E. I. du Pont de Nemours and Company
Washington Works
Mail: P.O. Box 2800
Washington, WV 26181-1217

December 9, 2015

CERTIFIED MAIL – 7007 1490 0001 6676 6541
RETURN RECEIPT REQUESTED

Mr. W. Fred Durham, Director
Division of Air Quality
WV Department of Environmental Protection
601 57th Street
Charleston, West Virginia 25304

RE: Permit Determination Request for Relocation of Process Analytical Test Procedures

Dear Mr. Durham:

With this letter DuPont requests a permit determination of whether or not changes are needed for current Rule 13 and Rule 30 air permits to address the relocation of process testing at the Washington Works facility to move certain testing from a central lab to existing laboratories in the process areas.

The test procedures in question are presently conducted in the Central Laboratory which is subject to the Title V permit, R30-10700001-2011 Segment 13 of 14. The only permit limitation on emissions from the test procedures is for emissions of methylene chloride, a 45CSR27 Toxic Air Pollutant. Other emissions that result from testing are not addressed in that permit or in permits that cover the several different process areas. We believe that the limits were imposed for methylene chloride because when the Title V permit for the central lab was issued in 2003 the entire facility was subject to a Best Available Technology plan for the chemical. Because the methylene chloride is almost entirely emitted by the Fluoropolymers unit which is now part of The Chemours Company FC, LLC, we believe the relocation of the emissions related to process testing should not require an air permit approval.

Should you have any questions or concerns regarding the actions described in this letter or any related matter, please contact me at 304-863-2202, or Chris Shoop at 304-863-2133.

Very truly yours,

C. R. Hill
SHE Manager
DuPont Washington Works

I.D. No. 10700001 Reg. 13
Company DuPont
Facility WW
Initials mE Region 3
PD15-104

ENCLOSURE
CRH:ces/mlg

CC:Michel Egnor, Permitting
WVDEP - Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

E. I. du Pont de Nemours and Company
Shipping: 8480 DuPont Rd – Bldg 24
Washington, WV 26181

WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

PERMIT DETERMINATION FORM (PDF)

FOR AGENCY USE ONLY: PLANT I.D. # _____

PDF # _____ PERMIT WRITER: _____

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):
E. I. du Pont de Nemours and Company

2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE):
DuPont Washington Works

3. NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE:
3252111

4A. MAILING ADDRESS:
DuPont Washington Works
P.O. Box 2800
Washington WV 26181-1217

4B. PHYSICAL ADDRESS:
DuPont Washington Works
8480 DuPont Road, Building 24
Washington WV 26181

5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE **MAP** AS **ATTACHMENT A**): See Map - From Charleston take I-77 north to the Route 50. Turn West on to Route 50 and use the bypass around Parkersburg. At the DuPont Road Exit - exit and at DuPont Road turn Left. The plant is approximately ¼ - ½ mile on the right side.

5B. NEAREST ROAD:	5C. NEAREST CITY OR TOWN:	5D. COUNTY:
DuPont Road	Parkersburg	Wood
5E. UTM NORTHING (KM):	**5F. UTM EASTING (KM):**	**5G. UTM ZONE:**
4346.8331	442.3767	17

6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED:
Charles R. Hill

6B. TITLE:
SHE Manager

6C. TELEPHONE:	6D. FAX:	6E. E-MAIL:
(304) 863-2202	(304) 863-2190	Charles-R.F.Hill-1@dupont.com

7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY):
107 - 00001

7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19 AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY):
Central Lab No Reg 13 R30-10700001 Part 13 of 14
Site-wide R13-2617I

Please see Attachment B Process Description for the other potentially impacted permits.

