UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 23, 2007

In Reply Refer To: WTR-7

Bob Roach, General Manager
All Metals Processing Company
264 West Spazier Road
Burbank, California 91502

Re: September 6, 2006 Clean Water Act Inspection

Dear Mr. Roach:

Enclosed is the April 23, 2006 report for our September 6, 2006 inspection of All Metals Processing in Burbank, California. Please submit a short response to the findings in Sections 2 through 4 of this report, to EPA, the City of Burbank, and the Regional Water Quality Control Board, by **June 30, 2007**.

The main findings are summarized below:

1 All Metals Processing qualifies as "zero-discharging" existing source job-shop metal finisher since it generates Federally-regulated process-related wastewaters but does not discharge to the sewers.

2 The local Burbank permit appropriately requires periodic self-certification of no discharge since compliance with Federal standards and local limits is achieved by not discharging to the sewers. Waste manifests should accompany the self-certifications.

3 The potential of an unauthorized discharge to the sewers should be minimized through (1) operating "dry" secondary containment, (2) installing hard-piping that eliminates the need for long hoses, and (3) ensuring all past connections to the sewer are permanently sealed.

I certainly appreciate the helpfulness of your staff extended to me during this inspection. I remain available to Burbank and to you to assist in any way. Please do not hesitate to call me at (415) 972-3504 or e-mail at arthur.greg@epa.gov.

Sincerely,

Greg V. Arthur
CWA Compliance Office

Enclosure

cc: Kristy Laird, Burbank

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Industrial User:	All Metals Processing Co. 264 West Spazier Road, Burbank, California 91502 Zero Discharging Existing Source Job-Shop Metal Finisher (40 CFR 413)
Treatment Works:	City of Burbank Burbank Water Reclamation Plant (NPDES Permit CA0055531)
Dates of Inspection:	September 6, 2006

Inspection Participants:

US EPA:	Greg V. Arthur, Region 9, CWA Compliance Office, (415) 972-3504
RWQCB-Los Angeles:	None
City of Burbank:	Kristy Laird, United Water, Inds Source Insp, (818) 972-1115 ex23 Jeff Carter, United Water, Supervisor, (818) 972-1115 ex17
All Metals Processing:	Bob Roach, General Manager, (818) 846-8844

Report Prepared By: Greg V. Arthur, Environmental Engineer

April 23, 2007

1.0 Scope and Purpose

On September 6, 2006 EPA and the City of Burbank conducted a compliance evaluation inspection of All Metals Processing in Burbank, California. The purpose was to ensure compliance with the Federal, State and local regulations covering the discharge of non-domestic wastewaters into the sewers under the Clean Water Act. In particular, it was to ensure:

- Classification in the proper Federal categories;
- Application of the correct Federal, State and local standards at correct sampling points;
- Consistent compliance with the standards; and
- Fulfillment of Federal self-monitoring requirements.

All Metals Processing, located at 264 West Spazier Road, would qualify as a categorical industrial user under the Clean Water Act within the Burbank sewer service area if it discharged process-related wastewaters to the sewers. The compliance of All Metals Processing was assessed through this inspection as part of an on-going EPA evaluation of industrial users in EPA Region by industry sector. The inspection participants are listed on the title page. Arthur conducted the inspection on September 6, 2006.

1.1 Process Description

All Metals Processing is a metal finishing job-shop that provides cadmium, bronze, and zinc plating, and passivation, black oxide, chem film, and phosphate coating. The operations by processing line (line designations A-E added for the purposes of this report) follow below:

Cadmium Plating Line "A" - ultrasonic alkaline cleaning, alkaline electrocleaning, hydrochloric-acid deoxidation, cyanide-cadmium plating, cyanide-copper plating, chromium conversion coating.

Zinc Plating Line "B" - alkaline electrocleaning, hydrochloric-acid descale, alkaline zinc plating, alkaline zinc/nickel plating, nitric-acid activation, and chromium conversion coating.

Passivation Line "C" - chromic-acid passivation, nitric-acid passivation, and chromium converstion coating.

Black Oxide Line "D" - alkaline soap cleaning, black oxide coating, dichromate sealing, zinc phosphating, and magnesium phosphating.

Bronze Plating Line "E" - alkaline electrocleaning, hydrochloric-acid deoxidation, acid electropolishing, and cyanide-bronze plating

All Metals Processing does not own the parts it finishes. Operations in the current configuration began in 1977 with realignment of the rinsing tanks in 1996 and the addition of the zinc/nickel plating Line “B” as a substitute for cadmium plating sometime after 2000.

