

Fact Sheet



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

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the original Fact Sheet corresponding with the issuance of the initial Title V operating permit issued on January 3, 2006.

Permit Number: **R30-09900010-2006**
Application Received: **September 27, 2007**
Plant Identification Number: **09900010**
Permittee: **Sunoco, Inc. (R & M)**
Facility Name: **Neal Plant / Kenova**
Mailing Address: **200 Big Sandy Road, Kenova, WV 25530**

Permit Action Number: MM01 Revised: June 9, 2008

Physical Location:	Kenova, Wayne County, West Virginia
UTM Coordinates:	360.6 km Easting • 4,246.1 km Northing • Zone 17
Directions:	From I-64, take Exit #1. Go south on US-52 for two (2) miles to the stoplight at the "T" intersection. Turn right and go ¼ mile and turn left through railroad underpass. Make a left after underpass and go one (1) mile to the plant entrance on the right.

Facility Description

The Sunoco, Inc., Neal Plant, is a polypropylene resin manufacturing facility. The plant is made up of three main areas: the purification process (Areas 10 and 11), the polymerization process (Area 91), and product finishing/storage. In addition, there is a 155 MMBTU/hr coal-fired boiler.

This minor modification permit is to incorporate changes from R13-1830F, issued on April 1, 2008. The changes proposed by R13-1830F and R30-09900010-2006-MM01 are for an increase in the feed rate of VOC to the OSBL Flare for Area 11 from 500,000 lbs/yr to 2,500,000 lbs/yr, an increase in the feed rate of VOC to the ISBL Flare for Area 91 from 500,000 lbs/yr to 2,500,000 lbs/yr, and an increase in the hourly and annual emission limits for the OSBL Flare and ISBL Flare, emission points B542E and 91E, respectively.

Emissions Summary

Emission rate changes associated with this minor modification are as follows:

Pollutant	lb/hr	ton/yr
VOC	+ 26.78	+ 5.9
CO	+ 70.65	+ 15.57
NO _x	+ 12.67	+ 2.86
PM ₁₀	+ 1.63	- 1.9

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of SO₂, CO, VOC, and NO_x and over 25 tons per year of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutants and over 25 tons per year of aggregate HAPs, Sunoco, Inc. 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR6 Control of air pollution from combustion of refuse.
 45CSR13 Preconstruction permits for minor sources.
 45CSR30 Operating permit requirement.

State Only: None

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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, 45CSR15, 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>)
R13-1830F	April 1, 2008	None

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 B," which may be downloaded from DAQ's website.

Determinations and Justifications

This Title V minor modification includes the following changes:

- 1) **Changes approved under R13-1830F.** In the modification permit, R13-1830F, Sunoco, requested an increase in the feed rate of VOC to the OSBL Flare for Area 11 from 500,000 lbs/yr to 2,500,000 lbs/yr, an increase in the feed rate of VOC to the ISBL Flare for Area 91 from 500,000 lbs/yr to 2,500,000 lbs/yr, and an increase in the hourly and annual emission limits for the OSBL Flare and ISBL Flare, emission points B542E and 91E, respectively. These changes affect conditions 6.1.5, 6.1.6, and 6.1.9 of the facility’s Title V permit.

The OSBL Flare (B542E) manages the fugitive equipment leaks and non-fugitive VOC emissions from Process Areas 10, 11, 15, and 16 and some emissions from Process Area 91; and controls emissions due to maintenance of equipment. In the event of an emergency, the OSBL Flare can also be used to control emissions. The ISBL Flare (91E) is primarily an emergency flare, but also manages some of the non-fugitive VOC emissions from Process Area 91 along with emissions due to maintenance of equipment.

When the previous 45CSR13 permit applications were submitted, the emission estimates from the OSBL Flare were based on the VOC load created by the regeneration of the propylene dryer units. There was no accounting for intermittent venting, maintenance events from other sources, and continuous venting from the analyzer speed loops and back purges, so the amount of VOC load to the OSBL Flare was underestimated. The estimates of VOC load to the ISBL were also based on incomplete information. Permit R13-1830F attempts to address these issues by increasing the VOC feed rates to the OSBL and ISBL Flares and increasing the hourly and annual emission limits for the flares based on the increased VOC feed rates.