7C. IS THIS PDF BEING SUBMITTED AS THE RESULT OF AN ENFORCEMENT ACTION? IF YES, PLEASE LIST: No

8A. TYPE OF EMISSION SOURCE (CHECK ONE):
☐ **NEW SOURCE** ☐ **ADMINISTRATIVE UPDATE**
☐ **MODIFICATION** ☒ **OTHER** (PLEASE EXPLAIN IN 11B)

8B. IF ADMINISTRATIVE UPDATE, DOES DAQ HAVE THE APPLICANT'S CONSENT TO UPDATE THE EXISTING PERMIT WITH THE INFORMATION CONTAINED HEREIN?
☒ **YES** ☐ **NO**

9. IS *DEMOLITION* OR PHYSICAL *RENOVATION* AT AN EXISTING FACILITY INVOLVED? ☐ **YES** ☒ **NO**

10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE:	10B. DATE OF ANTICIPATED START-UP:
Not Applicable	Not Applicable

11A. PLEASE PROVIDE A **DETAILED PROCESS FLOW DIAGRAM** SHOWING EACH PROPOSED OR MODIFIED PROCESS EMISSION POINT AS **ATTACHMENT B**.

11B. PLEASE PROVIDE A **DETAILED PROCESS DESCRIPTION** AS **ATTACHMENT C**.

12. PLEASE PROVIDE **MATERIAL SAFETY DATA SHEETS (MSDS)** FOR ALL MATERIALS PROCESSED, USED OR PRODUCED AS **ATTACHMENT D**. FOR CHEMICAL PROCESSE, PLEASE PROVIDE A MSDS FOR EACH COMPOUND EMITTED TO AIR.

13A. **REGULATED AIR POLLUTANT EMISSIONS:**

⇒ **FOR A NEW FACILITY,** PLEASE PROVIDE PLANT WIDE EMISSIONS BASED ON THE POTENTIAL TO EMIT (PTE) FOR THE FOLLOWING AIR POLLUTANTS INCLUDING ALL PROCESSES.

⇒ **FOR AN EXISTING FACILITY,** PLEASE PROVIDE THE PROPOSED CHANGE IN EMISSIONS BASED ON THE PTE OF ALL PROCESS CHANGES FOR THE FOLLOWING AIR POLLUTANTS.

PTE FOR A GIVEN POLLUTANT IS TYPICALLY BEFORE AIR POLLUTION CONTROL DEVICES AND IS COLLECTED BASED ON THE MAXIMUM DESIGN CAPACITY OF PROCESS EQUIPMENT.

POLLUTANT	**HOURLY PTE** (LB/HR)	**YEARLY PTE** (TON/YR) (HOURLY PTE MULTIPLIED BY 8760 HR/YR) DIVIDED BY 2000 LB/TON
PM	No Change	See Process Description
PM_{10}	0	0
VOCs	0	0
CO	0	0
NO_x	0	0
SO_2	0	0
Pb	0	0
HAPs (AGGREGATE AMOUNT)	0	0
TAPs (INDIVIDUALLY)* Methylene Chloride	0	0
OTHER (INDIVIDUALLY)*	0	0

* ATTACH ADDITIONAL PAGES AS NEEDED

13B. PLEASE PROVIDE ALL **SUPPORTING CALCULATIONS** AS **ATTACHMENT E**.

CALCULATE AN HOURLY AND YEARLY PTE OF EACH PROCESS EMISSION POINT (SHOWN IN YOUR DETAILED PROCESS FLOW DIAGRAM) FOR ALL AIR POLLUTANTS LISTED ABOVE INCLUDING INDIVIDUAL HAP'S (LISTED IN SECTION 112[b] OF THE 1990 CAAA), TAP'S (LISTED IN 45CSR27), AND OTHER AIR POLLUTANTS (E.G. POLLUTANTS LISTED IN TABLE 45-13A OF 45CSR13, MINERAL ACIDS PER 45CSR7, ETC.).

14. **CERTIFICATION OF DATA**

I, JAY VALVO (*TYPE NAME*) ATTEST THAT ALL THE REPRESENTATIONS CONTAINED IN THIS APPLICATION, OR APPENDED HERETO, ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE BASED ON INFORMATION AND BELIEF AFTER REASONABLE INQUIRY, AND THAT I AM A ***RESPONSIBLE OFFICIAL**** (*PRESIDENT, VICE PRESIDENT, SECRETARY OR TREASURER, GENERAL PARTNER OR SOLE PROPRIETOR*) OF THE APPLICANT.

