

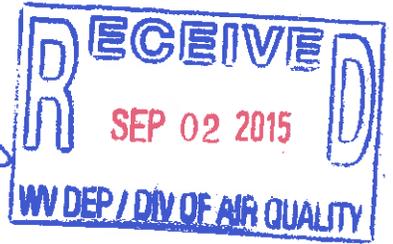


The Chemours Company
Washington Works
8480 DuPont Road
PO Box 1217
Washington, WV 26181

304-863-4000
chemours.com

August 31, 2015

CERTIFIED MAIL – 7014 1820 0001 2876 1192
RETURN RECEIPT REQUESTED



Mr. W. F. Durham, Director
Division of Air Quality
WV Dept. of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

IP: 10700182
Company: Chemours
Reg: 13-2654C
Facility: ww
Region: 3
Initials: ME

NON CONFIDENTIAL

RE: Permit Application Update for Permit R13-2654C – Addition of Toxic Air Pollutant Sources from Permit R13-2692A to R13-2654C

RE: Petition to Retire Permit R13-2692

Dear Mr. Durham:

Attached is a revision to the R13-2654C permit to add TAP emitting sources that are being moved from R13-2692A as a result of business reorganization activities at Washington Works. The relocation of the sources does not alter the magnitude of the sources, nor does it alter the composition of the sources. The relocation is to place the sources into an appropriate air permit to preserve the applicability record for the sources being moved. This requested permit change summarizes the needed changes in R13-2654 to reach the desired final state for the permit under the new business operational model.

The driving element for the addition of the sources from R13-2692 to R13-2654 is to preserve 45 CSR 27 regulatory requirements for selected affected sources. Because of business operational changes the need for the R13-2692 permit, which was established to allow commercial production of materials in nominally Research and Development (R&D) facilities, is no longer required. The facilities cover by R13-2692 will be operated strictly for R&D activities. Based on this change Chemours is requesting that the R13-2692 permit be retired after the modification to the R13-2654C permit, submitted here, has been approved.

We have discussed this permit change with your staff. Mr. M. Egnor has been very helpful in assisting us in navigating the task of processing the permits associated with the altered business operations mode.

Handwritten text in a box, possibly a title or header, including the word "Copy" and some illegible characters.

Four horizontal lines of handwritten text, likely a list or a set of instructions, with some illegible characters.

If there are questions or concerns with the application, please contact either John J. Mentink at (304) 863-2028 or john.j.mentink@usa.dupont.com or telephone me at (304) 863-4271.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Robert J. Fehrenbacher". The signature is fluid and cursive, with a large initial "R" and "J".

Robert J. Fehrenbacher
Plant Manager
Chemours Washington Works

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(1)

(1)

(1)

1. The first part of the document is a list of names and addresses of the members of the committee.



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
- CLASS I ADMINISTRATIVE UPDATE TEMPORARY
- CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
- SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office):
The Chemours Company FC, LLC

2. Federal Employer ID No. (FEIN):
46-5626518

3. Name of facility (if different from above):
Washington Works Facility

4. The applicant is the:
 OWNER OPERATOR BOTH

5A. Applicant's mailing address:
Building 1, Washington Works
Washington WV, 26181-1217

5B. Facility's present physical address:
8480 DuPont Road
Washington, WV 26181

6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? YES NO
 - If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A.
 - If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A.

7. If applicant is a subsidiary corporation, please provide the name of parent corporation:

8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? YES NO
 - If YES, please explain: Owns site
 - If NO, you are not eligible for a permit for this source.

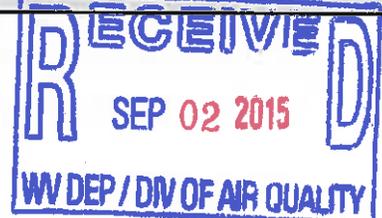
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Chemical Manufacturing

10. North American Industry Classification System (NAICS) code for the facility:
325199

11A. DAQ Plant ID No. (for existing facilities only):
107-00182

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
R13-2654C, R13-2692B, R13-3223, R30-107-00182-2011
Segment 11 of 14

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.



12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP as Attachment B**.

Take the Route 50 bypass **towards** Ohio from I-77. Exit the Route 50 bypass at the last exit in West Virginia. At the light **turn left** and continue on DuPont road for approximately ½ - ¾ mile. The main plant entrance will be visible on your right.

12.B. New site address (if applicable):

N/A

12C. Nearest city or town:

Parkersburg

12D. County:

Wood

12.E. UTM Northing (KM): 4346.8

12F. UTM Easting (KM): 442.3

12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:

This permit amendment is to move fur sources (22-S109, 22-S-202, 22-S208, 22-S-209) from Permit R13-2692B to permit R13-2654C to allow the retirement of R13-2692B permit.

14A. Provide the date of anticipated installation or change: 05/01/2015

- If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: Sources were added to R13-2692 in 12/2014.

14B. Date of anticipated **Start-Up** if a permit is granted. **Immediate:**14C. Provide a **Schedule** of the planned **Installation of/Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:

Hours Per Day 24 Days Per Week 7 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? YES NO17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).20. Include a **Table of Contents** as the first page of your application package.21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**).

- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.23. Provide a **Process Description** as **Attachment G**.

- Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.

- For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

- | | | |
|--|--|--|
| <input type="checkbox"/> Bulk Liquid Transfer Operations | <input type="checkbox"/> Haul Road Emissions | <input type="checkbox"/> Quarry |
| <input type="checkbox"/> Chemical Processes | <input type="checkbox"/> Hot Mix Asphalt Plant | <input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities |
| <input type="checkbox"/> Concrete Batch Plant | <input type="checkbox"/> Incinerator | <input type="checkbox"/> Storage Tanks |
| <input type="checkbox"/> Grey Iron and Steel Foundry | <input type="checkbox"/> Indirect Heat Exchanger | |
| <input checked="" type="checkbox"/> General Emission Unit, specify | | |

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

- | | | |
|--|---|--|
| <input type="checkbox"/> Absorption Systems | <input type="checkbox"/> Baghouse | <input type="checkbox"/> Flare |
| <input type="checkbox"/> Adsorption Systems | <input type="checkbox"/> Condenser | <input type="checkbox"/> Mechanical Collector |
| <input type="checkbox"/> Afterburner | <input type="checkbox"/> Electrostatic Precipitator | <input type="checkbox"/> Wet Collecting System |
| <input type="checkbox"/> Other Collectors, specify | | |

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

- Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

- If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "**Precautionary Notice – Claims of Confidentiality**" guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

- | | |
|--|---|
| <input type="checkbox"/> Authority of Corporation or Other Business Entity | <input type="checkbox"/> Authority of Partnership |
| <input type="checkbox"/> Authority of Governmental Agency | <input type="checkbox"/> Authority of Limited Partnership |

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. Certification of Information. To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned **Responsible Official** / **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE Robert J. Fehrenbacher (Please use blue ink) DATE: Aug. 31, 2015 (Please use blue ink)

35B. Printed name of signee: Robert J. Fehrenbacher		35C. Title: Plant Manager
35D. E-mail: robert.j.fehrenbacher@chemours.com	36E. Phone: 304-863-4305	36F. FAX: 304-863-4962
36A. Printed name of contact person (if different from above): David F. Altman		36B. Title: Sr. Env. Control Consult.
36C. E-mail: david.f.altman@chemours.com	36D. Phone: 304-863-4271	36E. FAX: 304-863-4862

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input checked="" type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input checked="" type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input checked="" type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input checked="" type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input checked="" type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
 - NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
 - NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
 - NSR permit writer should notify a Title V permit writer of draft permit,
 - Public notice should reference both 45CSR13 and Title V permits,
 - EPA has 45 day review period of a draft permit.

