YAKIMA REGIONAL CLEAN AIR AGENCY

Order of Approval Permit No. NSRP-09-SSLLC-17

New Source Review Order of Approval for Sun Steel LLC, for an Addition and Changes in Paint Operation

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

Applicant/Permittee:	SunSteel, LLC *Prefabricated Structural Steel metal parts*
Located at:	2002 Morgan Rd. Sunnyside, WA 98944
Contact:	SunSteel, LLC Carol Crockett U.S. Environmental Manager (301) 874- 5141

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: February 15, 2018

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 FINDING OF FACTS /DESCRIPTION OF THE SOURCE

1.1 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. Currently the Title V is under renewal. 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 increase the paint to the coating process resulting in new and increased pollutants.

1.3 Air emissions from this operation are primarily in the form small particulate matters (PM), and Volatile Organic Compounds (VOCs) some of which, are Hazardous Air Pollutants (HAPs) or Toxic Air Pollutants (TAP), in accordance with the Federal Clean Air Act (FCAA) or Washington Administrative Code (WAC) 173-460-150, respectively. These emissions are emitted from the coating operation. 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 the process diagram for the paint operations are as shown in Figures 1 and 3 below. AERMOD modeling was done by Trinity Consultants and shows that all HAPs TAPs passed the modeling screening and are below the Acceptable Source Impact Level (ASIL).

2.0 DETERMINATIONS

In relation to the above increase in paint operation, 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/modification 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 This Facility is subject to the National Emission Standards For Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63, Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations as an area source as defined in the Federal Clean Air Act (FCAA) section 112(a) (any stationary source of HAP that is not a major source);

2.5 This Facility is also subject to 40 CFR Part 63, Subpart MMMM (Surface Coating of Miscellaneous Metal Parts and Products); and

2.6 Increase in the paint quantity and air emissions is a modification to the previously permitted quantity and a 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/modification, installation and operation, **provided** the following conditions are met:

3.0 OPERATING APPROVAL CONDITIONS

3.1 This Order of Approval is for the increase in paint quantity and air emissions from the paint coating operations at the Facility located at 2002 Morgan Rd., Sunnyside, WA, in accordance with the plan and specifications submitted with the NSR application to YRCAA and specified in Appendix A 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 Permittee shall use High Volume Low Pressure (HVLP) spray equipment, and when upgrading shall use equal or more efficient spray equipment;

3.2.2 TAP air emissions shall always be below the Acceptable Source Impact Levels (ASILs);

3.2.3 When applicable, the Permittee shall strive for use of non-toxic solvent, paint, enamel and thinner;

3.2.4 The Permittee shall develop, maintain and implement an operation and maintenance (O&M) plan for the paint operation including appropriate training for all operators;

3.2.5 The Permittee shall not exceed the total raw materials specified in this permit;

3.2.6 The Facility 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;

3.2.7 The Facility is subject to and shall be 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 (d));

3.2.8 The Operation and Maintenance (O&M) plan for the increase in paints quantity shall be updated;

3.2.9 Previous O&M plan certification for the paint operation shall be continued and updated, if required; and

3.2.10 All other operation procedures and conditions approved by previous Orders as part of the O&M plan and resulted in compliance shall be part of the BACT.

3.3 The Permittee shall use HVLP spray guns or spray equipment of equivalent efficiency to reduce aerosol emissions.

3.4 Using AERMOD modeling analysis, the Facility passed the ASIL TAPs threshold limits (Table 1). However, The Facility should find another alternative paint for TNEMEC PERIMEPRIME 394-0250 and TENEMC ZINC SERIES 90-97 with less total isocyanate concentration when possible.

3.5 The maximum combined fugitive and point source emissions of HAPs in the overall facility operation shall not exceed 24.1 and/or 9.9 tons for any combined or single HAP, respectively, on a moving 12 month arithmetic average.

3.6 All workers performing painting must be certified that they have completed training in the proper spray application of paints and the proper setup and maintenance of spray equipment.

