# Metal Finishing Champion Group

# DTSC-Model Shop/P2 Presentation

LA INDUSTRY

MEDIA CENTER

AUGUST 22, 2019



# Agenda

**Facilitator: Edward Calleros** 

Introduction - Michael Simpson, IWMD's Manager Clean Up Green Up (CUGU) - Melissa Plamondon Metal Finishing Association of Southern California Pollution Prevention (P2) - Dr. Nabil Yacoub/DTSC The Industrial Wastewater Permit - Minh Nguyen Model Shop - Dr. Nabil Yacoub/DTSC Compliance Inspection - Miguel Rodas The Improvement Rule - Dr. Nabil Yacoub/DTSC DWP Water Conservation Program – Leo Gonzalez Survey - Jan Marte Closing Remarks - Manik Mohandas

Industrial Waste Management Division (IWMD)

Mr. Michael Simpson, P.E.

**Division Manager** 



#### Metal Finishing Association of Southern California

"The Voice of the Industry"

Advocacy/Representation

**Support & Information** 



# Pollution Prevention

A <u>practice</u> that reduces the amount of any hazardous substance, pollutant, or contaminant entering any environmental system or otherwise released into the environment.

## Department of Toxic Substances Control

Please welcome

# Dr. Nabil Yacoub

Senior Hazardous Substance Scientist California Environmental Protection Agency Who needs an Industrial Wastewater Permit?

It is the policy of the City of Los Angeles to assure that the highest and best use of the Publicly Owned Treatment Works (POTW) is for the collection, treatment and disposal of domestic wastewater.

The use of this system for industrial wastewater is a

privilege...

# The Industrial Wastewater permit.

#### BOARD OF PUBLIC WORKS MEMBERS

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LISA B. MOWERY

ADEL H. HAGEKHALIL ALEXANDER E. HELOU LEO N. MARTINEZ ROBERT B. IRVIN (ACTING)

INDUSTRIAL WASTE MANAGEMENT DIVISION 2714 MEDIA CENTER DRIVE LOS ANGELES, CA 90095 OFFICE: (323) 342-9200

November 01, 2016

A.V. Plating 12071 Branford Street, Unit 14 Sun Valley, Ca 91352

In Reply Refer to: IU109493.prm/nd

Attn: Lizzy Sedano, Manager

RENEWAL OF INDUSTRIAL WASTEWATER PERMIT FOR IU109493 PERMIT: W-517365

The Bureau of Sanitation has completed a review of A.V. PLATING's application to discharge industrial wastewater to the City of Los Angeles sewer system. Pursuant to the Bureau's audit, it has been determined that this facility is subject to the Metal Finishing, 40 CFR 433, Subpart A (PSNS) and other applicable Federal, State and Local wastewater discharge requirements. Therefore, in accordance with provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, this Industrial Wastewater Permit is being issued to include comprehensive permit conditions which identify the requirements that are applicable to A.V. PLATING. All discharges from this facility and actions and reports relating thereto shall be in accordance with the terms and conditions of this permit.

This permit shall become effective at midnight on November 01, 2016 and shall expire at midnight on October 31, 2019. During the term of this permit, the permittee shall immediately notify the Bureau of Sanitation of any changes to the facility, process, production, or pretreatment system that may change the characteristics which causes it to be different from that expressly allowed under this permit.

If there are any questions regarding these permit conditions, please contact Nataly Dakak of my staff at (323) 342-6097.