All the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

ATTACHMENT A

Business Certificate

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**E I DUPONT DE NEMOURS & COMPANY INC
8480 DUPONT RD PO BOX 1217
WASHINGTON, WV 26181-8398**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1030-4756

This certificate is issued on: 07/20/2010

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.
This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

ATTACHMENT B

Site Location Map

DIRECTIONS:

FROM AIRPORT:

1. Exit Airport Rd to Rte 31 S (right)
2. Rte 31 S to Rte 2 S (right)
3. Rte 2 S to Rte 68 S (Emerson Ave)

A) Washington Works

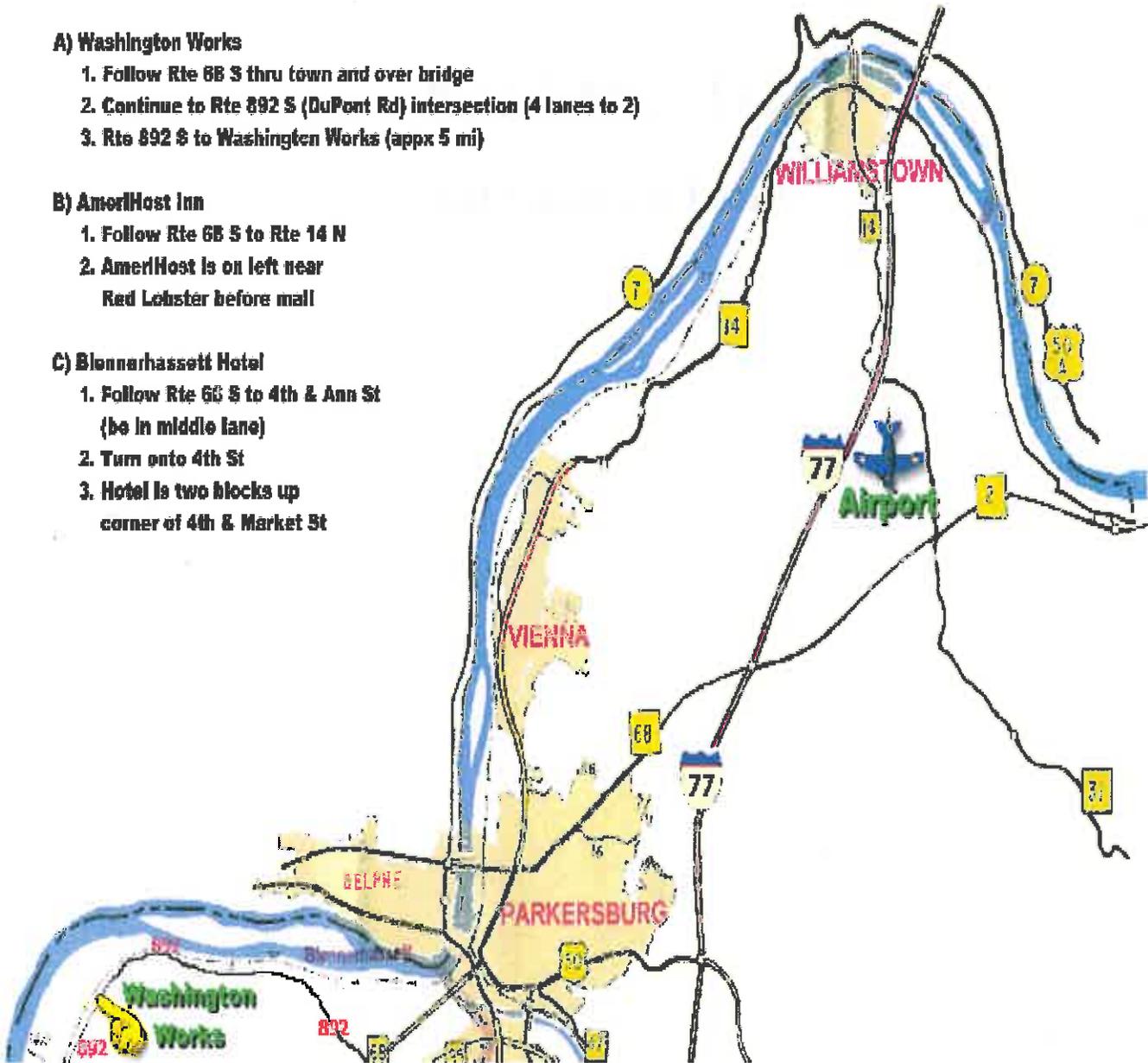
1. Follow Rte 68 S thru town and over bridge
2. Continue to Rte 892 S (DuPont Rd) intersection (4 lanes to 2)
3. Rte 892 S to Washington Works (appx 5 mi)

B) AmeriHost Inn

1. Follow Rte 68 S to Rte 14 N
2. AmeriHost is on left near Red Lobster before mall

C) Blennerhassett Hotel

1. Follow Rte 68 S to 4th & Ann St (be in middle lane)
2. Turn onto 4th St
3. Hotel is two blocks up corner of 4th & Market St



Attachment C – Installation and Startup Schedule

The changes proposed in this update of the R13-2654 involve actions to separate conditions from permit R13-2692A and preserve those conditions in this permit. The remaining terms and conditions of R13-2692A are to be eliminated when the permit (2692A) is retired due to a lack of business need for commercial product manufacturing in R&D facilities.

ATTACHMENT D

**Applicable Requirements & Methods of
Compliance**

Attachment D – Regulatory Discussion

This permit was originally designed to provide the construction program placement of the applicable requirements from the Consent Order CO-R27-92-19 for those sections of the Chemours Washington Works that do not have pre-existing R13 permits. No requirements of 45 CSR 27 are being eliminated and this permit (R13-2654) will work in conjunction with R13-3223 to ensure all applicable requirements found in the R27 Consent order are retained. This approach has not been altered. The current changes to this permit are to capture Research Laboratory Hoods that are currently in R13-2692 that is being retired. The following are still applicable –

45 CSR -2.3 :

"BAT", 'Best Available Technology' means an emissions limitation requiring the application of the maximum degree of reduction and control which the Director, on a case-by-case basis, determines is achievable for each toxic air pollutant which would be emitted from any stack, pipe, air pollution control device, or from any other equipment or facilities associated with a chemical processing unit. In the case of chemical processing units constructed or modified after the effective date of this rule, BAT may be less stringent than the most stringent emissions level that is achieved in practice by similar sources or processes. For existing chemical processing units, BAT may be less stringent than requirements for new or modified units. For all facilities, BAT shall represent the maximum degree of emission reduction that the Director determines is achievable taking into consideration the cost of achieving such emission reduction, and public health and environmental impacts. No BAT proposal shall be approvable that represents a level of control less stringent than any requirement for a chemical-processing unit under 40CFR61 or 40CFR60.

Best available technology was determined for the Consent Order CO-R27-92-19 to be the current aeration practices and wastewater treatment plant configuration. Emission limits were specified for the equipment used in the wastewater treatment plant (WWTP). No changes have been made to the WWTP that would that will increase emissions of a regulated Toxic Air Pollutant (TAP) such that a re-evaluation of BAT is necessary.

