CERTIFIED MAIL 7011 2970 0001 8520 2021
Return Receipt Requested

EC#2045

The Chemours Company FC, LLC
A wholly-owned subsidiary of E. I. du Pont de Nemours and Company
901 W DuPont Avenue
Belle. WV 25015

Belle Plant

May 14, 2015

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) 357-1171 or leanne.schottle.wheeler@chemours.com

Sincerely,

LeAnne S Wheeler

LeAnne S. Wheeler
Environmental Coordinator

Enclosures

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):

The Chemours Company FC, LLC

RECEIVED
MAY 18 2015
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

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:	5C. NEAREST CITY OR TOWN:	5D. COUNTY:
West DuPont Ave	Belle	Kanawha
5E. UTM NORTHING (KM):	**5F. UTM EASTING (KM):**	**5G. UTM ZONE:**
451.848	4,232.589	17

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

6B. TITLE: Environmental Coordinator

6C. TELEPHONE:	6D. FAX:	6E. E-MAIL:
304-357-1171	304-357-1204	leanne.schottle.wheeler@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:	10B. DATE OF ANTICIPATED START-UP:
April 2016	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 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		
PM_{10}		
VOCs		
CO		
NO_x		
SO_2		
Pb		
HAPs (AGGREGATE AMOUNT) Dimethyl sulfate		
TAPs (INDIVIDUALLY)*		
OTHER – NH3	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: 05 / 14 / 2015

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

NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS:

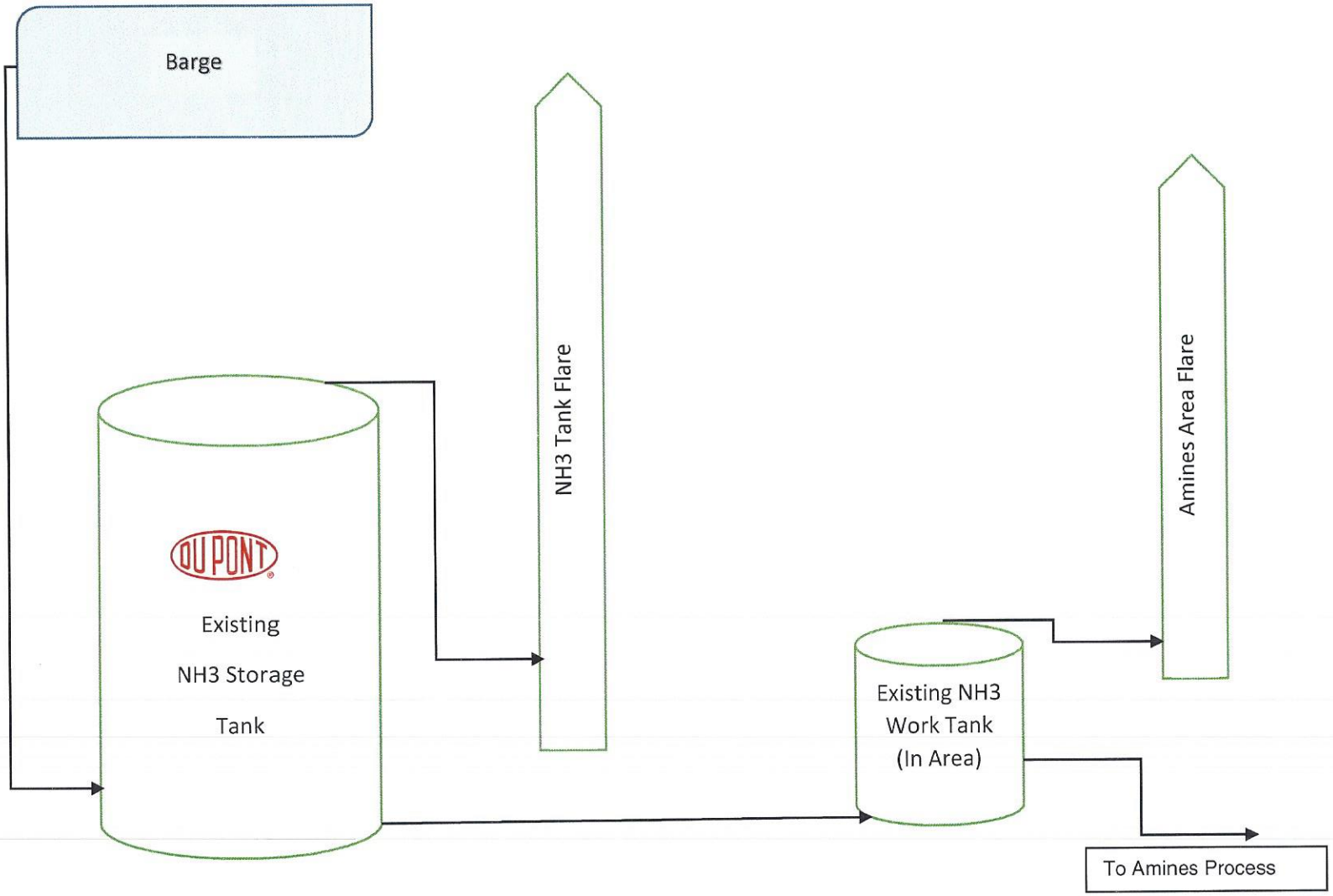
☐ **ATTACHMENT A** ☒ **ATTACHMENT B** ☒ **ATTACHMENT C** ☒ **ATTACHMENT D** ☐ **ATTACHMENT E**

