

# YAKIMA REGIONAL CLEAN AIR AGENCY

Order of Approval Permit No. NSRP-05-SSLLC-14

New Source Review Order of Approval for Sun Steel LLC, for an IBT Structural Steel Cleaning System a.k.a Wheelabrator Abrasive Blasting with a Dust Collector.

**IN THE MATTER OF** approving a project which establishes a new air contaminant source at Sun Steel LLC, THIS ORDER OF APPROVAL IS HEREBY ISSUED TO:

**Applicant/Permittee:** 

Sun Steel, LLC

Prefabricated Structural Steel metal parts

Located at:

2002 Morgan Rd.

Sunnyside, WA 98944

**Contact:** 

SunSteel, LLC Mike Greene

Safety, Health & Environmental Coordinator

2002 Morgan Rd. Sunnyside, WA 98944

(509) 837-7008

IN COMPLIANCE WITH THE PROVISIONS OF THE STATE OF WASHINGTON CLEAN AIR ACT (Revised Code of Washington (RCW) CHAPTER 70.94.152, WASHINGTON ADMINISTRATIVE CODE (WAC) 173-400-110 AND WAC 173-460-040.

ISSUE DATE: June 13, 2014

THIS ORDER OF APPROVAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

Construction of the equipment must be conducted in compliance with all data and specifications submitted with the application under which this Order is issued unless otherwise specified herein. The conditions and limitations of this NSR Order of Approval are attached as follows and shall become federally enforceable and part of the required provisions of the Title V Air Operating Permit AOP # Y-005-02:



### 1.0 Description of the Source

- Sun Steel, LLC. Formerly known as Canam Steel Corporation hereafter referred to as the Permittee. The Facility, SSLLC or the source is a Title V source in accordance with the Federal Clean Air Act. The Permittee has been issued an Air Operating Permit (AOP) in March 21, 2000. First and second permits renewal were issued for a period of five years term with permit number Y-005-01 and Y-005-02 in September 8, 2006 and March 28, 2013, respectively. The Permittee operates and fabricate structural steel members i.e., joist, girders and bridging (processes details for the facility are found in the statement of basis of the Title V AOP permit AOP # Y-005-02). The Facility is located at 2002 Morgan Rd., Sunnyside, WA.
- 1.2 The Permittee submitted a New Source Review (NSR) application and is proposing to install an IBT structural steel cleaning system also known as wheelabrator with dust collector. The Permittee is also proposing to eventually remove the current Wheelabrator abrasive blasting with FARR Gold Series Dust Collector which has 5000 actual cubic feet per minute (acfm) capacity. This Order of Approval (Order or Permit) NSRP-05-SSLLC-14 shall supersede NSRP-10-CSC-08 if the current wheelabrator system is removed or upon removal.
- 1.3 Air emissions from this operation are primarily in the form of Particulate Matter (PM), in accordance with the Federal Clean Air Act (FCAA) or Washington Administrative Code (WAC) 173-400-110, respectively. These emissions are emitted from the sandblasting (wheelabrator) and the dust collector. The Yakima Regional Clean Air Agency (YRCAA) issued a Determination of Non-Significance (DNS) with respect to the State Environmental Policy Act (SEPA) review for this project and it is on file.
- 1.4 The layout and specifications for the IBT structural steel cleaning system with the dust collectors were submitted with the NSR application and are part of this Permit as provided by the Permittee.

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#### 2.0 Determinations

In relation to the above installation, YRCAA determines that the source shall comply with the federal, state and local regulations and laws including but not limited to the following determination:

- 2.1 The Facility is located in an area that is in attainment with all criteria pollutants;
- 2.2 The Facility is a major stationary source, however, this installation is not subject to the Prevention of Significant Deterioration (PSD) permitting requirements of WAC 173-400-700 through 173-400-750;
- 2.3 The source is subject to 40 CFR Part 63, Subpart XXXXXX National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories;
- 2.4 The source is subject to 40 CFR Part 63, Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating Miscellaneous Metal Parts and Products; and
- 2.5 Installation/ modification of the of the IBT structural steel cleaning system with the dust collectors is a new source of air contaminants requiring a NSR permit pursuant to the Revised Code of Washington (RCW) 70.94.152 and the WAC 173-400-110.