BAT for research and Development and Laboratory activities is defined as currently "no-control" due to the small amounts being handled and the small associated emissions with the activities.

45 CSR 27-3.1:

Except as provided in Sections 3.2 and 3.3 of this rule, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in the Table A shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

This permit application updates the register the current sources for methylene chloride in the Research and Development area as part of an effort to maintain the elimination of the R21 and R27 consent orders and to document the R27 application to the hoods being removed from R13-2692 prior to the retirement of the permit.

45 CSR 27-3.2:

A BAT program for a plant containing multiple chemical processing units or emission sources may, for each chemical, consider the overall effectiveness of emissions control measures within a unit or the plant. All BAT programs shall fully consider the additive or cumulative health and environmental impacts of multiple pollutant and multiple unit emissions.

Compliance with this was specified as part of the Consent Order CO-R27-92-19.

45 CSR 27-3.4:

All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other abnormal discharges of toxic air pollutants into the air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculations using other process measurements.

Chemours intends to continue the conformance to the terms of the Consent Order for 45 CSR 27 through the use of this permit to establish emission limits for the specific TAPs being emitted.

45 CSR 27-3.5:

The Director may on a case-by-case basis require the installation and proper operation of monitoring devices to continuously or intermittently determine the concentrations or mass emission rates of toxic air pollutants normally or routinely emitted to the air.

The waste water treatment plant (WWTP) uses a composite sampler to determine the daily average formaldehyde concentration at the inlet to the WWTP. This daily sample is used as part of a 30-day rolling average formaldehyde inlet concentration and, along with EPA developed WATER9 emissions estimation software, to determine the emissions from the WWTP for comparison to limitations delivered in the permit.

Monitoring for the emissions from the R&D and Laboratory facilities in Research and Development are hinged upon the tracking of the consumption of the specified TAPs in the activities. Because of the small volumes involved and because of the lack of controls the assumption is for all listed material used in the hood or activity is vented from the hood or activity. So tracking of consumption becomes tracking of release.

45 CSR 27-4.1:

All owners and operators subject to the requirements of this rule shall, by application of BAT, prevent and control fugitive emissions to the air of toxic air pollutants as a result of leakage from equipment in toxic air pollutant service including but not limited to, pump seals, compressor seals, valves, sampling connections, open-ended lines, safety relief valves, and flanges. In no event shall any equipment standard, program, or work practice less stringent than required under 40CFR61, Subpart V be deemed to represent BAT for control of toxic air pollutant emissions: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation or standard. Equipment to be used in toxic air pollutant service installed after the effective date of this rule shall, to the maximum extent possible, be designed and operated so as to prevent leaks of toxic air pollutants.

TAP concentrations in vessels, lines and other equipment in the areas covered by this permit are insufficient to trigger applicability of the leak detection and repair rules.

The same applies to R&D activities.

45 CSR 27-6.1:

Owners and operators of chemical processing units and/or wastewater treatment systems subject to this rule shall employ BAT to remove and control or destroy toxic air pollutants from wastewater at the source and/or apply BAT at the wastewater treatment plant to prevent or control the discharge of toxic air pollutants resulting from air stripping or evaporation: Provided, that this

provision shall not be more stringent than any specifically applicable federal rule or standard.

BAT was established for the WWTP and other covered units with the signing of the Consent Order CO-R27-92-19. The original permit application incorporated those requirements into an R13 permit format to allow the elimination of the R21 and R27 Consent Orders.

45 CSR 27-6.3:

The Director may exempt wastewater treatment units, tanks, or equipment from the requirement for BAT if the owner or operator can demonstrate to the satisfaction of the Director that air stripping or volatilization and emission to the air of toxic air pollutants from such sources does not occur or is insignificant from the standpoint of emissions and/or impact upon public health.

Chemours is not asking for exemption of the R&D facilities being added into this permit.

45 CSR 27-7.1:

Owners and operators of chemical processing units or facilities subject to the requirements of this rule shall employ BAT to prevent or control toxic air pollutant discharges in the loading and unloading of railcars and tank trucks with toxic air pollutants or material mixtures containing toxic air pollutants.

BAT was established for the WWTP and other covered units with the signing of the Consent Order CO-R27-92-19. This permit incorporated those requirements into an R13 permit format to allow the elimination of the R21 and R27 Consent Orders.

R&D does perform the covered activity.

45 CSR 27-9.1:

No person shall construct, modify, or relocate chemical processing unit(s) without first obtaining a permit in accordance with the provisions of W. Va. Code §22-5-11, and all applicable rules of this agency. If the construction of a new chemical processing unit or the modification of an existing chemical processing unit at a plant increases total plant emissions of a toxic air pollutant to a level in excess of that in Table A, all chemical processing units emitting the pollutant shall become subject to BAT requirements or alternatively total plant emissions of the toxic air pollutant shall be reduced below the level of Table A.

BAT was established for the WWTP and other covered units with the signing of the Consent Order CO-R27-92-19. This permit incorporated those requirements into an R13 permit format to allow the elimination of the R21 and R27 Consent Orders

45 CSR 27-10.3:

Written records shall be maintained that identify all pumps, compressors, pressure relief valves, valves, sampling connections, open-ended lines, and flanges of a chemical processing unit that are in toxic air pollutant service. These records shall record the results of all monitoring and inspections, emissions control measures applied and the nature, timing, and results of repair efforts.

BAT was established for the WWTP and other covered units with the signing of the Consent Order CO-R27-92-19. This permit incorporates those requirements into an R13 permit format to allow the elimination of the R21 and R27 Consent Orders.

This is not applicable to the units being added to this permit.

45 CSR 27-10.4:

The emission to the air of any toxic air pollutant resulting from an abnormal release or spill in excess of the following amounts shall be reported to the Director or his authorized representative not later than 24-hours after the chemical processing unit owner/operator has knowledge of such emission:

10.4.a. For ethylene oxide, and vinyl chloride, one (1) pound.

10.4.b. For acrylonitrile and butadiene, ten (10) pounds.

10.4.c. For all other toxic air pollutants, fifty (50) pounds.

The owner or operator shall file a written report with the Director stating the details of all such incidents resulting in the emission of more than fifty (50) pounds of any toxic air pollutant within seven (7) days of the occurrence. The owner/operator shall submit to the Director, at his request, records of all abnormal toxic air pollutant discharges to the air.

45 CSR 27-10.5:

Any period of failure or inoperability of air pollution control equipment required by this rule shall be reported to the Director not later than 24 hours after the

owner/operator has knowledge of such failure. Such reports shall be made in conjunction with necessary requests for variances as provided under Section 12.

45 CSR 27-11.2:

In proposing a BAT plan, the owner or operator must fully document and describe all potentially applicable emissions control measures or technologies and fully justify that any selected control measure providing less emission reduction than the most stringent measure achieved in practice for similar processes is technologically or economically infeasible for application to a particular chemical process unit requiring BAT.

BAT was established for the WWTP and other covered units with the signing of the Consent Order CO-R27-92-19. This permit incorporated those requirements into an R13 permit format to allow the elimination of the R21 and R27 Consent Orders.

