

# DTSC's Enforcement Program

Prepared for the  
Independent Review Panel

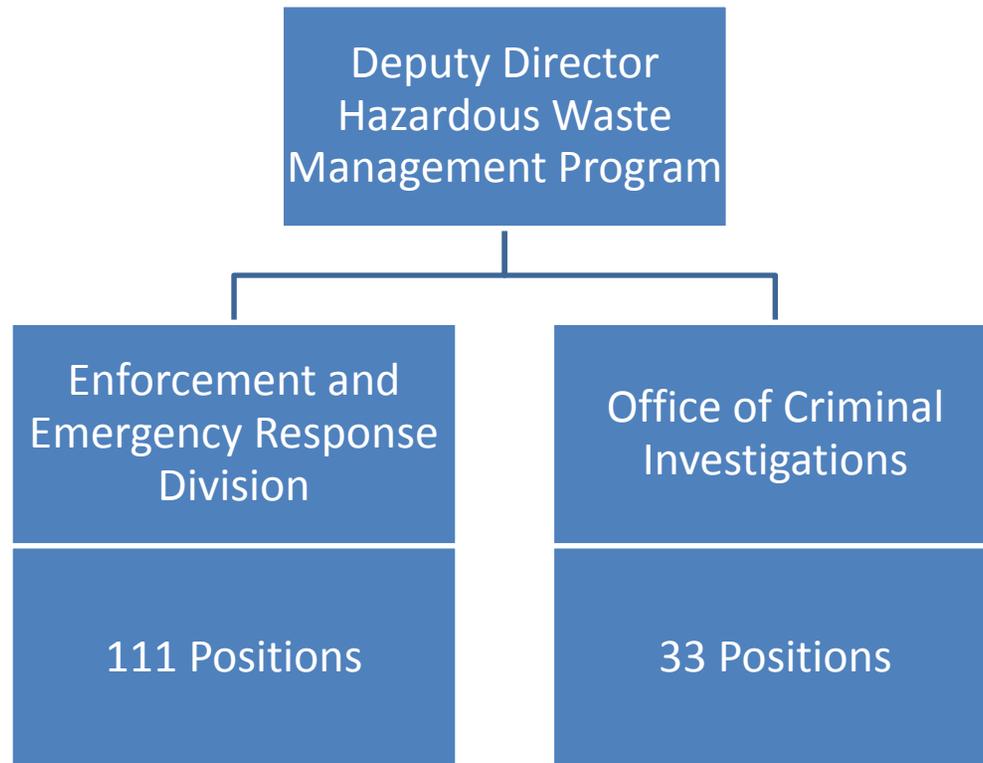
Elise Rothschild, Deputy Director  
Hazardous Waste Management Program



Department of Toxic Substances Control



# DTSC Enforcement Organizational Structure



Department of Toxic Substances Control



Cal/EPA

# Enforcement and Emergency Response Division

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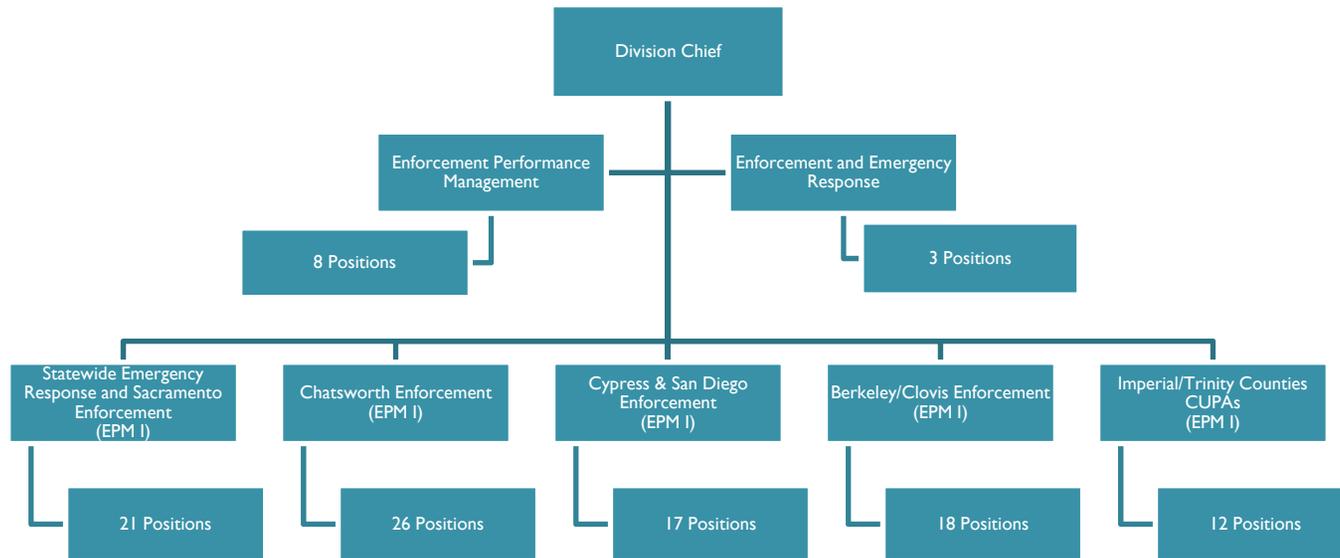
Keith Kihara, Division Chief  
Enforcement and Emergency Response



Department of Toxic Substances Control



# Enforcement and Emergency Response Organizational Structure



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# EERD Mission Statement

The mission of the EERD is to promote a cleaner and safer environment for all Californians through fair, consistent and timely enforcement and effective emergency response.

The vision of EERD is to ensure California's regulated community is in compliance with all hazardous waste and hazardous substances laws.



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# Laws Enforced

Health and Safety Code (HSC), Division 20, Chapter 6.5 (Hazardous Waste Control Law).