**THEREFORE**, it is hereby ordered that the project as described above, in the NSR application, and in detailed plans, specifications and other information submitted in reference thereto, is **approved** for construction, installation and operation, **provided** the following conditions are met:



#### 3.0 Operating Approval Conditions

- 3.1 This Order of Approval is for the IBT structural steel cleaning system also known as wheelabrator with dust collation system and will be located at 2002 Morgan Rd., Sunnyside, WA, in accordance with the plan and specifications submitted with the NSR application to YRCAA and specified in Table 1 of this Order.
- 3.2 Best Available Control Technology (BACT) shall be satisfied for any proposed new facility or modified air emission source to control air emissions. YRCAA finds BACT to be satisfied as follows:
  - 3.2.1 The source is subject to and shall be in compliance with 40 CFR Part 63, Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating Miscellaneous Metal Parts and Products;
  - 3.2.2 The wheelabrator unit must be in compliance with 40 CFR Part 63 Subpart XXXXXX National Emission Standards for Hazardous Air Pollutants (NESHAPs) Area Source for Nine Metal Fabrication and Finishing Source Categories (§63.11516 (f));
  - 3.2.3 An Operation and Maintenance (O&M) plan for all the units shall be developed as specified in this Order and manufacturers recommended standards;
  - 3.2.4 The units must be operated as per manufacturer specifications and certification; and
  - 3.2.5 The dust collector with 7500 acfm flow rate wand has a 99.8 % control efficiency for PMs.
- 3.3 This permit authorizes the use of the following equipment:

Table 1. Authorized Equipment List.

Emission Unit or Activity	Description	Efficiency	Capacity
IBT Automatic 12 wheel Blast System (Wheelabrator)	IBT-1795- Model # IBT-6996 RC		Note: Detailed description of the system is found in the NSR application.
2 IBT Cartridge Dust Collectors	IBT 1252/4	PM <sub>2.5</sub> 99.8%	7,500 CFM
2 After Filters	Secondary filters	PM <sub>2.5</sub> 99.8%	7,500 CFM



- 3.4 The filters used in the in the dust collectors-baghouse shall have a collection efficiency higher than that specified Table 1 above, which must be certified by the filters manufacturers.
- 3.5 The Facility shall strive to use natural blasting materials when applicable.
- 3.6 The Permittee must develop a site-specific O&M plan for these units. If an O&M is not developed yet, a plan must be completed within 60 days of the issuance of this Order and shall include, but not be limited to the following:
  - 3.6.1 The Site–Specific Emissions Management Plan should be updated annually and submitted with the compliance report as per 40 CFR Part 63- §63.11516 (f) 8.
  - 3.6.2 The Material and Safety Data Sheet (MSDS) for the abrasive materials used must be kept on site and available for inspection all the times.
  - 3.6.3 The scheduled inspection for these units for wear and tear or replacement, as specified by the equipment manufacturer.
- Opacity reading using EPA Method 22 or EPA Method 9 shall be performed according to the compliance requirement stated in 40 CFR Part 63 Subpart XXXXXX-§63.11516(f) and shall not exceed five percent and zero percent using Method 22 for fugitive emission and Method 9 from the stack or point source, respectively. Opacity frequency shall be as specified in 40 CFR Part 63 Subpart XXXXXX--§63.11517, use at least the quarterly frequency as below.
- 3.8 The Permittee shall install and maintain a gauge/manometer to measure the pressure drop across the exhaust of dust collector within 30 days of the receipt of this permit as specified by the manufacturer. The acceptable range for the gauge shall be developed based on the manufacturer's specification and clearly marked on or nearby the gauge.