45 CSR 27-11.3:

Upon approval by the Director of a compliance program, the owner or operator of a chemical processing unit or facility is not in violation of this rule so long as the approved or amended compliance program is observed: Provided, that the Director may re-evaluate toxic air pollutant emissions, control technology employed, and risks to public health at the end of a seven (7) year period following completion of each compliance program and may require additional or improved control measures.

Practical enforceability issues specific to 45 CSR 27 for the points being added to Section 6 of R13-2654:

Specific emission limitations established under the requirements of the Consent Order CO-R27-92-19 and Regulation 27 have been created. However, because the regulation does not have a "de minimus" emission exclusion all emissions of a triggered toxic air pollutant must be registered and reported. This creates a situation where practical enforceability must be taken into account in the establishment of monitoring, recordkeeping and reporting to demonstrate compliance with any permit term. Because the amount of emissions being added through this permit change is small Chemours is proposing that the additional units be added to Section 6 of the R13-2654 permit.

Chemours proposes to add a second source table to Condition 6.1.1 in r13-2654C to list the added sources.

Table 6.1.1.B

Source ID
22-S-109
22-S-202
22-S-208
22-S-209

Methylene Chloride Listing for addition to R13-2654 as Table 6.1.2.B

Source ID	Emission Point ID	TAP	Emission Rates	
			Pounds/Hour	Tons/Year
22-S-109	R022EF63	MeCL ₂	--	--
22-S-202	R022EF65	MeCL ₂	--	--
22-S-208	R022EF66	MeCL ₂	--	--
22-S-209	R022EF74	MeCL ₂	--	--
Sum Totals			0.01	0.03

The current Table listed in R13-2654C as Table 6.1.2 would be relabeled as Table 6.1.2.A and the equipment listing table in section 6.1.1 that corresponds to the 6.1.2.A would be labelled 6.1.1.A

Compliance for all these sources and emission points would consist of an annual verification of the emission amount of the listed toxic air pollutant as part of the Air Emission Inventory for the Chemours Washington Works. Unless Chemours specifically would calculate differently consumption of the regulated TAPs in the designated hoods or activities would translate into emission from those designated hoods or activities.

All Research and Development sources would use the procedures of interpretative rules 45 SCR 13 A and 45 CSR 13 B for determining emission rates and specific emissions associated with activities within the equipment. In these cases the emission limit in the table would be a ceiling amount allowed per hour or per year for activities emitting from the designated emission point.

45 CSR 13 Applicability:

The addition of the R&D hood limitations for methylene chloride from the R13—2692 permit is consist with, and compliments, the existing limitations listed in Section 6 of R13-2654C.

Management of Surfactant use in R&D Facilities:

A term will be added to the R13-2654C permit in Section 6 as term 6.1.6 which will read –

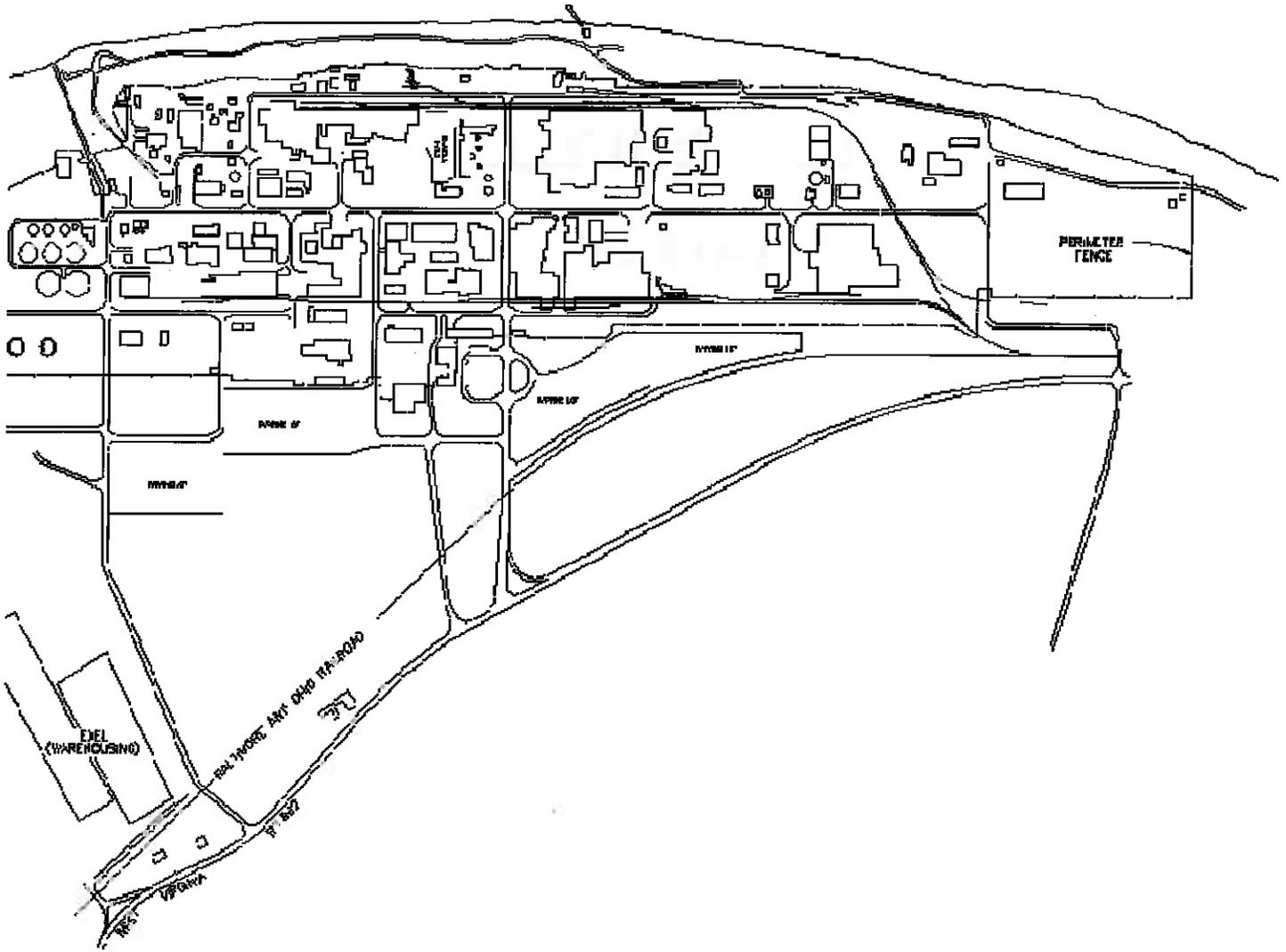
“The facilities shall not manufacture, use or purchase APFO”.

This is to preserve the elimination of APFO from use on-site at Chemours Washington Works.