California Code of Regulations (CCR), title 22

Imperial and Trinity County CUPA:

- HSC, Division 20, Chapters 6.67, 6.7 and 6.95
- HSC, Division 12, Chapter 1
- CCR, titles 19, 23 & 24



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# Core Activities

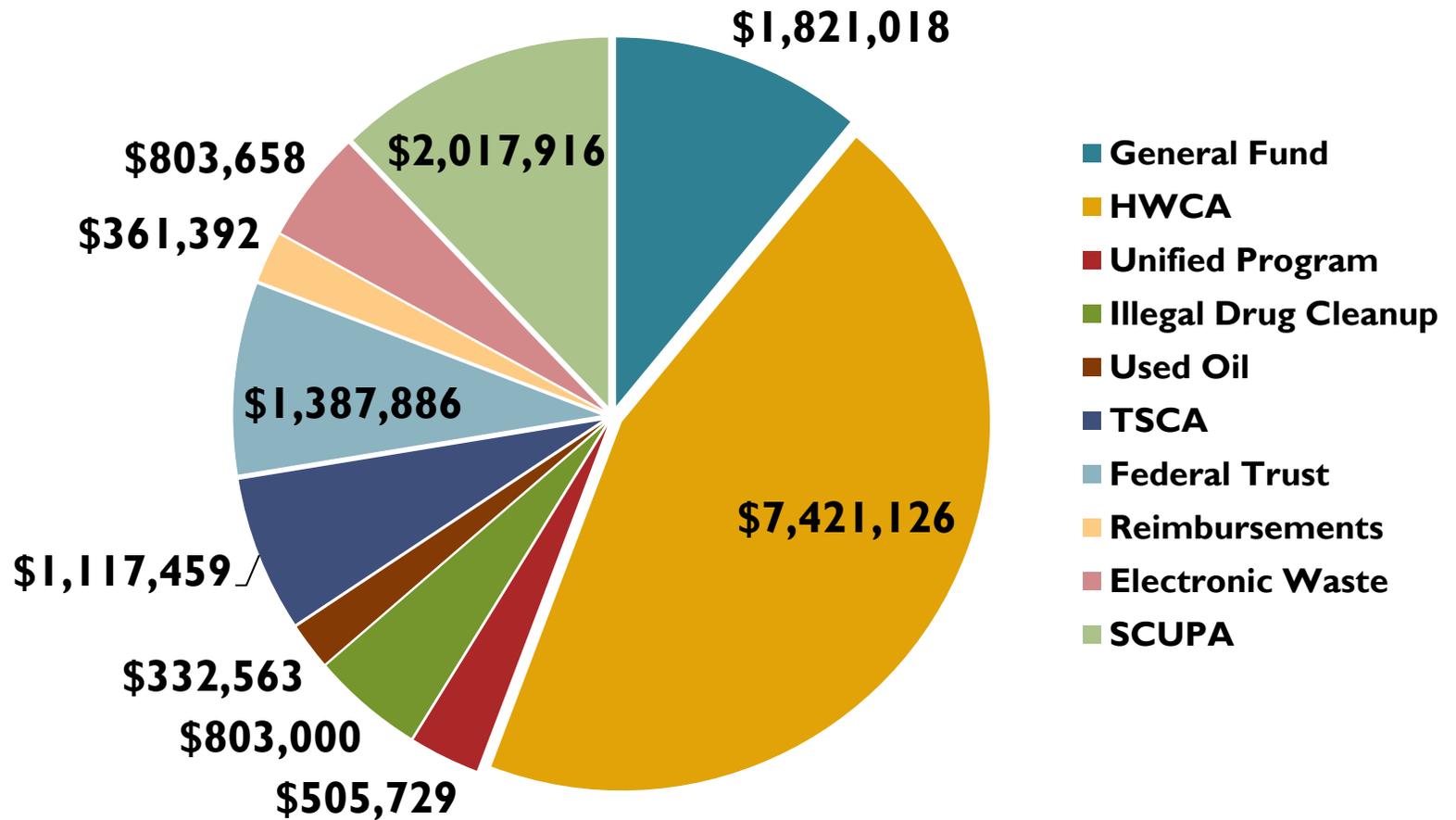
- Inspect permitted facilities, generators, transporters, and electronic waste recyclers and handlers
- Investigate or refer complaints
- Conduct appropriate and timely enforcement actions
- Oversee CUPA activities
  - Act as CUPA for Trinity and Imperial Counties
- Perform emergency responses
- Conduct focused compliance initiatives for specific geographic regions and industries



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# Enforcement - Funding Sources

