

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 1	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

PERMIT TO CONSTRUCT ANALYSIS

FACILITY MAILING ADDRESS

California Steel Industries
14000 San Bernardino Avenue
Fontana, California 92335

(ID: 046268 NOx RECLAIM Cycle 1 – Title V)

EQUIPMENT LOCATION

SAME AS ABOVE

EQUIPMENT DESCRIPTION

APPLICATION NO. 563565 TITLE V PERMIT REVISION

APPLICATION NO. 563564 PERMIT TO CONSTRUCT
PROCESS 11: PIPE MILL

PLASMA ARC CUTTER, D240, PRIMARY CROPPER, WITH 2 MODEL 1500S CUTTING TORCHES, ELECTRICALLY POWERED, 22.4 KW EACH.

APPLICATION NO. 563566 PERMIT TO CONSTRUCT

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. DUST COLLECTOR, C241, CLEAN AIR TECH, MODEL NO. CPC-100, WITH TWENTY-FOUR POLYESTER CARTRIDGE FILTERS, PTFE MEMBRANE, 1,033 SQ. FT. TOTAL FILTER AREA, PULSE JET CLEANED.
2. EXHAUST SYSTEM WITH A 10 HP BLOWER VENTING ONE PLASMA ARC CUTTER.

APPLICATION NO. 563567 PERMIT TO CONSTRUCT

PLASMA ARC CUTTER, D242, REWORK CUTTER, WITH 2 MODEL 1500S CUTTING TORCHES, ELECTRICALLY POWERED, 22.4 KW EACH.

APPLICATION NO. 563568 PERMIT TO CONSTRUCT

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. DUST COLLECTOR, C243, CLEAN AIR TECH, MODEL NO. CPC-100, WITH TWENTY-FOUR POLYESTER CARTRIDGE FILTERS, PTFE MEMBRANE, 1,033 SQ. FT. TOTAL FILTER AREA, PULSE JET CLEANED.
2. EXHAUST SYSTEM WITH A 10 HP BLOWER VENTING ONE PLASMA ARC CUTTER.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 2	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

BACKGROUND

Application No. 563565 was filed on May 7, 2014, for a De Minimis Significant Permit Revision. Application Nos. 563564, 563566-8 were filed on May 7, 2014, as a Class I Permits to Construct.

Complaints

There were no complaints credited to this facility for the past two years.

Notices to Comply

D28697, 4/26/13 to provide monthly throughput records of steel processed from January 2004 to present.

Applicant provided records by 5/3/13

E12239, 10/11/13 to calculate 15-min data using only valid data. 2) Calculate fuel for shared equipment by percent ratio. 3) Apply Missing Data Procedures to process and 219 whenever MDP us used for equipment on the same line. 4) Calculate emissions for D11 and D234 using Facility Permit to Operate emission factor. 5) Electronically report emissions for D9, D228, and D236. 6) Electronically report NOx Major Quarterly emissions.

Applicant corrected above by 10/25/13.

Notices of Violation

P57372, 2/1/13 for Failure to reconcile quarterly NOx emissions in the 2nd & 3rd Quarters. NOx emissions from the beginning of the 2011 compliance year through the end of the second and third quarter exceeded the annual NOx emissions allocation in effect at the end of the reconciliation periods for those quarters.

PROCESS DESCRIPTION

California Steel Industries, Inc. (CSI) is a steel rolling mill that produces hot rolled, cold rolled, pickled and oiled, galvanized steel products and electric resistance welded pipe.

The two Plasma Arc Cutters and associated Dust Collectors will be used in CSI's new #2 Pipe Mill. The new pipe mill will produce high-strength electrical resistance welded pipe (ERW) up to 24-inches in diameter and up to 80 feet in length. CSI's existing #1 Pipe Mill is limited to 16-inch diameter and 60-foot length pipes.

CSI produces ERW pipe in 73 different combinations of diameter and thickness. The one combination of ERW pipe that cuts the maximum amount of metal is 24 inches in

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 3	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

diameter and 0.75 inches thick. This particular combination will be used for emission calculation purposes.