ATTACHMENT E

Plot Plan

Plant Map

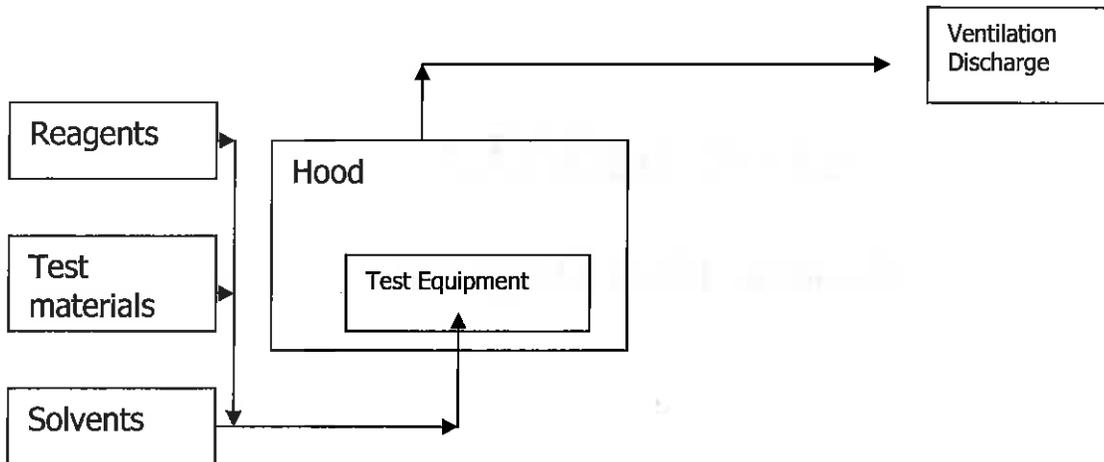


ATTACHMENT B - Plant

ATTACHMENT F

Process Flow Diagram

Generalized Hood Use Process Diagram



Laboratory hoods are primarily protective devices for Laboratory personnel. They are used to limit exposure of Laboratory personnel to chemicals that would be hazardous to them in high concentrations. By providing a constant air sweep from the room through the hood to the discharge the laboratory operator is prevented from close-up exposure to the materials being handled in the hood.

ATTACHMENT G

Process Description and Permit Background

Attachment G – Process Description of Permitted facilities.

A. Research and Development

Research and Development facilities at Washington Works consist of laboratory hoods, heat-aging test ovens and experimental extruders as well as small pilot plant operations utilized for research into specific process improvements.

General operations inside research hoods are directed at specific segments of the process being supported. As such the evolution of regulated materials (methylene chloride or formaldehyde under 45 CSR 27) may not be continuous in nature and may be closely linked to the process being supported at that moment. Hoods are used to ensure the safety of personnel performing the experiments by providing a negative pressure environment inside the hood area. The gasses that are emitted from the process being experimental apparatus are sucked away and discharged into the environment well away from other personnel in the plant. Because hoods are small units, and they are almost universally located inside of building structures, they do not handle large amounts of either formaldehyde or methylene chloride. The hoods are also not configured nor support by personnel for continuous operation with associated emissions of regulated pollutants since the supply of the pollutant is severely limited inside of the confines of the hood. Normal operations inside of a research hood would be from 7:00 AM to 5:00 PM on a 5-day per week basis.

Operations of the research and development heat-aging ovens and the R&D experimental extrusion lines are intermittent with only small amounts of Methylene Chloride being generated during the operation of the facilities.

ATTACHMENT H

Material Safety Data Sheets

SIGMA-ALDRICH**Material Safety Data Sheet**

Version 3.3
 Revision Date 01/11/2008
 Print Date 01/29/2008

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dichloromethane
 Product Number : 154792
 Brand : Sigma-Aldrich
 Company : Sigma-Aldrich
 3050 Spruce Street
 SAINT LOUIS MO 63103
 USA
 Telephone : +1 800-325-5832
 Fax : +1 800-325-5052
 Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Methylene chloride
 Formula : CH₂Cl₂
 Molecular Weight : 84.93 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Methylene chloride			
75-09-2	200-838-9	602-004-00-3	-

3. HAZARDS IDENTIFICATION**Emergency Overview****OSHA Hazards**

Target Organ Effect
 Harmful by ingestion.
 Irritant
 Carcinogen

Target Organs

Liver, pancreas, Blood

HMIS Classification

Health Hazard: 2
 Chronic Health Hazard: *
 Flammability: 0
 Physical hazards: 0

NFPA Rating

Health Hazard: 2
 Fire: 0
 Reactivity Hazard: 0

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Harmful if swallowed.

4. FIRST AID MEASURES**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES**Flammable properties**

Flash point 100.0 °C (212.0 °F)

Ignition temperature 556.1 °C (1,033.0 °F)

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.
Store under inert gas. Heat sensitive.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis

Methylene chloride	75-09-2	TWA	50 ppm 174 mg/m3	1996-05-18	US. American Conference of Governmental and Industrial Hygienists Threshold Limit Values for Chemical Substances in the Work Environment, Annual Reports for the Year 2004: Committees on Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs)
Remarks	Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. Substance identified by other sources as a suspected or confirmed human carcinogen. Refers to Appendix A – Carcinogens. 1996 Adoption				
		STEL	125 ppm	1997-04-04	US. Department of Labor - Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1000 Z-1-A
	See 1910.1052 Methylene chloride 63FR50711, 9/22/98 - Amended OSHA standard by adding provision for temporary medical removal protection benefits for employees and startup dates. 62 FR 66275, 12/18/97 - OSHA issued partial stay of start-up dates for compliance. See 29 CFR 1910.1052				
		TWA	25 ppm	1997-04-04	US. Department of Labor - Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1000 Z-1-A
	See 1910.1052 Methylene chloride 63FR50711, 9/22/98 - Amended OSHA standard by adding provision for temporary medical removal protection benefits for employees and startup dates. 62 FR 66275, 12/18/97 - OSHA issued partial stay of start-up dates for compliance. See 29 CFR 1910.1052				
		STEL	125 ppm	1997-04-04	US. Department of Labor - Occupational Safety and Health Administration; (OSHA) Standards, Toxic and Hazardous Substances, Subpart Z 29 CFR Part 1910.1000, Table Z-2
	See 1910.1052 Methylene chloride (Z37.23-1969)				
		TWA	25 ppm	1997-04-04	US. Department of Labor - Occupational Safety and Health Administration; (OSHA) Standards, Toxic and Hazardous Substances, Subpart Z 29 CFR Part 1910.1000, Table Z-2

See 1910.1052 Methylene chloride (Z37.23-1969)

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Colour	colourless

Safety data

pH	no data available
Melting point	-97.0 °C (-142.6 °F)
Boiling point	40.0 °C (104.0 °F)
Flash point	100.0 °C (212.0 °F)
Ignition temperature	556.1 °C (1,033.0 °F)
Lower explosion limit	12 %(V)
Upper explosion limit	19 %(V)
Vapour pressure	470.8 hPa (353.1 mmHg) at 20.0 °C (68.0 °F) 1,687.3 hPa (1,265.6 mmHg) at 55.0 °C (131.0 °F)
Density	1.32 g/cm ³
Water solubility	slightly soluble
Partition coefficient: n-octanol/water	log Pow: 1.25

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Alkali metals, Aluminum, Strong oxidizing agents, Bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Phosgene gas

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50 Oral - rat - 1,600 mg/kg

Remarks: Behavioral:Ataxia.

LC50 Inhalation - rat - 52,000 mg/m3

Irritation and corrosion

Skin - rabbit - Skin irritation - 24 h

Eyes - rabbit - Mild eye irritation - 24 h

Sensitisation

no data available

Chronic exposure

Carcinogenicity - rat - Inhalation

Tumorigenic:Carcinogenic by RTECS criteria. Endocrine:Tumors.