#### 4.0 General Operational Conditions

4.1 Establishment of the wheelabrator abrasive blasting and the dust collector, and any other emission points at this facility shall be in compliance with all other requirements specified in all current federal, state and local air pollution laws and regulations, including but not limited to 40 CFR Part 63 National Emission Standards for Hazardous Subpart MMMM –Air Pollutants for Surface Coating Miscellaneous Metal Parts and Products, 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants Subpart XXXXXX -Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, RCW 70.94.152 (Washington Clean Air Act), WAC 173-400 (General Regulations for Air Pollution Sources), WAC 173-460 (Controls for New Sources of Toxic Air Pollutants), and the YRCAA Regulation 1.



- 4.2 All plans, specifications or other information submitted to YRCAA and any further authorizations or approvals or denials in relation to this project, shall be incorporated herein and made a part of the YRCAA file and this Permit.
- 4.3 Nothing in this approval shall be construed as preventing or evading compliance with any other requirement(s) of law including those imposed pursuant to the Washington Clean Air Act, and rules and regulations thereunder. Any violation(s) of such rules and regulations are penalized in accordance with RCW 70.94.430 and YRCAA Regulation 1, Article 5, Penalties.
- 4.4 Authorization may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:
  - 4.4.1 Violation of any terms or conditions of this authorization; or,
  - 4.4.2 Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.
- 4.5 The provisions of this authorization are severable and, if any provision of this authorization, or application of any provisions of this authorization to any circumstance, is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.
- 4.6 The RCW rules and regulations may be superseded or revised without notice. It is the Permittee's responsibility to stay current with rules and regulations governing their business and therefore is expected to comply with all new rules and regulations immediately upon their effective date. Rules and regulation updates will be incorporated into existing permits or upon renewal or modification of said permits.
- 4.7 All air emissions from this facility shall be in compliance with air emission standards at all times. It is the responsibility of the owner to make sure that air emissions are within all known rules and regulations.
- 4.8 Deviations from these conditions are violations subject to penalties in accordance with RCW 70.94.430 and 431, WAC 173-400-230 and YRCAA Regulation 1, Article 5, Section 5.02.
- 4.9 If, or whenever the Permittee wants to modify the operation, install new equipment or change the quantity set forth in Appendix A of this permit, another NSR application must be filed and approved with YRCAA before the changes take place and BACT and T-BACT requirements must be satisfied.



#### 5.0 Emission Limits

- 5.1 The Permittee shall meet the emission limit of 0.01 grains per dry standard cubic foot (gr/dscf) from the dust collector. Table 2 shows the actual and allowable air emissions from this dust collector, Appendix A shows the calculations for these air emissions.
- The annual maximum amount of PMs, from the units must not exceed the allowable air emissions shown in Appendix A.
- 5.3 Opacity limit shall not exceed the limit set in condition 3.6 above.
- 5.4 Over-all emissions from the facility are specified in the Title V AOP #Y-005-02. In addition, HAPs emission from any single HAPs shall not exceed 9.9 Tons per year.

Table 2. Sun Steel Corporation Actual and Allowable Air Emissions.

Pollutants	Actual Emissions (lbs/year)*	Allowable Emissions (lbs/year)
Particulate Matter (PM <sub>10</sub> )	0.0256	0.135
Particulate Matter (PM <sub>2.5</sub> )	57.65	303.50

<sup>\*</sup>Above emissions are based on the information provided by Sun Steel Corporation and USEPA AP-42.

## 6.0 Monitoring, Recordkeeping and Reporting Requirements

- Once during each month that the dust collector is in use, the Permittee shall determine and record if the pressure drop across the exhaust filters is within the acceptable range. If the pressure drop is not within the acceptable range, the Permittee shall stop operation and take corrective action as specified in the facility's O&M plan.
- 6.2 Operation and Maintenance procedures shall include but not be limited to the following:
  - 6.2.1 Required scheduled lubrication of all moving parts as specified by the equipment manufacturer;
  - 6.2.2 Required scheduled calibration of process control instruments as specified by the equipment manufacturer; and
  - 6.2.3 Scheduled inspection and replacement of equipment or parts for wear and tear, as specified by the equipment manufacturer.