EVALUATION

Given: Plasma Arc Cutter – 2 Identical

- Total ERW Pipe Cut Daily - 396 each
- Maximum Outside Radius of ERW Pipe - 12", R
- Maximum Inside Radius of ERW Pipe - 11.25", r
- Maximum Thickness of ERW Pipe - 3/4"
- Width of Cut - 5 mm → 0.19685", L
- Density of ERW Pipe - 0.2836 lb/in³
- % Chrome - 0.10
- % Copper - 0.15
- % Manganese - 1.65
- % Nickel - 0.10
- PM₁₀ = 1.69% PM - Per Department of Energy Report January 2001
- PM_{Cr*} = 0.00022 PM_{Cr} - District Default
- Volume of steel removed - $\pi (R^2 - r^2) \times L$
 $\pi (12^2 - 11.25^2) \times 0.19685 = 10.78 \text{ in}^3/\text{cut}$
- PM → 396 cut/day x 10.78 in³/cut x 0.2836 lb/in³ = 1210.65 lb/day
- PM₁₀ → (396 cut/day x 10.78 in³/cut x 0.2836 lb/in³ x 0.0169 lb_{PM10}/lb_{PM})
→ 20.46 lb/day
- PM_{Cr*} → PM x % Chrome x 0.00022 PM_{Cr*/Cr}
→ 1210.65 lb/day x 0.10% Chrome x 0.00022 = 2.663 x 10⁻⁴ lb_{Cr*/day}
- PM_{Cu} → PM x % Copper
→ 1210.65 lb/day x 0.15% Copper = 1.81975 lb_{Cu}/day
- PM_{Mn} → PM x % Manganese
→ 1210.65 lb/day x 1.65 % Manganese = 19.9757 lb_{Mn}/day
- PM_{Ni} → PM x % Nickel
→ 1210.65 lb/day x 0.10 % Nickel = 1.21065 lb_{Cu}/day

	R1 lb/day	R2 lb/day	R1 lb/hr	R2 lb/hr
PM ₁₀	20.46	0.2046	0.8525	8.525 x 10 ⁻³
PM _{Cr*}	2.663 x 10 ⁻⁴	2.663 x 10 ⁻⁶	1.110 x 10 ⁻⁵	1.110 x 10 ⁻⁷
PM _{Cu}	1.81975	1.820 x 10 ⁻²	7.582 x 10 ⁻²	7.583 x 10 ⁻⁴
PM _{Mn}	19.9757	1.998 x 10 ⁻¹	0.8323	8.323 x 10 ⁻³
PM _{Ni}	1.21065	1.211 x 10 ⁻²	0.0504	5.04 x 10 ⁻⁴

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 4	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

R2 PM = 12.1065 lb/day → 0.5044 lb_{PM}/hr

PM Conc = $\frac{0.5044 \text{ lb}_{\text{PM}}/\text{hr} \times 7000 \text{ gr/lb}}{60 \text{ min/hr} \times 3,531 \text{ cfm}} = 0.0167 \text{ gr/cf}$

Dust Collector - 2 Identical

- Blower Horsepower - 10 Hp
- Volumetric Flowrate - 3531 scfm
- Total Filter Area - 1033 ft²
- Cleaning Method - Pulse Jet
- Capture Efficiency - 100% assumed
- PM₁₀ Efficiency - Greater than 99.99% per Cartridge Filter Manufacture
Source test will be conditioned to confirm overall control efficiency is at least 99%.

$\frac{3531 \text{ scfm}}{1033 \text{ ft}^2} = 3.42 \text{ ft/min}$ - Acceptable for cartridge filter, pulse jet cleaned

RULES COMPLIANCE

RULE 212 Public Notification

Paragraph 212 (c)(1) Requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. According to the website geodistance.com the closest school, Live Oak Elementary School is over 1 mile from California Steel Industries' property line. A 30-Day Public Notice is not required under this paragraph.

Paragraph 212(c)(2) The equipment will not result in on-site emission increase exceeding the daily maximums as specified in the table in Rule 212(g). Therefore, a 30-day public notice period will not be required under this paragraph.

Paragraph 212(c)(3) Public notice will not be required under this paragraph. See Rule 1401 evaluation section.

RULE 401 Compliance is expected. Visible emissions are not expected with proper maintenance and operation of this equipment.

RULE 402 Compliance is expected. Operation of this equipment is not expected to cause a nuisance.