SIGNATURE OF RESPONSIBLE OFFICIAL: _____

TITLE: PLANT MANAGER DATE: 12 / 8 / 15

** THE DEFINITION OF THE PHRASE '***RESPONSIBLE OFFICIAL***' CAN BE FOUND AT 45CSR13, SECTION 2.23.

NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS:

☒ **ATTACHMENT A** ☐ **ATTACHMENT B** ☒ **ATTACHMENT C** ☐ **ATTACHMENT D** ☒ **ATTACHMENT E**

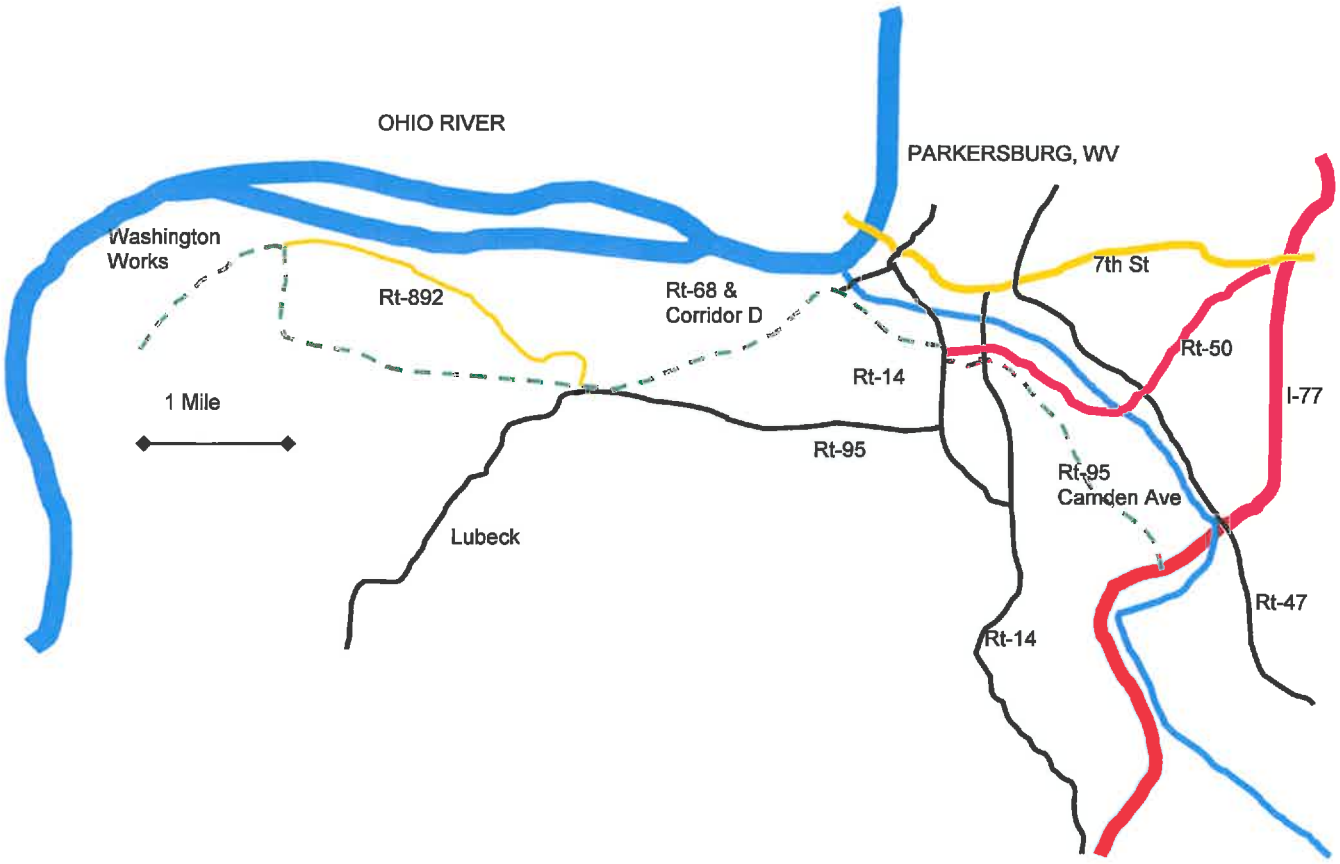
RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