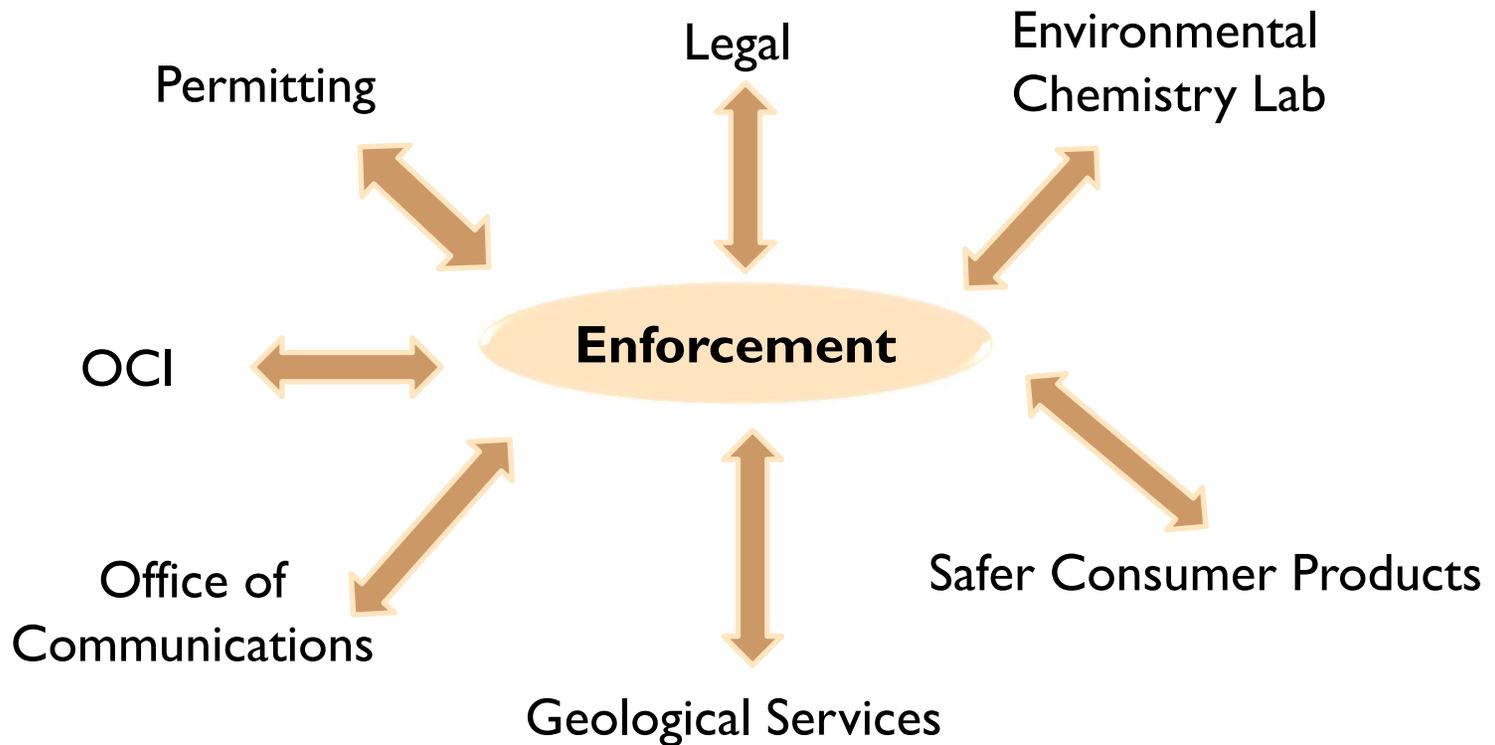


FY 2014-2015

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# Intra-Departmental Coordination



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# Types of Facilities Inspected

## DTSC inspects:

- Treatment, Storage, and Disposal Facilities
- Transporters
- E-Waste Facilities

## CUPAs inspect:

- Generators



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# Frequency of Regular Inspection

<b>Facility Type</b>	<b>Frequency</b>
<b>Operating Federal Facility with HW Permit</b>	Every year
<b>Operating HW Landfills</b>	Every year
<b>Transporters</b>	Ongoing
<b>E-Waste Recyclers</b>	Every year
<b>E-Waste Handlers</b>	Every 5 years
<b>Operating treatment or storage facility with a HW Permit</b>	Every 2 years
<b>Operating treatment or storage with a Standardized or State only HW Permit</b>	Every 1 - 3 years.
<b>Facility with HW Post Closure Permit</b>	Every 3 – 5 years.



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# Complaint Intake Process

Complaints are received via:

- DTSC Waste Alert Complaint Hotline
- Cal EPA Online Complaint Form System

Complaints are reviewed within DTSC



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# Inspection Planning

- Division Chief & Branch Chiefs
  - Annual Work Plan and schedule inspections (~May)
- Distribution of Work Plan to Supervisors (End of June)
- Implementation of Work Plan (July 1<sup>st</sup>)



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# Mandatory Certification and Training

- Mandatory Medical Monitoring
- Fit-Test for Respirators
- 40-Hour HAZWOPER Training  
(8 CCR 5192)
- First Aid/CPR  
(Every 2 years – 8 hour class)
- Annual 8-Hour HAZWOPER Refresher



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# Inspector Required Training

- Cal EPA Basic Inspector Academy
- California Compliance School
- Hazardous Waste Tracking System
- Waste Classification and Recycling
- Hazardous Waste Manifest
- Hazardous Waste Transporter
- Field Sampling for Enforcement
- EnviroStor Training