RULE 404 This equipment is in compliance with this rule. Per table 404(a), the allowable PM concentration at 3,531 scfm is 0.117 gr/scf. The PM concentration for this equipment is 0.0166 gr/scf.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 5	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

RULE 1155 Compliance is expected. The applicant is required to inspect filter media weekly. See Attached Table 1 from Rule 1155 for Summary of Requirements.

REG XIII **BACT** for a Plasma Arc Cutter is a Dust Collector, in compliance with BACT.

Modeling The PM₁₀ emissions of 0.2046 lb/day are below the screening level of 0.41 lb/hr. No further analysis is required.

Offsets are not required with PM₁₀ emission increase of 0.2046 lb/day.

RULE 1401 The Laser Cutters passed Tier 2 analysis, in compliance with this rule. See attached Rule 1401 calculation sheets.

REG XX CSI is a Cycle 1 NOx RECLAIM facility. This equipment does not emit NOx, thus RECLAIM rules do not apply

REG XXX This is a De Minimis Significant Permit revision. EPA 45- day Notice is required.

RECOMMENDATION

After of the 45-day EPA review period:

Approve Plan for A/N 563565 for a De Minimis Significant Permit Revision

Issue Permit to Construc for A/Ns 563564, 563566, 563567, & 563568 as described in this report.

A/N 563564

PLASMA ARC CUTTER, D240, PRIMARY CROPPER, WITH 2 MODEL 1500S CUTTING TORCHES, ELECTRICALLY POWERED, 22.4 KW EACH.

CONDITIONS:

B27.2 THE OPERATOR SHALL NOT USE MATERIALS CONTAINING ANY TOXIC AIR CONTAMINANTS (TACS) IDENTIFIED IN THE SCAQMD RULE 1401 (EXCEPT FOR THOSE COMPOUNDS LISTED BELOW), AS AMENDED 09/10/2010.

COMPOUND	CAS NO.	Weight %
CHROMIUM	18540-29-9	0.10
COPPER	7440-50-8	0.15
MANGANESE	7439-96-5	1.65
NICKEL	7440-02-0	0.10

The operator shall not exceed the usage limit specified above for the listed compounds.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 6	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

C1.30 THE OPERATOR SHALL LIMIT THE THROUGHPUT TO NO MORE THAN 396 IN ANY ONE DAY.

For the purpose of this condition, throughput shall be defined as cuts of carbon steel pipe.

The maximum outer diameter of the carbon steel pipe shall not exceed 24 inches.

The thickness of the carbon steel pipe cut shall not exceed 0.75 inches.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

A/N 564566

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. DUST COLLECTOR, C241, CLEAN AIR TECH, MODEL NO. CPC-100, WITH TWENTY-FOUR POLYESTER CARTRIDGE FILTERS, PTFE MEMBRANE, 1,033 SQ. FT. TOTAL FILTER AREA, PULSE JET CLEANED.
2. EXHAUST SYSTEM WITH A 10 HP BLOWER VENTING ONE PLASMA ARC CUTTER.

CONDITIONS:

A72.1 THE OPERATOR SHALL MAINTAIN THIS EQUIPMENT TO ACHIEVE A MINIMUM OVERALL CONTROL EFFICIENCY OF 99 PERCENT FOR PM10 DURING THE NORMAL OPERATION OF THE EQUIPMENT IT VENTS.

D29.5 THE OPERATOR SHALL CONDUCT SOURCE TEST(S) FOR THE POLLUTANT(S) IDENTIFIED BELOW.

POLLUTANT(S) TO BE TESTED	REQUIRED TEST METHOD(S)	AVERAGING TIME	TEST LOCATION
PM10 EMISSIONS	APPROVED DISTRICT METHOD	DISTRICT-APPROVED AVERAGING TIME	SIMULTANEOUS INLET AND OUTLET

In addition to the source test requirements of Section E of this facility permit, notify the District of the date and time of the test at least 10 days prior to the test.

The test(s) shall be conducted within 90 days after achieving maximum production rate, but no later than 180 cumulative days of operation after initial start-up.

The test shall be conducted during normal production.

Normal production rate will consist of at minimum two different ERW pipe diameters and/or thicknesses

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 7	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

Notwithstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 60 days after the source test was conducted.

D322.3 THE OPERATOR SHALL PERFORM ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA, AND IMPROPERLY INSTALLED FILTER MEDIA.