3.7 This Order authorizes the increase in paint as submitted with the application and shown in Appendix A.

3.8 The Facility shall strive to use water base paints and solvents when applicable.

3.9 Total emissions for criteria pollutants, HAPs, TAPs, and VOCs must be calculated and submitted to YRCAA on an annual basis as required in the AOP permit.

3.10 There must be no fallout or any fugitive emissions from this surface coating operation beyond the property boundary in a quantity that interferes unreasonably with the use and enjoyment of the property owner upon which the material is deposited or is detrimental to the health, safety or welfare of any person or causes damage to any property or business.

3.11 The Permittee must update the site-specific O&M plan to include this increase in paint. The plan must be completed within 90 days of the issuance of this Order and shall include, but not be limited to the following:

3.11.1 The Safety Data Sheet (SDS) for the paint materials used must be kept on site and available for inspection at all times.

3.12 Within 90 days from the date of issuance of this Order, the Permittee shall submit notification to YRCAA indicating that the O&M plan is completed and in place. If the Permittee needs to make any future modification to the surface coating operating procedures, an approval in writing from YRCAA must be issued before such modification takes place. The O&M documents must be updated and implemented to reflect such modification.

3.13 The door at the paint shop shall be closed at all times during spray painting.

3.14 No visible emission shall be allowed from the paint operation, stacks or any building opening. All surface coating must be conducted inside the operating surface coating booth or building

3.15 If visible emissions are observed, the Permittee shall immediately stop the operation creating the emission and take corrective action as directed in the O&M Plan until no more visible emissions are observed within 24 hours. Opacity shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9 or Method 22, as appropriate. Corrective actions may include the following:

3.15.1 Conduct an opacity evaluation by a certified opacity reader in accordance with 40 CFR Part 60, Appendix A, Method 9 or Method 22, as appropriate and such opacity evaluation shall be conducted within 48 hours to verify compliance with the respective opacity limits. If opacity is greater than zero, appropriate and timely corrective action must be taken no later than 48 hours to identify and correct the problem causing the opacity; and

3.15.2 Verify and certify that the fabric filtering system or any other affected part thereof is performing according to its design functions within the acceptable design parameters and is being operated according to O&M procedures. Therefore, it must be checked against any operational conditions that have resulted in compliance in the past. If the paint operation is not performing according to design and O&M procedures, the Permittee must stop the operation and further corrective action must be taken within 48 hours to correct the issue. If the Facility has no opacity reader, the Permittee must contact YRCAA and will be advised accordingly.

3.16 The Air Pollution Control Officer (APCO) or his designated official shall be allowed to enter the Facility at reasonable times to inspect for compliance with applicable regulations and the conditions of this Order.

4.0 General Operational Conditions

4.1 The operation 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, Subpart XXXXXX -Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations, 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 laws, 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 air emission limits shown Appendix A.

5.2 The annual maximum amount of air emissions must not exceed the allowable air emissions shown in Appendix A.

5.3 Opacity limit shall not exceed zero percent (0%) as specified above.

5.4 The maximum combined fugitive and point source emissions of HAPs in the overall facility operation shall not exceed 24.1 and/or 9.9 tons for any combined or single HAP, respectively, on a moving 12 month arithmetic average.

6.0 Monitoring, Recordkeeping and Reporting Requirements

6.1 Quantity of all paints shall be logged and kept on site. Daily use of the paints shall also be logged. Maintain a record of visual determination of emission opacity records, the filter efficiency demonstrations and paint shop filter maintenance activities. Any log shall be designed by the Permittee and shall contain at least the date, operator name and specific action taken.

6.2 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.

6.3 Safety Data Sheets (SDS) of all materials contributing to HAP, TAP and VOC emissions shall be maintained on-site and readily accessible when requested by YRCAA personnel.

6.4 All records shall be kept and maintained at the site for at least the most recent five years period from the present time and be made available during inspections or when requested by YRCAA.

6.5 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.

6.6 All recordkeeping required in this Order must be reported to YRCAA as specified.

6.7 Any application form, report, or compliance certification, including the annual consumption report, submitted pursuant to this permit must be signed by a responsible official.

6.8 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.

6.9 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. 1st 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 15th day of February, 2018.