THE PERMIT DETERMINATION FORM WITH THE INSTRUCTIONS CAN BE FOUND ON DAQ'S PERMITTING SECTION WEB SITE:

www.dep.wv.gov/daq

ATTACHMENT A

MAP to the Facility



From Interstate 77, take exit for Rt-95/Camden Avenue.
Proceed West until intersection with Rt-14 then turn right (north).
After about 1/4 mile turn left onto Corridor D Bypass entrance.
Follow the bypass to the exit just before the bridge.
Turn left (south) onto DuPont Rd, Rt-892.
Proceed approx. 1 mile to facility on right.

ATTACHMENT C

Process/Project Description

Relocation of Analytical Procedures and Related Emissions

DuPont Washington Works is a large production facility for several different product lines, one family of which is Zytel® nylon and several different brands of compounded polymer materials that are typically based on nylon. Historically, the different production units have maintained small laboratories located immediately in the production area for time-sensitive tests but for any complicated test methods have sent the samples to the Central Lab facility. At this time, DuPont is planning to relocate many of the present test procedures related to the Zytel® and compounded resins from the central facility to be performed in the area laboratories. This action will not involve test procedures for the Delrin® area (because they are performed within the Delrin® area) and the tests to be relocated do not cause emissions of formaldehyde.

We propose that the relocation of these test procedures from the central facility to existing laboratory facilities located at the production processes should not require any change to the present Reg 13 or Reg 30 permits. The proposed change will cause emissions of 11.9 lb/yr of VOC, 11.3 lb/yr of HAP, and 0.2 lb/yr of methylene chloride (included in the HAP number) to be relocated from vents associated with the Central Lab to be emitted instead from laboratory vents in the process areas.

For reference, the Central Laboratory is addressed by air permit R30-10700001 segment 13 of 14. The laboratory fume hoods are described collectively as sources L001 through L040 in condition 4.1.2 of the permit. They were assigned a limit to not exceed 0.04 tons per year (80 lb/yr) of methylene chloride on a rolling 12-month basis. No limitation was placed on the emissions of VOC or other HAP emitted from these vents. This facility was never issued a Reg 13 permit except that the methylene chloride restriction was described in R13-2617.

We believe the limit for methylene chloride was imposed because at the time the Title V permit was issued in about 2003 the Washington Works facility was subject to limits for emissions of Toxic Air Pollutants (TAPs) as determined in 45CSR27 because the facility had triggered applicability of 45CSR27 due emissions of methylene chloride from the Fluoropolymers unit that exceeded the applicability threshold. (The facility was also subject to 45CSR27 restrictions for formaldehyde, primarily from the Delrin® Acetal resins unit.) Because The Chemours Company FC, LLC (Chemours) was separated from DuPont on July 1, 2015 we believe the requirements for methylene chloride emitting sources should reside with the Chemours permitted units and only the requirements for formaldehyde emitting sources should remain with the DuPont permitted units.

The emission changes described below are estimated based on the performance of a certain number and type of tests. The quantities described are presently emitted from the Central Lab facility, though some additional repetitions were presumed in the estimates. The materials described will be emitted from existing laboratory fume hood vents that are not identified on the associated area-specific permits.

For the Zytel® Autoclaves Lab, R13-1145E, R30-10700001 Segment 5 of 14 - Section 5:

	CAS #	lb/yr
VOC		7.21
Methanol	67-56-1	2.21
Diethanolamine	111-42-2	0.03
Phenol	108-95-2	1.04
m-Cresol	108-39-4	3.38

For the Zytel® MPW Lab, R13-1686G, R30-10700001 Segment 5 of 14 - Section 6:

	CAS #	lb/yr
VOC		3.67
Methanol	67-56-1	2.76
Diethanolamine	111-42-2	0.03
Tetrachloroethylene	127-18-4	0.16
Phenol	108-95-2	0.63
Methylene Chloride	75-09-2	0.16

For the EPC-East Compounding Lab, R13-2244I, R30-10700001 Segment 6 of 14:

	CAS #	lb/yr
VOC		0.33
Methanol	67-56-1	0.24
Diethanolamine	111-42-2	0.02
Tetrachloroethylene	127-18-4	0.07

For the Specialty Compounding Lab, R13-1533K, R30-10700001 Segment 8 of 14:

	CAS #	lb/yr
VOC		0.63
Methanol	67-56-1	0.51
Diethanolamine	111-42-2	0.02
Tetrachloroethylene	127-18-4	0.04
Methylene Chloride	75-09-2	0.03

ATTACHMENT E

Calculations

Air Pollutant Emissions from Relocated Test Procedures

The calculations show estimated emissions associated with conduct of test methods in the production unit laboratories. For each test type, the volume of solutions to be used were determined from the test procedure and the number of test iterations was estimated based on expected annual use. The resulting volumes of solvents to be handled are described in the tables below for each of the four area laboratories.

Solvents that are not considered to be "VOC" are included in the annual volume but are not included in the VOC quantity. Non-VOC components excluded were: water, acetone, methylene chloride and tetrachloroethylene. All EPA listed Hazardous Air Pollutants are listed individually, and are included in the VOC quantity, unless they are excluded from the definition of VOC. Methylene chloride was the only Toxic Air Pollutant (TAP) that was identified; it is also a HAP but is not VOC.

Based on the annual solvent use and percentages the annual mass of each component was calculated using the component density. The density for VOC was presumed to be that of the majority solvent or was adjusted. Based on "solvent use" the amounts of solvent lost to evaporation was determined using engineering estimates and laboratory observation.

For the Zytel® Autoclaves Lab, R13-1145E, R30-10700001 Segment 5 of 14, Section 5:

	564,327	mL	Annual Solvent Use		
		Density	lb/yr Use	Evap Loss	lb/yr
VOC	81.1%	0.9	900.7	0.8%	7.21
Methanol	11.3%	0.792	110.3	2.0%	2.21
Diethanolamine	0.2%	1.01	2.9	1.0%	0.03
Phenol	15.7%	1.07	207.7	0.5%	1.04
m-Cresol	53.2%	1.03	675.5	0.5%	3.38

For the Zytel® MPW Lab, R13-1686G, R30-10700001 Segment 5 of 14, Section 6:

	261,490	mL	Annual Solvent Use		
		Density	lb/yr Use	Evap Loss	lb/yr
VOC	54.4%	0.9	282.08	1.3%	3.67
Methanol	30.2%	0.792	138.03	2.0%	2.76
Diethanolamine	0.5%	1.01	2.86	1.0%	0.03
Tetrachloroethylene	1.7%	1.62	16.07	1.0%	0.16
Phenol	20.4%	1.07	126.14	0.5%	0.63
Methylene Chloride	0.4%	1.33	3.28	5.0%	0.16

For the EPC-East Compounding Lab, R13-2244I, R30-10700001 Segment 6 of 14:

	12,117	mL	Annual Solvent Use		
		Density	lb/yr Use	Evap Loss	lb/yr
VOC	78.3%	0.792	16.57	2.0%	0.33
Methanol	55.6%	0.792	11.76	2.0%	0.24
Diethanolamine	5.7%	1.01	1.53	1.0%	0.02
Tetrachloroethylene	16.0%	1.62	6.93	1.0%	0.07

For the Specialty Compounding Lab, R13-1533K, R30-10700001 Segment 8 of 14:

	20,423	mL	Annual Solvent Use		
		Density	lb/yr Use	Evap Loss	lb/yr
VOC	89.5%	0.792	31.73	2.0%	0.63
Methanol	71.8%	0.792	25.45	2.0%	0.51
Diethanolamine	4.4%	1.01	1.98	1.0%	0.02
Tetrachloroethylene	5.0%	1.62	3.61	1.0%	0.04
Methylene Chloride	1.1%	1.33	0.63	5.0%	0.03