1.2 Facility SIC Code

All Metals Processing is assigned the SIC code for plating, polishing, anodizing, and coloring (SIC 3471) and metals coating (SIC 3479).

1.3 Facility Wastewater Sources

There are no process-related wastewater discharges from All Metals Processing to the Burbank sewers. There are a number of process-related wastewater spents, all delivered by pump and hose to totes for off-site hauling. The metal finishing lines generate spents, rinses, and residuals. For the purposes of this report, the tank designation numbers are those identified by All Metals Processing during this inspection. The line designations in this report are the following: Cadmium Plating Line "A"; Zinc/Nickel Plating Line "B"; Passivation Line "C", Black Oxide Line "D", and Bronze Plating Line "E".

Spent Solutions – The imparted contamination from the processing of parts and the progressive drop in solution strength results in the generation of spent solutions. According to All Metals Processing, spent solutions are delivered for hauling off-site as hazardous. The list of spent solutions follows below.

Baths Generating Spents		Baths Not Generating Spents
	C48 - Cr-acid passivation C47 - nitric-acid passivate D-alk - alkaline soap clean D-deox - hydrochloric deox D-boxi - black oxide-iron D-boxb - black oxide-brass D-boxs - black oxide-stainlss D-cr - dichromate seal D-zp - zinc phosphating D-mp - mag phosphating E102 - alkaline electroclean E104 - hydrochloric deox E106 - acid electropolish	A80 - CN-cadmium plate ✓ A5 - CN-copper plating B13 - chem-film conv coat B14 - chem-film conv coat B15 - chem-film conv coat B17 - chem-film conv coat B19 - chem-film conv coat C49 - nitric-acid passivate C-irid - iridite conv coat E112 - CN-bronze plating E113 - CN-bronze plating ✓ Continuous filtering
Hauled Off-site as Hazardous		Regenerated by Adds Only

Rinses and Washwaters – All Metals Processing employs first- or second-stage static and static spray drag-out rinses. There are no overflow rinses. Spent static drag-out rinses are delivered by pump and hose to totes for off-site hauling. In addition, on the day of this inspection, a few inches of drainage from unidentified sources was found to be impounded within the secondary containment berms under the floors. The list of rinses and washwaters follows on the next page. See the photos depicted in section 1.5 of this report.

Rinses and Washwaters Not Discharged		Rinses Discharged
A2A - 1° static spray for A2 ✓ A3A - 1° static spray for A3 ✓ A5A - 1° static spray for A5 ✓ A81 - 1° static spray for A80 A82 - 2° static for T5 A84 - 1° static for T83 A85 - 2° static for T83 A87 - 1° static for T86 A88 - 2° static for T86 B16 - 1° static for B13/14/15 ✓ B18 - 1° static for B17/19 ✓ B2 - 1° static for B1 B5 - 1° static for B3/6 B9 - 1° static for B7/8 B10 - 2° static for B7/8 B12 - 1° static for B11 ✓ Reclaimed Drag-out	C* - 1° static for C-irid ✓ C47 - 1° static for C48 C57 - 2° DI static for C48/49 C58 - 2° DI static for C48/49 D* - 1° spray static for D-alk D* - 1° static for D-deox D* - 1° statics for D-line E103 - 1° static for E102 E105 - 1° static for E104 E101 - 2° static for E-line E107 - 1° static for E106 E108 - 1° static for E106 E109 - 1° static for E112/113 E110 - 1° static for E112/113 E111 - 1° static for E112/113 2° Containment Drainage ✓ Reclaimed Drag-out	None
Hauled Off-site as Haz		Discharged to the Sewers

Residuals – All Metals Processing employs spray static rinses, DI water as make-up, as well as one acid activation step to neutralize the surface chemistry of the previous step, all in order to extend the useful life of the metal finishing solutions. According to the General Manager, All Metals Processing hauls off-site for disposal as hazardous generated tank bottom sludges, floor grime and debris, and drainage captured within secondary containment. DI columns are serviced off-site by the vendor. No other residuals are generated on-site because All Metals Processing provides no chemical treatment or preconditioning of any spent solutions or spent static rinses.

1.4 Facility Process Wastewater Handling

All Metals Processing is not configured to discharge process-related wastewaters to the sewers and as a result does not provide any wastewater treatment beyond the filter pressing of high strength spents. All Metals Processing used to discharge ~8,000 gallons per day on average to the Burbank sewers through an industrial wastewater treatment unit. The metal finishing lines were modified in 1996 to reduce solution drag-out and institute countercurrent and drag-out rinsing practices. The metal finishing lines were further modified since then to eliminate overflow rinsing practices altogether. All Metals Processing now asserts that all spent solutions, spent static rinses, secondary containment drainage, and debris are hauled off-site for disposal as hazardous.