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:

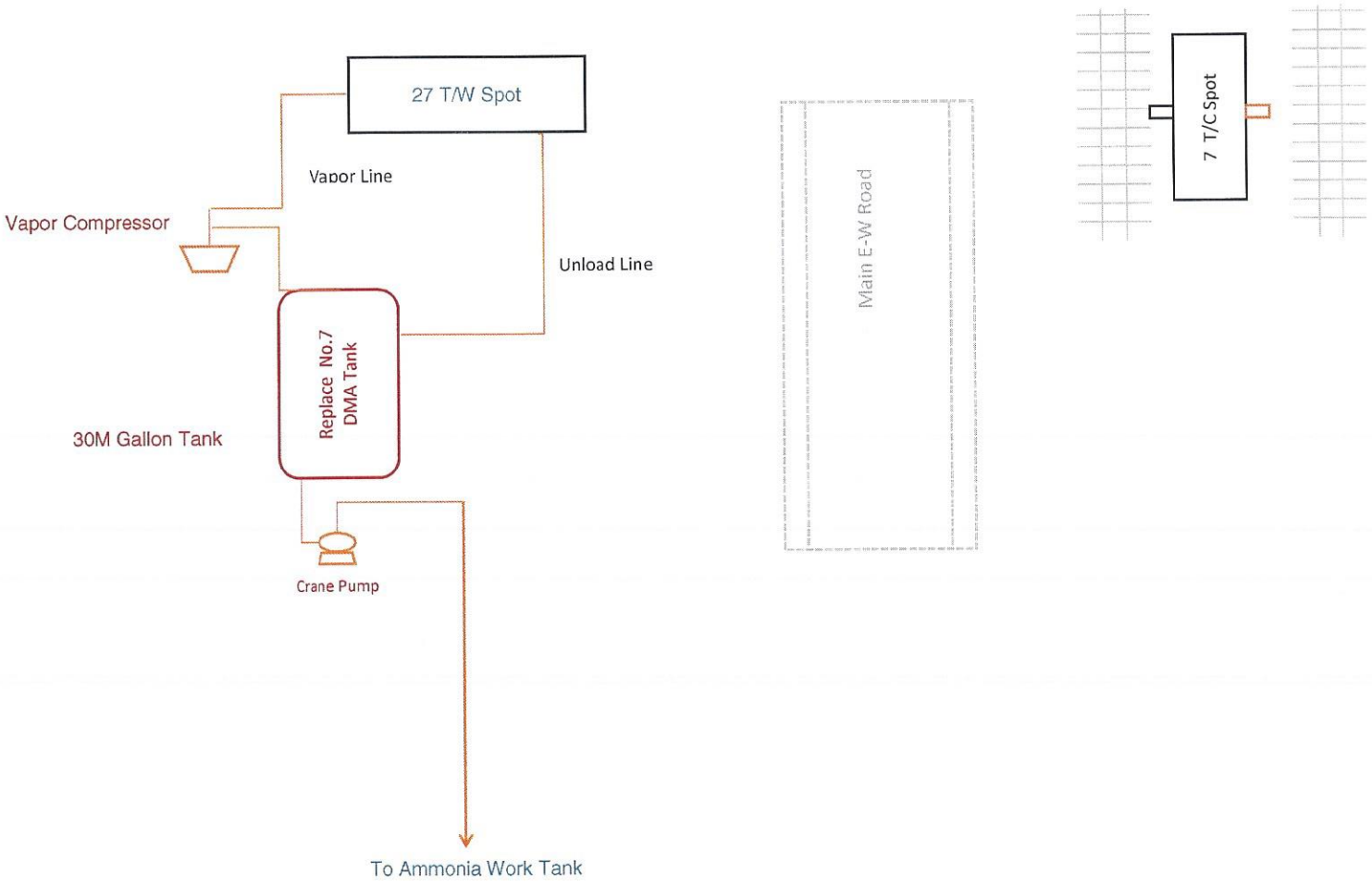
www.dep.wv.gov/daq

Current NH3 Supply



Proposed NH3 Supply Scenario during large tank inspection and maintenance:

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



Belle Plant 7 Tank Ammonia Project – Permit Determination

Ammonia (NH3) 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 storage tank. During 2016 the site plans to empty, clean, and inspect this tank. In order to store NH3 during the large tank outage, the site plans to construct a 30,000 gallon storage tank. The new tank will be built on the site of an existing tank (#7 Dimethyl Amine Tank) which will be removed. Once the large tank is returned to service, the new tank (30,000 gallon) will be put in dimethyl amine service (DMA).

By this request, we are asking the Department's determination as to the requirement for a construction permit for construction of the 30,000 gallon NH3 tank.

Currently, NH3 is shipped to the site in barges and unloaded from barges to the large NH3 tank. The large tank vents to a flare located near the tank. NH3 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 tank will be constructed for NH3 storage. This tank will be located in the process unit at the location of an existing amines tank. NH3 will be unloaded from tank wagons using vapor exchange between the tank and the tank wagon. NH3 will be transferred from the new tank to the existing work tank. Venting of the work tank will not change. The new NH3 tank will not vent during normal operation.

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

- There will be no increase in emissions because the total through put of NH3 will not change.
- The new tank is not subject to NSPS because NH3 is not a VOC.
- The new tank is not subject to a MACT standard because NH3 is not a HAP.

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

Ammonia
B0000132 Revised 13-OCT-1999

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Corporate MSDS Number	: DU000002
CAS Number	: 7664-41-7
Formula	: NH3
Molecular Weight	: 17.03
CAS Name	: AMMONIA
Grade	: ANHYDROUS

Tradenames and Synonyms

NH3
Anhydrous Ammonia
Ammonia, Anhydrous

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont Chemical Solutions Enterprise
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information	: 1-800-441-7515 (outside the U.S. 302-774-1000)
Transport Emergency	: CHEMTREC 1-800-424-9300(outside U.S. 703-527-3887)
Medical Emergency	: 1-800-441-3637 (outside the U.S. 302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
*AMMONIA	7664-41-7	99.5
WATER	7732-18-5	<0.5

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

Causes skin and eye burns; eye damage may be permanent, including blindness. Causes nose, throat, and lung irritation. Contact with liquid may cause frostbite. Gross overexposure may be fatal.

