

Fact Sheet



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

Permit Number: **R30-00300006-2023**

Application Received: **March 15, 2022**

Plant Identification Number: **03-54-003-00006**

Permittee: **Argos USA LLC**

Facility Name: **Martinsburg Plant**

Mailing Address: **1826 South Queen Street, Martinsburg, WV 25401**

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 WV State Route 45 at Martinsburg. The facility is 0.5 miles south to the end of Queen Street.

Facility Description

Argos USA LLC owns and operates a cement manufacturing plant, which is characterized by SIC Code 3241. The plant operates a preheater/precalciner (PH/PC) kiln system that uses primarily 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. Argos uses approximately 292,110 stons of coal annually and fly ash from electric power plants. Argos 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.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2021 Actual Emissions
Carbon Monoxide (CO)	4464.54	474.34
Nitrogen Oxides (NO _x)	4041.69	945.62
Particulate Matter (PM _{2.5})	222.72	62.43
Particulate Matter (PM ₁₀)	585.22	202.34
Total Particulate Matter (TSP)	928.85	430.32
Sulfur Dioxide (SO ₂)	4517.63	558.80
Volatile Organic Compounds (VOC)	159.88	33.16

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2021 Actual Emissions
Acetaldehyde	28.78	16.55
Benzene	7.42	4.22
Ethylbenzene	1.03	0.57
Formaldehyde	14.93	8.05
Fluorides	1.02	0.52
Hydrochloric acid	21.17	2.59
Naphthalene	13.20	7.63
Styrene	9.86	5.62
Toluene	7.20	3.96
Xylenes (mixed isomers)	21.15	11.70
Aggregate HAPs (includes HAPS not listed above that are < than 1 tpy)	127.47	62.44

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

Title V Program Applicability Basis

This facility has the potential to emit 4,464.54 tpy of CO; 4,041.69 tpy of NO_x; 585.22 tpy of PM₁₀; 4,517.63 tpy of SO₂; 159.88 tpy of VOC; 28.78 tpy of Acetaldehyde; 14.93 tpy of Formaldehyde; 21.17 tpy of Hydrochloric Acid; 13.20 tpy of Naphthalene; 21.15 tpy of Xylenes and 127.47 tpy of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Argos USA LLC 's Martinsburg Plant 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:

45CSR2	To Prevent And Control Particulate Air Pollution From Combustion Of Fuel In Indirect Heat Exchangers
45CSR5	To Prevent And Control of Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas
45CSR6	Control Of Air Pollution From Combustion Of Refuse
45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations
45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers.
45CSR11	Prevention Of Air Pollution Emergency Episodes
45CSR13	Permits For Construction, Modification, Relocation And Operation Of Stationary Sources Of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, And Procedures For Evaluation
45CSR14	Permits For Construction And Major Modification Of Major Stationary Sources For The Prevention Of Significant Deterioration Of Air Quality
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30	Requirements For Operating Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
45CSR40	Control of Ozone Season Nitrogen Oxides Emissions
40 C.F.R. Part 60 Subpart F	Standards of Performance for Portland Cement Plants
40 C.F.R. 60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants
40 C.F.R. 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 C.F.R. 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 61 Subpart M	National Emission Standard for Asbestos
40 C.F.R. 63 Subpart LLL	National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry
40 C.F.R. Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 82 Subpart F	Ozone depleting substances

State Only:

45CSR4	No objectionable odors.
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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 (if any)
CO-R7-E-2016-6	April 12, 2016	
R14-0026P	June 21, 2022	

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 is a renewal of the Title V permit which was issued on October 12, 2017 and modified on July 3, 2018. Unless otherwise noted, the terminology “current permit” or “CP” means Title V Operating Permit R30-00300006-2017 (MM01 and MM02).

This permit renewal also includes changes associated with the Minor Modification R30-00300006-2017 (MM03) application received on May 9, 2022 which incorporates the revisions made in R14-0026P Modification Permit for the:

- 1) Construction of a new partially enclosed outdoor coal/petcoke storage pile, and
- 2) To replace the existing conveyance system for transporting coal rejects to the rejects bin with two pneumatic sliding gates, one screw conveyor, and one rotary feeder.

The change of potential emissions associated with MM03 are as follows:

Pollutant	Change in Potential Emissions TPY
Particulate Matter (PM)	+ 0.99
Particulate Matter (PM ₁₀)	+ 0.25
Particulate Matter (PM _{2.5})	+ 0.06

Substantial changes to the most recent version of the current Title V Permit consist of the following:

Note: COA in the following discussions means citation of authority.

1) Title V Boilerplate changes

- **Condition 2.11.4.** – The COA has been corrected.

