

Fact Sheet



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

Permit Number: **R30-01100009-2015**
Application Received: **February 18, 2015**
Plant Identification Number: **011-00009**
Permittee: **Steel of West Virginia, Inc.**
Mailing Address: **2nd Avenue and 17th Street, Huntington, WV 25726**

Revised: *N/A*

Physical Location: Huntington, Cabell County, West Virginia
UTM Coordinates: 375.03 km Easting • 4253.77 km Northing • Zone 17
Directions: From Charleston, travel west on I-64 to Exit 15. Turn right on US-60 for
5.3 miles. US-60 is 3rd Avenue in Huntington. Turn right onto 17th Street.

Facility Description

Steel of West Virginia (SWVA), Inc. manufactures hot rolled steel products covered by Standard Industrial Classification (SIC) Code 3312. The facility has the potential to operate 24 hours per day, 7 days per week, 52 weeks per year. The facility consists of two electric arc furnaces (EAFs), a continuous caster and caster cutoff torches, scrap preparation torches, and ladle preheaters. The manufacturing steps include melting scrap steel, casting billets, reheating and hot rolling the billets, shot blasting, welding, punching and shearing.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2014 Actual Emissions
Carbon Monoxide (CO)	331.54	258.63
Nitrogen Oxides (NO _x)	244.36	142.92
Particulate Matter (PM _{2.5})	54.85	37.01
Particulate Matter (PM ₁₀)	65.08	41.33

Regulated Pollutants	Potential Emissions	2014 Actual Emissions
Total Particulate Matter (TSP)	101.70	60.83
Sulfur Dioxide (SO ₂)	35.73	29.77
Volatile Organic Compounds (VOC)	72.30	28.42

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2014 Actual Emissions
2-Propoxyethanol (Propyl Cellosolve)	4.34	0.97
Cadmium Compounds	0.025	0.025
Chromium Compounds	0.053	0.049
Hexane	2.07	0.800
Lead Compounds	0.693	0.443
Manganese Compounds	2.05	1.21
Nickel Compounds	0.011	0.007
Tetrachloroethylene	0.018	0.004

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

Title V Program Applicability Basis

This facility has the potential to emit 331.54 tons per year of Carbon Monoxide and 244.36 tons per year of Nitrogen Oxides and 101.7 tons per year of Total PM. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, SWVA, 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.

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

Federal and State:	45CSR2	PM limits on boilers
	45CSR6	Open burning prohibited
	45CSR7	PM limits on manufacturing processes
	45CSR10	SO ₂ limits
	45CSR11	Standby plans for emergency episodes
	45CSR13	Construction Permits
	45CSR16	New Source Performance Standards
	45CSR21	Emissions of VOCs
	45CSR29	Emission statements for VOCs and NO _x
	45CSR30	Operating permit requirement
	45CSR34	Emissions Standards for HAPs
	40 CFR Part 60, Subpart JJJJ	NSPS for Spark Ignition engines
	40 CFR Part 61	Asbestos inspection and removal
	40 CFR Part 82, Subpart F	Ozone depleting substances

	40 CFR Part 63, Subpart ZZZZ	MACT for Reciprocating Internal Combustion Engines
	40 CFR Part 63, Subpart YYYYY	MACT for area sources: Electric Arc Furnace Steelmaking Facilities
	40 CFR Part 63, Subpart CCCCC	MACT for Gasoline Dispensing Facilities
	40 CFR Part 64	Compliance Assurance Monitoring
State Only:	45CSR4	No objectionable odors.

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 request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4(a)(14). 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)
R13-0834	April 1, 1986	

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 second renewal of the Title V Permit. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes: Condition 3.3.1.d. was added.

Other changes:

The Equipment Table was updated as follows:

- The Ladle Preheaters, EU005, have been replaced and are now listed as EU005A (design capacity increased from 4.0 MMBtu/hr to 5.5 MMBtu/hr each). There was no increase in manufacturing process weight rate, therefore there was no increase in permitted emissions listed in Section 4.1.3. Rolling Mill #2 has had a process change increasing the design capacity from 32 tons/hr to 36.8 tons/hr. The permitted emissions listed in Section 4.1.3. have been updated. These changes resulted in a small increase in emissions, however the increase was less than the 45CSR13 threshold of 6 pph and 10 tpy.
- Three emergency generators, EU034, EU035, and EU036, have been added and are subject to 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart JJJJ. See discussions below for more detail.
- The gasoline storage tank was added to the Equipment Table because it is subject to 40 CFR 63 Subpart CCCCC, the Gasoline Dispensing Facilities MACT.

- Miscellaneous equipment, with no applicable requirements, was added to the renewal Title V Permit Equipment Table by request of SWVA, Inc. (EU001, EU029, EU030, EU031, EU032, EU033).

