

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b> <b>ENGINEERING AND COMPLIANCE DIVISION</b> <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGE 1	PAGES 4
	APPL. NO. 488618 CPL	DATE 10/29/08
	PROCESSOR MFN	REVIEWER

## PERMIT TO OPERATE 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.      488615      -      TITLE V PERMIT REVISION**

**APPLICATION NO.      488618      -      PERMIT TO OPERATE**

MODIFICATION OF THE CONTINUOUS PICKLE LINE (PROCESS 4) WITH THE REMOVAL OF:

ONE PROCESS TANK, STEEL LINED WITH RUBBER AND ACID BRICK, 70'-6" L. X 10'-3¼" W. X 7'-11⅛" H.

ONE PROCESS TANK, STEEL LINED WITH RUBBER AND ACID BRICK, 80'-0" L. X 10'-3¼" W. X 7'-11⅛" H.

THE ADDITION OF:

TWO PROCESS TANKS, COPOLYMER POLYPROPYLENE, 70'-6" L. X 10'-2⅝" W. X 6'-8⅝" H.

### BACKGROUND

Application No. 488615 was filed on September 30, 2008, for a RECLAIM facility permit modification. Application No. 488618 was filed on September 30, 2008, for a Class I equipment modification.

### **Complaints**

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

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGE 2	PAGES 4
	APPL. NO. 488618 CPL	DATE 10/29/08
	PROCESSOR MFN	REVIEWER

**Notice to Comply**

D14669, 11/9/07 to provide a copy of SK contract for 05 & 06, waste manifests & purchase invoices for 05 & 06, solvent usage records, facility layout and purchase invoices for 2007.

All requested information was provided during the follow-up inspection.

**Notice of Violation**

P49086, 11/30/07 for failure to use compliant solvent for repair & maintenance cleaning. Failure to use compliant solvent for solvent degreasing in a batch loaded cold cleaner.

**PROCESS DESCRIPTION**

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

The steel manufacturing process begins in the hot strip mill, where thick steel slabs are heated in large furnaces followed by steel pickling with HCl in the 62-inch continuous pickling line (CPL). The presence of oxides (scale, rust) on the surface of sheet metal creates an irregular working surface for processing. The oxide is removed in the CPL and a clean surface is provided to create a uniform steel working surface for further processing such as coating adherence. At that point the steel is either sent to the Galvanizing Line for further processing or directly to shipping.

The CPL consists of four covered process tanks (pickling tanks), a rinse tank, HCl storage tanks and an acid feed line. The pickling tanks contain dilute solutions of HCl approximately 1 wt% in process tank 1 and up to 12 wt% in process tank 4.

The existing process tanks are constructed of steel and lined with rubber and acid brick. In order to reduce the maintenance requirement of these tanks, CSI is proposing to replace process tanks 3 & 4 with plastic (copolymer polypropylene). At this time, process tanks 1 & 2 will not be replaced.

The new process tanks are replacing existing process tanks. There will be no increase in production, and thus no expected increase in emissions associated with this equipment modification. These new process tanks will be connected into the existing fume exhaust system, just as the current tanks are.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGE 3	PAGES 4
	APPL. NO. 488618 CPL	DATE 10/29/08
	PROCESSOR MFN	REVIEWER

The four process tanks of the CPL and four 20,000 gallon HCl storage tanks are vented to an acid fume scrubber, C132. This scrubber is required to comply with limits set forth in 40 CFR 63 subpart CCC, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for HCl Steel Pickling Facilities.

**EVALUATION**

**Given:**

Operating Schedule: 24 hrs/day, 7 days/wk, 52 wks/yr

Current Tank	Outside Length	Outside Width	Outside Height
1	79'-0"	10'-3¼"	7'-11⅛"
2	70'-6"	10'-3¼"	7'-11⅛"
3	70'-6"	10'-3¼"	7'-11⅛"
4	80'-0"	10'-3¼"	7'-11⅛"
New Tank	Outside Length	Outside Width	Outside Height
3	70'-6"	10'-2⅝"	6'-8⅝"
4	70'-6"	10'-2⅝"	6'-8⅝"

There is no production or emission increase associated with the replacement of process tanks 3 & 4. The previous emissions shall be brought forward. The CPL and associated equipment are still required to meet the limits of 40 CFR 63 Subpart CCC, which limits the outlet concentration of HCl in the Acid Fume Scrubber, C132, to a maximum of 18 ppmv or an overall control efficiency of 97%. The most recent compliant source test (conditionally acceptable with a test date of 2/2/08) has the outlet concentration at <3 ppmv and an overall control efficiency of over 99%.

40 CFR 63 Subpart CCC requires testing of the scrubber to “no less frequently than every 2½ years”, this scrubber has been tested February 2002, August 2004, August 2006 and February 2008. In reviewing these source test reports, the inlet emission rate has remained consistent at ~106 lb/hr and the outlet has decreased from 1.37 lb/hr to 0.2 lb/hr.

**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

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGE 4	PAGES 4
	APPL. NO. 488618 CPL	DATE 10/29/08
	PROCESSOR MFN	REVIEWER

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. No visible emissions complaints were found for this facility

**RULE 402** Compliance is expected. Operation of the equipment is not expected to create a nuisance. No nuisance complaints were found for this facility.

**REG. XIII** There is no emission increases associated with this equipment modification. Reg XII is not triggered.

**RULE 1401** There is no increase in emissions associated with this equipment modification, R1401 evaluation is not required.

**REG XXX** This is a de minimis significant permit revision. EPA 45-day review is required.

**Subpart CCC:** The modified equipment will still be controlled by the Acid Fume Scrubber, C132, which has demonstrated continued compliance with 40 CFR 63 Subpart CCC. Compliance is less than 18 ppmv of HCl or control efficiency greater than 97%. The current compliant source test has the efficiency greater than 99% and a concentration less than 3 ppmv.

### **RECOMMENDATION**

Issue Permit to Operate as described in this report and facility permit after the end of the 45-day EPA review period.