- **Condition 2.22.1.** – The COA has been updated to remove 45CSR38 which has been repealed.
 - **Conditions 3.1.3. and 3.1.6. (3.1.7. CP)** – These conditions were revised to update the boilerplate language.
 - **Condition 3.5.3.** – This condition was revised to update the US EPA mailing address.
- 2) Throughout the current permit, several permit conditions were marked as “Reserved” and have been deleted in the renewal permit. The subsequent permit conditions have been renumbered. Any references to these renumbered conditions that are contained in other permit conditions have been updated.
- 3) Throughout the current permit, in many of the permit condition citations of authority, the emission unit group (e.g., EU1), the emission point ID (e.g., CD45.16) and/or the emission unit ID (e.g., EP42.04) are included in parentheses within the brackets of the COA. Since these references are not actually citations of authority but rather an indication of the equipment associated with the permit requirements, these references have been moved outside of the COA brackets.
- 4) **Condition 1.1. - Emission Units Table**
- Revised to match Boilerplate format - Deleted “Associated Emissions Points” columns since the information was redundant to the information in the other columns. (e.g., “ID No.” column had either “None” in the fields or the fields were blank; “Transfer Description” column had information that was also in the “Emission Unit Description” column. For the emission units that did not have a transfer description in the “Emission Unit Description” the information was added. Also, the “Fugitive Dust Control System/Control Device” column information was already in the “Control Device” column or has been added to it.)
 - The description for Emission Unit EP37.15 was updated for the HP rating of 2 of the engines.
 - Emission Unit EP40.08 was missing from the current permit and has been added to the renewal above emission point CD40.08.
 - The description for Emission Unit EP42.01 was updated.
 - Updated the descriptions for Emission Units EP15.01.01 and EP15.01.02.
 - Added Emission Units EP15.01.01A, EP15.01.03, EP15.01.04, EP15.01.05 and EP41.02.05.
 - Updated the descriptions for EP22.07, CD22.07, EP22.08 and CD22.08.
 - Added Emission Unit EP15.04.05.
 - Updated the design capacity and “Year Installed/ Modified” for EP25.06.02.
 - Corrected the design capacity for Emission Units EP25.18 and EP25.19.
 - Updated the “Control Device” information for Emission Units EP41.04 and EP41.05.
 - Updated the Transfer Point descriptions at the end of the “Emissions Units” table.
- 5) **Condition 1.2., Active R13, R14, and R19 Permits** – Updated R14-0026 to the “P” version and the date of issue.

