

# Metal Industries



## Metals Industries

“Metals Industries,” when taken as a whole, are one of the largest user groups of toxic chemicals in the world. California has been one of the largest centers of metals based industries in the world supplying the defense, automobile, and special products industries. Some of the materials used in metal finishing are solvents and surfactants for cleaning, acids and bases for etching, and solutions of metal salts for plating the finish onto the substrate.

**The Reynolds Group** (TRG) has been providing assistance to this industry for 20 years, beginning in the 1980’s when small metal plating operations were scrutinized for contributions to U.S. EPA Superfund programs. Until today, business and property transactions involving metal finishers routinely require environmental due diligence.

TRG uses the results from metals investigations to provide relevant information regarding potential contamination for use in property transfers, liability valuation, litigation support, remedial action planning, regulatory negotiation, source identification, and waste minimization. Our two decades of assessment and remediation experience, with wide ranges of organic and inorganic chemicals, provide our clients with the breadth of knowledge to tackle any assignment. TRG also provides a full range of risk analysis, expert consulting, and remediation services.

## REPRESENTATIVE CLIENT LIST (All Services)

### Banks/Insurance Co.

Stancorp Financial Group  
World Trade Bank  
Union Bank of California

### Property Owners

CB Commercial Real Estate  
Koll Management Services  
Morgan Stanley Real Estate  
Primestor Development, Inc.

### Industrial

Unilever  
McMullen Oil Company  
Brea Cañon Oil Company

### School Districts

Los Angeles  
Long Beach  
Santa Ana  
San Bernardino

### Law Firms

Allen, Matkins, Leck, Gamble, Mallory, Natsis  
Manatt, Phelps & Phillips  
Weston, Benshoof, Rochefort, Rubalcava  
Walsworth, Franklin, Bevins & McCall

### Government

California Regional Water Quality Control Board  
County of Riverside Real Estate Services  
County of Orange General Services  
County of San Bernardino Engineering Services  
City of San Diego  
Los Angeles County Dept. of Public Works  
Orange County Water District

## SUCCESS STORIES

### Chromium VI at a Metal Finishing Facility – Los Angeles, CA

Since the early 2000's, the Los Angeles Regional Water Board (LARWQCB) began searching for sources of chromium that had impacted key beneficial drinking water supplies in the Los Angeles area. **The Reynolds Group's** (TRG) client, a metal plating company, is located downgradient from a Fortune 500 company that had detected elevated concentrations of chromium in the groundwater beneath its site. Suspicious that the chromium contamination migrated from the client's site, the LARWQCB required TRG's client to audit its current and past practices, as well as assess the soil and groundwater beneath its location. Working with the law firm of Franklin, Bevins, Walsworth & McCall, TRG demonstrated that the problem at the Fortune 500 company was more likely its own problem than TRG's clients. By creating a compilation of surveyed regional issues report, TRG was able to graphically demonstrate that its client's chromium issue was de minimus at most.

### Mercury at Distribution Facility – Rancho Dominguez, CA

Shortly after purchasing a distribution facility in Rancho Dominguez, CA, a medical supply company noticed beads of mercury literally weeping out of the concrete loading dock of their newly acquired facility.

TRG performed a limited site assessment at the site. Laboratory analytical results from soil samples collected during the investigation determined that mercury did exist beneath the site at concentrations ranging from 248 to 1,006,800 micrograms per kilogram (mg/kg). By comparison, for determination of risk to human health, the EPA has established a Preliminary Remediation Goal (PRG) for mercury of 310,000 ug/kg (as of 2005) for industrial sites such as this one.

In addition, a Mercury Screening Survey was performed. The survey determined that mercury vapors were present at various locations inside and outside of the site building ranging from 0.01 to 0.1 milligrams per cubic meter of air (mg/m<sup>3</sup>).

TRG's work provided quantifiable information that workers may have been exposed to levels of mercury that exceeded acceptable concentrations, that there was mercury in the ground that exceeded acceptable standards, and that there may be liabilities (costs) associated with further assessment, ultimately resulting in remediation of the mercury to acceptable standards.

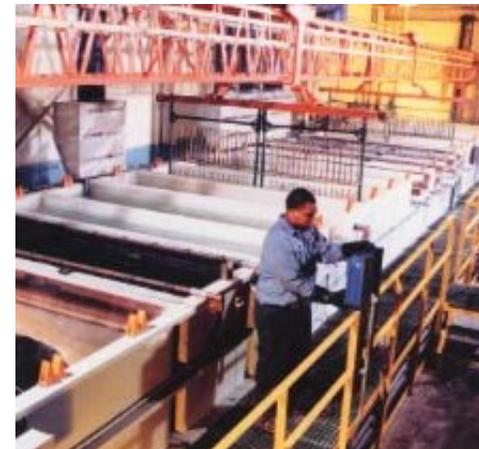
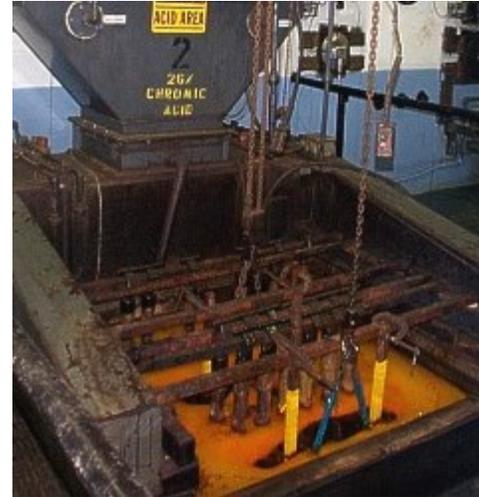
Potential concerns included worker exposure to mercury vapors and elemental mercury, future use of the property, and the potential of mercury migration to groundwater. TRG advised the owner that a prudent immediate remedial effort would involve removing the concrete and soil surrounding the concrete joints inside the building in the vicinity of the loading dock to mitigate the visible source. This would generate the least waste and remove the most mercury-impacted materials identified at the site.

### Lead in the Soil at Recycling Facility – Pomona, CA

This former battery recycling/salvage facility was located in Pomona, CA. A Preliminary Endangerment Assessment was finalized by the California Department of Toxic Substances Control (DTSC), which also oversaw the investigation activities.

Used batteries were manually broken apart and the lead core materials were salvaged for recycling. Associated by-products of this procedure were lead oxides and battery acids, primarily sulfuric acid. Battery wastes were reported to be released on the main site and at off-site facilities. High levels of lead were detected in the site surface soils (between 0 and 1 foot depths) during previous investigations. The removal action addressed the removal and disposal of lead remaining in contaminated soil.

Shallow soils in the sidewalks off-site were found to contain elevated levels of lead. These contaminated sidewalk areas posed potential health risks to children in the surrounding area of the site. The maximum lead concentration (4,200 mg/kg) detected during the preliminary endangerment assessment also significantly exceeded the Preliminary Remediation Goal (PRG) for children (412.4 mg/kg). The removal action consisted of excavating the lead impacted soils in the areas around the site to remove the hazard.



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