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: Group 2B - The agent (mixture) is possibly carcinogenic to humans. (Methylene chloride)

NTP: Reasonably anticipated to be human carcinogens. (Methylene chloride)

OSHA: 19.101.052 (Methylene chloride)

Genotoxicity in vivo - rat - Oral

DNA damage

Signs and Symptoms of Exposure

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anesthetic effects, Difficulty in breathing, Headache, Dizziness, Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears., Effects due to ingestion may include:, Gastrointestinal discomfort, Central nervous system depression, Paresthesia., Drowsiness, Convulsions, Conjunctivitis., Pulmonary edema. Effects may be delayed., Irregular breathing., Stomach/intestinal disorders, Nausea, Vomiting, Increased liver enzymes., Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material., Abdominal pain

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Harmful if swallowed.
Target Organs	Liver, pancreas, Blood,

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

no data available

Ecotoxicity effects

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h
 NOEC - Cyprinodon variegatus (sheepshead minnow) - 130 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 1,682.00 mg/l - 48 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)**

UN-Number: 1593 Class: 6.1 Packing group: III
 Proper shipping name: Dichloromethane

IMDG

UN-Number: 1593 Class: 6.1 Packing group: III EMS-No: F-A, S-A
 Proper shipping name: DICHLOROMETHANE
 Marine pollutant: No

IATA

UN-Number: 1593 Class: 6.1 Packing group: III
 Proper shipping name: Dichloromethane

15. REGULATORY INFORMATION**OSHA Hazards**

Target Organ Effect, Harmful by ingestion., Irritant, Carcinogen

TSCA Status

On TSCA Inventory

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

	CAS-No.	Revision Date
Methylene chloride	75-09-2	1987-01-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Methylene chloride	75-09-2	1987-01-01

Pennsylvania Right To Know Components

Methylene chloride

CAS-No.
75-09-2Revision Date
1987-01-01**New Jersey Right To Know Components**

Methylene chloride

CAS-No.
75-09-2Revision Date
1987-01-01**California Prop. 65 Components**WARNING! This product contains a chemical known in the State of
California to cause cancer.

Methylene chloride

CAS-No.
75-09-2Revision Date
1992-10-26**16. OTHER INFORMATION****Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

ATTACHMENT I
Equipment List Form

1.0 Emission Units

Emission Point ID	Control Device ID	Emission Unit ID	Emission Unit description	Year installed
22-E-109	none	22-S-109	Laboratory Hood	1970
22-E-202	none	22-S-202	Laboratory Hood	1970
22-E-208	none	22-S-208	Laboratory Hood	1970
22-E-209	none	22-S-209	Laboratory Hood	1970
R022EF52	none	R022SB06	Hood	1950
R022EF63	none	R022SB17	Hood	1950
R022EF65	none	R022SB19	Hood	1950
R022EF66	none	R022SB20	Hood	1950
R022EF51	none	R022S-B05	Hood	1950
R022EF74	none	R022SB28	Hood	1950
R022EF115	none	R022SB36	Hood	1985
R022EF117	none	R022SB38	Hood	1985
R022EF118	none	R022SB40	Hood	1985
R022EF025	none	R022S-002	Extruder	1975
R022EF157	none	R022S-003	Vacuum System	1985
R022EF030	none	R022S-007	Extruder	1985
R022EF160	none	R022S-005	Vacuum System	1985
R022EF123	none	R022S-008	Extruder	1990
R022EF155	none	R022S-009	Vacuum System	1990
R022EF121	none	R022S-011	Extruder	1985
R022EF168	none	R022S-012	Vacuum System	1985
R022EF132	none	R022S-047	Local Vent	1985
480	none	P201	WWTP Tank	1973
480	none	P202	WWTP Tank	1973
480	none	P205	WWTP Mix Tank	1973
480	none	P206	WWTP Aeration Tank	1973
480	none	P207	WWTP Aeration Tank	1973
480	none	P208	WWTP Aeration Tank	1988
480	none	P209	WWTP Deaeration Tank	1980
480	none	P210	WWTP Clarifier Tank	1973
480	none	P211	WWTP Clarifier Tank	1973
480	none	P212	WWTP Clarifier Tank	1980
480	none	P214	WWTP Sump	1976
480	none	P215	WWTP Sump	1973
480	none	P218	WWTP Dewatering Pit	1996

EQUIPMENT LIST FORM FOR ADDITIONS

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
22-S-109	Laboratory Hood	none	none	22-E-109	Upward Vertical Stack
22-S-202	Laboratory Hood	none	none	22-E-202	Upward Vertical Stack
22-S-208	Laboratory Hood	none	none	22-E-208	Upward Vertical Stack
22-S-209	Laboratory Hood	none	none	22-E-209	Upward Vertical Stack

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

pward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

EQUIPMENT LIST FORM

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
22-S-109	Laboratory Hood	none	none	22-E-109	Upward Vertical Stack
22-S-202	Laboratory Hood	none	none	22-E-202	Upward Vertical Stack
22-S-208	Laboratory Hood	none	none	22-E-208	Upward Vertical Stack
22-S-209	Laboratory Hood	none	none	22-E-209	Upward Vertical Stack
R022S B06	Hood	none	none	R022E F52	Vertical Stack
R022S B17	Hood	none	none	R022E F63	Vertical Stack
R022S B19	Hood	none	none	R022E F65	Vertical Stack
R022S B20	Hood	none	none	R022E F66	Vertical Stack
R022S-B05	Hood	none	none	R022E F52	Vertical Stack

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

appropriate designation. Must match process flow diagram.² Number as 1c, 2c, 3c . . . or other appropriate designation. Must match process e . . . or other appropriate designation. Must match process flow diagram.⁴ Please add descriptors such as upward vertical stack, downward ef vent, rain cap, etc.

EQUIPMENT LIST FORM

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
R022S B28	Hood	none	none	R022E F74	Vertical Stack
R022S B36	Hood	none	none	R022E F115	Vertical Stack
R022S B38	Hood	none	none	R022E F117	Vertical Stack
R022S B40	Hood	none	none	R022E F118	Vertical Stack
R022S -002	Extruder	none	none	R022E F025	Vertical Stack
R022S -003	Vacuum System	none	none	R022E F157	Vertical Stack

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

ward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

EQUIPMENT LIST FORM

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
R022S-007	Extruder	none	none	R022E F030	Vertical Stack
R022S-005	Vacuum System	none	none	R022E F160	Vertical Stack
R022S-008	Extruder	none	none	R022E F123	Vertical Stack
R022S-009	Vacuum System	none	none	R022E F155	Vertical Stack
R022S-011	Extruder	none	none	R022E F121	Vertical Stack
R022S-012	Vacuum System	none	none	R022E F168	Vertical Stack
R022S-047	Local Vent	none	none	R022E F132	Vertical Stack
P201	WWTP Tank	none	none	480	Open Top Vessel
P202	WWTP Tank	none	none	480	Open Top Vessel
P203	WWTP Cooling Tower	none	none	480	Vertical Stack
P204	WWTP Cooling Tower	none	none	480	Vertical Stack

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

pward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

EQUIPMENT LIST FORM

Page ___ of ___

Revision 12/01/2000

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
P205	WWTP Mix Tank	none	none	480	Open Top Vessel
P206	WWTP Aeration Tank	none	none	480	Open Top Vessel
P207	WWTP Aeration Tank	none	none	480	Open Top Vessel
P208	WWTP Aeration Tank	none	none	480	Open Top Vessel
P209	WWTP Deaeration Tank	none	none	480	Open Top Vessel
P210	WWTP Clarifier Tank	none	none	480	Open Top Vessel
P211	WWTP Clarifier Tank	none	none	480	Open Top Vessel
P212	WWTP Clarifier Tank	none	none	480	Open Top Vessel
P214	WWTP Sump	none	none	480	Open top in-ground vessel
P215	WWTP Sump	none	none	480	Open top in-ground vessel
P223	Phosphoric Acid Tank (not-in-service)	None	none	480	Tank