The increased VOC feed rates to the OSBL and ISBL Flares result in the following emission rate increases:

Emission Point	Pollutant	R13-1830E		R13-1830F		Change	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
91E (ISBL Flare)	VOC	1.19	0.74	6.68	3.69	+ 5.49	+ 2.95
	CO	3.21	2.00	17.65	9.78	+ 14.44	+ 7.78
	NO _x	0.79	0.49	3.27	1.91	+ 2.48	+ 1.42
	PM ₁₀	3.14	1.96	1.81	1.01	- 1.33	- 0.95
B542E (OSBL Flare)	VOC	1.19	0.74	22.48	3.69	+ 21.29	+ 2.95
	CO	3.20	1.99	59.41	9.78	+ 56.21	+ 7.79
	NO _x	0.75	0.47	10.94	1.91	+ 10.19	+ 1.44
	PM ₁₀	3.14	1.96	6.10	1.01	+ 2.96	- 0.95

The increased feed rate to the OSBL (B542E) and ISBL (91E) Flares increased the 45CSR§6-4.1 hourly emission limits. According to the engineering evaluation for R13-1830F, the 45CSR§6-4.1 hourly particulate matter emission limits for the OSBL Flare (B542E) are 54.40 lb/hr during normal operations and 20.72 lb/hr during emergency operations; and the 45CSR§6-4.1 hourly particulate matter emission limits for the ISBL Flare (91E) are 497.76 lb/hr during normal operations and 3.86 lb/hr during emergency operations. These 45CSR§6-4.1 hourly particulate matter emission limits are much less stringent than the R13-1830F emission limits of 6.10 lb/hr for the OSBL Flare (B542E) and 1.81 lb/hr for the ISBL Flare (91E).

- 2) **Addition of the Cooling Tower to the Section 1.0 Emission Units Table.** The cooling tower is existing and no changes in the physical structure, operation, or emissions are being proposed as part of this modification. The cooling tower was not included in the Section 1.0 Emission Units Table in the initial Title V permit because the cooling tower was considered an insignificant emission unit. Based on the cooling tower’s potential emissions, Sunoco has determined that the cooling tower is not an insignificant emission unit and should be included in the Section 1.0

- Emission Units Table. Although the cooling tower has been included in the table, it does not have any applicable requirements.
- 3) **Revision of the 45CSR2/45CSR10 Monitoring Plan.** Sunoco requested a change to their 45CSR2/45CSR10 Monitoring Plan which was included as Attachment B of the Title V permit. The revised monitoring plan changes the monitoring requirements for the baghouse pressure drop in Section I.B.2. It changes the monitoring from continuously to every six hours. The revised monitoring plan was approved by the DAQ on April 7, 2008.
 - 4) **Removal of the 40 C.F.R. 63, Subpart DDDDD placeholder language.** On July 30, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the Boiler MACT. As a result of the court's decision, a MACT for this source category will have to be implemented via a 112(j) case-by-case MACT determination or a subsequent 40 C.F.R. 63 proposal. Per DAQ's "Interim Guidance for Existing Sources – Boiler and Process Heater MACT Vacature," dated September 7, 2007, the DAQ does not intend to implement the provisions of the Boiler and Process Heater MACT for existing sources at this time. US EPA will be issuing guidance regarding the 112(j) case-by-case MACT determination of equivalent emission limitation in the future. Due to these facts, the 40 C.F.R. 63, Subpart DDDDD placeholder language has been removed.
 - 5) **Addition of the Active R13, R14, and/or R19 Table in Section 1.2 of the Title V permit.** The Title V permit boilerplate has been revised such that a new Section 1.2 Table has been added which lists all the active R13, R14, and/or R19 permits and their date(s) of issuance. Also, the underlying authority for any conditions from the R13, R14, and/or R19 permits has been changed to cite the original permit number in the Title V permit. These changes will eliminate the need to go through the entire Title V permit to change the R13, R14, and/or R19 permit numbers each time an R13, R14, and/or R19 permit is modified. The only required change will be to the Section 1.2 Table.

Non-Applicability Determinations

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

None.

Request for Variances or Alternatives

None.

Insignificant Activities

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

Comment Period

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

Carrie McCumbers
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

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.

Point of Contact

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

No comments were received.