

Hand Delivered  
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EC#2045



The Chemours Company FC, LLC  
901 W DuPont Avenue  
Belle, WV 25015

**Belle Plant**

March 28, 2016



Director  
Division of Air Quality  
WV Department of Environmental Protection  
601 57th Street SE  
Charleston, WV 25304

RE: Belle Plant Permit Determination

Dear Director,

Enclosed please find a Permit Determination Form and applicable Attachments for a proposed change at the Belle Plant.

If there are any questions or comments, please contact me at (304) 357-1498 or [jillian.nicole.harris@chemours.com](mailto:jillian.nicole.harris@chemours.com)

Sincerely,

Jillian Harris  
Environmental Consultant

I.D. No. 03900001 Reg. 13  
Company Chemours  
Facility Belle Region 3  
Initials me  
PA16-025

Enclosures



WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY  
601 57<sup>th</sup> 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):

The Chemours Company FC, LLC

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

Belle Plant

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

325199

4A. MAILING ADDRESS:

901 West DuPont Ave, Belle WV 25015

4B. PHYSICAL ADDRESS:

Same

5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A):

Exit U.S. Route 60 at the Belle exit; turn right onto old Route 60; travel 500 feet west; turn left to enter the main gate of the DuPont Belle plant.

5B. NEAREST ROAD:

West DuPont Ave

5C. NEAREST CITY OR TOWN:

Belle

5D. COUNTY:

Kanawha

5E. UTM NORTHING (KM):

451.848

5F. UTM EASTING (KM):

4,232.589

5G. UTM ZONE:

17

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

Jillian Harris

6B. TITLE: Environmental Consultant

6C. TELEPHONE:

304-357-1498

6D. FAX:

304-357-1204

6E. E-MAIL:

jillian.nicole.harris@chemours.com

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

039 – 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):

R30-03900001-2011 (5 of 5)

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:

April 2016

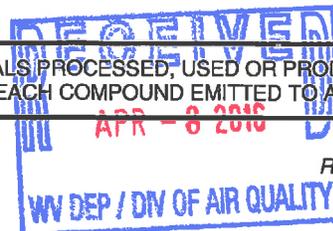
10B. DATE OF ANTICIPATED START-UP:

May 2016

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 PROCESSES, 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		
PM <sub>10</sub>		
VOCs		
CO		
NO <sub>x</sub>		
SO <sub>2</sub>		
Pb		
<b>HAPs</b> (AGGREGATE AMOUNT) Dimethyl sulfate		
<b>TAPs</b> (INDIVIDUALLY)*		
<b>OTHER – NH3</b>	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, TIMOTHY L. BYRD (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: 04 / 04 / 2016

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

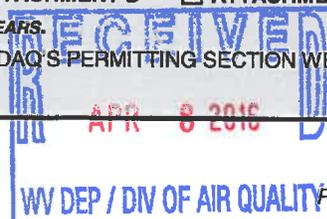
**NOTE:** PLEASE CHECK ENCLOSED ATTACHMENTS:

