	CHCl ₃ (lb/hr)	CCl ₄ (lb/hr)
Acid fume scrubber stack	27.53	8.21
Bleach tower stack	30.50	12.49
Edwards stack	1.47	4.85
Nash stack	2.37	3.58

Point Sources Total	61.87	29.13
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35. On May 22, 2017, Respondent notified Ohio EPA that in response to its receipt of stack testing data on May 21, 2017, Respondent was temporarily ceasing operations of EU P002 for Chlorez® solid chlorinated paraffin production, in order to provide Respondent with an opportunity to review equipment and overall unit operations specific to CHCl₃ and CCl₄.

36. Ohio EPA uses the U.S. EPA Integrated Risk Information System ("IRIS") toxicity values to evaluate life-time health impacts (assumed to be 70 years). The IRIS chronic risk ambient air concentration corresponding to a risk of 1 in 100,000 (IE-5) is 1.7 µg/m³ for CCl₄.

37. Ohio EPA uses the Maximum Allowable Ground Level Concentration ("MAGLC") values to evaluate short-term (1-hour) health impacts. The corresponding MAGLCs are 1,167 µg/m³ for CHCl₃ and 738 µg/m³ for CCl₄.

38. On May 30, 2017, Ohio EPA received the results of the refined air dispersion modeling that was completed by Respondent for CHCl₃ and CCl₄. The following table shows the short-term results of the modeling and whether the pollutant-specific MAGLC was exceeded or not:

HAPs	Modeling Results (µg/m³)	MAGLC (µg/m³)	MAGLC Exceeded?
CHCl ₃	12,560.96	1,167	Yes
CCl ₄	6,677.30	738	Yes

39. The following table shows the long-term results of the modeling and whether the pollutant-specific IRIS IE-5 was exceeded or not:

HAPs	Modeling Results (µg/m³)	IRIS IE-5 (µg/m³)	IRIS IE-5 Exceeded?
CCl ₄	305.31	1.7	Yes

40. The Director has determined that Respondent has:

- Modified and operated EUs P006, P011, P016, P017 and P018 prior to the issuance of Chapter 31 modification PTIs and installed and operated EUs P019 and P917 prior to the issuance of installation PTIs, in violation of OAC Rule 3745-31-02 and ORC § 3704.05(C);
- Failed to maintain an operations log of the daily visible emissions checks for EU P917 for several months and from January of 2015 until January of 2016, failed to submit or failed to timely submit quarterly deviation reports and monthly reports for EU P005, in violation of PTI # 06-1939, PTI # P0116484,

permit-to-operate ("PTO") # P0090799, PTI # 06-2473, and ORC § 3704.05(C);

- Exceeded the VOC emissions limitation from EU P005, in violation of the terms and conditions of PTI # 06-1939 and ORC § 3704.05(C);
- Failed to comply with certain applicable regulatory requirements, as indicated in paragraph 31 above;
- Failed to comply with 40 CFR Part 63, Subpart FFFF by not reducing CHCl_3 and CCl_4 by at least 98%, in violation of 40 CFR Part 63, Subpart FFFF;
- Operated several EUs at the facility without obtaining a valid PTI and/or Title V permit, in violation of OAC Rule 3745-31-02 and OAC Rule 3745-77-02 and ORC § 3704.05(G); and
- Caused or is causing an air pollution nuisance, in violation of OAC Rule 3745-15-07 and ORC § 3704.05(G).

41. On June 2, 2017, Ohio EPA issued and Respondent agreed to Director's interim Findings and Orders to Respondent. The Orders included the following:

- a. Respondent shall continue to cease operations of EU P002 for Chlorez® production until such a time that Respondent can demonstrate compliance with the IRIS 1×10^{-5} chronic risk factor for chloroform (CHCl_3) and carbon tetrachloride (CCl_4). Respondent shall not operate EU P002 for Chlorez® production without Ohio EPA approval. In order to obtain Ohio EPA approval to operate, Respondent shall submit a request, in writing, to start operations back up with supporting documentation demonstrating how they meet and will continue to meet the IRIS 1×10^{-5} chronic risk factor. Such documentation should include, but is not limited to, revised air dispersion modeling, a description of what corrective actions were implemented, and a monitoring plan which describes how these corrective actions will be monitored to demonstrate compliance the IRIS 1×10^{-5} chronic risk factor until such a time as permanent controls will be installed.
- b. Respondent may temporarily resume operations, with approval from Ohio EPA for the purposes of conducting stack tests. Respondent shall submit an Intent-to-Test ("ITT") notification to Ohio EPA at least five (5) business days prior to starting the operation of P002 for Chlorez® production for the purpose of conducting the stack tests. The ITT shall identify the stacks to be tested for CHCl_3 and CCl_4 and the dates of the tests. The stacks to be tested shall include but not limited to the following stacks: Acid fume

scrubber stack, Bleach tower stack, Edwards stack, and Nash stack. Emissions unit P002 shall be operated at or as close as possible to its maximum rated capacity during the tests. EU P002 for Chlorez® production shall cease operations upon completion of the stack tests until Ohio EPA approves operations to resume in accordance with paragraph 41.a.