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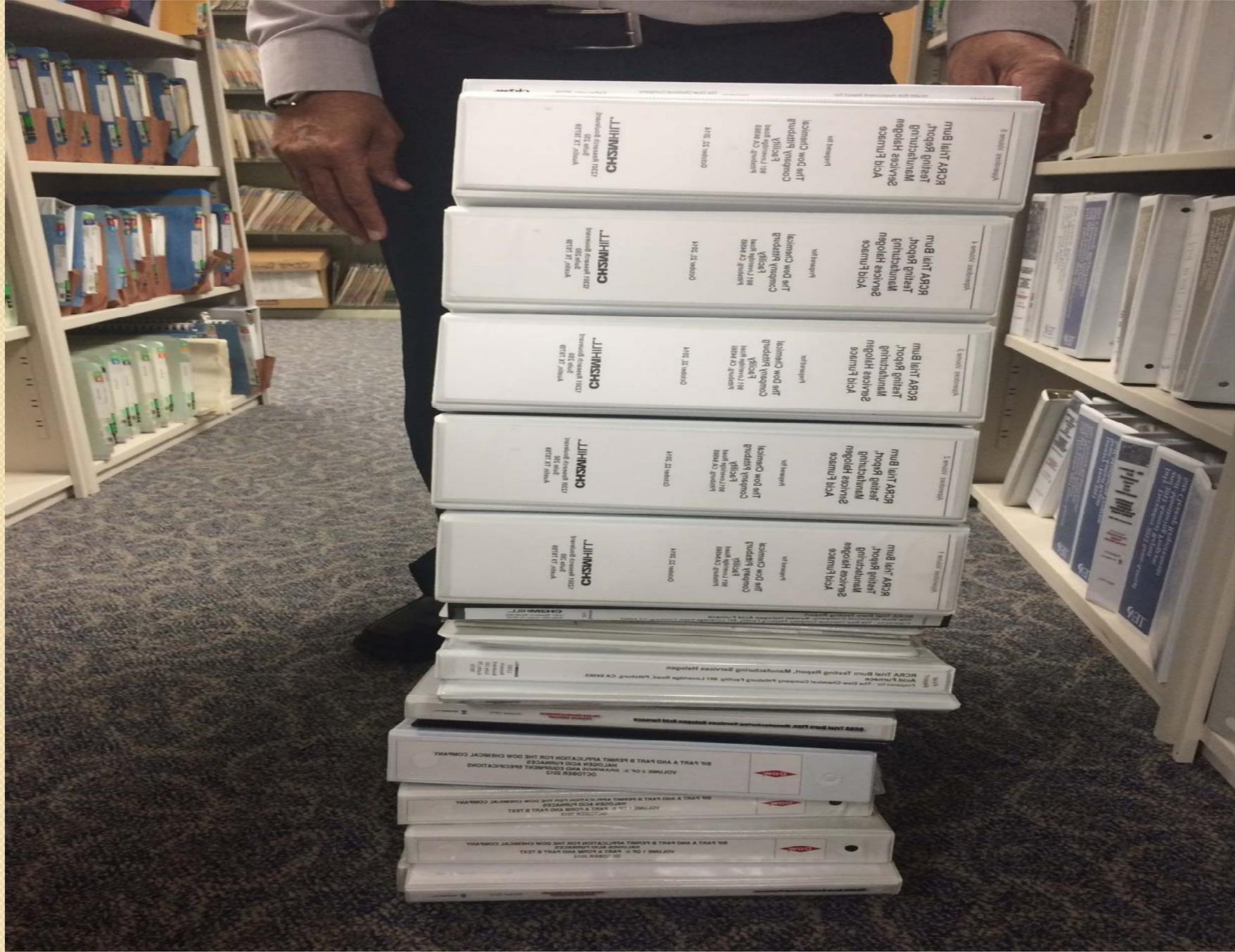
# Inspector Safety Hazard Appraisal Recognition Plan (HARP)

- Prepare a HARP for each inspection:
  - Conduct file review
  - Coordinate with Health and Safety to assess all potential hazards
  - Determine adequate personal protective equipment for inspection
  - Determine all monitoring and sampling equipment needed



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# Sulfur Complex Process Overview

## Process Description-

The Sulfur Complex converts H<sub>2</sub>S and NH<sub>3</sub> gases to elemental sulfur, nitrogen and water. The DGA Regeneration System removes H<sub>2</sub>S Gases from the rich DGA received from Units 233, 240 and 250 by using steam stripping in 3 Regeneration towers. The Water Stripping System removes NH<sub>3</sub> Gases received from the Refinery Process Water System (Tanks 204, 205, 209, 294) by using steam stripping in 4 Water Stripping towers. The Sulfur Recovery System converts the H<sub>2</sub>S and NH<sub>3</sub> Gases to elemental sulfur by burning them in a Reaction Furnace at 2300 to 2500 deg. F and then cooling them down to a 300 deg. F, then the gases are reheated to a 450 deg. F and passes over 3 reactor beds to convert 97% of the gases to elemental sulfur. The remaining 3% is converted to elemental sulfur in the Tail Gas Removal System by converting the remaining sulfur compounds back to H<sub>2</sub>S gases by using a Hydrogenation Reactor and then absorbing the H<sub>2</sub>S gases in a Stretford Solution (Unit 236 and 238) or in a MDEA solution (Unit 235). The Stretford Solution chemically converts the H<sub>2</sub>S gases to elemental sulfur and the H<sub>2</sub>S gases in the MDEA solution is removed by steam stripping in a Regeneration tower.

## Process

DGA Regeneration System  
Water Stripping System  
Sulfur Recovery System  
Tail Gas Removal System

## Temperatures/Pressure

60-260 deg. F	9-16 psig
60-260 deg. F	9-16 psig
275-2800 deg. F	0-10 psig
60-800 deg. F	0-16 psig

## Safety Hazards

This unit contains-

Ammonia Acid Gas (NH <sub>3</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Pit Vent Gas
Antifoam	Verti-Press Sulfur Cake	Verti-Press Sulfur Cake
BFW-Oxygen Scavenger	150# Steam	Refinery Process Wastewater
Bleach	Hot Condensate	Stripped Water
CTW Corrosion Inhibitor	Anthraquinone Desulfonic Acid (ADA)	Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )
Catalyst Criterion N-39	Asbestos	Spent Caustic
Caustic Soda Solution 50%	BFW-Phosphate Treatment	800# Steam
Diglycolamine (DGA)	Carbon Dioxide (CO <sub>2</sub> )	50# Steam
Hydrogen Sulfide (H <sub>2</sub> S)	CTW Antiscalant	
Natural Gas	Catalyst Discovery DD-431	
Oxygen 100%	Diesel	
Refinery Fuel Gas	Elvan K Sodium Ammonium Vanadate	
Sour Water	MDEA	
Sulfur	Nitrogen (N <sub>2</sub> )	

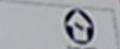
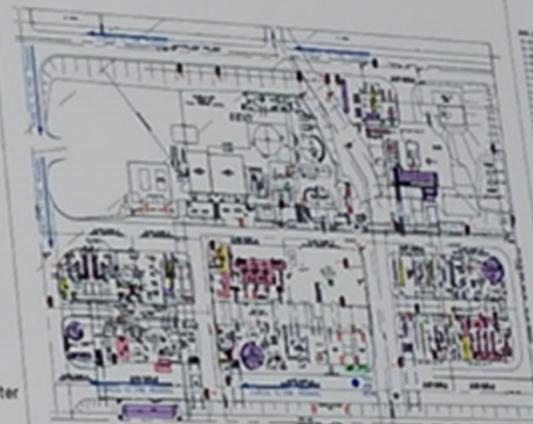
## Check-in/out Procedure:

- All Personnel entering the unit must check in at the Operators shelter.
- Sign out when exiting the unit.

