

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 Fact Sheet corresponding with the Title V operating permit issued on August 18, 2015.

Permit Number: **R30-02900008-2015**
Application Received: **September 14, 2015**
Plant Identification Number: **03-54-02900008**
Permittee: **Ergon Corporation - West Virginia, Inc.**
Mailing Address: **P.O. Box 356, Newell, WV 26050**

Permit Action Number: *MM01* Revised: *August 16, 2016*

Physical Location: Newell, Hancock County, West Virginia
UTM Coordinates: 531.25 km Easting • 4495.35 km Northing • Zone 17
Directions: Two miles south of Newell on State Route 2.

Facility Description

Ergon Corporation - West Virginia, Inc. (EWVI) owns and operates a petroleum refinery (SIC 2911 and NAICS 32411) in Newell, West Virginia. The refinery processes crude oil and produces several petroleum products such as diesel, gasoline, kerosene, and crude oils. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week.

This modification incorporates the changes authorized by R13-2334Y, which include: installing a process-gas-fired 8.745 mmBtu/hr process heater; increasing the platformer capacity to 4,600 barrels per day; adding new equipment to recover LPG from fuel gas used at the refinery; and increasing the crude oil throughput for the existing crude oil tank group to 802,264,890 gallons per year.

Emissions Summary

With the proposed changes in Permit R13-2334Y and Title V minor modification MM01, the facility's changes to their potential to emit are:

Carbon Monoxide (CO)	-1.37 tpy
Nitrogen Oxides (NO _x)	-2.91 tpy
Particulate Matter (PM, PM ₁₀ , PM _{2.5})	-0.05 tpy
Sulfur Dioxide (SO ₂)	0.15 tpy
Volatile Organic Compounds (VOCs)	1.79 tpy
Hazardous Air Pollutants (HAPs)	0.13 tpy

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 250.31 tons per year of Carbon Monoxide, 204.65 tons per year of Nitrogen Oxides, and 172.46 tons per year of Volatile Organic Compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Ergon - West Virginia, 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:	45CSR2	Opacity and PM limits for boilers and heaters
	45CSR10	Limit on Sulfur emissions
	45CSR13	Construction permits
	45CSR16	40 CFR Part 60 Performance Standards
	45CSR30	Operating permit requirement
	40CFR60, Subpart Ja	NSPS for Petroleum Refineries
	40CFR60, Subpart Kb	NSPS for Storage Tanks
	40CFR60, Subpart GGGa	NSPS for Equipment Leaks

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>)
CO-SIP-95-1	January 9, 1995	
Consent Decree Civil No. 3:03CV114010S	September 30, 2003	
R13-2334Y	January 8, 2016	

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

This Title V minor modification includes the revisions authorized by NSR permit R13-2334Y. As a result of the 45CSR13 changes, the following changes were made to the Title V permit under minor modification MM01:

- The Emissions Units Table 1.1. was revised by increasing the design capacity of the Crude Distillation Unit, updating the year installed for Heater H-500S and Tanks 4060 and 4061, and adding the Platformer Expansion Fugitives (PL-FUG) and Y-Grade NGL Fugitives (YNGL-FUG)
- Section 1.2, for "Emission Units and Active R13, R14, and R19 Permits" was updated to R13-2334Y, with an issued date of January 8, 2016.
- Condition 3.1.14. was revised to include R13-2334Y to correspond with R13-2334Y, Condition 2.5.1.
- Condition 3.4.4. was revised to correspond to R13-2334Y, Condition 4.4.2.
- The Applicable Rules Table in Section 4.0 was revised to include the changes made for H-500S.
- The Table in Condition 4.1.22. was revised so the emission limits agree with R13-2334, 4.1.22.
- The headings for Conditions 4.1.12., 4.1.26., 4.2.9., 4.2.14., 4.4.6., 4.4.7., 4.4.16., 4.5.7., and 4.5.8. were changed to include or remove H-500S, as applicable.
- A heading was added for Testing Condition 4.3.1. to indicate it applies to H-101R, H102R, H-500S, and H-501R.
- Section 6.0 heading was changed to include PL-FUG and YNGL-FUG.
- The crude oil charge rate in Condition 6.1.1. was revised.
- Condition 6.1.4. was revised to correspond to the changes made in R13-2334Y, Condition 6.1.4.
- The crude oil throughput in Condition 7.1.1. for tanks 4000, 4001, 4060, and 4061 was revised.
- The Table in Condition 7.1.2. was changed to agree with R13-2334Y, Condition 7.1.2.