PREPARED BY:

Hasan M. Tahat, Ph.D.
Compliance, Engineering and Planning Division Supervisor
Yakima Regional Clean Air Agency

REVIEWED BY:

Norman Hepner, P.E.,
Nth Degree Engineering Solutions

ISSUED BY:

Keith M. Hurley
Air Pollution Control Officer
Yakima Regional Clean Air Agency

Table 1. AERMOD Air Toxic Analysis.

Pollutant	Meteorological Year	Modeled Concentration (ug/m^3)	UTM Easting (m)	UTM Northing (m)	ASIL ($\mu g/m3$)	ASIL Averaging period	Exceeds ASIL?	Percent of ASIL (%)
Ethylbenzene	Maximum	0.3941	270,080.8	5,134,878.9	0.4	Annual	No	98.52%
	2010	0.38	270,080.8	5,134,878.9				
	2011	0.38	270,080.8	5,134,878.9				
	2012	0.39	270,080.8	5,134,878.9				
	2013	0.39	270,080.8	5,134,878.9				
	2014	0.32	270,080.8	5,134,878.9				
Methylene Diphenyl Diisocyanate	Maximum	0.664	269,933.0	5,135,013.3	0.7	24 hr	No	94.87%
	2010	0.33	269,753.8	5,134,810.2				
	2011	0.35	270,082.2	5,134,908.9				
	2012	0.41	269,955.1	5,134,773.3				
	2013	0.40	269,949.4	5,135,050.0				
	2014	0.66	269,933.0	5,135,013.3				

SunSteel, LLC Sunnyside, Washington
2017 NSR for New Paints
PTE Particulate Matter from Spray Painting

	14629	2016 Paint Sprayed (gals)
	32000	Projected Maximum Annual Paint Use (gals)
Assumption	40%	of paint oversprayed
Assumption	50%	of overspray is PM10
Assumption	50%	of overspray is PM2.5
	6400	gallons oversprayed PM10
	6400	gallons oversprayed PM2.5
Assumption	99.0%	capture efficiency
	6336	gallons removed PM10
	6336	gallons removed PM2.5
	64	gallons PM10 not filtered (emitted)
	64	gallons PM2.5 not filtered (emitted)
Assumption	11.0	pounds per gallon of coating
	704	pounds emitted PM10
	704	pounds emitted PM2.5
	0.35	tons emitted PM10
	0.35	tons emitted PM2.5

SunSteel, LLC - Sunnyside, Washington
2017 NSR for New Paints
Calculations of PTE HAP Emissions