## Sulfur Complex Radio Channel - A-9

In case of emergency -

- Dial 88 or 2222 on a Refinery Telephone
- Contact the Unit Operator via In-Plant Radio, or
- Direct Dial Telephone (510) 245-4475



LEGEND

Red	High Temperature Area
Orange	High Pressure Area
Yellow	Low Temperature Area
Green	Low Pressure Area
Blue	Water
Purple	Steam
Light Blue	Process Gas
Dark Blue	Process Liquid
Light Green	Process Solid
Light Purple	Process Vapor
Light Orange	Process Slurry
Light Red	Process Dust
Light Yellow	Process Ash
Light Blue-Gray	Process Sludge
Light Green-Gray	Process Residue
Light Purple-Gray	Process Waste
Light Orange-Gray	Process Byproduct
Light Red-Gray	Process Scrap
Light Yellow-Gray	Process Debris
Light Blue-Gray	Process Spill
Light Green-Gray	Process Leak
Light Purple-Gray	Process Emission
Light Orange-Gray	Process Discharge
Light Red-Gray	Process Overflow
Light Yellow-Gray	Process Underflow
Light Blue-Gray	Process Backflow
Light Green-Gray	Process Reverse
Light Purple-Gray	Process Contamination
Light Orange-Gray	Process Interference
Light Red-Gray	Process Obstruction
Light Yellow-Gray	Process Blockage
Light Blue-Gray	Process Jamming
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Light	



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# Post-Inspection

- Discuss findings with supervisor
- Send samples collected to ECL
- Enter data into EnviroStor
- Inspection report sent to facility within 65 days
- Determine if a formal enforcement action required and request attorney from Office of Legal Counsel



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# Enforcement Response

- No Violations
- Violations
  - Minor
  - Class 2
  - Class 1



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# Enforcement Options

- **Administrative Enforcement:** Prepare Enforcement Order or Consent Order to be reviewed by supervisor, Branch Chief, and assigned DTSC attorney
- Refer to Attorney General's Office as Civil or Administrative Case (sometimes handled as criminal case)
- Refer to District Attorney's Office as Criminal Case (sometimes handled as civil case)



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# Routine Inspections

CY 2014-April 1, 2016

Calendar Year	Inspections	Referrals	
		District Attorney	Attorney General
2014	288	-	6
2015	309	-	4
2016 (1 <sup>st</sup> Quarter)	82	-	-
Totals	679	0	10



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# Complaints

## CY 2014-APRIL 1, 2016

Calendar Year	Assigned	Complaint Site Visit	Closed Investigation	Referrals	
				District Attorney	Attorney General
2014	57	39	55	-	5
2015	43	30	22	-	1
2016 (1 <sup>st</sup> Quarter)	10	11	5	-	-
Totals	110	80	82	0	6



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# Performance Metric: Inspection Reports

## CY 2014-April 1, 2016

<b>Calendar Year</b>	<b>Inspections</b>	<b>Inspection Reports Sent Within 65 Days</b>
2014	327	277
2015	339	270
2016 (1st Quarter)	93	75



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# Performance Metric: Return To Compliance

- Not all inspections lead to violations
- No statutory requirement for facility to return to compliance
- Utilize EPA's guidance requiring a facility to return to compliance within 240 days



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# Performance Metric: Enforcement Actions

- Open cases
- Process enhancements
- Establishing performance metrics



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# Enforcement Performance Management Branch (EPMB)

- July 2015 BCP established a new branch with 8 positions to:
  - Determine work load standards
  - Develop and implement a comprehensive training program
  - Develop/update regulations, policies & procedures, guidelines, etc.
  - Increase program consistency, efficiency, effectiveness, and transparency
  - Lean Six Sigma Project



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# Certified Unified Program Agency (CUPA)

- Established in 1993 by statute, SBI 082
- Cal/EPA's certification of CUPAs began in 1997
- Local regulatory agency's granted authority to implement 6 state programs
- DTSC conducts CUPA evaluations
- DTSC is the CUPA for Trinity and Imperial Counties



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# CUPA Evaluation

- 3 year evaluation cycle.
- Evaluation team consists of a CalEPA team leader plus 1 evaluator from DTSC, SWRCB, OES and OSFM.
- 2-3 evaluations are conducted every month; 32 evaluations per year for DTSC staff
- Office and field component.
- An evaluation summary of findings is issued to the CUPA with corrective actions if needed.



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# Border Activities





# Data Management

- Inspection and enforcement data is stored in EnviroStor
- Data is used to measure performance
- Enhancements to EnviroStor are ongoing



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# Enforcement and Environmental Justice

- Using tools such as CalEnviroScreen and Geographic Information System
- Targeted Initiatives (e.g. Metal Recyclers and CalEPA EJ)
- Participation and support of IVAN
- DTSC's SEP policy went into effect May 5, 2016



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# CalEnviroScreen

- The Office of Environmental Health Hazard Assessment (OEHHA's) CalEnviroScreen is used to identify communities in California with high cumulative environmental impacts
- Enforcement is using GIS mapping of communities with high cumulative environmental impacts to prioritize inspection and enforcement work



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# Cal EPA Environmental Justice Initiative

- Los Angeles
  - Boyle Heights
  - Pacoima



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# Boyle Heights

## July – September 2015

- Led 12 hazardous waste facility inspections
- Joint inspection with LA CUPA and LA County Fire/Health/HazMat with 11 inspections
- Joined other agencies on 23 joint inspections
- Coordinated with USEPA, DPR, CalRecycle on joint inspections



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# Pacoima

## November – December 2015; January 2016

- Led 12 hazardous waste facility inspections
- 6 joint inspections with LA CUPA, LA County Fire/Health/HazMat and State Water Board