40 CFR 60, Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007 - Subpart Ja of 40 CFR 60 is for petroleum refineries at which construction commenced after May 14, 2007. Process heater H-500S is subject to the requirements of Subpart Ja because it meets the applicability requirements and definition of a "fuel gas combustion device" in §60.100a(a) and §60.100a(b), respectively. The only substantive standard applicable to H-500S is emission limits or fuel gas concentration limits in 40CFR §60.102a(g)(1). Ergon has indicated they will comply with the above requirement through the use of continuous H₂S fuel monitoring (pursuant to the requirements of §60.107a) on the process gas that fires the new replacement process heater.

40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 - Subpart Kb was previously determined to apply to the modified storage tanks TK-4060 and TK-4061 and the modifications herein do not change that determination. The tanks will have to continue to meet the requirements given under §60.112b(a) and (b).

40 CFR 60, Subpart GGa: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 - Subpart GGa of 40 CFR 60 is the NSPS for equipment leaks of VOC in petroleum refineries for which construction commenced after November 7, 2006. The new Platformer Expansion (PL-FUG) and Y-Grade NGL (YNGL-FUG) Units are subject to the requirements under GGa. Subpart GGa incorporates by reference the fugitive requirements under 40 CFR 60, Subpart VVa. Ergon shall be required to meet these requirements within the permit.

Non-Applicability Determinations

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

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration - The Newell Refinery is located in Hancock County, WV, which is classified as "in attainment" with all National Ambient Air Quality Standards. However, as the facility is a "listed source" under §45-14-2.43 ("Petroleum Refineries"), the individual major source applicability threshold for all pollutants is 100 TPY. As stated in Title V Program Applicability Basis, the existing facility-wide PTE is greater than 100 TPY for CO, NO_x, and VOCs. Therefore, the existing facility is defined as a "major stationary source" under 45CSR14 and the modifications evaluated herein are subject to a Prevention of Significant Deterioration (PSD) Applicability Analysis.

Under the review for Permit Number R13-2334T, Ergon modified the Unifiner to increase the capacity and replaced the H-501 heater. Additionally, the increase in Unifiner capacity led to an increase in throughput for Tanks 4004, 4006, 4014, 4015, 4050, and also led to an increase in throughput to the truck loading operations [TLOAD and OXIDIZER]. As a result of the changes, a PSD Applicability Analysis was submitted under R13-2334T. This analysis showed that the difference in actual-to-potential emissions of the emission units involved in the modification and those affected upstream/downstream of the changes were less than the "significant" thresholds given under §45-14-2.74. Pursuant to §45-14-19.7, once a synthetic minor has been issued for a modification, relaxing the limits upon which that synthetic minor was issued (that results in a "major modification") could result in the requirement for a retroactive PSD review.

Therefore, as a result of the changes requested under R13-2334Y, a new PSD Applicability Analysis was requested that showed, using the same baseline actual emissions used in the R13-2334T PSD Applicability Analysis (annualized emissions from 2009 and 2010), the new potential-to-emit (PTE) of the same equipment/processes (with some noted changes), was not, on a pollutant-by-pollutant basis, more than a "significant" difference that would define the modifications evaluated herein as major (based on the language under §45-14-19.7).

Based on information submitted by Ergon and on information from the R13-2334T fact sheet, the modifications evaluated herein were determined not to be defined as a "major modification" and, therefore, PSD Review pursuant to 45CSR14 was not required.

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: N/A

Ending Date: N/A

Point of Contact

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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@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

Not applicable.