D381.2 THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A QUARTERLY BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE QUARTERLY PERIOD. THE ROUTINE QUARTERLY INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- 1). STACK OR EMISSION POINT IDENTIFICATION;
- 2). DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
- 3). DATE AND TIME VISIBLE EMISSION WAS ABATED.

E102.1 THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.

H23.6 THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES OR REGULATIONS:

CONTAMINANT	RULE	RULE/SUBPART
PM10	DISTRICT RULE	1155

K67.1 THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

the date, time and description of any maintenance or repairs resulting from the inspection.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	PAGE 8	PAGES 8
	APPL. NO. #2 Pipe Mill PM.docx	DATE 06/26/14
	PROCESSOR MFN	REVIEWER

the name of the person performing the inspection and/or maintenance of the filter media.

the date, time and results of the inspection.

A/N 563567

PLASMA ARC CUTTER, D242, REWORK CUTTER, WITH 2 MODEL 1500S CUTTING TORCHES, ELECTRICALLY POWERED, 22.4 KW EACH.

CONDITIONS: SAME AS A/N 563564

A/N 563568

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. DUST COLLECTOR, C243, CLEAN AIR TECH, MODEL NO. CPC-100, WITH TWENTY-FOUR POLYESTER CARTRIDGE FILTERS, PTFE MEMBRANE, 1,033 SQ. FT. TOTAL FILTER AREA, PULSE JET CLEANED.
2. EXHAUST SYSTEM WITH A 10 HP BLOWER VENTING ONE PLASMA ARC CUTTER.

CONDITIONS: SAME AS A/N 563566

Table 1
Summary of Requirements

Fabric Filtration PM Air Pollution Control Equipment (baghouses)*			Other Fabric and Non-Fabric Filtration PM Air Pollution Control Equipment (dust collectors, cyclones, ESPs, wet scrubbers)*	
Tier 1 ≤ 500 square feet	Tier 2 > 500 – 7,500 square feet	Tier 3 > 7,500 square feet	n/a	n/a
Once-a-week visible emissions monitoring and recordkeeping (new, existing)	Once-a-week visible emissions monitoring and recordkeeping (new, existing)	Until BLDs is installed, once-a-week visible emissions monitoring and recordkeeping	Once-a-week visible emissions monitoring and recordkeeping (new, existing)	
--	--	BLDS installation (new, existing)	--	
--		Emission limit (0.01 gr/dscf)	--	
		Title V facilities conduct initial source test and test every five years relative to compliance with the emission limit.		

* Except as provided in subdivision (g) Exemptions.

TIER 1 SCREENING RISK ASSESSMENT REPORT

Receptor Distance (actual) (m)	260
Receptor Distance (for X/Q LOOKUP) (m)	100

Tier 1 Results	
Cancer/Chronic ASI	Acute ASI
4.89E+00	9.45E-01
FAILED	PASSED

APPLICATION SCREENING INDEX CALCULATION

Compound	Average Annual Emission Rate	Max Hourly Emission Rate (lbs/hr)	Cancer / Chronic Pollutant Screening Level (lbs/yr)	Acute Pollutant Screening Level (lbs/hr)	Cancer / Chronic Pollutant Screening Index	Acute Pollutant Screening Index (PSI)
Chromium, hexavalent	9.70E-04	1.11E-07	1.75E-03		5.54E-01	
Copper and copper compounds	6.62E+00	7.58E-04		2.68E-01	3.12E+00	2.33E-03
Manganese and manganese compounds	7.27E+01	8.32E-03	2.33E+01		1.22E+00	
Nickel & nickel compounds (except nickel oxide):	4.40E+00	5.04E-04	3.62E+00	5.35E-04		9.42E-01
TOTAL (APPLICATION SCREENING INDEX)					4.89E+00	9.45E-01

TIER 2 SCREENING RISK ASSESSMENT REPORT

A/N:
Fac:

563564 & 67
46268

Application deemed complete date: 05/07/14

2. Tier 2 Data

MET Factor	1.19
4 hr	0.92
6 or 7 hrs	0.78

Dispersion Factors tables

3	For Chronic X/Q
6	For Acute X/Q

Dilution Factors (ug/m3)/(tons/yr)