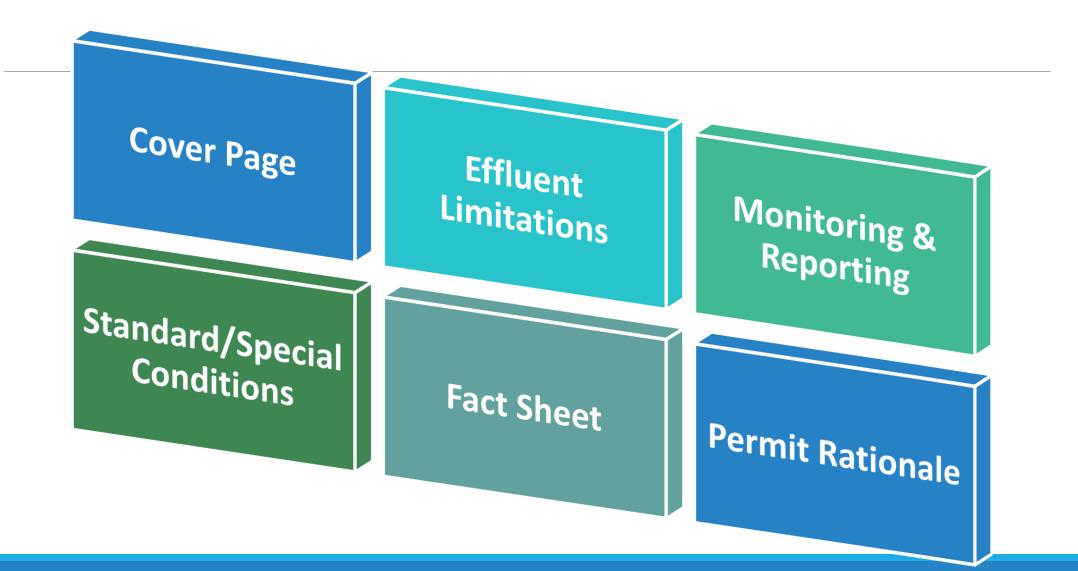
Sincerely,

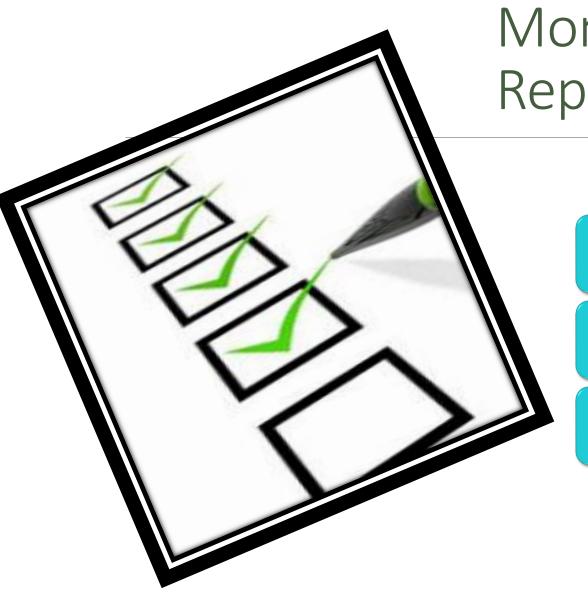
ENRIQUE C. ZALDIVAR, Director LA Sanitation

Bv

Michael Simpson, Division Manager Industrial Waste Management Division

#### The Contents of an Industrial Wastewater Permit





Monitoring & Reporting Requirements

If <10K gpd----Bimonthly SMR;

If >10K gpd----Monthly SMR

TTOs (RE list)

# Meeting Compliance



#### Comply with Report Due Dates



#### **Comply with Discharge Limitations**



Significant Non-Compliance (SNC)

Discharge & non-discharge violations

## Special & Standard Conditions

#### **SPECIAL CONDITIONS**

- Reasonable Expected (RE) TTOs
- ❖ Toxic Organic Management Plan (TOMP)
- pH monitoring/recording system
- Flow meter maintenance/calibration
- Certification requirement for pollutant neither present nor expected
- Manifest requirements

#### STANDARD CONDITIONS (PART 6)

- ☐ General & specific prohibitions (Interference, Pass Through, or Imminent Danger).
- ☐ Permit Provisions
- Operation & maintenance of pollution controls
- ■Monitoring & records
- Additional reporting requirements

## SIGNIFICANT NON-COMPLIANCE How to avoid being in SNC



Understand SNC criteria



Schedule sampling early (1st month)