HUMAN HEALTH EFFECTS:

Skin contact may cause skin irritation with discomfort or rash. Skin contact with liquified compressed gas will cause frostbite and dermatitis. Eye contact may cause eye irritation with discomfort, tearing, or blurring of vision. Inhalation may cause irritation of the upper respiratory passages, or nonspecific discomfort such as headache. Ingestion may cause corrosive injury to the mouth, esophagus, and stomach, leading to pain, vomiting, and circulatory collapse. Perforation of the gastrointestinal tract can occur.

Higher exposures may lead to skin burns or ulceration; eye corrosion with corneal or conjunctival ulceration, or blindness; temporary lung irritation effects with possible modest initial symptoms such as cough, discomfort, difficulty in breathing or shortness of breath, followed in hours by severe shortness of breath requiring prompt medical attention; nonspecific discomfort such as nausea, headache, or weakness. Fatality may occur from gross overexposure. The compound has been infrequently associated with skin sensitization in humans.

The concentration of ammonia that is Immediately Dangerous to Life and Health (IDLH) is 300 ppm in air.

Individuals with preexisting diseases of the lungs, skin, or eyes may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

Treat for frostbite if necessary by gently warming the affected area.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Give large quantity of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

FIRE FIGHTING MEASURES

Flammable Properties

Flammable limits in Air, % by Volume

LEL	: 15
UEL	: 28
Autoignition	: 651 C (1204 F)

Vapor forms explosive mixture with air.

Fire and Explosion Hazards:

Presence of oil or other combustibles increase fire hazard. Follow appropriate National Fire Protection Association (NFPA) codes.

Extinguishing Media

Water Spray, Water Fog.

(FIRE FIGHTING MEASURES - Continued)

Fire Fighting Instructions

Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment. Shut off source of fuel, if possible and without risk. Use water spray. Cool tank/container with water spray. Runoff from fire control may be a pollution hazard.

Keep personnel removed and upwind of fire. Dilute released material with water spray from a distance to prevent splashing on personnel. Use water on ammonia gas. DO NOT put water on liquid ammonia. If allowed to evaporate or if leaks are dispersed in air, be sure gas/vapor is dissipated below flammable limits.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Keep upwind of leak - evacuate until gas has dispersed.

Initial Containment

Remove source of heat, sparks, flame, impact, friction or electricity. Allow to evaporate. Dissipate vapor with water spray. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Neutralize with dilute acids.

Accidental Release Measures

Comply with Federal, State, and local regulations on reporting releases. The CERCLA Reportable Quantity is 100 lbs.

Caution: Neutralization may generate heat from reaction of acid and ammonia.

DuPont Emergency Exposure Limits (EEL) are established to facilitate site or plant emergency evacuation, and to specify airborne concentrations of brief durations which should not result in permanent adverse health effects or interfere with escape. These limits are used in conjunction with engineering controls/monitoring and as an aid in

(ACCIDENTAL RELEASE MEASURES - Continued)

planning for episodic releases and spills. For more information, contact DuPont. The Emergency Exposure Limits (EEL) for ammonia are 300 ppm for 1 minute with a not to exceed ceiling of 300 ppm and 100 ppm for 2-60 minutes.

HANDLING AND STORAGE

Handling (Personnel)

Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

Handling (Physical Aspects)

Keep away from heat, sparks and flames.

Storage

Keep container in a cool place. Keep container tightly closed. Store in accordance with Federal Regulations. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Store in cool, well ventilated area.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use a totally enclosed system. Keep container tightly closed.

Do not mix with materials listed as incompatible or reactive (see Hazardous Reactivity section). Use sufficient ventilation to keep employee exposure below recommended exposure limits.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of material.

RESPIRATORS

A NIOSH approved air purifying respirator with an ammonia cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING

Wear impervious clothing to prevent ANY contact with this product, such as gloves, apron, boots or whole bodysuit made from neoprene, as appropriate.