	Projected Annual Use (Gal)	Density (lb/gal)	Ethyl benzene		MIK		Xylenes		Cumene		Toluene		Methanol		Diphenylmethane Diisocyanate Reactive Polymer		Cumene	
			% by wt	lbs	% by wt	lbs	% by wt	lbs	% by wt	lbs	% by wt	lbs	% by wt	lbs	% by wt	lbs	% by wt	lbs
ZINC CD DUST F 72# KEG	21168	58.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ZINC CD II PART E 4-GAL KIT	1240	8.17	0.04	411.31	0.02	165.13	0.23	2327.04	0.00	0.00	0.00	0.00	0.01	136.77	0.00	0.00	0.00	0.00
XYLENES	20	7.17	0.15	21.51	0.00	0.00	0.85	121.69	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
MEK REDUCER MEK/SW	2580	6.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACROPOXY 646 FAST CURE EPOXY PART B HARD	32	13.48	0.008	3.451	0.07	30.20	0.04	17.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACROPOXY 646 MILL WHITE PART A	28	12.18	0.03	8.90	0.00	0.00	0.15	50.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MS-SW MINERAL SPIRITS	50	6.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACROPOXY 646 BLACK PART A	14	10.71	0.03	4.48	0.00	0.00	0.17	25.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STEEL SPEC STRUCTURAL STEEL GRAY PRIMER	20154	12.35	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PROCRYL UNIVERSAL PRIMER GRAY	820	10.23	0.00	0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DEVRAN 201H	100	9.51	0.10	95.10	0.000	0.000	0.50	475.50	0.00	0.00	0.00	0.00	0.01	9.51	0.00	0.00	0.00	0.00
TENEMC ZINC SERIES 90-97 PART A 4 GAL KIT	84	8.92	0.10	74.57	0.000	0.000	0.60	447.43	0.00	0.00	0.00	0.00	0.00	0.00	0.02	17.45	0.00	0.00
TENEMC ZINC DUST 73# KEG PART B	1606	58.8	0.00	0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TENEMC SERIES # 2 THINNER	20	7.25	0.30	43.50	0.000	0.000	1.00	145.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STEEL SPEC STRUCTURAL STEEL RED PRIMER	252	13.26	0.03	93.56	0.003	10.025	0.15	501.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STEEL SPEC STRUCTURAL STEEL RED PRIMER	140	12.68	0.00	0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XBARRIER 3 METAL SHOP PRIMER GRAY	30	10.42	0.038	11.941	0.000	0.000	0.22	67.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TNEMEC PERIMEPRIME 394-0250	772	21.36	0.000	0.000	0.000	0.000	0.00	0.00	0.01	164.94	0.00	0.00	0.00	0.00	0.02	336.48	0.01	164.94
Tnemec Uni-bond DF Series 115 (57GN)	50	11.62	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carboline Carbocoat 116	240	12.51	0.010	30.024	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW Shop Primer (Project D16624 Only)	1802	13.69	0.006	148.016	0.000	0.000	0.04	986.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Xylene	725	7.26	0.000	0.000	0.000	0.000	1.00	5263.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toluene	2700	7.23	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	1.00	19521	0.00	0.00	0.00	0.00	0.00	0.00
	31853																	
Total HAP (lbs)			**946**		**205**		**10429**		**165**		**19521**		**146**		**354**		**165**	
Total HAP (tons)			**0.47**		**0.10**		**5.21**		**0.08**		**9.76**		**0.07**		**0.18**		**0.08**	

TOTAL POTENTIAL HAP 15.97 Tons

SunSteel, LLC - Sunnyside Washington
2017 NSR for New Paints
Summary of PTE Calculations

Particulate Matter

Maximum Yearly PM10 Emissions:	0.35 Tons
Maximum Yearly PM2.5 Emissions:	0.35 Tons

Hazardous Air Pollutants

Maximum Yearly Total HAP Emissions:	15.97 Tons
Maximum Single HAP Emissions:	9.76 Tons

Volatile Organic Compounds

Maximum Yearly VOC Emissions:	57.08 Tons

Toxic Air Pollutants

Maximum Yearly Total TAP Emissions:	24.78 tons
Maximum Single TAP Emissions:	9.76 tons

MFG NUMBER	PAINT DESCRIPTION SEE MSDS FOR MATERIALS	UOM	Projected Use	Density	VOC Content (lbs/gal)	VOC Emissions (lbs)
B69D00011	ZINC CD DUST F 72# KEG	lbs	21168	58.8	0	0
B69V00003	ZINC CD II PART E 4-GAL KIT	gal	1240	8.17	5.24	6497.60
XYLENE/SW	XYLENES	gal	20	7.17	7.17	143.40
MEK/SW	MEK REDUCER MEK/SW	gal	2580	6.68	6.68	17234.40
B58V600	MACROPOXY 646 FAST CURE EPOXY PART B HARD	gal	32	13.48	1.62	51.84
B58W00610	MACROPOXY 646 MILL WHITE PART A	gal	28	12.18	2.11	59.08
B50AZ6	KEM KROMIK UNIVERSAL METAL PRIMER GRAY	gal	0	12.65	3.28	0.00
R1K4	MS-SW MINERAL SPIRITS	gal	50	6.42	6.42	321.00
B58B600	MACROPOXY 646 BLACK PART A	gal	14	10.71	2.13	29.82
B50AV11	STEEL SPEC STRUCTURAL STEEL GRAY PRIMER	gal	20154	12.35	2.77	55826.58
B66A00310	PROCRYL UNIVERSAL PRIMER GRAY	gal	820	10.23	0.8	656.00
DC201H0245/A5GL	DEVRAN 201H	gal	100	9.51	2.72	272.00
F090-0097A-5G	TENEMC ZINC SERIES 90-97 PART A 4 GAL KIT	gal	84	8.92	3.83	320.19
F090-0097B-LPK	TENEMC ZINC DUST 73# KEG PART B	lbs	1606	58.8	0	0.00
F041-002-5G	TENEMC SERIES # 2 THINNER	gal	20	7.25	7.25	145.00
B50RW3	STEEL SPEC STRUCTURAL STEEL RED PRIMER	gal	252	13.26	2.71	682.92
B50NV12	STEEL SPEC STRUCTURAL STEEL RED PRIMER	gal	140	12.68	2.8	392.00
708098	XBARRIER 3 METAL SHOP PRIMER GRAY	gal	30	10.42	3.28	98.40
F394-0250-5G	TNEMEC PERIMEPRIME 394-0250	gal	772	21.36	2.05	1583.01
0115-57GN	Tnemec Uni-bond DF Series 115 (57GN)	gal	50	11.62	1.14	57.00
02950700005D	Carboline Carbocoat 116	gal	240	12.51	2.08	499.20
B50AV8431	SW Shop Primer (Project D16624 Only)	gal	1802	13.69	2.5	4505.00
	Xylene	gal	725	7.26	7.26	5263.50
	Toluene	gal	2700	7.23	7.23	19521.00
			31852.8			