ATTACHMENT A     ATTACHMENT B     ATTACHMENT C     ATTACHMENT D     ATTACHMENT E

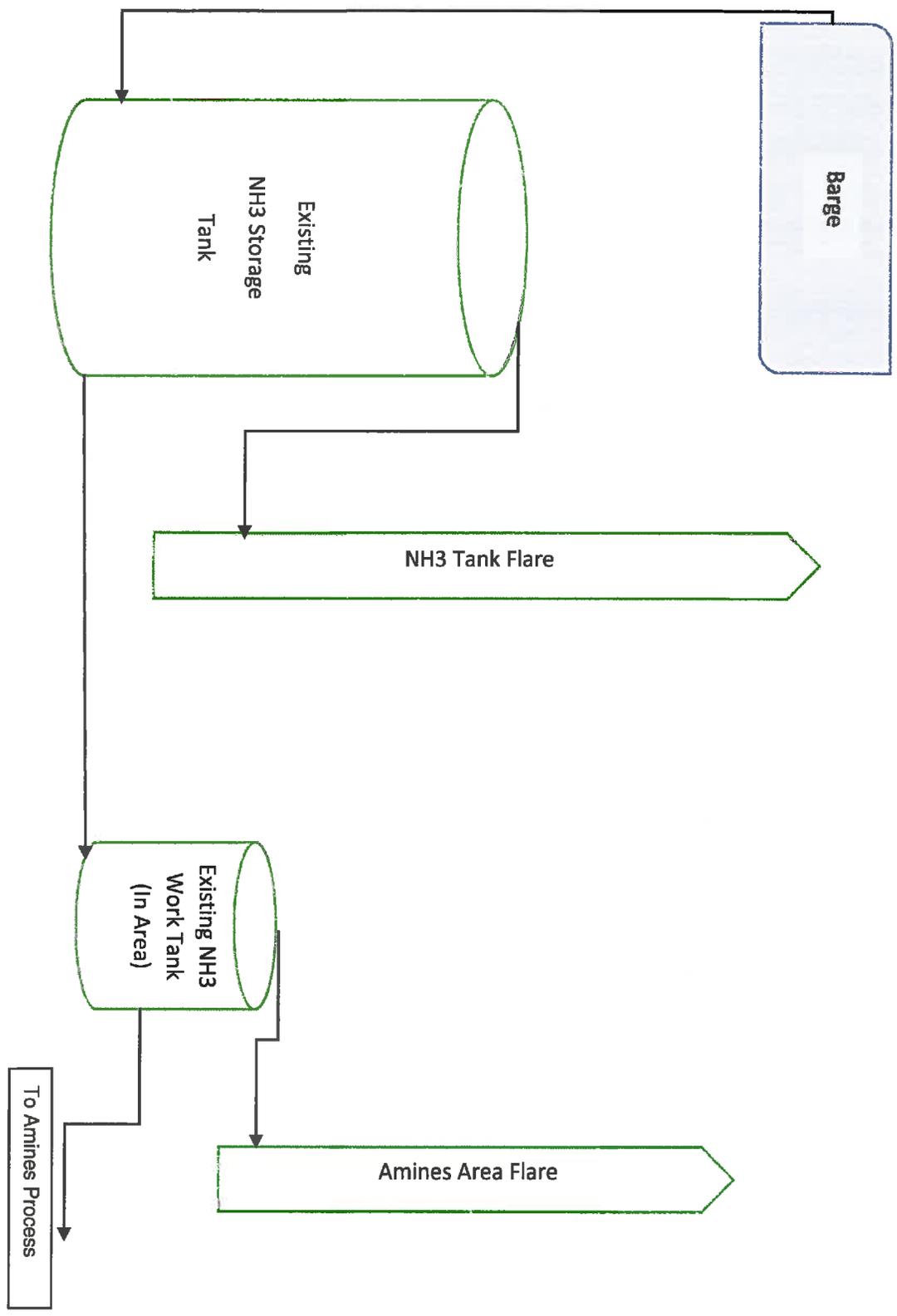
RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

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

[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)