Receptor	X/Q	X/Qmax
Residential	0.246	15.54
Commercial	1.532	83.56

Adjustment and Intake Factors

	AFann	DBR	EVF
Residential	1	302	0.96
Worker	1	149	0.38

A/N: 563664 & 67

Application deemed complete date: 05/07/14

TIER 2 RESULTS

5a. MICR

MICR = CP (mg/(kg-day))⁻¹ * Q (ton/yr) * (X/Q) * AFann * MET * DBR * EVF * 1E-6 MP

Compound	Residential	Commercial
Chromium, hexavalent	2.10E-08	2.55E-08
Copper and copper compounds		
Manganese and manganese compounds		
Nickel & nickel compounds (except nickel oxide):	1.70E-07	2.07E-07
Total	1.91E-07	2.32E-07
	PASS	PASS

No Cancer Burden, MICR < 1.0E-6

5b. Cancer Burden	NO
X/Q for one-in-a-million:	
Distance (meter)	
Area (km ²):	
Population:	
Cancer Burden:	

6. Hazard Index

HIA = [Q(t)/hr] * (X/Q)max * AF / Acute REL

HIC = [Q(t)/yr] * (X/Q) * MET * MPI / Chronic REL

Target Organs	Acute	Chronic	Acute Pass/Fail	Chronic Pass/Fail
Alimentary system (liver) - AL			Pass	Pass
Bones and teeth - BN			Pass	Pass
Cardiovascular system - CV			Pass	Pass
Developmental - DEV			Pass	Pass
Endocrine system - END			Pass	Pass
Eye			Pass	Pass
Hematopoietic system - HEM		2.87E-01	Pass	Pass
Immune system - IMM	2.11E-01		Pass	Pass
Kidney - KID			Pass	Pass
Nervous system - NS		7.36E-01	Pass	Pass
Reproductive system - REP			Pass	Pass
Respiratory system - RES	2.11E-01	2.87E-01	Pass	Pass
Skin			Pass	Pass

A/N: 563564 & 67

Application deemed complete date:

05/07/14

6a. Hazard Index Acute

HIA = $\sum (Q_i / (L_i \cdot h_i)) \cdot (X_i / Q_i)_{max} \cdot AF_i$ Acute REL
 HIA - Residential

Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Chromium, hexavalent										
Copper and copper compounds									1.18E-04	
Manganese and manganese compounds									3.92E-02	
Nickel & nickel compounds (except nickel oxide):										
Total						3.92E-02			3.93E-02	

Compound	HIA - Commercial									
	AL	CV	DEV	EYE	HEM	INM	NS	REP	RESP	SKIN
Chromium, hexavalent										
Copper and copper compounds									6.34E-04	
Manganese and manganese compounds									2.11E-01	
Nickel & nickel compounds (except nickel oxide):						2.11E-01				
Total						2.11E-01			2.11E-01	

6b. Hazard Index Chronic

HIC = (Q(ton/yr) * (X/Q) * MET * MPJ / Chronic REL

Compound	HIC - Residential												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Chromium, hexavalent							4.60E-02					7.10E-07	
Copper and copper compounds													
Manganese and manganese compounds										1.18E-01			
Nickel & nickel compounds (except nickel oxide):												4.60E-02	
Total							4.60E-02			1.18E-01		4.60E-02	

6b. Hazard Index Chronic (cont.)

A/N: 563564 & 67

Application deemed complete date:

05/07/14

Compound	HIC - Commercial												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Chromium, hexavalent Copper and copper compounds Manganese and manganese compounds Nickel & nickel compounds (except nickel oxide):							2.87E-01			7.36E-01		2.87E-01	4.42E-06
Total							2.87E-01			7.36E-01		2.87E-01	

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 11: PIPE MILL					
PLASMA ARC CUTTER, PRIMARY CROPPER, CUSTOM BUILT, MODEL 1500S CUTTING TORCHES, EACH 22.4 KW, 2 TOTAL A/N:	D240	C241			B27.2, C1.30
DUST COLLECTOR, CLEAN AIR TECH, MODEL CPC-100, 1033 SQ.FT.; 24 BAGS A/N:	C241	D240			A72.1, D29.5, D322.3, D381.2, E102.1, H23.6, K67.1
PLASMA ARC CUTTER, REWORK CROPPER, CUSTOM BUILT, MODEL 1500S CUTTING TORCHES, EACH 22.4 KW, 2 TOTAL A/N:	D242	C243			B27.2, C1.30
DUST COLLECTOR, CLEAN AIR TECH, MODEL CPC-100, 1033 SQ.FT.; 24 BAGS A/N:	C243	D242			A72.1, D29.5, D322.3, D381.2, E102.1, H23.6, K67.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

