

# Fact Sheet



## For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-09900112-2014**  
Application Received: **May 24, 2013**  
Plant Identification Number: **099-00112**  
Permittee: **MPLX Terminal and Storage LLC**  
Facility Name: **Butane Storage**  
Mailing Address: **P.O. Box 1492; Catlettsburg, KY 41129**

*Revised: N/A*

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Physical Location: Kenova, Wayne County, West Virginia  
UTM Coordinates: 360.647 km Easting • 4,247.173 km Northing • Zone 17  
Directions: From I-64 East, take Exit 1 for US-52 S toward Kenova Ceredo. On US-52 S/W Virginia 75 E, turn right onto Co Hwy 1/16, turn left to stay on Co Hwy 1/16, turn left onto Novamount Rd, facility will be on the right.

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### Facility Description

This facility (SIC Code: 2869) and Catlettsburg Refining LLC's Catlettsburg Refinery are considered a single source for Clean Air Act permitting purposes. The Catlettsburg Refinery produces butane all year. During summer operation, the refinery produces an excess of butane which is transferred by pipeline and stored in the cavern until winter when there is a higher demand to blend it into gasoline. The cavern also has the ability to store butane delivered by railcar. Historically butane from this facility was stored at this facility in railcars and/or other butane caverns.

**Emissions Summary**

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2012 Actual Emissions<sup>1</sup></b>
Carbon Monoxide (CO)	0.00	0.00
Nitrogen Oxides (NO <sub>x</sub> )	0.00	0.00
Particulate Matter (PM <sub>2.5</sub> )	0.00	0.00
Particulate Matter (PM <sub>10</sub> )	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
Sulfur Dioxide (SO <sub>2</sub> )	0.00	0.00
Volatile Organic Compounds (VOC)	2.87	0.92

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2012 Actual Emissions<sup>1</sup></b>
1,3-Butadiene	2.18E-04	0.00
Benzene	4.37E-04	0.00

*Some of the above HAPs may be counted as PM or VOCs.*

*<sup>1</sup>The facility began operating on August 6, 2012, thus actual emissions data for 2012 reflect emissions for only part of a year.*

This facility does not have the potential to emit equal to or greater than 100,000 tons per year of carbon dioxide equivalent (CO<sub>2</sub>e) and 100 tons per year of greenhouse gases (GHGs) on a mass basis.

**Title V Program Applicability Basis**

This facility and Catlettsburg Refining, LLC’s Catlettsburg Refinery are considered a single source for Clean Air Act permitting purposes. The combined facility has the potential to emit 458.8 TPY of PM<sub>10</sub>, 2657.4 TPY of SO<sub>2</sub>, 2536.6 TPY of NO<sub>x</sub>, 4312.2 TPY of CO, 7322.5 TPY of VOC, 169.8 TPY of Benzene, 160.7 TPY of Cumene, 338.3 TPY of total HAPs, and 5,421,808.9 TPY of CO<sub>2</sub>. Due to the combined facility’s potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, over 25 tons per year of aggregate HAPs, and over 100,000 TPY of CO<sub>2</sub>e, MPLX Terminal and Storage LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

**Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR16	NSPS
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60, Subpart VVa	Equipment leaks in synthetics industry.
	40 C.F.R. Part 60, Subpart GGGa	Equipment leaks in petroleum refineries.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Fugitive particulate matter.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit <i>(if any)</i>
None	N/A	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

**Determinations and Justifications**

**40 CFR 60 Subpart GGGa -Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006:** 40 CFR 60 Subpart GGGa applies to all equipment leak components within a petroleum refining process unit for which construction, reconstruction, or modification commenced after November 7, 2006. The butane cavern equipment leak components that are located in West Virginia are part of the HF

Alkylation petroleum refining process unit permitted by the Kentucky Division for Air Quality (KDAQ). The HF Alky unit meets the definition of a process unit under 40 CFR 60 Subpart GGGa and has already triggered applicability of 40 CFR 60 Subpart GGGa. Therefore, the equipment leak components for the butane cavern are subject to 40 CFR 60 Subpart GGGa. According to 40CFR§60.592a (condition 4.1.1 of this permit), a facility subject to the provisions of 40 CFR 60, Subpart GGGa shall comply with the requirements of 40 CFR §§ 60.482-1a to 60.482-10a as soon as practicable, but no later than 180 days after initial startup.