Xylene * 1330-20-7		Ethylbenzene * 100-41-4		MIK * 108-10-1		Methanol ** 67-56-1		Toluene * 108-88-3		MEK ** 78-93-3		Silica (cryst, resp)** 7631-86-9		Methylene Diphenyl Diisocyanate ** 101-68-8		Cumene ** 98-82-8		Ethlyene Glycol Monobutyl Ether 111-76-2	
% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)	% by wt	(lbs)
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.97	2327.045	4.06	411.3105	1.63	165.132	1.35	136.7658	0	0	0	0	9.18	930.0074	0	0	0	0	0	0
84.86	121.6892	15	21.51	0	0	0	0	0.14	0.20076	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	100	17234.4	0	0	0	0	0	0	0	0
4	17.2544	0.8	3.45088	7	30.1952	0	0	0	0	0	0	57	245.8752	0	0	0	0	0	0
14.75	50.3034	2.61	8.901144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.25	0	3.62	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16.9	25.33986	2.99	4.483206	0	0	0	0	0	0	0	0	37.8	56.67732	0	0	0	0	0	0
0	0	0	0	0.3	746.7057	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	475.5	10	95.1	0	0	1	9.51	0	0	0	0	0	0	0	0	0	0	0	0
60	447.4272	10	74.5712	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	74.5712	0	0	0	0
100	145	30	43.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	501.228	2.8	93.56256	0.3	10.02456	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0.3	10.02456	0	0	0	0	0	0
21.66	67.70916	3.82	11.94132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	824.7096	1	164.9419	0	0
0	0	1	30.024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	58.1
4	986.7752	0.5	123.3469	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	5263.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	100	19521	0	0	0	0	0	0	0	0	0	0

Total (lbs) 114159
Total (tons) 57.08

	10429		922		952		146		19521		17234		1301		899		165		58	
	5.21		0.46		0.48		0.07		9.76		8.62		0.65		0.45		0.08		0.03	
Averaging Period	24-hr		Year		24-hr		24-hr		24-hr		24-hr		24-hr		24-hr		24-hr		24-hr	
ASIL ($\mu g/m^3$)	221		0.4		3000		4000		5000		5000		3		0.7		400		13000	
SQER (lb/avg period)	29		76.8		394		526		657		657		0.394		0.092		52.6		1710	
De Minimis (lb /avg period)	1.45		3.84		19.7		26.3		32.9		32.9		0.0197		0.0046		2.63		85.4	
g/s			1.33E-02												1.29E-02					

ASIL = Acceptable Source Impact Level
SQER = Small Quantity Emission Rate
ASIL, SQER and De Minimis from WAC 173-460-150
Assume paint emissions occur 24 hr/day 365 days/year