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- 6) **Condition 3.1.18. (3.1.20. CP)** – Updated the language to the current version of 40 CFR §63.1345.
 - 7) **Condition 3.1.23. (3.1.25. CP)**
 - Updated the language to the current version of 40 CFR §63.1348(a)(3) which includes changing §63.1343(e) to §63.1343(b).
 - Deleted the reference to condition 4.1.5.(b) since condition 4.1.5. in the current permit is marked as “reserved” and the reference was overlooked for deletion during the last renewal.
 - Updated the COA to add “(i) and (ii)” to 40 CFR §63.1348(a)(3).
 - 8) **Condition 3.2.1.**
 - Updated the COA to add “45CSR14, R14-0026, B.10.”
 - Deleted paragraph (4) since the requirements of this paragraph are also contained in condition 3.2.5. (3.2.7. CP).
 - 9) **Conditions 3.2.2. and 3.2.3. (3.2.4. CP)** - Updated the COA for the current version of 40 CFR 60 Subpart F.
 - 10) **Condition 3.2.4. (3.2.5. CP)** - Updated the language to the current version of 40 CFR §63.1350(g).
 - 11) **Condition 3.2.5. (3.2.7. CP)** - Updated the language and COA to the current version of 40 CFR §63.1350(f)(1) and (f)(2). Since this condition contains all of the requirements of (f)(1) and (f)(2), the subsections of these rule citations were deleted from the COA. Also added “§63.1341” to the COA.
 - 12) **Condition 3.2.6. (3.2.9. CP)** - Updated the COA to the current version of 40 CFR 60 Subpart F.
 - 13) **Condition 3.2.7. (3.2.10. CP)** - Updated the COA to the current version of 40 CFR 60 Subpart F.
 - 14) **Condition 3.2.11. (3.2.15. CP)** – Updated the language to the current version of 40 CFR §63.1350(p)(1); Updated the COA for the current version of 40 CFR 60 Subpart F. Removed the “Note” since the Site-Specific Monitoring Plan has been removed from Appendix A (see below) and added “Your site-specific monitoring plan must be maintained on site and made available upon request” to the requirement. Also added 45CSR§30-12.7 to the citation of authority.
 - 15) **Condition 3.2.12. (3.2.16. CP)** – Updated the language to the current version of 40 CFR §63.1350(n). Since this condition contains all of the requirements of §63.1350(n), the subsections of this rule citation were deleted from the COA.
 - 16) **Condition 3.2.13. (3.2.17. CP)** – Updated the language to the current version of 40 CFR §63.1350(m)(3); Updated the COA for the current version of 40 CFR 60 Subpart F.
 - 17) **Condition 3.3.2.** – Updated the language to the current version of 40 CFR §63.1349(a).
 - 18) **Condition 3.3.3.** – Updated the language to the current version of 40 CFR §63.1349(b). Added “(i)” in the COA for §63.1349(b)(4) and deleted 45CSR16.
 - 19) **Condition 3.3.7. CP** – 40 CFR §63.1349(d) has been deleted and marked reserved in the current version of Subpart LLL. Therefore, this condition has not been included in the renewal permit.
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- 20) **Condition 3.4.7.** – Updated the language to the current version of 40 CFR §63.1355(e).
 - 21) **Condition 3.5.11.** – Updated the language to the current version of 40 CFR §63.1354(b).
 - 22) **Condition 3.5.12.** – Updated the language to the current version of 40 CFR §63.1354(c).
 - 23) **Section 4.0 Title** - The Title has been revised to delete “Source-Specific Requirements” and to move “Modern Preheater-Preheater Kiln System and related Equipment” outside of the brackets; Added “emission point ID(s): Groups” inside of the brackets.
 - 24) **Condition 4.1.2.** – Revised the PM allowable emissions per R14-0026P in conjunction with MM03.
 - 25) **Conditions 4.1.9., 4.1.10., 4.1.11. (4.1.10., 4.1.11., 4.1.12. CP)** – Updated the language to the current version of 40 CFR 60 Subpart OOO. Added “40 CFR 60 Subpart OOO Table 2 Item 1” to the COA of 4.1.9. and added “40 CFR 60 Subpart OOO Table 3” to the COA of 4.1.10. and 4.1.11.
 - 26) **Condition 4.1.12. (4.1.13. CP)** – Replace “Following” with “Group 2 point” per R14-0026P in conjunction with MM03.
 - 27) **Condition 4.1.13. (4.1.15. CP)** – Added the note “[*Note: Approval for the use of refuse based (derived) fuels was given through permit determination PD20-008 on February 7, 2020*]” at the end of the requirement as requested by the facility in the renewal application.
 - 28) **Condition 4.1.34. (4.1.40. CP)** – Added emission points and revised emission limits and descriptions per R14-0026P in conjunction with MM03.
 - 29) **Condition 4.1.36. (4.1.42. CP)** – Added requirements from 40 CFR §§60.254(b)(1), (b)(3) and (c) for emission points EP41.02.05, EP15.01.01A, EP15.01.01 through EP15.01.05, and EP15.04.05 in conjunction with MM03. Since the truck unloading is directly to the coal storage pile, it falls under the definition of “open storage pile” as equipment used in the loading, unloading and conveying operations of the facility and therefore is subject to open pile storage requirements in §60.254(c).
 - 30) **Condition 4.1.40. (4.1.47. CP)** – Revised the descriptions for CD22.05, CD22.07, and CD22.08 as requested in the renewal application and to match the descriptions in R14-0026P.
 - 31) **Conditions 4.1.45., 4.1.46. (4.1.52., 4.1.53. CP)** – Updated the language to the current version of 40 CFR 60 Subpart III. Removed “(1)-(3)” from the COA in condition 4.1.46. since all of the requirements of §60.4211(a) are included in this condition.
 - 32) **Condition 4.1.49. (4.1.56. CP)** – Added emission point EP15.04.05 and revised emission limits for EP25.15 and EP25.06.02 per R14-0026P and the “combined source” limits in conjunction with MM03.
 - 33) **Condition 4.1.56. (4.1.63. CP)** – Updated the language to account for the revised language in the current version of 40 CFR 63 Subpart ZZZZ pertaining to emergency RICE.
 - 34) **Condition 4.1.57. (4.1.64. CP)** – Updated the language to the current version of 40 CFR 60 Subpart III.
 - 35) **Condition 4.2.4.** – Added “Performance Specification 8A (THC)” as contained in R14-0026P §B11.
 - 36) **Condition 4.2.6.** – Added “and 45CSR16” as contained in 45CSR§40-10.4.a.
 - 37) **Condition 4.3.5.** – Updated the language to the current version of 40 CFR 60 Subpart III.