The following portions of 40 CFR §§ 60.482-1a to 60.482-10a do not apply to this facility:

- 40CFR§60.482-2a: no pumps in light liquid service are used at this facility.
- 40CFR§60.482-3a: no compressors are used at this facility.
- 40CFR§§60.482-4a(a) and (b): no pressure relief devices in gas/vapor service that vent to the atmosphere are used at this facility.

The following portions of 40 CFR §§ 60.482-1a to 60.482-10a were included in this permit:

- 40CFR§60.482-1a(e): exemption requirements for equipment designated as being in VOC service less than 300 hr/yr (condition 4.1.3 of this permit).
- 40CFR§60.482-4a(c): requirements for pressure relief devices in gas/vapor service (condition 4.1.14 of this permit).
- 40CFR§60.482-5a: requirements for sampling connection systems (condition 4.1.15 of this permit).
- 40CFR§60.482-6a: requirements for open-ended valves or lines (conditions 4.1.4 through 4.1.9 of this permit).
- 40CFR§60.482-7a: requirements for valves in light liquid service (conditions 4.2.1 and 4.2.2 of this permit).
  - For a given process unit, the permittee may elect to follow the alternative requirements found in 40CFR §§ 60.483-1a, 60.483-2a, or 63.168 (condition 4.1.2 of this permit).
- 40CFR§60.482-8a: Requirements for pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service (condition 4.2.4 of this permit).
  - According to 40CFR§60.593(a)(g), connectors in gas/vapor or light liquid service are exempt from the requirements of 40CFR§60.482-11a (connectors in gas/vapor service and light liquid service), provided the owner or operator complies with 40CFR§60.482-8a for all connectors, not just those in heavy liquid service.
- 40CFR§60.482-9a: delay of repair requirements (conditions 4.1.10 through 4.1.13 and 4.2.3 of this permit).

Additionally, testing requirements of 40CFR§60.485a, recordkeeping requirements of 40CFR§60.486a, and reporting requirements of 40CFR§60.487a were included with this permit as conditions 4.3.1, 4.4.1, and 4.5.1.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

**45CSR7—To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations:** This rule does not apply since this facility does not emit smoke, particulate matter, or other gaseous matter. Also, this facility does not meet the definition of a manufacturing process in 45CSR§7-2.20.

**45CSR21—To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:** The only potentially applicable sections of this regulation are 45CSR§21-26 for Leaks from Petroleum Refinery Equipment and 45CSR§21-40 for Other Facilities that Emit Volatile Organic

Compounds. The butane cavern does not meet the definition of a petroleum refinery in 45CSR§21-2.55, since this facility is not engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through the redistillation, cracking, or reforming of unfinished petroleum derivatives; so 45CSR§21-26 does not apply. The butane cavern's aggregate maximum theoretical VOC emissions are below 100 TPY, so 45CSR§21-40 does not apply.

**45CSR27—To Prevent and Control the Emissions of Toxic Air Pollutants:** This facility does not meet the definition of “chemical processing unit” in 45CSR§27-2.4 since the butane stored in the cavern is below 5% benzene by weight, thus this rule does not apply.

**40 CFR 64—Compliance Assurance Monitoring:** This facility does not have any pollutant-specific emission units that satisfy the requirements of 40CFR§64.2(a), thus CAM does not apply.

### Request for Variances or Alternatives

None.

### Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

### Comment Period

Beginning Date: November 16, 2013  
Ending Date: December 16, 2013

### Point of Contact

All written comments should be addressed to the following individual and office:

Rex Compston, P.E.  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478  
[Rex.E.Compston@wv.gov](mailto:Rex.E.Compston@wv.gov)

### Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### Response to Comments (Statement of Basis)

The fact sheet was revised as recommended in the following comments from the EPA:

- 1) Page 2 of the fact sheet says “This facility is contiguous with Catlettsburg Refining, LLC’s Catlettsburg Refinery.” I would recommend saying that they are considered a single source for clean air act permitting purposes, since being contiguous is not the only criteria that needs to be met.
- 2) The “Non-Applicability Determinations” section on page 5 of the fact sheet says that 40 CFR part 63 CC is not applicable to the facility because, “Pursuant to 40CFR§63.640(p)(2), equipment leaks that are also subject to the provisions of 40 CFR 60, Subpart GGGa are required to comply only with the provisions specified in 40 CFR 60, Subpart GGGa. **Thus, this subpart does not apply.**” 40 CFR 63.640(p)(2) doesn’t exempt from subpart CC, it only says that compliance with GGGa is compliance with CC. I recommend removing CC from the “Non-Applicability Determinations” section.