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# California Compliance School

- Classes provided in Pacoima and Boyle Heights:
  - 2 classes provided
  - 1 class was in Spanish



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# Identifying Violations Affecting Neighborhoods (IVAN) Program

- Original IVAN in Imperial County
- DTSC receives and refers or investigates environmental complaints and incident reports
- DTSC supports 8 IVAN task forces: Imperial County, Coachella, Wilmington, Bayview Hunters Point, Kern County, Kings County, Fresno (City & County) and Sacramento (City & County)



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# Supplemental Environmental Projects (SEP)

- Policy went into effect on May 5, 2016
- Proposed SEP must improve public health and the environment
- Prioritizes Environmental Justice communities
- Up to 50% of penalty can be applied to a SEP
- “Completion Report” required



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# Lean Six Sigma

## Enforcement Case Response Time Improvement

### GOAL

**90% Administrative Cases with  
assessed penalties up to \$75,000 are  
settled within 180 days**



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# Draft Violation Scoring Procedure

- To clarify how a facility's compliance history would be used as a basis for determining when violations support denial of a permit application or revocation of a permit
- To assist with making permit decisions in a consistent, transparent and accountable way



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# Draft Violation Scoring Procedure

- DTSC Outreach Efforts
  - Community
    - Kern Environmental Enforcement Network
    - LA Environmental Justice Network
- Legislature
  - Legislative Assembly and Senate Staff
- Industry
  - California Council for Environmental and Economic Balance
  - California Chamber of Commerce



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# Draft Violation Scoring Procedure

- Draft regulations in development
- Aligns with SB 673
- Evaluation of existing tools
- Additional outreach sessions
- Move to formal rulemaking by Jan 1, 2017



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# AB 1075 (Alejo)

## Health & Safety Code

- 25186.05(a): Defines a noncompliance as: *creates a significant risk of harm to the public health or safety of the environment resulting from acute or chronic exposure to hazardous waste or hazardous waste constituents, and that threat makes it reasonably necessary to take action to prevent, reduce, or mitigate that exposure.*
- 25186.05(d)(1): *DTSC shall consider three or more incidents of ...noncompliance ... for which a person or entity has been found liable or has been convicted, with respect to a single facility within a five-year period, as compelling cause to deny, suspend, or revoke the permit, registration, or certificate.*



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# AB 1075 (Alejo)

- Authority to temporarily suspend a permit without a hearing.
- Additional enhanced civil penalty if a person has been found liable or convicted of two or more previous violations within a 5-year period.



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# Emergency Response Overview

- Off-Highway Cleanup Account
- Drug Lab Cleanup Account
- Coordination Activities w/ USEPA, State Agencies, and CUPA's on Disaster Planning & Response
- Recent Activities include responding to wildfires in Lake, Calaveras, Trinity, and Monterey Counties



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# Office of Criminal Investigations

Prepared for the  
Independent Review Panel

Hansen Pang, Chief Investigator

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# Mission Statement

The mission statement of OCI is to prevent and investigate violations of California's Hazardous Waste Control Laws for the safety of the public and protection of the environment.