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

r appropriate designation. Must match process flow diagram.

pward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

EQUIPMENT LIST FORM

Emissions Unit (Source)		Air Pollution Control Device		Emission Point	
ID No. ¹	Source	ID No. ²	Device Type	ID No. ³	Emission Type ⁴
R200S-023	Oven	none	none	R200E004	Vertical Stack
R217S-010	Oven	none	none	R217E003	Vertical Stack
R217S-011	Oven	none	none	R217E003	Vertical Stack
R217S-012	Oven	none	none	R217E003	Vertical Stack
R217S-013	Oven	none	none	R217E003	Vertical Stack

will be part of this permit application review, including previously unpermitted emissions units (sources) and air pollution control devices.

¹ appropriate designation. Must match process flow diagram.
² appropriate designation. Must match process flow diagram.
³ appropriate designation. Must match process flow diagram.
⁴ upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

ATTACHMENT J

EPDS Forms

ATTACHMENT K

Fugitive VOC Emissions Form

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS
<p>1.) Will there be haul road activities?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.</p>
<p>2.) Will there be Storage Piles?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.</p>
<p>3.) Will there be Liquid Loading/Unloading Operations?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.</p>
<p>4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.</p>
<p>5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.</p>
<p>6.) Will there be General Clean-up VOC Operations?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.</p>
<p>7.) Will there be any other activities that generate fugitive emissions?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.</p>
<p>If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."</p>

FUGITIVE EMISSIONS SUMMARY	All Regulated Pollutants-Chemical Name/CAS ¹	Maximum Potential Uncontrolled Emissions ²		Maximum Emissions ³ lb/hr
		lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads	Not Applicable			
Unpaved Haul Roads	Not Applicable			
Storage Pile Emissions	Not Applicable			
Loading/Unloading Operations				
Wastewater Treatment Evaporation & Operations	Formaldehyde (50-00-0) Methylene Chloride (Toluene Methanol Ethyl Acrylate Methyl Methacrylate Dimethylformamide Acrylic Acid n-hexane VOC	Shown on Individual equipment sheets	Shown on Individual equipment sheets	
Equipment Leaks		Does not apply		Does not apply
General Clean-up VOC Emissions				
Other				

¹ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, C Organics, O₃, NO, NO₂, SO₂, SO₃, etc. DO NOT LIST CO₂, H₂, H₂O, N₂, O₂, and Noble Gases.

² Give rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

³ Give rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁴ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

ATTACHMENT L

Emissions Unit Data Forms

APPENDIX L- Emission Unit Form

Emission Unit Description

Emission unit ID number: 22-S-109	Emission unit name: Lab hood	List any control devices associated with this emission unit: NA
---	--	---

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Exhaust hood in lab 109

Manufacturer: Buffalo Forge	Model number: NA	Serial number: NA
---------------------------------------	----------------------------	-----------------------------

Construction date: 1968	Installation date: 1970	Modification date(s): MM/DD/YYYY
-----------------------------------	-----------------------------------	--

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2830 ACFM

Maximum Hourly Throughput: 12,990 pph	Maximum Annual Throughput: 56,896 ton/yr	Maximum Operating Schedule: 8760 hr/yr
---	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO _x)	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM _{2.5})	NA	NA
Particulate Matter (PM ₁₀)	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO ₂)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering estimate</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See attachment D for list of applicable regulations.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. All records of checks will be kept for five years.

Are you in compliance with all applicable requirements for this emission unit? Yes No

APPENDIX L - Emission Unit Form

Emission Unit Description

Emission unit ID number:

22-S-202

Emission unit name:

Lab hood

List any control devices associated with this emission unit: NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Exhaust hood in lab 202

Manufacturer:
Buffalo Forge

Model number:
NA

Serial number:
NA

Construction date:
1968

Installation date:
1970

Modification date(s):
MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2830 ACFM

Maximum Hourly Throughput:
12,990 pph

Maximum Annual Throughput:
56,896 ton/yr

Maximum Operating Schedule:
8760 hr/yr

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?

Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating:

Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO _x)	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM _{2.5})	NA	NA
Particulate Matter (PM ₁₀)	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO ₂)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc).

Engineering estimate

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See appendix D for list of applicable regulations.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. All records of checks will be kept for five years.

Are you in compliance with all applicable requirements for this emission unit? Yes No

APPENDIX L - Emission Unit Form

Emission Unit Description

Emission unit ID number:
22-S-208

Emission unit name:
Lab hood

List any control devices associated with this emission unit: NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Exhaust hood in lab 208

Manufacturer:
Buffalo Forge

Model number:
NA

Serial number:
NA

Construction date:
1968

Installation date:
1970

Modification date(s):
MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2830 ACFM

Maximum Hourly Throughput:
12,990 pph

Maximum Annual Throughput:
56,896 ton/yr

Maximum Operating Schedule:
8760 hr/yr

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? Yes No

If yes, is it?

Indirect Fired Direct Fired

Maximum design heat input and/or maximum horsepower rating:

Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO _x)	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM _{2.5})	NA	NA
Particulate Matter (PM ₁₀)	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO ₂)	NA	NA
Volatile Organic Compounds (VOC)	0.000001	0.0000044
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering estimate</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See appendix D for list of applicable regulations.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. All records of checks will be kept for five years.

Are you in compliance with all applicable requirements for this emission unit? Yes No

APPENDIX L - Emission Unit Form

Emission Unit Description

Emission unit ID number: 22-S-209	Emission unit name: Lab hood	List any control devices associated with this emission unit: NA
---	--	--

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Exhaust hood in lab 209

Manufacturer: Buffalo Forge	Model number: NA	Serial number: NA
---------------------------------------	----------------------------	-----------------------------

Construction date: 1968	Installation date: 1970	Modification date(s): MM/DD/YYYY
-----------------------------------	-----------------------------------	--

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 2830 ACFM

Maximum Hourly Throughput: 12,990 pph	Maximum Annual Throughput: 56,896 ton/yr	Maximum Operating Schedule: 8760 hr/yr
---	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO _x)	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM _{2.5})	NA	NA
Particulate Matter (PM ₁₀)	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO ₂)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>Engineering estimate</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See appendix D for list of applicable regulations.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. All records of checks will be kept for five years.

Are you in compliance with all applicable requirements for this emission unit? Yes No

ATTACHMENT M

APCD Data Forms

There are no Air Pollution Control Devices associated with the sources removed from the R13-2692 permit and transferred to the R13-2654 permit.

ATTACHMENT N

Supporting Emission Data and Calculations

Calculations are documented in the original application for R13-2654 for those units not removed or relocated during the inter-permit transfers associated with the reorganization of the Washington Works Site.