See the following link: http://www.pfonline.com/articles/050005.html. Also ***see*** the photos on the next page in section 1.5 of this report.

Composition - The process wastewaters listed in section 1.3 above would be expected to contain cadmium, copper, chromium, lead, nickel, zinc, and acidity, as well as oil & grease, salts, surfactants, and other pollutants in the surface grime cleaned off of parts.

Delivery - All Metals Processing uses a portable pump and long hosing to deliver spent solutions to barrels for off-site disposal. The hose length is sufficiently long enough to reach any portion of the shop including areas with working connections to the sewers, such as bathrooms. No floor drains were found. However, the decommissioned industrial wastewater treatment unit was observed still to be in place over a large sump.

1.5 Photo Documentation

Four of the seven photographs taken during this inspection are depicted below and saved as *allmetals-1.jpg* through *allmetals-7.jpg*. The photos not depicted here were duplicates.

Photo: New zinc/nickel plating line
Taken By: Greg V. Arthur
Date: 09/06/06

Photo: Typical static rinse tanks
Taken By: Greg V. Arthur
Date: 09/06/06

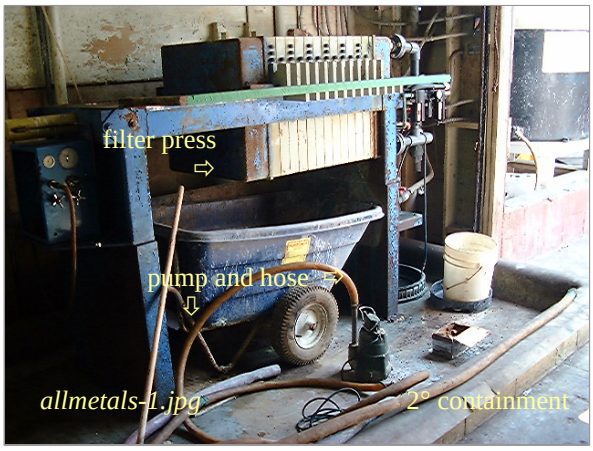

Photo: Portable pump and hosing
Taken By: Greg V. Arthur
Date: 09/06/06

Photo: Working connections to the sewers
Taken By: Greg V. Arthur
Date: 09/06/06

1.6 POTW Legal Authorities

The City of Burbank – Burbank operates a wastewater treatment plant, which discharges to the Los Angeles River, and an approved pretreatment program, as required by the State of California in the Los Angeles RWQCB's Waste Discharge Requirements, No. R4-2006-0085, reissued to Burbank in 2006 and serving as NPDES Permit No. CA0055531. Burbank has established a sewer use ordinance that applies to all industrial users within its city limits. Under this authority, Burbank issued industrial user permit No.1046 authorizing discharge of only domestic wastewaters from All Metals Processing to the sewers.

1.7 Sampling Record

There are no compliance samples since All Metals Processing is not authorized to discharge under the Burbank industrial user permit No. 1046.

2.0 Sewer Discharge Standards and Limits

Federal categorical pretreatment standards (where they exist), national prohibitions, State groundwater, and the local limits (where they exist) must be applied to the sewered discharges from industrial users. (40 CFR 403.5 and 403.6).

Summary

No Federal categorical pretreatment standards, national prohibitions, or local limits apply because there are no process-related wastewater discharges to the sewers. However, All Metals Processing does generate wastewaters that would be regulated under the Federal job-shop electroplating and metal finishing standards if discharged. The application of Federal standards, national prohibitions, and local limits was determined through visual inspection.

Requirements

- None.

Recommendations

- The Burbank permit should also list the Federal standards that would apply if process-related wastewaters were discharged to the sewers.

2.1 Classification by Federal Point Source Category

All Metals Processing would qualify as both an existing source job-shop metal finisher and new source metal finishing subject to the Federal standards in 40 CFR 413 and 433, if its process-related wastewaters were discharged to the sewers. The zinc/nickel plating Line "B", added to satisfy a recent Boeing specification for cadmium plating replacement, would qualify as a new source metal finishing line because it began operations after the August 31, 1982 promulgation date of the metal finishing rule for new sources in 40 CFR 433. The other metal finishing lines would not qualify as new sources but rather remain as existing sources subject to the job-shop electroplating rule in 40 CFR 413 . No process would qualify under any other Federal rule in 40 CFR 407-471.