Added new condition 6.1.6. to incorporate requirement from 45 CSR § 21-19.4.

Compliance Plan for 40 CFR 63 Subpart YYYYY - Electric Arc Furnace. Old Section 4.6.1. listed a compliance plan allowing the facility an extension of compliance. The Compliance Plan has been completed, therefore the requirements in Condition 4.6.1. and the reference to the plan in condition 4.1.11. have been deleted.

40 CFR 63 Subpart ZZZZ applies to existing, new, or reconstructed reciprocating internal combustion engines. SWVA, Inc. has an emergency use 97-hp diesel-fired engine (EU034) that was installed in 1996, which classifies this engine as an existing, emergency use CI RICE located at an area source of HAPs. The operating limitations are listed in new Section 7.0.

40 CFR 60 Subpart JJJJ applies to owners and operators of stationary spark-ignition (SI) engines constructed after June 12, 2006. SWVA, Inc. operates two natural gas-fired emergency engines: a 255-hp engine installed in 2010 (EU035), and a 268-hp engine installed in 2013 (EU036). The maintenance, testing, recordkeeping, and reporting requirements are listed in new Section 7.0. EU035 and EU036 are also subject to 40 CFR 63 Subpart ZZZZ and must comply with the MACT by complying with 40 CFR 60 Subpart JJJJ in accordance with 40 CFR §63.6590(c)(1).

40 CFR 63 Subpart CCCCC applies to Gasoline Dispensing Facilities. SWVA, Inc. has a small, 300 gallon gasoline storage tank that dispenses less than 10,000 gallons per month. The tank is considered new in accordance with 40 CFR § 63.11112(b). 40 CFR § 63.11115(b) requires submittal of reports, however 40 CFR § 63.11116(b) exempts facilities with monthly throughput of less than 10,000 gallons from submitting notifications or reports. Requirements from the rule have been added to new Section 8.0.

40CFR Part 64 - Compliance Assurance Monitoring (CAM). The facility currently has approved CAM plans for the Electric Arc Furnaces (EU006 and EU007) from the 2010 renewal permit. No changes were made to the CAM plans for this second renewal, however additional CAM requirements were added to the permit in conditions 4.2.6., 4.4.5., and 4.5.3. Monitoring the baghouses will demonstrate compliance for minimizing HAP emissions in Conditions 4.1.7. and 4.2.3.

Non-Applicability Determinations

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

40CFR Part 60, Subpart AA and AAa - The existing EAFs and associated baghouses were constructed prior to October 21, 1974. Work was performed on the EAFs in 1979, however the work did not meet the definition of "modification" or "reconstruction" as determined in the significant modification issued on July 10, 2006.

40CFR Part 60, Subparts K, Ka, Kb - The facility does store petroleum-based liquids in fixed roof storage tanks, however there are no tanks with capacities greater than 65,000 gallons (Subpart K), 40,000 gallons (Subpart Ka), or 75 cubic meters (Subpart Kb).

40CFR Part 63, Subpart DDDDD - The facility does not meet the definition of a major source of HAPs.

40CFR Part 63, Subpart FFFFF - The facility does not meet the definition of a major source of HAPs.

40CFR Part 63, Subpart MMMM - The facility does not meet the definition of a major source of HAPs.

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: Friday, October 30, 2015

Ending Date: Monday, November 30, 2015

Point of Contact

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

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West Virginia Department of Environmental Protection
Division of Air Quality
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Charleston, WV 25304
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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 following are condensed versions of comments from US EPA and the DAQ's response:

Condition 4.1.10 - The requirement from 40 CFR 63 Subpart YYYYYY to have a scrap contaminant prevention plan is not enforceable unless the plan is affixed to the permit or is required to be maintained in a specified location. DAQ responded that affixing the plan means modifying the permit whenever the plan is amended, that the plan is required to be maintained onsite, and that the permittee is required to certify that the plan exists and is maintained onsite. No changes were made.

Condition 4.2.3. is not specific regarding procedures to maintain and operate equipment to minimize HAPs and EPA requested additional requirements to monitor the baghouse. DAQ responded that the monitoring requirement is for a non-quantitative requirement (Condition 4.1.7.) and that the monitoring of the baghouse is already covered under the CAM plan for PM emissions. A note was added in the CAM determination above.

NSR Permit R13-2618 was issued in 2005 to replace the existing electric arc furnaces with a new electric arc furnace. DAQ responded that R13-2618 was declared inactive and inspections have found the existing electric arc furnaces in place.

The Title V permit capacities for the continuous caster and rolling mills do not agree with the "expected" rolling mill capacity reported to the SEC in 2012. The facility responded that the Rolling Mill #2 capacity has increased and the Title V permit (pages 3 and 20) and Fact Sheet (Emissions Summary Table) were updated to indicate the increased capacity.