RESEARCH PPL AIR EMISSIONS PERMIT CALCULATIONS

EMISSION POINT	EMISSION SOURCES
22-E-109	22-S-109
22-E-202	22-S-202
22-E-208	22-S-208
22-E-209	22-S-209

AMOUNT PER
EMSSION POINT

Area Hoods & Surface Coater

Product Emission	Emission Rate (lbs/lb)	Extr. Rate (lbs/hr)	(A) (lbs/hr)	(A) (tn/yr)	State	Filter Efficiency %	Potential & Actual	
							Emission (E) (lbs/hr)	Annual Emission (tn/yr)
MAXIMUM EMISSIONS								
METHYLENE CHLORID	0.0000001	12,990	0.0013	0.0000006	V	NA	0.0013	0.0000006

EACH LAB HAS 1 GALLON OF SUBSTANCE PER YEAR, EMMISIONS BASED ON ALL EVAPORATING

BLOWER RATE 2830 ACFM
BLOWER RATE 169,800 ACFH

1 CUBIC FOOT OF AIR WEIGHS 0.0765 POUNDS

BLOWER RATE = 169,800ACFH x 0.0765 LB/FT^3 = 12,990 PPH

Product Emission	Rate (lbs/lb)	Rate (lbs/hr)	(A) (lbs/hr)	(A) (tn/yr)	State	Cyclone Efficiency	Emission Rate (C) (lbs/hr)	Annual Emission (D) (tn/yr)
LAB HOODS								
METHYLENE CHLORID	0.0000001	12,990	0.0013	0.0000006	V	NA	0.0013	0.0000006

ATTACHMENT O

Monitoring, Recordkeeping, Reporting and Testing

Monitoring, Recordkeeping, Reporting and Testing (MRRT) remain the same as in the original application documents for those sources and emission points already in the permit. Changes to MRR may be found in the proposed language for Section 6 of Permit R13-2654 found in Attachment Z.

Attachment S

Title V Permit Revision Information

Attachment P
Public Notice

No public notice is required for the changes proposed for this permit. All emission changes are the result of sources being transferred to other permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? Yes No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

This is the relocation of terms concerning Methylene Chloride handling Laboratory Hoods located in the R&D Title V segment. There will be a citation change as the hoods will be shifting from R13-2692 to R13-2654 in preparation for the retirement of R13-2692 due to commitment to not perform commercial manufacture in the Fluoropolymers research facilities. There is also an addition to the R13-2654 permit Section 6 a term restricting the "Use, Manufacture or Purchase" of APFO.

See Attachment Z for proposed Title V language.

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R13-3223	12/08/2014	Referenced
	/ /	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
	MM/DD/YYYY	

6. Change in Potential Emissions

Pollutant	Change in Potential Emissions (+ or -), TPY
This is a transfer of emission points between permits	There is no change in emissions for the site or Title V permit

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary	
Mark all applicable requirements associated with the changes involved with this permit revision:	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS (Subpart(s) _____)	<input type="checkbox"/> Section 112(d) MACT standards (Subpart(s) _____)
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input checked="" type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) ⁽¹⁾
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)
<p>⁽¹⁾ If this box is checked, please include Compliance Assurance Monitoring (CAM) Form(s) for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why Compliance Assurance Monitoring is not applicable:</p> <p style="margin-left: 40px;">Emission are too low to trigger applicability</p>	

2. Non Applicability Determinations
<p>List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.</p> <p><i>There no changes in the claims of non-applicability in the R&D Title V permit due to the R13-2654 being revised.</i></p>
<p><input type="checkbox"/> Permit Shield Requested <i>(not applicable to Minor Modifications)</i></p>

Attachment Z
Supplemental Information

7. Certification For Use Of Minor Modification Procedures (Required Only for Minor Modification Requests)

Note: This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows.

- i. Proposed changes do not violate any applicable requirement;
- ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;
- iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;
- v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;
- vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.

(Signed)	 <i>(Please use blue ink)</i>	Date:	<u>Aug. 31 2015</u> <i>(Please use blue ink)</i>
Named (typed):	Robert J. Fehrenbacher	Title:	Plant Manager

Note: Please check if the following included (if applicable):

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Compliance Assurance Monitoring Form(s) |
| <input type="checkbox"/> | Suggested Title V Draft Permit Language |

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

Table 6.1.2.B

Pollutant	Emission Rates	
	Hourly (Pounds/hour)	Annual (Tons/year)
Methylene Chloride	0.01	0.03

6.1.3 Emission sources and associated emission points affected by Section 6.0 of this permit and subject to 45 CSR 21, shall be subject to the standards and requirements set forth in R13-3223, and any amendments thereto.

6.1.4 Emission sources and associated emission points affected by Section 6.0 of this permit and subject to 45 CSR 27, shall be subject to the standards and requirements set forth in R13-3223, and any amendments thereto.

6.1.5 **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45 CSR 13-5.11]**

6.1.6 The permittee shall not purchase, use or manufacture Ammonium Perfluorooctanate (APFO) in facilities covered by this permit.

6.2 Monitoring Requirements

6.2.1 For the purposes of determining compliance with the emission limits set forth in section 6.1.2 of this permit, the permittee shall monitor Formaldehyde and Methylene Chloride emissions released from the R&D and Laboratory operations.

6.3 Testing Requirements

[Reserved]

6.4 Recordkeeping Requirements

6.4.1 Record of Monitoring. The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit, and the time of sampling or measurement.
- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses
- d. The analytical techniques or methods used

6.0 Source-Specific requirements – Research and Development Hoods

6.1 Limitations and Standards

6.1.1 Sources identified in tables 6.1.1.A and 6.1.1.B of this permit shall be operated in accordance to the limitations and requirements set forth in 45 CSR 13A or 45 CSR 13B. Operations shall be limited to Research and Development (R&D) and laboratory activities.

Table 6.1.1.A

Source IDs		
R022S002	R022S012	R022SB20
R022S003	R022S047	R022SB28
R022S007	R022SB05	R022SB36
R022S008	R022SB06	R022SB38
R022S009	R022SB17	R022SB40
R022S011	R022SB19	

Table 6.1.1.B

Source IDs
22-S-109
22-S-202
22-S-208
22-S-209

6.1.2 Toxic Air pollutants released from the sources identified in Tables 6.1.1.A and 6.1.1.B shall be limited to the combined maximum rates as shown in the respective Tables 6.1.2.A and 6.1.2.B of this permit.

Table 6.1.2.A

Pollutant	Emission Rates	
	Hourly (Pounds/hour)	Annual (Pounds/year)
Formaldehyde ¹	---	100
Methylene Chloride ¹	---	500

1. Per 45CSR13A-4.1.b.3, emission limits of toxic air pollutants shall be based on 45 CSR 13-2.17.c and / or 2.17.d, which establishes limits based on 10% of the amounts set forth in permit R13-3223, and does not address hourly emission rates.

- e. the results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

6.4.3 Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved
- b. Steps taken to minimize emissions during the event
- c. The duration of the event
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded.

- e. The cause of the malfunction
- f. Steps taken to correct the malfunction
- g. Any changes or modifications to equipment or procedures that would help prevent future occurrences of the malfunction.

6.4.4 To demonstrate compliance with the emission limits associated with the "Research and Development Activities Sources" as identified in Section 6.1.1 of this permit, the research facilities shall maintain a monthly record of the specific pollutant regulated and consumed by the source. This monthly consumption record will be used to generate a rolling 12-month annual record of use/emissions for comparison with limitations found in Tables 6.1.2.A and 6.1.2.B.

6.5 Reporting Requirements

[Reserved]