2.2 Local Limits and National Prohibitions

Local limits and national prohibitions would apply to any discharge of the process-related wastewaters generated on-site. Local limits and national prohibitions are meant to express the limitations on non-domestic discharges necessary to protect the sewers, treatment plants, treatment plant sludges, and their receiving waters from adverse impacts. Generally, technically-based numerical local limits supplant national prohibitions.

2.3 Federal Categorical Pretreatment Standards
Existing Source Job-Shop Electroplating - 40 CFR 413

40 CFR 413	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CNt	CNa	TTO	TM
daily-maximum (mg/l)	**1.2**	7.0	4.5	**0.6**	4.1	-	4.2	1.9	**5.0**	2.13*	10.5
four-day average (mg/l)	**0.7**	4.0	2.7	**0.4**	2.6	-	2.6	1.0	**2.7**	-	6.8
stat conversion to mo-avgs	**0.5**	2.5	1.8	**0.3**	1.8	-	1.8	0.55	**1.5**	-	5.0
bold - the only standards that apply if the discharge is <10,000 gpd / * TTO **4.57** mg/l											

Applicability - The Federal job-shop electroplating standards apply to job-shop metal finishers that do not own more than 50% of the parts processed and were in operation in their present configuration before the August 31, 1982 proposal date of the Federal metal finishing rule. The job-shop electroplating standards in 40 CFR 413.14(b)(f), 413.54(b)(f), and 413.64(b)(f) would apply to any dischargers under 10,000 gallons per day apply to any process wastewater discharges to the sewers from existing source lines at All Metals Processing.

2.4 Federal Categorical Pretreatment Standards
New Source Metal Finishing - 40 CFR 433.17

40 CFR 433.17	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CNt	CNa	TTO
daily-maximum (mg/l)	0.11	2.77	3.38	0.69	3.98	0.43	2.61	1.20	0.86	2.13
month-average (mg/l)	0.07	1.71	2.07	0.43	2.38	0.24	1.48	0.65	0.32	-

Applicability - Under 40 CFR 433.10(a), the metal finishing standards apply to the process wastewaters from the new source metal finishing lines because the facility's operations involve electroplating, electroless plating, anodizing, chemical coating, and etching. The metal finishing standards "... apply to plants that perform ..." the core operations of electro-plating, electroless plating, etching, anodizing, chemical coating, or printed circuit board manufacturing and they extend to other on-site operations, such as cleaning, associated with metal finishing and specifically listed in 40 CFR 433.10(a). If any of the core operations are performed, the new source metal finishing standards apply to discharges from any of the new source core or associated operations.

Under 40 CFR 433.12(c), the cyanide standards as applied to metal finishing wastewater discharges must be adjusted to account for dilution from non-cyanide bearing waste streams (Federally-regulated and unregulated).

2.5 Federal Standards Applied to Combined Flows

The Federal standards applied to any discharge from All Metals Processing would account for the application of both 40 CFR 413 and 433. The adjustments are dependent on how much of the discharge flow is generated by existing source and new source lines, on whether the facility discharges less or more than 10,000 gpd, and how much is cyanide-bearing. The Burbank permit does not reference the Federal standards.

2.6 Pollutants of Concern

There are no pollutants of concern as long as All Metals Processing does not discharge its process-related wastewaters. The pollutants of concern would comprise those regulated by the Federal existing source job-shop metal finishing standards, new source metal finishing standards, national prohibitions (*pH*), and certain local limits for which there is a potential to exceed the local limits.

2.7 Compliance Sampling

There are no identified process-related wastewater discharges to the sewers. As a result, there are no sampling points for the non-domestic wastewaters.

3.0 Compliance with Federal Standards, National Prohibitions, and Local Limits

Industrial users must comply with the Federal categorical pretreatment standards that apply to their process wastewater discharges. 40 CFR 403.6(b).

Categorical industrial users must comply with the prohibition against dilution of the Federally-regulated waste streams as a substitute for treatment. 40 CFR 403.6(d).

Industrial users must comply with the provision restricting the bypass of treatment necessary to comply with any pretreatment standard or requirement. 40 CFR 403.17(d).

All non-domestic wastewater discharges to the sewers must comply with local limits and the national prohibitions. 40 CFR 403.5(a,b,d).

Summary

All Metals Processing achieves compliance with the Federal standards for existing source job-shop metal finishers by not discharging the Federally-regulated process-regulated wastewaters to the sewers. All Metals Processing accomplishes "zero-discharge" compliance through the collection and off-site hauling of all generated wastewaters. In the same way, All Metals Processing ensures compliance with the national prohibitions and local limits that would apply to discharges. However, the use of a portable pump and long hoses to transfer between tanks or to deliver to off-site disposal makes it physically possible for an inadvertent or unauthorized discharge of process-related wastewaters to the sewers. Wastewater practices resulting in the impoundment of drainage within the secondary containment increases the potential for the inadvertent or unauthorized discharge of wastewaters to the sewers.