Exposure Guidelines

Exposure Limits

Ammonia

PEL (OSHA)	:	50 ppm, 35 mg/m3, 8 Hr. TWA
TLV (ACGIH)	:	25 ppm, 17 mg/m3, 8 Hr. TWA STEL 35 ppm, 24 mg/m3
AEL * (DuPont)	:	25 ppm, 8 & 12 Hr. TWA 50 ppm, 15 minute TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	:	-33 C (-27 F) @ 760 mm Hg
Vapor Pressure	:	7,500 mm/Hg @ 25 C (77 F)
Vapor Density	:	0.6 (Air = 1.0) at 0 deg C (32 deg F)
% Volatiles	:	100 WT%
Solubility in Water	:	31.8 WT% @ 25 C (77 F)
Form	:	Gas at ambient conditions
Color	:	Colorless
Specific Gravity	:	0.682 @ -33.4C (-28.1F)

Odor : Intensely pungent; Threshold : 5 ppm;
Readily Detectable: 20-25 ppm

STABILITY AND REACTIVITY

Chemical Stability

Reacts with halogens, mercury, gold and silver to form explosive compounds.

(STABILITY AND REACTIVITY - Continued)

Incompatibility with Other Materials

Incompatible with strong oxidizers, calcium, hypochlorite bleaches, gold, silver, mercury, and their salts, halogens and acids.

Decomposition

Decomposition temperature: 450-500 C (842-932 F)

Decomposes by reaction with acids. Hazardous gases/vapors produced are hydrogen.

Polymerization

Polymerization will not occur.

Other Hazards

Alloys of copper and zinc and mercury thermometers should not be used in ammonia service.

TOXICOLOGICAL INFORMATION

Animal Data

Inhalation 1-hour LC50	:	7,338 ppm in rats
Oral LD50	:	350 mg/kg in rats

Ammonia is corrosive to skin and eyes. Toxic effects described in animals from exposure by inhalation at concentrations of 300 mg/m3 and greater include irritation of the respiratory tract with difficulty in breathing and eye irritation. At concentrations of 455 mg/m3 and greater, effects include respiratory and eye irritation, and corneal opacities. Limited acceptable information on mutagenicity showed that ammonia was negative in a bacterial cell culture.

ECOLOGICAL INFORMATION

Ecotoxicological Information

Aquatic Toxicity

96-hour LC50, rainbow trout: 0.39 mg/L

DISPOSAL CONSIDERATIONS

Waste Disposal

Do not flush to surface water or sanitary sewer system.

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State, and local regulations. If permitted, non-usable free liquid and contaminated water may be disposed of in an approved biological treatment system.

TRANSPORTATION INFORMATION

Shipping Information

DOT

Proper Shipping Name	: AMMONIA ANHYDROUS, LIQUIFIED
Hazard Class	: 2.2
I.D. No. (UN/NA)	: UN 1005
DOT Label(s)	: NONFLAMMABLE GAS
Special Information	: POISON-INHALATION HAZARD, ZONE D

DOT/IMO

Proper Shipping Name	: AMMONIA ANHYDROUS, LIQUIFIED
Hazard Class	: 2.3
UN No.	: 1005
DOT/IMO Label	: POISON GAS
Special Information	: POISON-INHALATION HAZARD, ZONE D

Reportable Quantity : 100 lb

Shipping Containers

Tank Trucks.

Barge

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Reported/Included.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute	: Yes
Chronic	: Yes
Fire	: No
Reactivity	: No
Pressure	: Yes

(REGULATORY INFORMATION - Continued)

LISTS:

SARA Extremely Hazardous Substance	-Yes
CERCLA Hazardous Material	-Yes
SARA Toxic Chemicals	-Yes

AMMONIA is specifically listed in Appendix A of 29 CFR 1910.119. Use of ammonia may require compliance with 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals.

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	: 3
Flammability	: 1
Reactivity	: 0
NPCA-HMIS Rating	
Health	: 3
Flammability	: 1
Reactivity	: 0

Personal Protection rating to be supplied by user depending on use conditions.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsible for MSDS	: MSDS Coordinator
>	: DuPont Chemical Solutions Enterprise
Address	: Wilmington, DE 19898
Telephone	: (800) 441-7515

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS