

# Fact Sheet



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

Permit Number: **R30-01100009-2010**

Application Received: **July 28, 2009**

Plant Identification Number: **011-00009**

Permittee: **SWVA, Inc.**

Mailing Address: **2<sup>nd</sup> Avenue and 17<sup>th</sup> Street Huntington, WV 25726**

*Revised N/A*

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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 3<sup>rd</sup> Avenue in Huntington. Turn right onto 17<sup>th</sup> Street.

## Facility Description

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

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Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2008 Actual Emissions
Carbon Monoxide (CO)	321.78	241.3
Nitrogen Oxides (NO <sub>x</sub> )	141.57	113.25
Particulate Matter (PM <sub>10</sub> ) <i>PM<sub>10</sub> is a component of TSP</i>	71.80	57.28
Total Particulate Matter (TSP)	91.77	74.11
Sulfur Dioxide (SO <sub>2</sub> )	36.82	27.69

Volatile Organic Compounds (VOC)	148.94	28.77
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2008 Actual Emissions</b>
2-Propoxythanol (Propyl Cellosolve)	5.71	0.8616
Arsenic Compounds	0.003	0.002
Cadmium Compounds	0.029	0.027
Chromium Compounds	0.099	0.091
Manganese Compounds	2.65	2.23
Mercury Compounds	0.001	0.001
Nickel Compounds	0.014	0.012
Tetrachloroethylene	0.004	0.003

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

**Title V Program Applicability Basis**

Due to this facility's potential to emit over 100 tons per year of Carbon Monoxide, Nitrogen Oxides, and Volatile Organic Compounds, 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 <sub>2</sub> limits.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Construction Permits
	45CSR21	Emissions of VOCs
	45CSR29	Emission Statements for VOCs and NO <sub>x</sub>
	45CSR30	Operating permit requirement.
	40CFR Part 61	Asbestos inspection and removal
	40CFR Part 82, Subpart F	Ozone depleting substances
	40CFR Part 63, Subpart YYYYYY	NESHAPs for area sources: Electric Arc Furnace Steelmaking Facilities
State Only:	45CSR4	No objectionable odors.
	45CSR42	Greenhouse Gas Emissions Inventory Program

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 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 ( <i>if any</i> )
R13-0834	35581	

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

**Permit R13-1100**, was issued May 19, 1989 and allowed the facility to operate a dip system paint line. It was listed in the original fact sheet as an active permit, however Permit Determination PD97-131, dated September 4, 1997, required the facility to remove the dip system and replace it with a Flow Coater. The Permit Determination did not list any requirements.

**Conditions 6.1.1. and 6.1.2.** of the old permit - removed the compliance date of May 31, 1993 since it has already passed.

**Condition 6.1.5.** Initial calculations show that if the paint booth were operated 8760 hours per year, the paint booth throughput would be 175,200 gallons per year, and emissions of HAPs would be greater than 10 tons per year, which would classify the facility as a major source. However, due to physical constraints, the paint booth throughput cannot be greater than 62,500 gallons per year. This operational limit was incorporated into the Title V permit as Condition 6.1.5. to maintain the facility as an area source for HAPs.

**40 CFR Part 63 Subpart YYYYY** - SWVA, Inc. is subject to the NESHAP for Area Sources: Electric Arc Furnace Steelmaking Facilities. This NESHAP establishes pollution prevention practices and emission standards based on generally available control technology (GACT) for the control of Urban Hazardous Air Pollutants that are emitted from electric arc furnaces (EAF) and argon-oxygen decarburization (AOD) vessels. The pollution prevention management practices (Condition 4.1.10.) require the facility to minimize chlorinated plastics, lead, and free organic liquids charged to the furnace, as well as reduce mercury emissions generated from furnace charge materials by removing mercury switches from the scrap. The emission standards limit PM to 0.0052 gr/dscf (Condition 4.1.11.b.1.) and opacity to 6% (Condition 4.1.11.b.2.) from the Electric Arc Furnaces. Compliance is demonstrated through PM and opacity testing (Condition 4.3.3.), and requirements for Recordkeeping (Condition 4.4.4.), and Reporting (Condition 4.5.2.). The EAFs have a production capacity of less than 150,000 tpy, and there are no AOD vessels at this facility, therefore these sections of the regulation were not incorporated into the Title V Permit.

SWVA, Inc. requested and WVDEP conditionally approved an extension of compliance for the opacity limit until December 28, 2010. The facility is not out of compliance with the GACT, however the conditions of the compliance extension represent a state enforceable requirement and have been incorporated into the Title V

Permit (Condition 4.6.1.).

**Conditions 3.2.1. and 4.2.1.** A new visible emissions requirement for the EAFs was added to the permit as Condition 4.2.1. because the EAFs are now subject to the 6 percent opacity standard from the GACT and CAM. The visible emissions requirement in Condition 3.2.1. now notes that the EAFs are excluded from this requirement.

**40CFR Part 64 - Compliance Assurance Monitoring (CAM).** SWVA, Inc. is a major source for Carbon Monoxide, Nitrogen Oxides, and Volatile Organic Compounds, however there are no control devices for these pollutants, therefore CAM does not apply for these pollutants in accordance with 40 CFR § 64.2(a)(2). The facility is not a major source of PM, however, in accordance with 40 CFR §63.10686(e), the Electric Arc Furnaces are subject to 40 CFR Part 64. Each EAF represents a pollutant specific emissions unit (PSEU) for PM. Emissions from the Electric Arc Furnaces (EU006 and EU007) are controlled by baghouses CE006, CE007, and CE008. Monitoring per the CAM Plan is identical for EU006 and EU007 and will be as follows:

CE007, CE008, CE006		Indicator No. 1	Indicator No. 2
<b>I.</b>	<b>Indicator</b>	Fan motor amps (condition 4.2.5.)	Visual Observations (condition 4.2.1.)
	<b>Monitoring Approach</b>	The baghouse is equipped with fans that draw air from the melt shop to the baghouse compartments. An excursion is defined as fan motor amp readings outside of the Indicator Range over a 24-hour averaging period (condition 4.2.5.)	Visible inspection of the baghouse emission points for indication of visible emissions. (condition 4.2.1.)
<b>II.</b>	<b>Indicator Range or Designated Condition*</b>	185 to 205 amps ± 15% for CE006 and CE008; 60 to 65 amps ± 15% for CE007 (condition 4.2.5.)	Presence of visible emissions. (condition 4.2.1.)
<b>III.</b>	<b>Performance Criteria</b>	Measure the total fan amperage of each baghouse fan. (condition 4.2.5.)	Weekly visible emissions observation when the EAF is in operation. (condition 4.2.1.)
	<b>A. Data Representativeness</b>		
	<b>B. Verification of Operational Status</b>	Performance testing in accordance with Permit Condition 4.6.1.d.	Upon observation of visible emissions at the baghouse, the compartment(s) observed to have emissions will be isolated for inspection and repairs if necessary. (condition 4.2.1.)
	<b>C. QA/QC Practices and Criteria</b>	N/A - Ammeters do not require calibration.	The personnel conducting the visible emissions observations shall be trained and semi-annually certified for Method 9 readings. (condition 4.2.1.)
	<b>D. Monitoring Frequency</b>	Once per shift when the EAF is operational. (condition 4.2.5.)	Weekly when the electric arc furnace is operational. (condition 4.2.1.)
	<b>Data Collection Procedures</b>	Plant personnel read and the fan amp measurements are recorded for the two baghouse fans on the Wheelabrator baghouse (CE007), the single baghouse fan for the East baghouse (CE006), and the single baghouse fan for the West baghouse (CE008) once per shift when the EAF is operational. (condition 4.2.5.)	Plant personnel read and record the visible emissions readings of the baghouses weekly when the electric arc furnace is operational. All visible emission records shall be maintained on-site for a minimum of 5-years and shall be made available on request. (condition 4.2.1.)

	<b>Data averaging periods</b>	24 Hours (condition 4.2.5.)	Three 6-minute intervals. (condition 4.2.1.)
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\*In accordance with 40 CFR part 63, subpart YYYYYY, SWVA is in the process of upgrading its emission capture equipment. This upgrade will likely have an impact on the operational parameters for the baghouses, including the fan amperage ranges. The indicator range may be adjusted up or down as indicated by subsequent performance tests. The permittee shall keep records and notify the Director of the indicator range changes.

### Non-Applicability Determinations

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

45CSR13 - R13-2618 - Permit has been declared inactive, therefore the requirements from this permit have not been included in the renewal Title V Permit.

40CFR Part 60, Subpart AA - does not apply to the EAFs nor the canopy hood since it is not part of a "dust handling system".

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: June 30, 2010

Ending Date: July 30, 2010

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

Bobbie Scroggie  
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.

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**Point of Contact**

Bobbie Scrogie  
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

**Response to Comments (Statement of Basis)**

SWVA received an extension of time to comply with the EAF MACT opacity standard in order to install improved capture equipment. This improved equipment includes new fans and motors on the baghouses identified as CE006 and CE008, which were just recently installed. As such, the fan amperage ranges identified in the application and included in the proposed Section 4.2.5 permit term are no longer relevant. SWVA has only had this new equipment in operation for the past three weeks, and as such is still in the process of optimizing the operation. However, based on preliminary assessments, we believe that a proper fan amperage range in order to assure compliance would be 185 to 205, +/- 15% for CE006 and CE008. We request that WVDEP incorporate this new range in the Title V permit term.

WVDEP incorporated the new fan amperage range in Section 4.2.5. of the permit, and modified the CAM plan on page 4 of the Fact Sheet to provide performance testing for verification of operational status.