Diligence with monitoring and reporting (submittals)

# Metal Finishing Model Shop Program

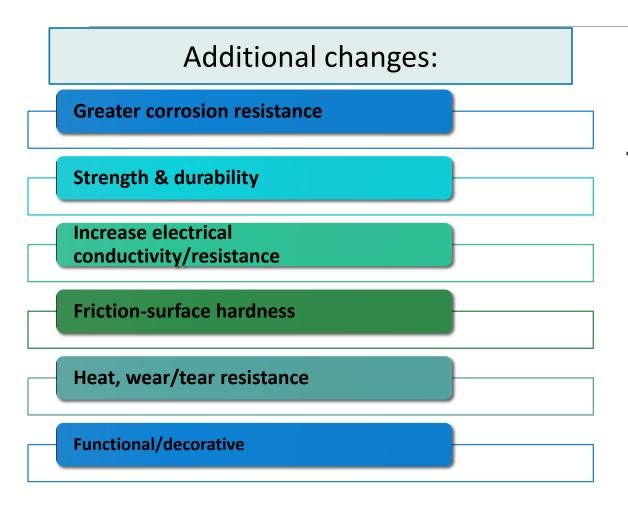
A partnership between the industry and regulatory agencies to help metal finishing businesses run cleaner, safer shops.

## The Inspection

- Baseline Information
- Finishing Processes
- Pollutants
- Evaluation of
- Pretreatment Systems
- Determine Compliance



# What is Metal Finishing?



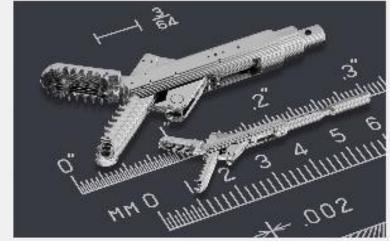
The process of changing the surface of an object, for the purpose of improving its appearance and/or durability.