**FACILITY PERMIT TO OPERATE
CALIFORNIA STEEL INDUSTRIES INC**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D240	1	11	0
C241	1	11	0
D242	1	11	0
C243	1	11	0

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F10.1 Material(s) that contain the following compound(s) shall not be used in this facility;

0.004 percent or more of arsenic and 0.002 percent or more of cadmium by weight

No scrap other than clean non-ferrous scrap or rerun scrap shall be melted at this facility

[RULE 1407, 7-8-1994]

F14.1 The operator shall not use diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

PROCESS CONDITIONS

P28.1 Except for diesel transfers, Phase I vapor recovery systems shall be in full operation whenever fuel is being transferred into storage tanks.

Except for diesel transfers, Phase II vapor recovery systems shall be in full operation whenever fuel is being transferred into motor vehicles, as defined in Rule 461.

All Phase I and Phase II vapor recovery equipment at this facility shall be installed, operated and maintained to meet all California Air Resources Board certification requirements.

[RULE 461, 6-3-2005; RULE 461, 4-6-2012; RULE 461, Balance Conditions, 1-9-2004;
RULE 461, OPW Phase I EVR Conditions, 6-3-2005]

[Processes subject to this condition : 15]

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

DEVICE CONDITIONS

A. Emission Limits

A72.1 The operator shall maintain this equipment to achieve a minimum overall control efficiency of 99 percent for PM10 during the normal operation of the equipment it vents.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1401, 9-10-2010]

[Devices subject to this condition : C241, C243]

B. Material/Fuel Type Limits

B27.2 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401 (except for those compounds listed below), as amended 09/10/2010.

COMPOUND	CAS NO.	Weight %
CHROMIUM	18540-29-9	0.10
COPPER	7440-50-8	0.15
MANGANESE	7439-96-5	1.65
NICKEL	7440-02-0	0.10

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D240, D242]

C. Throughput or Operating Parameter Limits

C1.30 The operator shall limit the throughput to no more than 396 in any one day.

**FACILITY PERMIT TO OPERATE
 CALIFORNIA STEEL INDUSTRIES INC**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, throughput shall be defined as carbon steel pipe cut.

The maximum outer diameter of the carbon steel pipe shall not exceed 24 inches.

The thickness of the carbon steel pipe cut shall not exceed 0.75 inches.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[**RULE 1303(b)(2)-Offset, 5-10-1996**; **RULE 1303(b)(2)-Offset, 12-6-2002**; **RULE 1401, 9-10-2010**]

[Devices subject to this condition : D240, D242]

D. Monitoring/Testing Requirements

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
PM10 emissions	Approved District method	District-approved averaging time	Simultaneous inlet and outlet

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

In addition to the source test requirements of Section E of this facility permit, notify the District of the date and time of the test at least 10 days prior to the test.

The test(s) shall be conducted within 90 days after achieving maximum production rate, but no later than 180 cumulative days of operation after initial start-up.

The test shall be conducted during normal production.

Normal production rate will consist of at minimum two different ERW pipe diameters and/or thicknesses.

Notwithstanding the requirements of Section E conditions, the source test results shall be submitted to the District no later than 60 days after the source test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C241, C243]

D322.3 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C241, C243]

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D381.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C241, C243]

E. Equipment Operation/Construction Requirements

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C241, C243]

H. Applicable Rules

H23.6 This equipment is subject to the applicable requirements of the following rules or regulations:

FACILITY PERMIT TO OPERATE CALIFORNIA STEEL INDUSTRIES INC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Contaminant	Rule	Rule/Subpart
PM10	District Rule	1155

[RULE 1155, 12-4-2009]

[Devices subject to this condition : C241, C243]

K. Record Keeping/Reporting

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

the name of the person performing the inspection and/or maintenance of the filter media

the date, time and results of the inspection

the date, time and description of any maintenance or repairs resulting from the inspection

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C241, C243]