

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 January 19, 2012.

Permit Number: **R30-00300006-2012**
Applications Received: **November 12, 2015 and February 11, 2016**
Plant Identification Number: **03-54-003-00006**
Permittee: **Essroc Cement Corporation**
Facility Name: **Martinsburg**
Mailing Address: **1826 South Queen Street, Martinsburg, WV 25401**

Permit Action Number: *MM05 and MM06* Revised: *August 9, 2016*

Physical Location: Martinsburg, Berkeley County, West Virginia
UTM Coordinates: 243.50 km Easting • 4369.00 km Northing • Zone 18
Directions: Take south Queen Street Exit off of WV State Route 45 at Martinsburg.
The facility is 0.5 miles south at the end of Queen Street.

Facility Description

Essroc Cement Corporation owns and operates a cement manufacturing plant, which is characterized by SIC Codes 3241 and 1422. The plant operates a preheater/precalciner (PH/PC) kiln system that uses primary coal and petcoke. The PH/PC kiln produces cement clinker, an intermediary product of cement, which is then ground into finished cement. The nominal capacity of the plant is 2,212,890 short tons (stons) per year of clinker. Essroc uses approximately 292,110 stons of coal annually and fly ash from electric power plants. Essroc also has the ability to burn petroleum hydrocarbon contaminated soils that were generated onsite in the PH/PC cement kiln. The facility has the potential to operate twenty-four (24) hours a day, seven (7) days per week, and fifty-two (52) weeks per year.

The purpose of MM05 (changes approved under R14-0026L) is to install/modify four (4) material handling storage areas, and decommission various sources that are no longer necessary. The purpose of MM06

(changes approved under R14-0026M) is the addition of an alternate crushing system comprised of three (3) mobile crushers.

Emissions Summary

The emissions changes associated with these modifications are as follows:

Pollutant	Change in PTE (TPY)
PM _{2.5}	-5.29
PM ₁₀	-14.49
TSP	-8.58
SO ₂	+7.60
NO _x	+22.16
CO	+21.55
VOCs	+2.46

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 4,458.50 tpy of CO; 4,031.75 tpy of NO_x; 584.65 tpy of PM₁₀; 4,515.50 tpy of SO₂; and 158.78 tpy of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Essroc Cement Corporation 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:	45CSR7	Particulate matter emissions
	45CSR13	NSR Permitting
	45CSR16	Standards of performance for new stationary sources
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs
	40CFR60, Subpart OOO	Nonmetallic mineral processing plants
	40CFR60, Subpart IIII	Standards of performance for stationary CI
		Internal Combustion Engines
	40CFR63, Subpart LLL	NESHAP for portland cement manufacturing industry
	40CFR63, Subpart ZZZZ	RICE MACT

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>)
R14-026M	April 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

40CFR60, Subpart OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

The changes made with this modification are subject to 40 CFR 60 Subpart OOO because they occurred after April 22, 2008 and the mobile plant processes more than 150 tons of aggregate per hour. The proposed construction will include three (3) mobile crushers (EP37.15), which are defined as affected facilities in 40 CFR 60 Subpart OOO. According to 40CFR§60.672(b), opacity should be no greater than 7% from any transfer point on belt conveyors or from any other affected facility (as defined in 40CFR§§60.670 and 60.671) and no greater than 12% from any crusher when the particulate matter control methods and devices proposed within application R14-0026M are in operation. The 7% and 12% opacity limits are more stringent than existing language in conditions 4.1.11 and 4.1.12 of this permit, because the new equipment was installed after April 22, 2008. Additional language was added to specify the more stringent opacity limits.

40CFR60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Essroc is subject to this subpart because the engines were manufactured after April 1, 2006. The mobile units will utilize a CAT C13 diesel engine with a displacement of 18.1 L to operate the systems for both movement around the site and aggregate processing. The engines for the three mobile crushers are EPA Tier III certified engines. Applicable requirements for the mobile crusher engines are already included in this permit as conditions 4.1.50-4.1.55. Additional requirements were added to this permit as discussed later.

40CFR63, Subpart LLL: National Emission Standard for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry

According to 40CFR§63.1351, the compliance for this subpart was September 9, 2015 for all emission units, except for the open clinker pile requirements. The compliance date for the open clinker pile requirements was February 12, 2014. On May 12, 2015, the plant submitted a one year extension request to the WV DEP for demonstrating compliance with this MACT for Mercury and HCl emission limits through CEM monitoring. The extension request was granted, and the plant must now demonstrate compliance with the Mercury and HCl emission limits and CEMS monitoring by September 9, 2016.

The tarped clinker storage and handling sources and finish mill limestone storage and handling sources will be affected sources under this subpart and are subject to a 10 percent opacity limitation on a six minute block average (condition 3.1.20), with the exception of the storage piles. EP37.06, the limestone crusher feed pile, is not an affected source under this subpart. EP27.07, EP37.08, and EP37.11 are all subject to the open clinker storage pile requirements under this subpart, which has been addressed in previous permitting actions. The plant will utilize water sprays and partial enclosures to control fugitive dust emissions from

the open clinker storage piles. The alternate fuel feeding system sources will continue to be subject to this subpart.

40CFR63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Essroc is subject to 40CFR63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because the three (3) mobile crushers are considered new engines at an area source of HAPs since they were constructed on or after June 12, 2006. However, the only requirements that apply are those required under 40CFR60 Subpart IIII.

Changes to Permit Language

The following changes were made with this modification:

- The emission units table was updated to reflect the current equipment at this facility.
- EP42.09 was removed from the citation in condition 3.1.20.
- The emission limits in condition 4.1.2 were updated.
- The tables and emission limits in conditions 4.1.9, 4.1.13, 4.1.22, 4.1.24, 4.1.39, 4.1.43, and 4.1.56 were updated to reflect current emission limits and the current equipment.
- Conditions 4.1.11, 4.1.12, and 4.3.3 were revised by adding more stringent opacity requirements for equipment installed after April 22, 2008.
- The citation for condition 4.1.52 was updated to include a reference to condition A.7 of R14-026M.
- The citation for condition 4.1.53 was updated to include a reference to condition A.6 of R14-026M.
- Old condition 4.2.5, which addressed COMS, was removed. This condition was replaced with new language addressing daily and monthly records of the amount of clinker transferred to the outdoor clinker storage piles. This condition was changed because condition B.12 of R14-026M, which this Title V permit condition references, was revised because 40CFR63, Subpart LLL no longer requires COMS.
- Testing requirements from 40CFR§60.4212 were added as condition 4.3.5.
- Condition 4.5.13 was added addressing daily and monthly records of the amount of limestone delivered to pile EP37.06. This condition references condition B.19 of R14-026M.
- Initial notification and recordkeeping requirements from 40CFR§60.4214(a) were added as condition 4.5.14.
- Additionally, the conditions in R14-026M were slightly renumbered, and various citations were updated accordingly in this permit.

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

Beginning Date: N/A
Ending Date: N/A

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 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478
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)

Not applicable.