### Industries Served by Metal Finishing













## **Metal Finishing Processes**







**Electroplating** 

**Electroless Plating** 

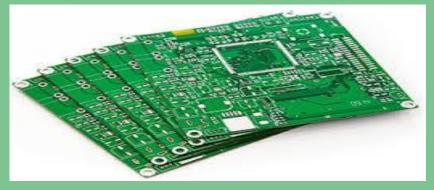
Coating

**Anodizing** 

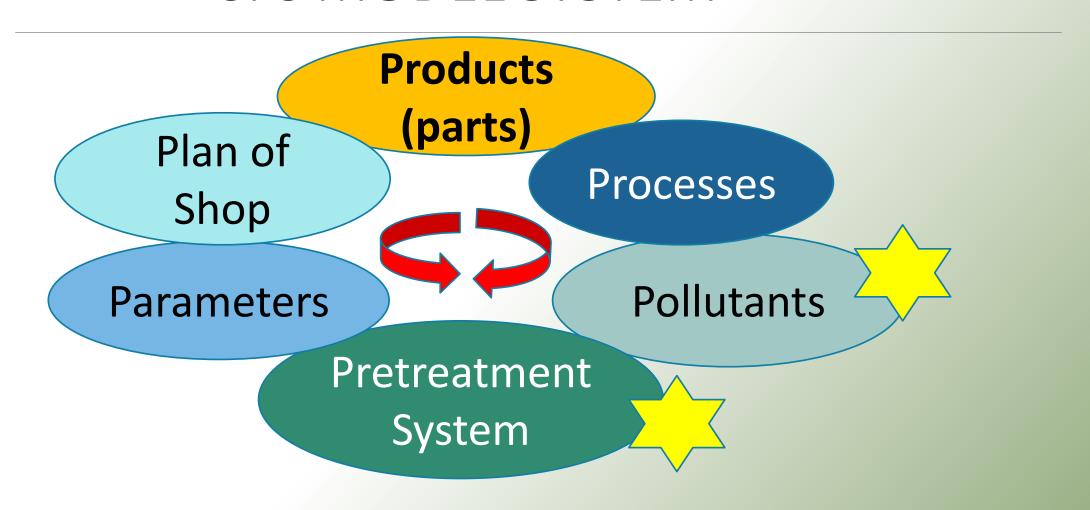
**Chemical Etching/Milling** 

**Printed Circuit Board (PCB)** 





### 6Ps MODEL SYSTEM



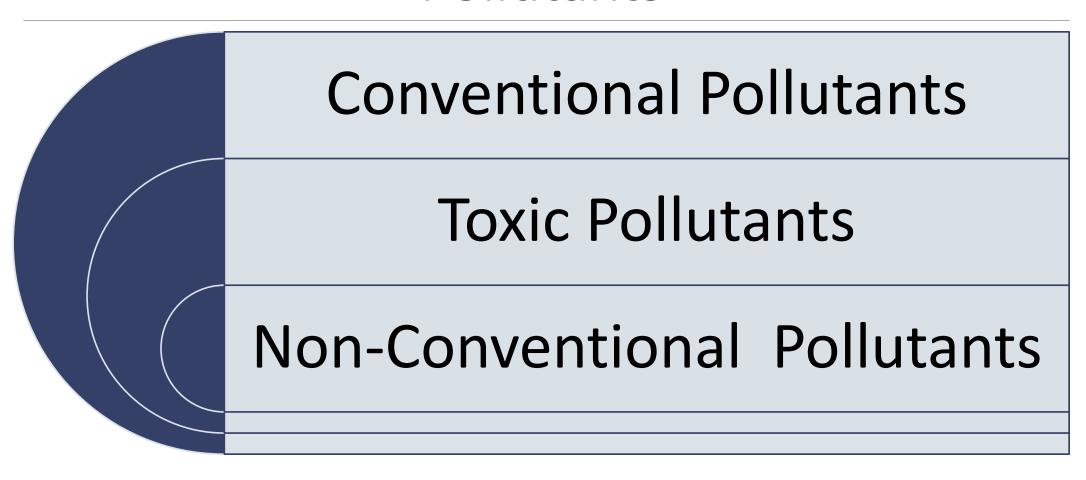
# Products (Parts) & Processes

Raw materials to finished products Identify waste streams and volume Piping; hard piping vs. flex hoses Dilution sources Tank layout (existing vs. current)