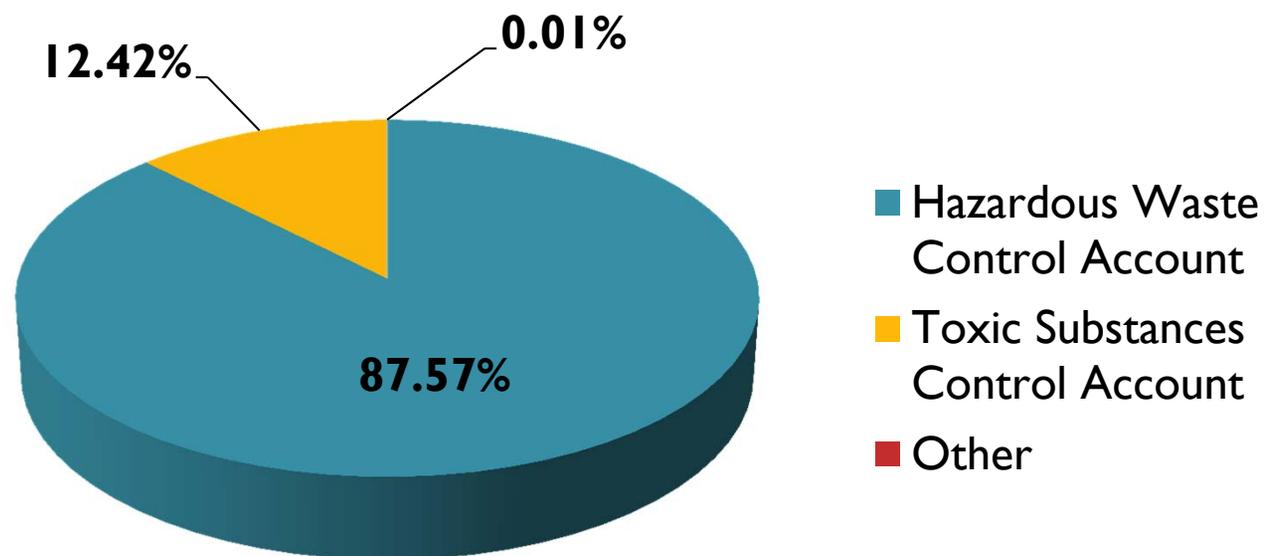


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# OCI Funding Sources



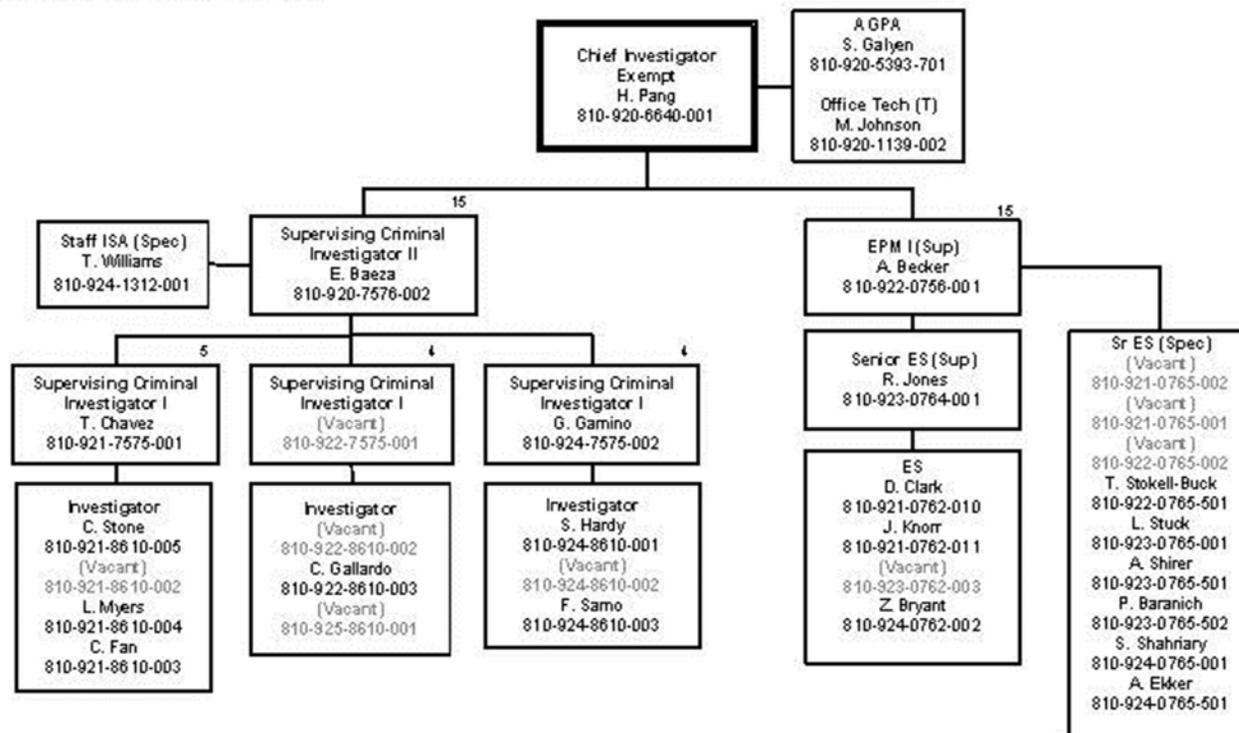
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# Program Organization


**Department of Toxic Substances Control**  
**Hazardous Waste Management Program**  
**Office of Criminal Investigations**

May 2016



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# Criminal Investigators

- Sworn Peace Officers
- Investigate most serious offenses



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# Criminal Investigators – Recruit/Retention

- Hiring Process
  - POST requirement
- Maintaining Certification
- Cost/Time
- Turnover



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# Environmental Scientists

- Lead civil investigations
- Work side by side with OCI investigators on criminal cases
- Provide support to local, state and federal agencies



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# Computer Forensic Examiner

- Seizure of electronic evidence
- Operates OCI's Surveillance Program
- Liaison between agencies and department



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# Case Initiation

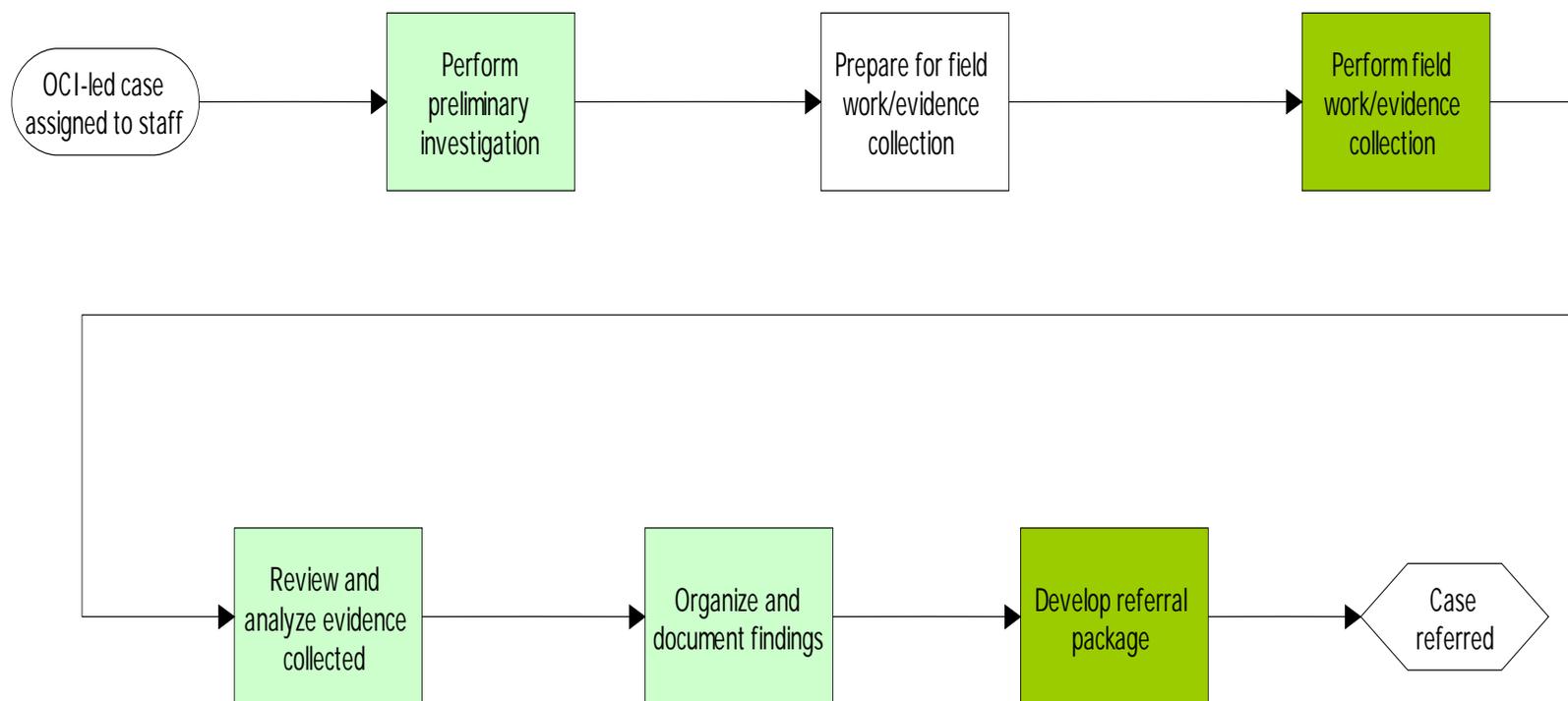
- Responds to complaints from Cal/EPA's On-Line Complaint System, <https://calepacomplaints.secure.force.com/complaints/>
- DTSC's Waste Alert Complaint Hotline, 800-698-6942
- Self generated
- Referral from local, state, federal agencies