- c. Within thirty (30) days of the stack test completion date, Respondent shall submit a report of the results of the stack testing identified in paragraph 41.b. to Ohio EPA.
- d. Within thirty (30) days of the stack test completion date, Respondent shall revise the air dispersion modeling and submit the results to Ohio EPA.

42. On June 2, 2017, Respondent submitted PTI applications for EUs J001, J002, P018, P019, P914, and P917. Respondent also stated that EU P020 was de Minimis and did not require a PTI.

43. On June 6, 2017, Respondent conducted emissions performance tests after modifications to the process were made and new control equipment was installed for CHCl₃ and CCl₄ emissions from the four stacks serving EU P002. A draft of the results was received by SEDO on June 14, 2017.

44. On June 12, 2017, Respondent submitted a draft Feasibility Study for EU P005, the air stripper and associated treatment facilities. This study evaluates four different control options for technical feasibility, percent of emission reductions, availability of needed equipment and consequences to dispersion modeling.

45. On June 20, 2017, Respondent submitted a revision to the May 30, 2017 modeling which utilized emission rates from the June 6, 2017 emissions testing and also accounted for emissions from P005.

46. On June 23, 2017, Respondent submitted the formal stack test report for emission testing conducted on May 10 to 19, 2017 and June 6, 2017, via Air Services.

47. On June 26, 2017, Ohio EPA requested further information and a revision to the Feasibility Study for EU P005.

48. On June 28, 2017, Ohio EPA requested a revision to the compliance plan originally submitted on May 4, 2017.

49. Prior to August 2, 2017, Respondent submitted documentation and a monitoring plan to meet the IRIS 1×10^{-5} chronic risk factor for the Chlorez® process as referenced in Finding No. 41 of these Orders.

50. 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 their relation to benefits to the people of the State to be derived from such compliance.

V. ORDERS

The interim Orders issued to Respondent on June 2, 2017 are hereby superseded and terminated by these Orders. The Director hereby issues the following Orders:

1. Respondent shall complete an evaluation of current wastewater treatment system operations and possible changes that could be implemented to minimize or eliminate fugitive emissions of VOC, HAP and toxic air contaminants (TACs) from the use of contaminated groundwater as non-contact or process water within the facility. This project shall be completed as follows:

- By August 31, 2017, Respondent shall submit to Ohio EPA a revised feasibility study of alternative groundwater extraction procedures and/or control equipment options that will reduce both stack and fugitive emissions of VOCs, HAPs and TACs resulting from the use of contaminated groundwater at the facility as requested on June 26, 2017. If the study shows significant VOC, HAP and TAC emissions reductions are feasible and are needed to satisfy state air toxics modeling requirements, Respondent shall submit for Ohio EPA review and approval a proposed implementation schedule for completing changes to the system and updated emissions calculations that quantify the reductions that would be achieved by the selected changes.
- By October 1, 2017, Respondent shall submit documentation to Ohio EPA, demonstrating that the permanent cover has been installed on EU P005.

2. By August 1, 2017, Respondent shall submit, to Ohio EPA, updated and complete PTI applications for EUs P006, P016 and any other EUs (other than EUs P011, P018 and P019, which are addressed in Order 3 below, and EUs P002, P005, and P015, which are addressed in Order 4 below) which require modifications prior to the Title V application submittal required pursuant to Order 6 below. These PTI applications must include:

- Current controls or proposed controls needed to achieve compliance as outlined in the compliance plan;
- Detailed regulatory applicability determinations as detailed in the PTI applications submitted; and
- Updated and accurate Air Services profiles for all EUs at the facility.

3. By August 18, 2017, Respondent shall advise Ohio EPA whether the PTI applications for EUs P011, P018, and P019 are complete. If one or more of such applications are not complete, then, by September 15, 2017, for the EU(s) in question, Respondent shall submit, to Ohio EPA, complete PTI applications.

4. By August 15, 2017, Respondent shall submit to Ohio EPA draft permit applications for EUs P002, P005, and P015. Respondent shall submit to Ohio EPA the final permit applications for EUs P002, P005, and P015 by September 15, 2017.

5. By August 22, 2017, Respondent shall submit to Ohio EPA, air dispersion modeling that demonstrates the air quality impact of the emissions of CCl₄ versus the IRIS 1×10^{-5} chronic risk factor and its applicable MAGLC and CHCl₃ versus its applicable MAGLC after the installation of the planned new thermal oxidizer with updated stack and emission parameters that reflect after-control operations.

