



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):

Praxair, Inc.

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

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

3 2 5 1 2 0

4A. MAILING ADDRESS:

901 W. DuPont Ave  
Belle WV 25015

4B. PHYSICAL ADDRESS:

901 W. DuPont Ave  
Belle, WV 25015

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

Travel east on US 60 from Charleston, exit US 60 at Belle. Turn right on West DuPont Avenue. Turn left into DuPont's visitor entrance. Praxair is wholly within DuPont's facility.

5B. NEAREST ROAD:

West DuPont Ave

5C. NEAREST CITY OR TOWN:

Belle

5D. COUNTY:

Kanawha

5E. UTM NORTHING (KM):

4232629N

5F. UTM EASTING (KM):

451430E

5G. UTM ZONE:

17

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

Scott Heath

6B. TITLE:

Environmental Specialist

6C. TELEPHONE:

856-723-7543

6D. FAX:

856-299-2524

6E. E-MAIL:

Scott\_heath@praxair.com

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

039 - 00059

7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19 AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY):

R13-0891A

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:

ASAP/ /2015

10B. DATE OF ANTICIPATED START-UP:

ASAP/ /2015

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.

MAR - 6 2015

**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		
HAPs (AGGREGATE AMOUNT)		
TAPs (INDIVIDUALLY)*		
OTHER (INDIVIDUALLY)*		

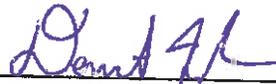
\* ATTACH ADDITIONAL PAGES AS NEEDED

**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, DERRICK FAUBER (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: OPERATIONS MANAGER DATE: 2 / 23 / 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](http://www.dep.wv.gov/daq)

**Request for Determination**

**Praxair – Belle CO Plant**

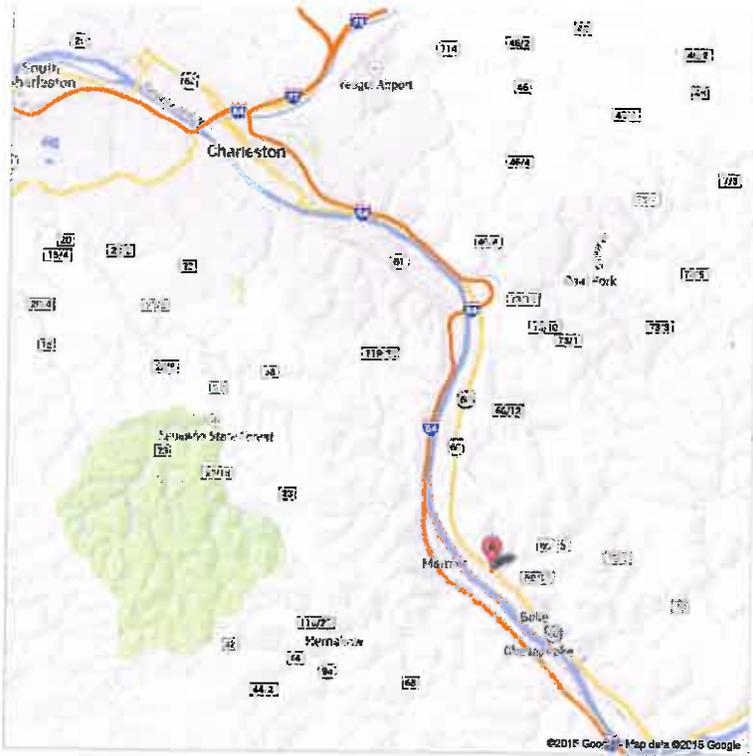
**DAQ Plant ID 039-00059**

**Attachment A**

**Map**

Google

Address **901 W Dupont Ave**  
**Belle, WV 25015**



Request for Determination

Praxair – Belle CO Plant

DAQ Plant ID 039-00059

Attachment B

Process Flow Diagram



**Request for Determination**

**Praxair – Belle CO Plant**

**DAQ Plant ID 039-00059**

**Attachment C**

**Description of Proposed Change**

## Attachment C

### Description of Proposed Change

Praxair is working with our customer DuPont to restore cooling water capacity to our CO Plant on DuPont's Belle facility. At present Praxair can only operate one of the two Syngas Compressors. DuPont is installing new river water discharge lines for one of the two compressors which will allow us to operate at or near the maximum production limit set forth in our Rule 13 air permit (R13-0891A).

Praxair requests a Determination from WVDEP on whether a proposed stand pipe would be required to be added to our air permit. The purpose of the stand pipe is to direct process gas to a safe location should a leak occur in the heat exchanger of our SynGas compressors. Scott Heath, Praxair's Environmental Specialist discussed this matter with Ed Andrews of the Division of Air Quality via telephone on January 26, 2015.

The cooling water piping will be new carbon steel pipe and will tie into a new river water header directly outside of the compressor building. The header will be routed north along the existing pipe rack until it reaches the De-aerator (DA) area where it will be transferred underground and sent to DuPont's open cooling water sewer hub located northwest of the reformer area. DuPont's cooling water sewer discharges to their outfall 017 directly to the Kanawha River under a NPDES Permit from WVDEP.

In addition, a 4 inch stand pipe will be installed at the DA area. The stand pipe will be constructed approximately 15 feet above the height of the DA deck, about 35 feet above grade. Carbon Monoxide (CO) MSA monitors will be installed at the end of the stand pipe and at the open cooling water sewer hub connection (at grade) to alert plant operators in our control room should process gases leak into the cooling water and vent pipe from a compressor leak. The proposed stand pipe will receive and direct hydrogen and CO gas to a safe location only in the event of a tube leak in the SynGas compressor (i.e., a malfunction of the compressor). Please note that Praxair maintains preventative and corrective maintenance procedures for our SynGas compressors to avoid tube leaks and equipment malfunctions.

The other Syngas Compressor will continue to be cooled by a water feed and return line that returns water back to DuPont's cooling water sewer system at the east side of our facility. No changes are proposed for the return water at this location.

Request for Determination

Praxair – Belle CO Plant

DAQ Plant ID 039-00059

Attachment D

Material Safety Data Sheets

(previously submitted with April 2007 application for Permit R13-0891A)