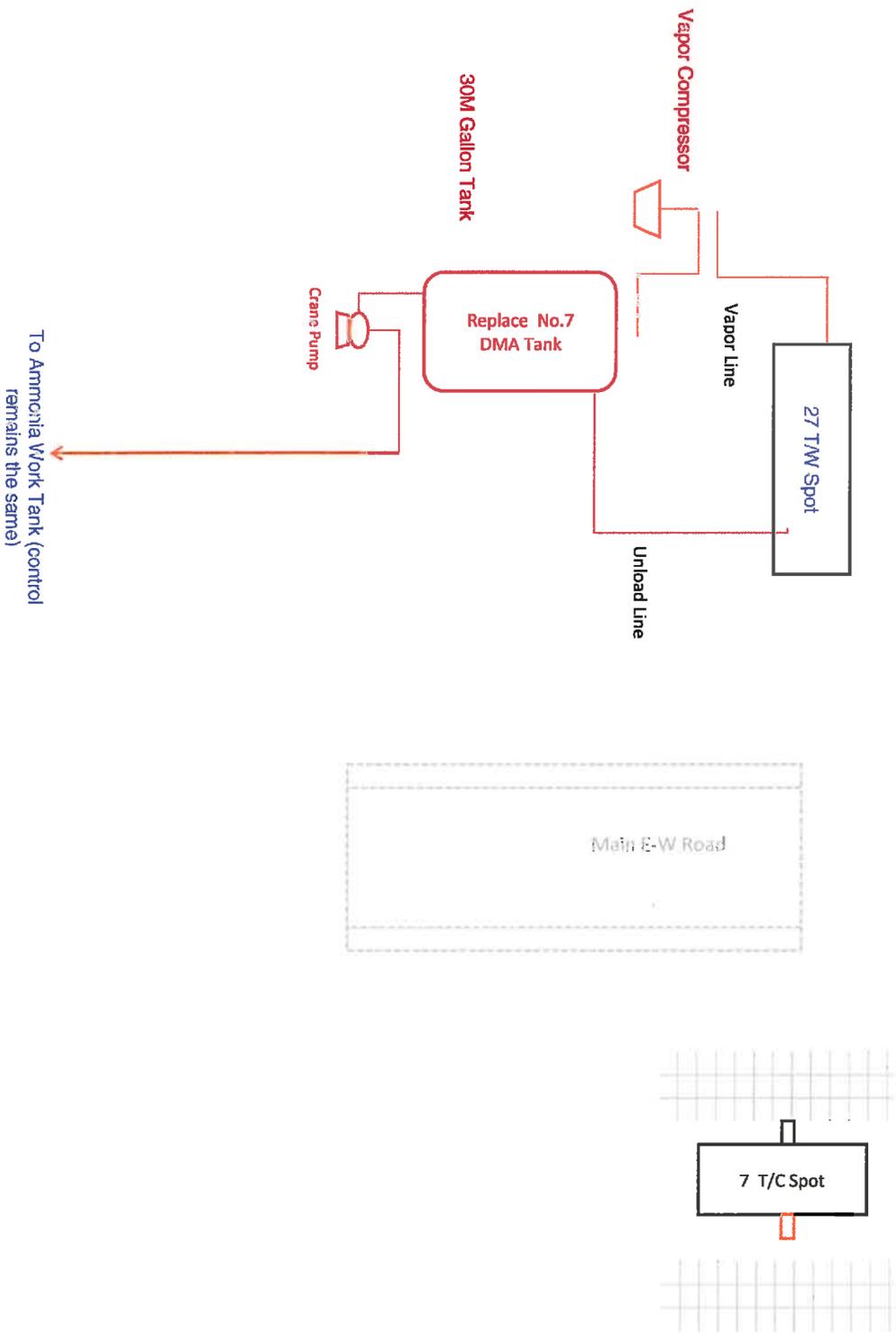


### Current NH3 Supply



### Proposed NH3 Supply Scenario during large tank inspection and maintenance:

**Red Lines and Equipment are new.**  
**Blue Equipment is existing.**



Attachment C  
Belle Plant 7 Tank Ammonia Project – Permit Determination

Ammonia (NH<sub>3</sub>) is used as an ingredient in the Methyl Amines Products (MAP) at the Belle Plant. The current supply system (shown in the Process Flow Diagram) utilizes a 7MM gallon refrigerated storage tank. During 2016 turnaround, the site plans to empty, clean, and inspect this existing refrigerated 7MM gallon tank. In order to store NH<sub>3</sub> and continue to run the process unit during the large tank outage, the site plans to construct a 30,000 gallon storage tank. The new NH<sub>3</sub> tank will be built on the site of an existing tank (#7 Dimethyl Amine Tank) which will be removed from service.

Currently, refrigerated NH<sub>3</sub> is shipped to the site in barges and unloaded from barges to the existing 7MM gallon NH<sub>3</sub> tank. The large tank vents to a flare located near the tank. NH<sub>3</sub> is transferred via pipeline from the large tank to a work tank in the process unit. The work tank vents to the amines process flare.

In order to remove the large tank from service for inspection, a new tank will be constructed for NH<sub>3</sub> storage. This tank will be located where the #7 Dimethyl Amines Tank was located. This tank has been removed from service. NH<sub>3</sub> will be unloaded from tank wagons using vapor exchange between the tank and the tank wagon. NH<sub>3</sub> will be transferred from the new tank to the existing work tank. Venting of the work tank will not change. The new NH<sub>3</sub> tank is a pressure vessel (normal operating pressure around 200 psig) and will not vent during normal operation.

By this request, we are asking the Department's determination as to the requirement for a construction permit for construction of the new 30,000 gallon NH<sub>3</sub> pressure vessel.

We believe that a construction permit is not required for the following reasons:

- There will be no increase in emissions because the total throughput of NH<sub>3</sub> to the amines process will not change and the venting of the work tank to the flare will remain the same.
- The new tank is not subject to NSPS because NH<sub>3</sub> is not a VOC. In addition, this tank is considered a pressure vessel with no venting due to the high vapor pressure of ammonia.
- The new tank is not subject to a MACT standard because NH<sub>3</sub> is not listed as HAP.
- The new tank and associated piping is not regulated by any LDAR requirements because NH<sub>3</sub> is not a VOC or HAP.

***Note (#7 Dimethyl Amines Tank is out of service and removed from this location.) If the new 30,000 gallon NH<sub>3</sub> pressure vessel is modified to an amines tank, this will be addressed in a new permit determination form at a later date.***