6. By October 1, 2017, Respondent shall re-submit Title V fee emission reports utilizing the May of 2017 stack test data for the calendar years 2011 to 2016 using Ohio EPA's eBusiness Center: Air Services and thereafter pay the fees established by those reports in accordance with the invoices received from Ohio EPA.

7. By October 16, 2017, Respondent shall submit, to Ohio EPA, an updated and complete Title V application that accounts for all the planned and completed changes at the facility since the Title V application was revised on April 4, 2013. The application should include the updated information requested in Orders 1 to 3 above and the Air Services profile shall be updated to reflect the current information for all EUs at the facility.

8. By August 17, 2017, Respondent shall submit to Ohio EPA a revision to the compliance plan originally submitted on May 4, 2017. By March 29, 2018, Respondent shall submit, to Ohio EPA, via Air Services, documentation of the actions taken in response to the revised compliance plan and in order to demonstrate compliance with applicable federal rules (NESHAP, NSPS and MACT) relating to the EUs that are the subject of the revised compliance plan.

9. In the event Ohio EPA determines that additional information is needed to process the permit applications that are the subject of these Orders, Ohio EPA will notify Respondent by writing. Respondent shall provide Ohio EPA with the requested

information in timely manner and no later than the deadline specified in the written request.

10. Until such a time that the permanent control identified in the revised compliance plan (to be submitted in accordance with Order 8) is installed and demonstrating compliance with all applicable regulations and the IRIS 1×10^{-5} chronic risk factor for CCl_4 , but no later than March 28, 2018 Respondent may operate EU P002 a total of 14 days within any 28-day period. During this interim period, the schedule of operation of EU P002 within any 28-day period may vary. For example, Respondent may operate EU P002 on a 7-day on and 7-day off production schedule, on a continuous 14-day production schedule, or on a schedule that includes multiple individual operating periods that collectively total 14 days, but no more than 14 days. During this interim production period ending March 28, 2018, Respondent shall, by the 15th of each month, submit a monthly report, to Ohio EPA, of the operational run times and monitoring data collected to demonstrate compliance with the conditions modeled after the July 2017 performance tests.

11. During the first operational run of the chlorination's finishing unit, Respondent shall have the carbon drums tested for breakthrough analysis to satisfactorily demonstrate that the carbon is providing sufficient control of emissions for the proposed two days of use prior to being taken out of service and returned for recycling or proper disposal. The analysis performed on the carbon drums and justification for two-day operational periods for carbon drums shall be submitted to the Ohio EPA for review and approval prior to Respondent proceeding with a second operational run.

12. Respondent shall conduct an evaluation to determine if the facility exceeded the major source threshold (100 TPY) for one or more regulated NSR pollutants (OAC 3745-31-01 (NNNN)(2)) and triggered major stationary source classification. Each modification, pursuant to OAC 3745-31-01 (LLL), or installation for the EUs listed in the table in Finding #2 which occurred after the facility was classified as a major stationary source and within 5 years of the date of these Orders shall undergo an evaluation to determine if PSD review was required. Respondent shall submit to Ohio EPA, a report summarizing the PSD evaluation for each EU by December 31, 2017. Nothing in this paragraph is intended to limit the rights of Ohio EPA, to the extent provided by law, to require evaluation of any such modifications or installations that occurred more than 5 years prior to the date of these Orders, or to limit the rights of Respondent to contest any such requirement, and both Ohio EPA and Respondent reserve their rights with respect to any claim, cause of action or demand in law or equity relating to any modifications or installations that occurred more than 5 years prior to the date of these Orders.

13. Respondent shall submit to Ohio EPA, by February 28, 2018, a compliance plan addressing any PSD violations disclosed in the PSD evaluation report requested in Order 12 above.

14. Respondent shall pay the amount of two hundred thousand dollars (\$200,000) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Within thirty (30) 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 two hundred thousand dollars (\$200,000). The official check shall be submitted to Carol Butler, or her successor, together with a letter identifying the Respondent, to:

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

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 submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is as defined in OAC Rule 3745-33-03(D)(1) for a corporation, or a corporate officer who is in charge of a principal business function of Respondent.

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, operations by Respondent.

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

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio EPA
Southeast District Office
2195 Front Street
Logan, Ohio 43138
Attention: Melisa Witherspoon

and to:

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

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 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

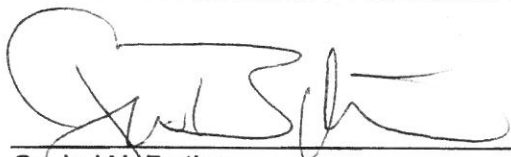
The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

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



Craig W. Butler
Director

8/4/17

Date

AGREED:

Dover Chemical Corporation

Jack L. Teat Jr.
Signature

8-4-17
Date

JACK L. TEAT JR
Printed or Typed Name

PRESIDENT
Title