Below De Minimis Emission Rate
Exceeds De Minimis but below SQER
Exceeds De Minimis and SQER

VOC Inrease for new Permit

Projected VOC Emission in 2022	57.08	tons
2011 Renewal VOC Emissions fromPTE Calcs	19.2	tons
ProjectedVOC Emissions Increase 2011 to 2022	**37.90**	**tons**

Emissions per period (lbs)	28.57	921.70	2.61	0.40	53.48	47.22	3.56	2.46	0.45	0.16
De Minimis Emission Rate	Exceeds Below	Exceeds Exceeds	Below Below	Below Below	Exceeds Below	Exceeds Below	Exceeds Exceeds	Exceeds Exceeds	Below Below	Below Below
Small Quantity Emission Rate										

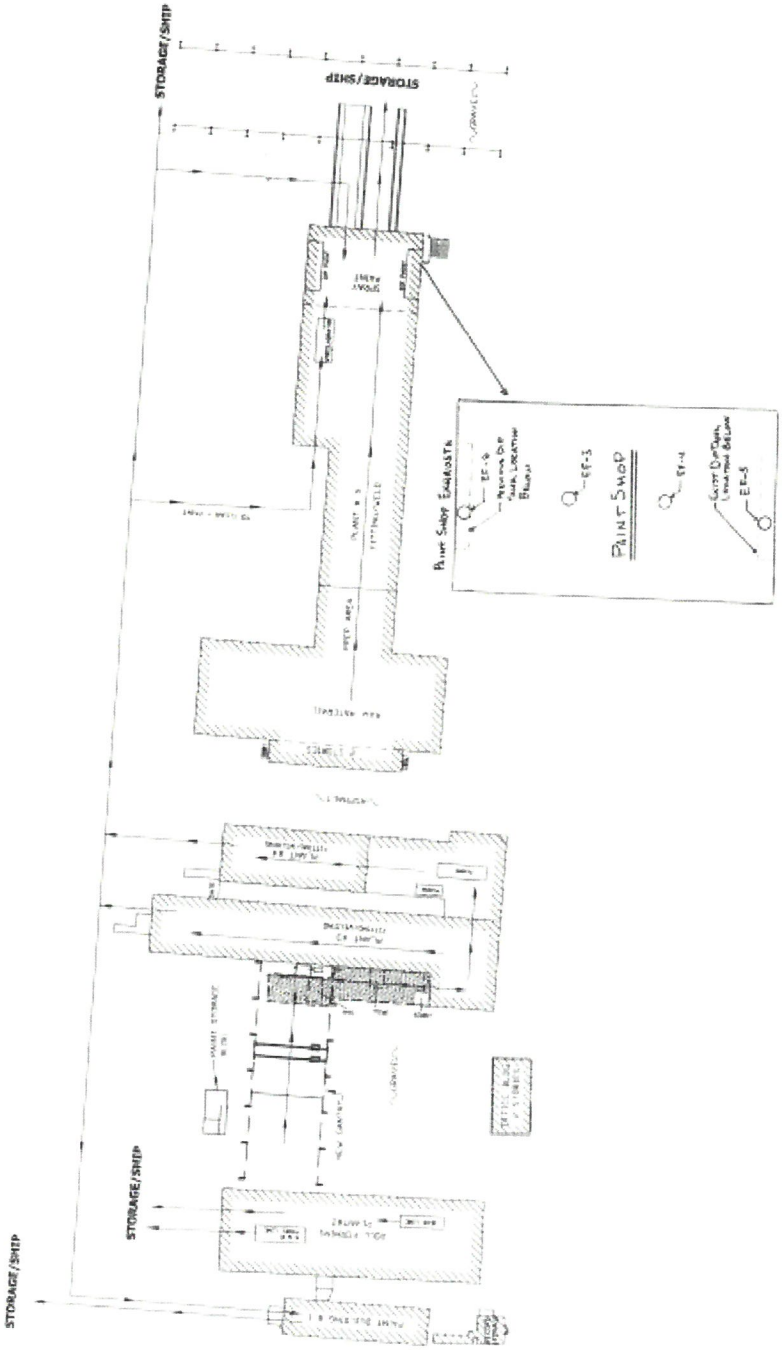

Figure1. Facility process diagram including the paint area

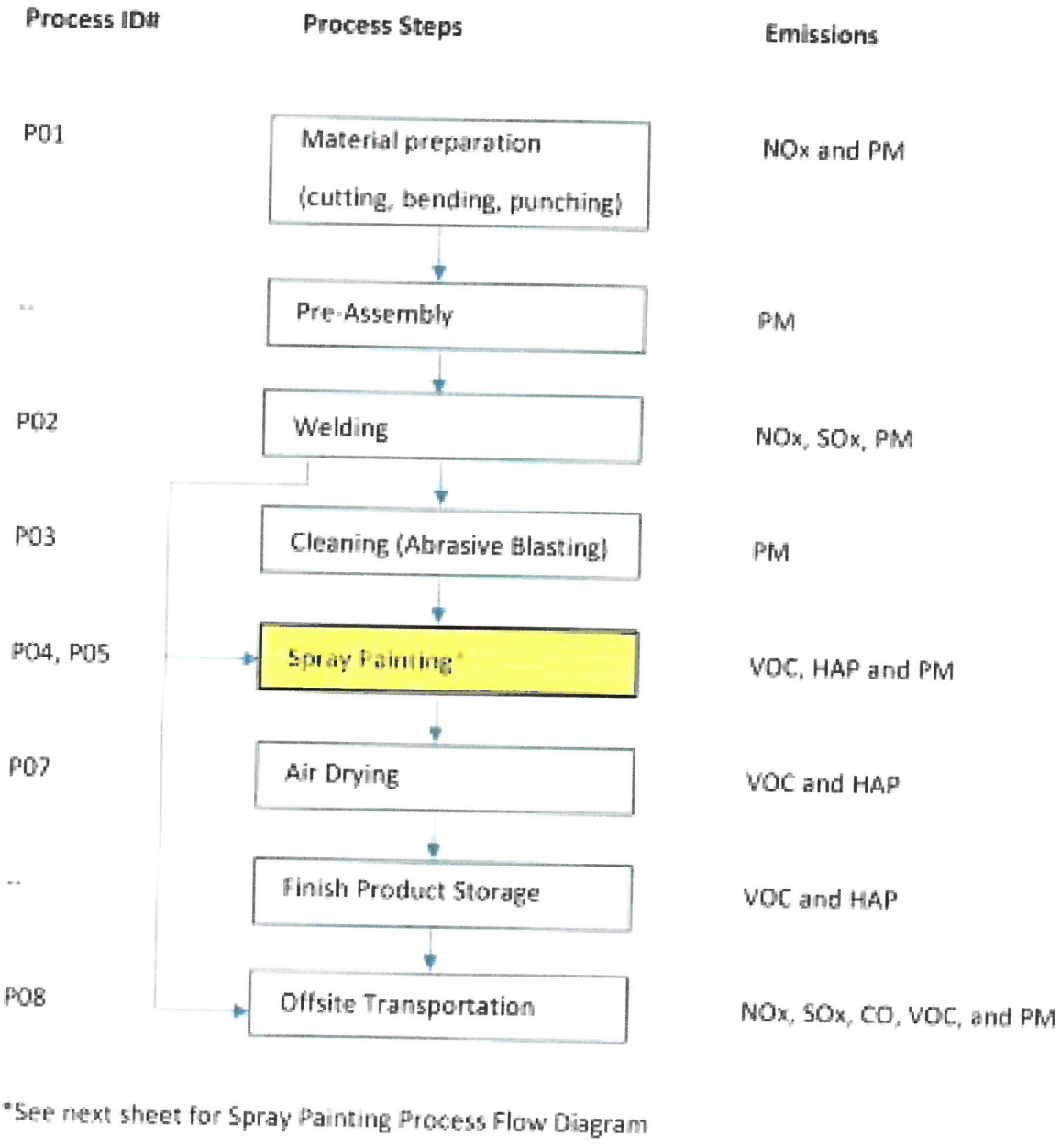

Figure 2. Structural Steel process flow diagram showing the spray painting

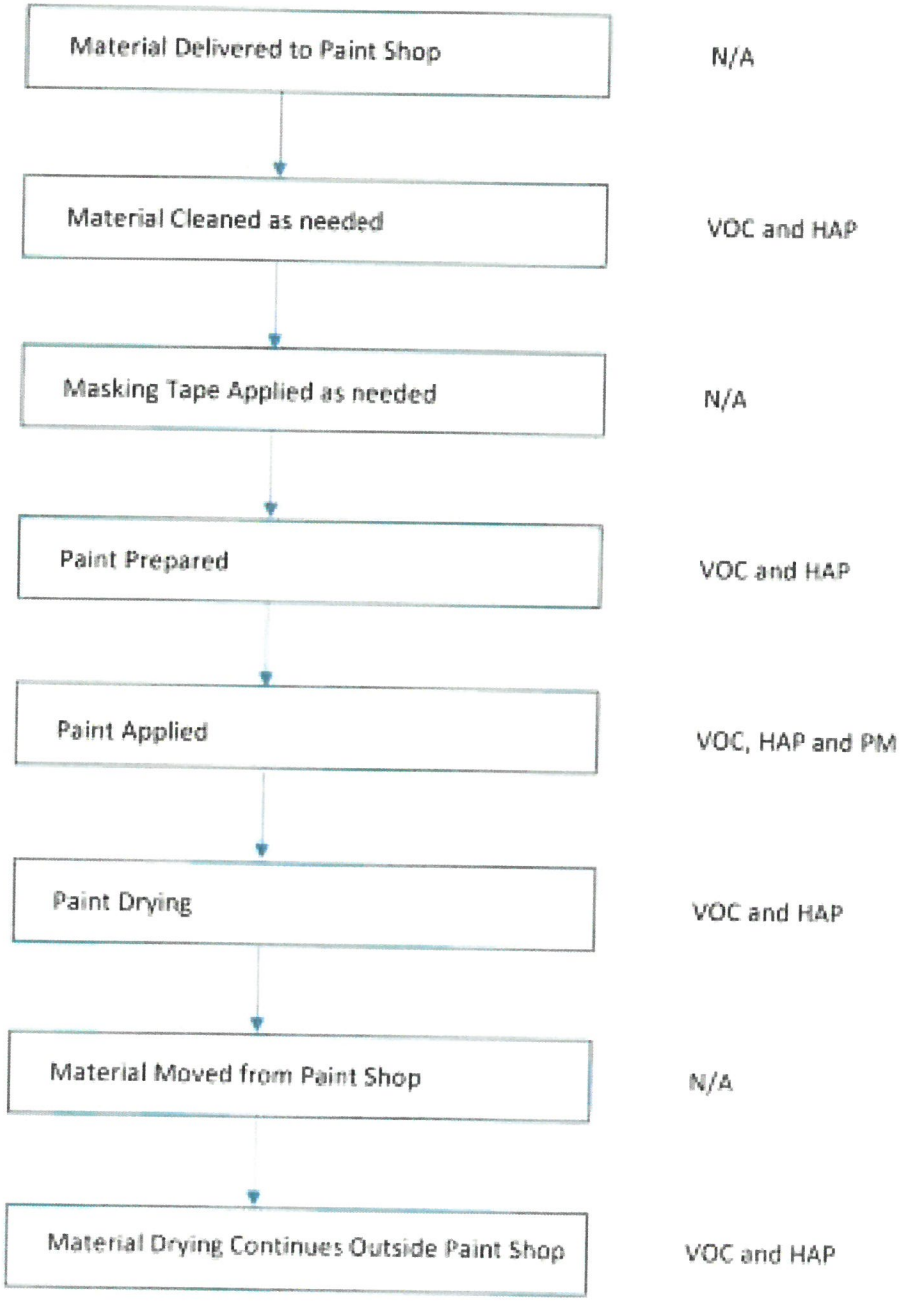

Figure 3. Spray painting process flow Diagram