Regulated Waste Streams

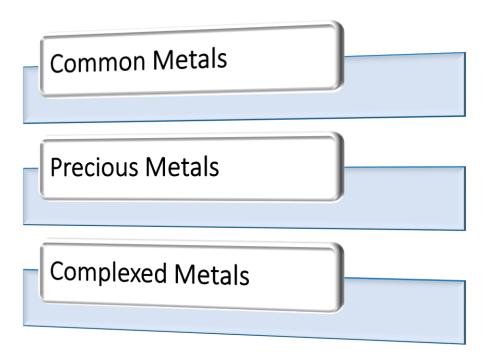
Dilution

#### **Pollutants**



#### Wastewater Characteristics

#### **Inorganic Wastes**



#### **Organic Wastes**

Cyanide Oil/Grease/Dirt

Toxic Organics

#### Process Line

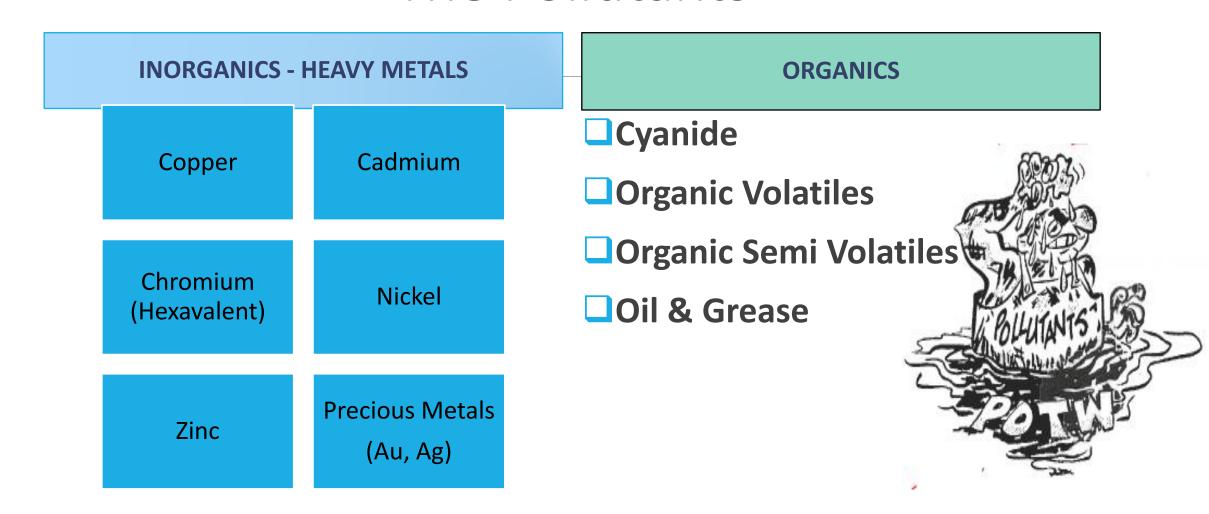
**Surface Preparation** 

**Metal Finishing** 

**Post Treatment** 



#### The Pollutants

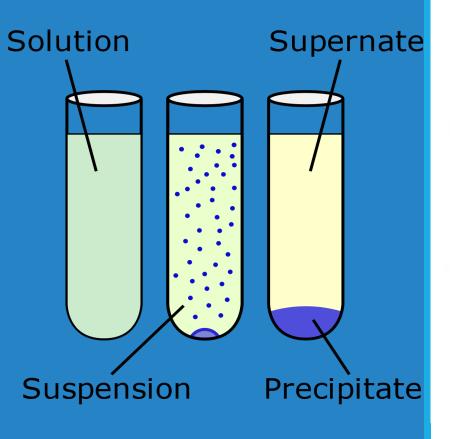


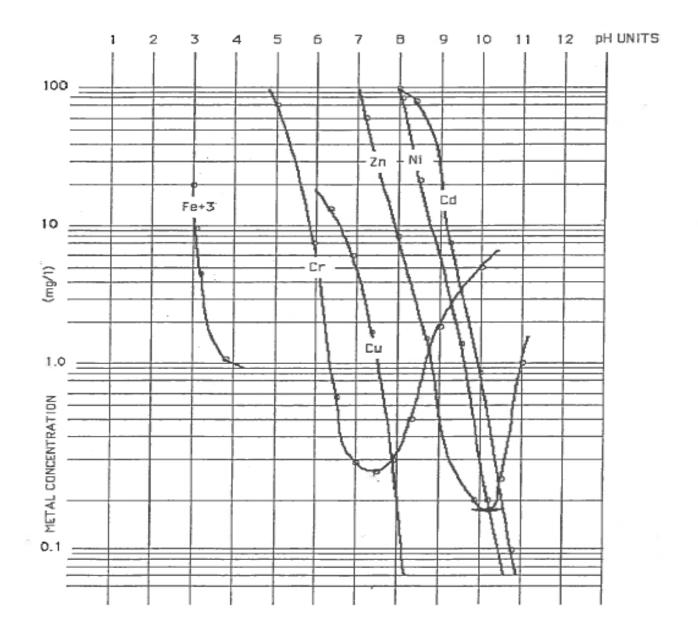
## Wastewater Treatment Fundamentals

Federal Water Pollution Control Act **Clean Water Act** 

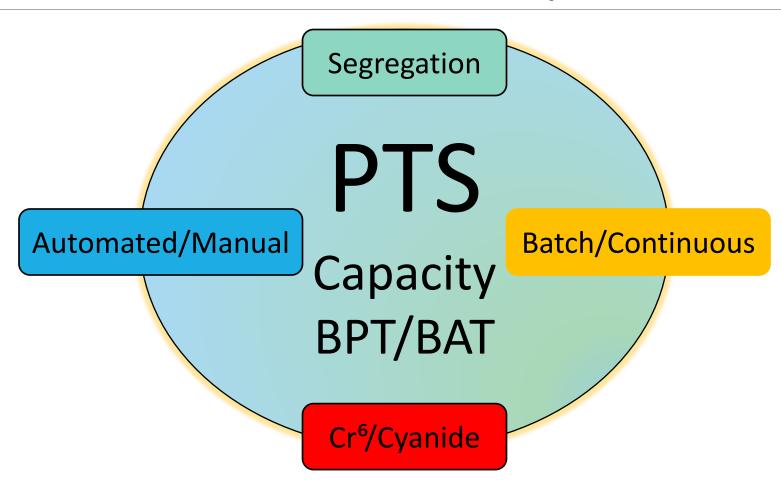
goal: elimination of pollutants

# Solubility of Metals





# The Pretreatment System (PTS)



#### Parameters



**Monitoring Requirements** 



Reporting Requirements

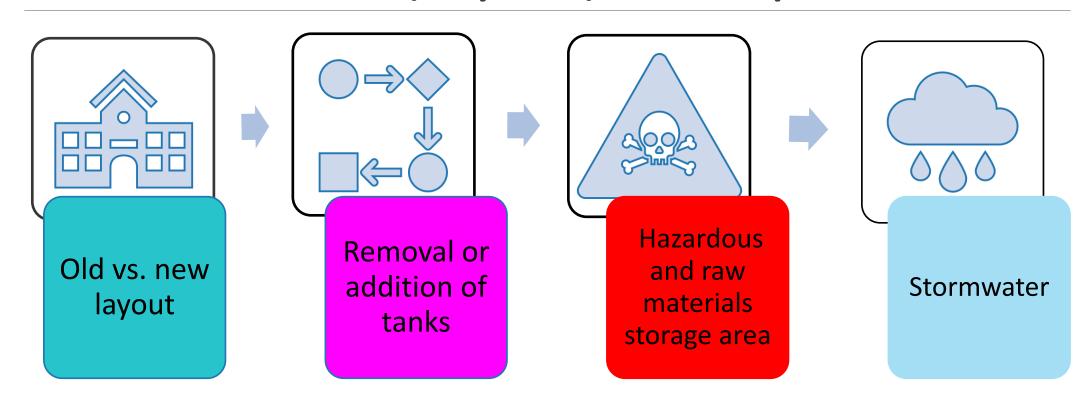


**Special Conditions** 



**Standard Conditions** 

# Plan (Layout) of Shop



# What is your take?

# Eye on the Target

Find the pollutants

Treatment of pollutants

# PTS Assessment

Type of Pollutants

Load of pollutants

# **Minimal** Function

Enhance efficiency

Implement SOP

QA/QC

# Generator Improvement Rule

Ignitable

Corrosive

Reactive

Toxic









## Department of Toxic Substances Control

Please welcome

# Dr. Nabil Yacoub

Senior Hazardous Substance Scientist California Environmental Protection Agency

## WATER CONSERVATION PROGRAM









## Water Conservation Technical Assistance Program (TAP)

#### What Is It?

- The Technical Assistance Program (TAP) is a financial incentive program offering commercial, industrial, institutional, and multi-family residential customers in Los Angeles up to \$250,000 for the installation of pre-approved equipment and products, which demonstrate water savings.
- This joint effort between the LADWP and you, our customer, will help modernize your facility with the latest water-efficient equipment, save you money, and conserve our most precious natural resource.