- 6.3 The Wheelabrator abrasive blasting and dust collector maintenance shall be logged and kept on site. Any log shall be designed by the Permittee and shall contain at least the date, operator name and specific action taken.
- The required records, logs and a copy of the O&M plan for this Facility shall be kept on site and shall always be readily available, organized and accessible when requested by YRCAA Air Pollution Control Officer (APCO) or his representative or during an inspection. The O&M plan shall be updated to reflect any changes in operating procedures and such changes shall be routinely implemented.
- 6.5 Material Safety Data Sheets (MSDS) of all materials contributing to HAP, TAP and VOC emissions shall be maintained on-site and readily accessible when requested by YRCAA personnel.
- All records shall be kept and maintained at the site for at least the most recent five years period from any present time and be made available during inspections or when requested by YRCAA.
- 6.7 Total emissions for criteria pollutants, HAPs, TAPs and VOCs must be calculated and reported to YRCAA with the annual emission inventory compliance requirement as specified in the Title V AOP #Y-005-02.
- 6.8 All recordkeeping required in this Order must be reported to YRCAA as specified.
- 6.9 Any application form, report, or compliance certification, including the annual consumption report, submitted pursuant to this permit must be signed by a responsible official.
- 6.10 This permit and its conditions shall remain in effect in the event of any change in control or ownership of the facility. In the event of any such change in control or ownership of the subject facility, the Permittee shall notify the succeeding owner of the permit and conditions and shall notify the YRCAA of the change in control or ownership as specified by the Title V AOP #Y-005-02.
- 6.11 This permit is void without paying the complete appropriate/required fees to YRCAA, pursuant to RCW 70.94.152.



Any person feeling aggrieved by this NSR Order may obtain review thereof by application, within thirty (30) days of receipt of this NSR permit to the Pollution Control Hearings Board (PCHB), P.O. Box 40903, Olympia, WA. 98504-0903. Concurrently, a copy of the application must be sent to the YRCAA, 329 N. 1<sup>st</sup> St., Yakima, WA. 98901. These procedures are consistent with the provisions of Chapter 43.12B RCW and the rules and regulations adopted thereunder.

DATED at Yakima, Washington this June 13, 2014.

PREPARED & APPROVED BY:

Hasan M. Tahat, Ph.D.

Engineering and Planning Division Supervisor

Yakima Regional Clean Air Agency

For

Gary W. Pruitt

Air Pollution Control Officer

Yakima Regional Clean Air Agency

REVIEWED BY:

Joseph Andreotti, P.E., Andreotti and Associates



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### IBT structural Steel Cleaning System

2 IBT Cartridge Dust Collector 2 DC After Filter Assemblies

Air Flow (2\*7,500):

15,000.00 cfm

Filtration efficiency:

IBT Cartridge Dust collector	PM10	99.80%
	PM2.5	70%
After Filter	PM10	99.80%
	PM2.5	97%

Emision Factor PM	Emision Factor	Actual operating	Potential operating time
(grains/dscf)	PM (lbs/dscf)	time per yr (min)	per yr (min)
0.01	1.42857E-06	299520	525600

	Actual EMISSIONS (lbs/yr)	Actual EMISSIONS (tons/yr)
PM10	0.025673143	0.00001284
PM2.5	57.64904229	0.02882452
	Allowable	Allowable
	EMISSIONS	EMISSIONS
	(lbs/yr)	(tons/yr)
PM10	0.135154286	0.00006758
PM2.5	303.4889486	0.15174447

	Uncontrolled EMISSIONS (lbs/yr)	Uncontrolled EMISSIONS (TPY)
PM10	6418.3	3.209
PM2.5	1925.5	0.963

**Hours of Operation** 

nours of Operation		
Actual		
4992	hrs/yr	
Potential		
8760	hrs/yr	