



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX – PACIFIC SOUTHWEST REGION**  
**75 Hawthorne Street**  
**San Francisco, CA 94105-3901**

Nov 24, 2010

In Reply Refer To: WTR-7

Mr. Salvador Carranza  
Maintenance Manager  
Air Louvers/Samson Products, Inc.  
6285 Randolph St.  
Commerce, CA 90040

Re: August 24, 2010 Clean Water Act Inspection

Dear Mr. Carranza:

Enclosed is the November 22, 2010 report for our inspection of Air Louvers/Samson Products, Inc. at the above address in Commerce, CA.

The main findings are summarized below:

1. This facility is subject to the federal categorical standard for metal finishing, 40 CFR 433, because of its phosphating process.
2. The facility implements efficient water use practices by employing countercurrent flow rinses in its wash/phosphating system and reusing rinse water to make up its phosphating solution.
3. Though the facility has had some problems with consistent compliance with the federal categorical copper and zinc limits, Air Louvers/Samson Products has placed its clarifier on a more frequent cleaning schedule and, thus far, has been achieving consistent compliance with the copper and zinc limits.

By January 31, 2011, please submit a short response letter to the Summary of Findings in Section 3.0 of this report. Your letter should include an individual response to each of the numbered findings in Section 3.0.

Please send your letter to the attention of Anna Yen at EPA (and include the code "WTR-7" in the address above), with copies to the Sanitation Districts of Los Angeles Counties and the Los Angeles Regional Water Quality Control Board.

We would like to thank you for your cooperation during the inspection. If you have any questions, please call Anna Yen at (415) 972-3976 or e-mail her at [yen.anna@epa.gov](mailto:yen.anna@epa.gov).

Sincerely,  
<Original  
signed by>  
Ken Greenberg  
Chief, Clean Water Act Compliance Office

Enclosure

cc (enclosure by email):

Rob Wienke, Sanitation Districts of Los Angeles County

Rebecca Christmann, Regional Water Quality Control Board, Los Angeles Region

**U.S. Environmental Protection Agency  
Region 9  
Clean Water Act Compliance Office**

**Industrial User Inspection Report**

**Industrial User:** Air Louvers/Samson Products, Inc.  
**Industrial User Address:** 6285 Randolph St., Commerce, CA 90040

**Inspection Date:** August 24, 2010

**EPA Region 9 Inspector:** Anna Yen, Environmental Engineer  
Water Division, CWA Compliance Office

**Sanitation Districts of Los Angeles County Inspectors:** John Boyd, Supervising Industrial Waste Inspector  
Stephen Wittmer, Industrial Waste Inspector

**Facility Contact During Inspection:** Salvador Carranza, Maintenance Manager

**Report Date:** November 22, 2010

*Report prepared by Anna Yen*

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## **1.0 Scope and Purpose**

The purpose of the industrial user inspection on August 24, 2010 was to determine the pretreatment standards and requirements that apply to this facility and to ensure compliance with those standards and requirements. This inspection is part of a regionwide EPA effort, stemming from an environmental justice initiative, to focus inspections along the I-710 corridor in the Los Angeles area.

This facility is an industrial user which discharges to the local publicly owned treatment works (POTW), the Joint Water Pollution Control Plant (JWPCP).

## **1.1 General and Process Description**

Air Louvers/Samson Products ("Air Louvers") began operations at this facility in 1996. This facility produces such items as access panels (e.g., for valves), door frames, louvers, metal cabinets, vision frames (i.e., window frame in a door). Raw materials for these products include rolls and sheets of steel, aluminum, stainless steel, and a small quantity

of galvanized steel.

The facility has various machines for manipulating and cutting the raw materials. One machine unrolls each roll of steel. Another machine cuts the sheet of steel or other types of metal into specific lengths. Another machine is used to punch mounting holes. All of the machines described above use no lubricants or liquids of any type. Welding is performed by employees at the facility. Once the parts are ready for painting, they are hung onto rods which convey the parts first to a wash/phosphating system and then to the painting section of the facility.