Requirements

- The secondary containment must be operated “dry” without impounding drainage.

Recommendations

- All Metals Processing should eliminate the possession on-site of long hoses currently used in the transfer of solutions and spents throughout the facility.
- Hard piping from the tanks generating spents to the chemical storage area would ensure the transfer and delivery of spents to only the barrels for off-site hauling.
- Old sewer connections and piping should be verified as permanently sealed and removed.

3.1 National Objectives

The general pretreatment regulations were promulgated in order to fulfill the national objectives to prevent the introduction of pollutants that:

(1) cause operational interference with sewage treatment or sludge disposal,
(2) pass-through sewage treatment into the receiving waters or sludge,
(3) are in any way incompatible with the sewerage works, or
(4) do not improve the opportunities to recycle municipal wastewaters and sludge.

This inspection did not include an evaluation of whether achievement of the national objectives in 40 CFR 403.2 have been demonstrated by the Burbank wastewater treatment plant through consistent compliance with their sludge and discharge limits.

3.2 Compliance with Standards and Limits

All Metals Processing complies with the applicable Federal standards and local limits strictly through the proper handling of spents by the shop operators. Consistent compliance depends on the successful and consistent delivery of spent solutions, spent static rinses, and drainage to barrels for hauling off-site as hazardous. An inadvertant or unauthorized discharge of process-related wastewaters of any quality to the sewers would violate the local limits as expressed by the Burbank permit for All Metals Processing as a narrative prohibition against discharge. An inadvertant or unauthorized discharge likely would also violate the numerical Federal standards and local limits since the All Metals Processing does not treat any wastewaters on-site for the removal of metals and the destruction of cyanide.

All Metals Processing possesses at least one portable pump outfitted with a long hose extension for the delivery. The portable pump can be stationed any where in the shop and the hose is long enough that its outlet can be directed to and from many location on-site, including the bathroom sewer connection. It would be better to have a hard-plumbed line, with stand-pipe inlets in the metal finishing area, leading to the chemical storage area. This would not preclude the use of the portable pump to deliver the spents but it would eliminate the need for long hose lengths. Maintaining only short hose lengths prevents the delivery of spent solutions to improper disposal points. ***See*** the photos in section 1.5 of this report.

During this inspection, All Metal Processing was also found impounding significant volumes of drainage within the secondary containment. The sources of the drainage were not determined during this inspection. However, the presence of impounded drainage circumvents the purpose of “dry” secondary containment. The large volume of impounded wastewater also increases the potential for an inadvertent or unauthorized discharge.

3.3 Dilution and Bypassing

The Federal standards in 40 CFR 403.6(d) and 403.17(d) prohibit “dilution as a substitute for treatment” and “bypassing any treatment necessary to comply with standards. There is no possibility to violate the prohibition against dilution as a substitute for treatment since All Metals Processing does not provide wastewater treatment nor discharge wastewaters to the sewers. On the other hand, an inadvertent or unauthorized discharge to the sewers would violate the prohibition against bypassing since compliance with Federal standards and local limits is achieved through the capture and off-hauling of all wastewaters.

4.0 Compliance with Federal Monitoring Requirements

Significant industrial users must self-monitor for all regulated parameters at least twice per year unless the sewerage agency monitors in place of self-monitoring. 40 CFR 403.12(e) & 403.12(g).

Each sample must be representative of the sampling day's operations. Sampling must be representative of the conditions occurring during the reporting period. 40 CFR 403.12(g) and 403.12(h).

Summary

All Metal Processing does not qualify as a significant industrial user since it does not discharge its Federally-regulated wastewaters to the sewers. As a result, it is not necessary to for Burbank to issue a permit with self-monitoring requirements. However, since All Metals Processing achieves compliance with the Federal metal finishing standards, national prohibitions, and local limits through zero-discharge practices, it is appropriate that Burbank has issued a permit that substitutes a written certification of no discharge in lieu of semi-annual self-monitoring. The 2006 waste manifests listed the deliveries to Varia Waste Management of filter cake, chromium-bearing, alkaline, and acidic wastewaters, black oxide wastewaters, cyanide-bearing wastewaters, and oily wastewaters. EPA concludes that the manifest likely account for the types of wastewaters expected to be generated by All Metals Processing.

Requirements

- None.

Recommendations

- The semi-annual self-certification statements should include copies of the hazardous waste manifests documenting the off-hauling of spents, spent static rinses, and drainage.