#### **Benefits**

- Modernize your facility with the latest water efficient equipment
- Save money on your water bill
- Conserve a precious resource

#### **Instructions**

- PROJECTS THAT HAVE BEEN STARTED OR ALREADY COMPLETED PRIOR TO REBATE APPROVAL ARE NOT ELIGIBLE.
- II. Read the program terms and conditions and the guidelines provided with the application package. (Visit www.ladwp.com/tap)

III. To talk to a Water Conservation Specialist about your potential project and/or to assure that your project qualifies for the program call 1-800-544-4498 press "5". In order to know if your proposed project qualifies, please be prepared to answer the following questions:

- 1. What exactly does your proposed project do?
- 2. How does it work?
- 3. How soon do you expect to have it up and running?
- 4. Will the work be done in-house or by a contractor?
- 5. Approximately how much will this project cost you?
- 6. How much water do you expect to save?

IV. Remember, this program is funded by the Los Angeles Department of Water and Power and is subject to change at any time without prior notice.

#### Power Rinse Savings Chart

Hours of Usage	Water Savings	Wastewater savings	Gas savings	Annual Dollar
	(gallons/day)	(gallons/day)	(therms/day)	Savings
2 hours per day	100	100	0.7	\$300 - \$400
4 hours per day	200	200	1.3	\$700 - \$900
6 hours per day	300	300	2.0	\$1000 - \$1300

#### **Submit completed application to:**

LADWP Water Conservation Technical Assistance Program (TAP) 1230 W. 3rd St Ste. 111 Los Angeles, CA 90017

#### **Contact Information:**

Water Conservation Hotline: 1-800-544-4498

Fax Number: (213) 367- 1055

#### **Pre-Rinse Spray Valve**





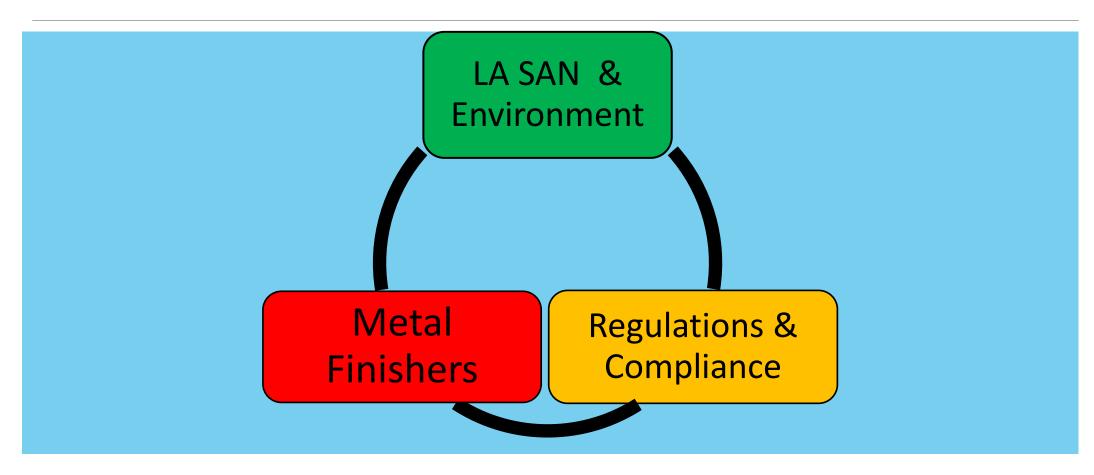
#### **Features**

- Ultra efficient 1.1 gallon per minute
- Solid brass and 100% ceramic disk means no leaks
- High power fan spray measures minimum 3 inches wide at a distance of 9 inches from spray nozzle
- Convenient always-on handle clip for constant flow
- Interchangeable with all brands
- 5 year warranty

# The Survey



## Final Remarks



## Important Links to check Lasan.org/IWMD/Resources



The City of Los Angeles – Green Business Program

https://www.lacitysan.org/san/sandocview?docname=cnt022378

Business Resource & Incentive Guide LA Industry's Guide to Savings

https://www.lacitysan.org/san/sandocview?docname=cnt020103

Green Chemistry Guide

https://www.lacitysan.org/san/sandocview?docname=cnt022546

LADWP
Water Conservation Rebate Program

https://www.ladwp.com/