#### Washing

Parts hanging on rods are conveyed to a four-tank wash/phosphating system (*see Photo 1 in Attachment 1*) before being painted. At Tank #1, phosphating occurs during which an iron phosphate coating is applied to the part. This phosphating solution not only degreases the part but also prepares the part so that the paint will more readily stick to the part. At Tanks #2 and #3, the part is rinsed with tap water. At the final tank, the part is rinsed with deionized (DI) water.

Countercurrent rinses are employed in all rinse tanks. The used DI water from the final tank is circulated to Tank #3, the used rinse water from Tank #3 is circulated to Tank #2, and the used rinse water from Tank #2 is circulated to Tank #1 to mix with a phosphoric acid-based solution for the phosphating step.

The phosphating solution is recirculated and reused. The DI water is supplied by an outside vendor.

An overflow tank is located next to the four-tank wash/phosphating system. *See Photo 2 in Attachment 1*. Air Louvers stated that it is hardly ever used. For example, when the facility cleans the tanks, it just adds water to the system, the excess water overflows into the overflow tank. At the time of the inspection, it was three-fourths full. Air Louvers stated that this liquid is pumped to the onsite wastewater treatment system. Air Louvers could not remember when it was last pumped. Air Louvers stated that it does not use much water. When pressed for an estimate, Air Louvers gave a rough estimate of much less than 100 gallons per week of water that has to be put into the system. This estimate is much less than the amount currently stated in Air Louvers' pretreatment permit. In a follow-up phone call, Air Louvers confirmed that it has made operational changes to decrease the amount of wastewater it sends to the local sewer system.

#### Painting

The washed and prepared parts, still hanging on rods, are conveyed to an oven to bake at 420°F. From there, the parts are conveyed into an electrostatic paint booth. The overspray is collected and reused.

#### Onsite Wastewater Treatment System

See Section 1.3

## **1.2 Facility Wastewater Sources and Other Wastes**

Air Louvers generates the following wastewaters:

- Overflow tank rinses from the washing/phosphating system
- Cooling tower blowdown
- Air compressor condensate

The overflow tank contents are pumped to the onsite wastewater treatment system. The cooling tower blowdown and air compressor condensate collect in a sump. The sump pump conveys the sump contents to the onsite wastewater treatment system.

Once processed through the onsite wastewater treatment system, the treated wastewater is discharged to the local sewer system.

## **1.3 Facility Process Wastewater Treatment System**

The facility's wastewater treatment system consists of a pH adjustment tank and a three-stage clarifier, with a sample box directly downstream of the clarifier. *See Photo 3 in Attachment 1.* The pH adjustment, through the addition of acid or caustic, occurs automatically. The pH is recorded continuously and is also logged manually. Discharge from the clarifier flows to the local sewer system. *See Photos 4 & 5 in Attachment 1.*

Air Louvers has the clarifier cleaned every six months. Air Louvers hires an outside company to pump the clarifier out and dispose of the contents.

## **1.4 Wastewater Discharge**

Wastewater from this facility discharges to the Joint Water Pollution Control Plant. The Sanitation Districts of Los Angeles County ("LACSD") owns and operates the wastewater treatment plant, which is subject to requirements under an NPDES permit (No. CA0053813) issued by the Regional Water Quality Control Board.

EPA notes Air Louvers' positive practices of implementing efficient water use: countercurrent flow for the rinse tanks in the four-stage washing/phosphating system and reuse of virtually all rinse waters.

## **2.0 Compliance with Federal Categorical Standards**

This facility is subject to the federal categorical standard for metal finishing, 40 CFR 433. Therefore, it is a categorical industrial user (CIU). The phosphating process performed at this facility triggers applicability of this categorical standard. Additionally, because the facility constructed and began operations after August 31, 1982, the publication date of the proposed rule, the facility is a new source rather than an existing source. Therefore, the "Pretreatment standards for new sources" in 40 CFR 433.17 apply.

An industrial user is subject to the federal categorical standard for metal finishing if it performs any of the following six core operations listed in 40 CFR 433: electroplating, electroless plating, chemical coating, chemical milling/etching, anodizing, and printed circuit board manufacturing.