- 38) **Condition 4.3.12. (4.3.14. CP)** – Revised the introductory language to add “and 60.254(b)(1)” and added requirements from 40 CFR §§60.255(b) (b)(2), (b)(2)(i), and (b)(2)(ii) for emission points EP41.02.05 and EP15.01.01 through EP15.01.05 in conjunction with MM03.
- 39) **Condition 4.3.13. (4.3.15. CP)** – Revised the introductory language to add “and 60.254(b)(1)” in conjunction with MM03.
- 40) **Condition 4.4.5.** – Updated the language to the current version of 40 CFR §60.7(a).
- 41) **Condition 4.4.12.** – Added this permit condition containing the requirements from 40 CFR §§60.258(a), (a)(1) through (a)(6) for emission points EP41.02.05, EP15.01.01 through EP15.01.05, EP15.01.01A, and EP15.04.05 in conjunction with MM03. Also renumbered the subsequent permit conditions.
- 42) **Condition 4.4.16. (4.4.15.CP)** – Added “(a)(1) and (a)(2)” to the COA since §63.7555(a)(3) is not applicable and is not included in this condition.
- 43) **Condition 4.5.10.** – Added this permit condition for the requirements from 40 CFR §60.258(d) in conjunction with MM03. Also renumbered the subsequent permit conditions.
- 44) **Condition 4.6.1.** – Since a compliance plan is not required, this condition has been marked as “Reserved.”
- 45) **Appendix A** – Argos USA has requested the removal of the Site-Specific Monitoring Plan stating that it was included in the 2017 Title V Renewal Application to meet the requirements of 45CSR10 for a monitoring plan. However, per 45CSR§10-8.2.c.1, the installation, operation, and maintenance of a SO₂ CEMS fulfills the requirements for a monitoring plan, and a separate monitoring plan is not required. Therefore, the Site Specific Monitoring Plan should not be required to be included as an appendix to the permit. Since 40 CFR 63 Subpart LLL only requires the monitoring plan to be developed and submitted upon request and does not require the plan to be included in the Title V permit and since the SO₂ CEMs satisfies the Monitoring Plan requirements of 45CSR10, and after consultation with WVDEP enforcement personal, it has been determined that the Site-Specific Monitoring Plan is not required to be included in the permit and therefore has been removed. The requirement to maintain the monitoring plan on site and to make it available upon request has been added to condition 3.2.11.

Federal Regulatory Discussion

40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation and Processing Plants

Per 40 CFR §60.250(d), affected facilities subject to 40 CFR 60 Subpart Y include coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles that commenced construction, reconstruction or modification after May 27, 2009 and process more than 200 tons of coal per day. The new coal/petcoke outdoor storage area, specifically emission sources EP15.01.01.A and EP15.04.05, and the new Coal Mill Reject System, EP41.02.05, and EP15.01.01 through EP15.01.05 are affected sources under 40 CFR 60 Subpart Y and subject to all applicable requirements, particularly §§60.254(b), (b)(1), (b)(3) and (c), §§60.255(b) (b)(2), (b)(2)(i) and (b)(2)(ii), §60.257(a), §§60.258(a), (a)(1) through (6), §60.258(c) and §60.258(d).

Non-Applicability Determinations

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

- a. **40 CFR Part 60 Subpart LL - Standards of Performance for Metallic Mineral Processing Plants:** Does not apply because lime or limestone is not a metallic mineral.

- b. **40 CFR Part 60 Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries:** Does not apply because lime or limestone is not listed as a mineral processed or produced in a mineral processing plant.
- c. **40 CFR Part 72 - Acid Rain Program General Provisions:** Does not apply to Argos USA, LLC because it is not considered a Title IV (Acid Rain) Source.
- d. **40 CFR Part 64 – Compliance Assurance Monitoring (CAM):** All emission units with a PM control device, potentially subject to CAM for PM are subject to one of the following federal regulations which were proposed by the Administrator after November 15, 1990: 40 CFR 60 Subpart OOO, 40 CFR 60 Subpart Y, and 40 CFR 63 Subpart LLL. Therefore, pursuant to 40 CFR §64.2(b)(1)(i), they are exempt from the CAM Rule for PM.

The only emission unit at the Plant with the potential to emit uncontrolled amounts of SO₂, NO_x, CO, and/or VOC greater than 100 tons/year is the PH/PC kiln system. However, although the PH/PC kiln system is subject to limitations on these pollutants, it does not use a control device to meet the CO or VOC emission limitations. Therefore, the PH/PC kiln system is not subject to 40 CFR 64 for CO or VOC.

The PH/PC kiln system does utilize air pollution control devices in order to comply with its emission limitations on SO₂ and NO_x. Specifically, a SO₂ scrubber and SNCR NO_x control system are utilized by the PH/PC kiln system. However, per Condition 4.2.4 of the existing Title V Operating Permit, the plant is required to operate an SO₂, NO_x, CO and THC continuous emission monitoring system (CEMS) on the main stack that vents all emissions from the PH/PC kiln system. Therefore, pursuant to 40 CFR §64.2(b)(1)(vi), since a continuous compliance determination method to demonstrate compliance with the emission limits is specified in the current Title V (Part 70) Operating Permit, the PH/PC kiln system for these pollutants are exempt from 40 CFR 64

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: January 25, 2023
Ending Date: February 24, 2023

Point of Contact

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

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41910
frederick.tipane@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.