The facility has had some trouble complying with the federal copper and zinc limits over the past couple years. EPA reviewed monitoring records of September 2007 through August 2010. Out of a total of 12 samples taken either by Air Louvers or LACSD, the facility was out of compliance with its copper limits (either daily or monthly) on 3 days. Out of a total of 14 samples pulled either by Air Louvers or LACSD, the facility was out of compliance with its zinc limits (either daily or monthly) on 4 days. The most recent copper and zinc violations during the time period that EPA reviewed occurred in April 2010. *See table in Attachment 2.*

Based on the facility's written responses and follow-up sampling and analysis, it appears that the facility's compliance problems are resolved when the clarifier is cleaned out. In a follow-up conversation with Air Louvers on October 27, 2010, EPA learned that Air Louvers has been working with LACSD to find a solution to the compliance issues. Air Louvers has implemented a more frequent schedule for cleaning its clarifier and has been taking monthly samples for analysis to report to LACSD. Air Louvers now cleans its clarifier every three months instead of every six months. Air Louvers stated that it has not violated its copper and zinc limits since April 2010 and is confident that this more frequent cleaning schedule will prevent future violations of the copper and zinc limits.

## **2.1 Compliance with Other Federal Pretreatment Requirements**

This facility is a categorical industrial user (CIU) and, therefore, is also a significant industrial user (SIU) because it is subject to a federal categorical standard. Like any industrial user, it must comply with pretreatment requirements in 40 CFR 403, including, but not limited to, national prohibitions in 40 CFR 403.5 and reporting requirements in 40 CFR 403.12. Note that some requirements in 40 CFR 403 are applicable specifically to SIUs and some even more specifically to CIUs.

## **2.2 Compliance with Local Limits**

The facility's most recent pretreatment permit issued by LACSD is Permit No. 14073 R-1. The facility's sample point, as indicated in its permit, is the sample box directly downstream of the clarifier. The facility's permit requires Air Louvers to sample once per six months. For the time being, however, LACSD is requiring monthly sampling from Air Louvers (see Section 2.0).

## **3.0 Summary of Findings**

1. This facility is subject to the federal categorical standard for metal finishing, 40 CFR 433, because of its phosphating process, which is a type of chemical

coating process.

2. This facility is an SIU and a CIU. The facility is subject to applicable pretreatment requirements in 40 CFR 403.
3. The facility implements efficient water use practices by employing countercurrent flow rinses in its wash/phosphating system and reusing rinse water to make up its phosphating solution.
4. Over the past couple years, the facility has had some problems with consistent compliance with the federal categorical copper and zinc limits. Air Louvers has placed its clarifier on a more frequent cleaning schedule and informed EPA that, based on monthly monitoring results, the facility has been achieving consistent compliance with the copper and zinc limits since April 2010.

## Attachment 1: Photos



**Photo 1**

Four-Tank Wash/Phosphating System  
*Taken by Anna Yen on August 24, 2010*



**Photo 2**

Overflow Tank  
*Taken by Anna Yen on August 24, 2010*





**Photo 3**

Sample Box at Discharge End of Clarifier  
*Taken by Anna Yen on August 24, 2010*



**Photo 4**

Discharge pipe from clarifier to outside  
building

*Taken by Anna Yen on August 24, 2010*



**Photo 5**

Clarifier discharge pipe outside of building  
- leading down to local sewer system

*Taken by Anna Yen on August 24, 2010*

## Attachment 2: Compliance Monitoring Records Review

Permit Limits in mg/L (Federal Categorical Limits Adjusted for Dilution Flows):	Copper	Zinc
Daily	3.36	2.59
Monthly	2.06	1.47
Measured Levels (mg/L)		
Sample Date (1 <sup>st</sup> day of composite sample)	Copper	Zinc
8/10/10	0.21	0.042
4/26/10	12.5	8.3
4/23/10		0.029
2/17/10	0.24	0.064
1/19/10	0.78	3.92
11/12/09		0.013
9/30/09	0.072	0.055
9/8/09	2.36	30.9
3/19/09	0.25	0.62
2/25/09	0.10	0.27
8/28/08	2.95	2.09
2/27/08	0.38	0.31
2/19/08	0.26	<0.05
9/26/07	<0.02	0.081

Key:

**xxx** Out of compliance with federal daily and/or monthly limit (adjusted) of 40 CFR 433.17