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# Investigation Process



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# Current Projects

- **Key Initiatives**
  - **Metal Recyclers Enforcement**
  - **Transportation Enforcement**
  - **Task Force/Statewide activities**
  - **Program Improvements (Lean Six Sigma)**
- **Performance Metrics: Ongoing cases and data management**



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# OCI Special Project - 2016 Metal Recyclers Enforcement Initiative

Montclair Recycling yard fire has spread to neighborhood structures.

MontclairFD/LACoFD @FOXLA



Massive fire tears through Sun Valley auto wrecking yard



**Antonia Becker, Environmental Program Manager I**

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# OCI Special Projects – Metal Recyclers Enforcement Initiative

- Over 1,000 metal recycling facilities in California
- Most are located in EJ communities
- Many releasing toxic chemicals



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# OCI Special Projects – Metal Recyclers Enforcement Initiative

- Objectives:
  - To eliminate threats to EJ communities
  - To significantly improve the environmental regulatory compliance rate
  - To evaluate the need for operating standards



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# OCI Special Projects – Metal Recyclers Enforcement Initiative

- Scope:
  - Metal recycling inspections in EJ communities
  - Focus on facilities that accept and process vehicles, appliances, and electronic waste
  - OCI collaborating with CUPAs, Air and Water Quality agencies



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# OCI Special Projects – Metal Recyclers Enforcement Initiative

- Scope (Cont’):
  - 42 inspections by July 1, 2017
  - Selection criteria:
    - having significant impacts to EJ communities
    - metal recycling facilities with metal shredding units
    - have uncontained hazardous waste



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# OCI Special Projects – Metal Recyclers Enforcement Initiative

- Progress:
  - Inspections started in January 2016
  - 9 inspections conducted, 11 more this year
  - Violations at all 9 facilities inspected thus far
  - Enforcement actions being prepared



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# OCI Special Projects – Transportation Enforcement Initiative



# OCI Special Projects – Transportation Enforcement Initiative

- Objective:
  - To improve the environmental regulatory compliance rate among Hazardous Waste Transporters
- Goal:
  - Inspect 500 trucks within one year



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# OCI Special Projects – Transportation Enforcement Initiative

- CHP – DTSC collaboration at Livermore Scales in Alameda County



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# OCI Special Projects – Transportation Enforcement Initiative

- Inspections of commercial vehicles at the US/Mexico Ports-of-Entry, at Calexico and Otay Mesa borders



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# Task Force/Statewide Activities

- Task Force Activities
- Quarterly meeting with District Attorney Offices
- Partnership with District Attorney Offices and Attorney General Office
  - Multi-county cases
  - Statewide cases
    - Civil Penalties – more than \$100 million over 8 years



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# *Lean Six Sigma Referral Improvement Process Initiative*

*Taryn Stokell Buck, Sr. Environmental Scientist*



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# Lean Six Sigma Program

- OCI participated in 2015 Lean Six Sigma Green Belt training program offered by GO-Biz
- Problem: Over the past 10 years, the average time for a case to be investigated and referred has grown from under 5 months to 1.5 years
- Objective: To refer 95% of cases within 6 months



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# Lean Six Sigma Program – Problem Root Causes

- Competing case work
- Staff vacancies or extended leave
- Non-value added activities
- Search warrants
- Long completion times for post-field work steps



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# Lean Six Sigma Program – Improvement Techniques

- “Case Tracker” Documentation
  - Outline deliverables and deadlines for each step of the investigation and referral process

CIVIL AND ADMINISTRATIVE CASE TRAVELER					
The steps taken to complete the investigation and referral for OCI case number _____ should include:					
Stage		Due Dates			Completion Date
1	Preliminary investigation				
2a	Prepare for field work				
2b	Perform field work				
2c	Perform post-field work				
3	Review and analyze evidence				
4	Organize and document findings				
5	Develop referral package				
Stage		1	2a-c	3	
Case Value (1-10)					
Case Complexity (1-10)					
Rating (1, 2a, 2b)					

OFFICE OF CRIMINAL INVESTIGATIONS CIVIL AND ADMINISTRATIVE CASE TRAVELER			
PREPARE FOR AND PERFORM FIELD WORK AND POST-FIELD WORK			
The steps taken to prepare for and perform field work and post-field work for OCI case number _____ should include:			
Include (Y/N)		Due Date	Completion Date
Prepare for field work			
	Prepare inspection warrant		
	Write inspection warrant		
	Review by OLC		
	Review by supervisor		
	Prepare health & safety forms		
	Prepare pre-HARP		
	Submit to IH for review & signature		
	Prepare and submit post-HARP		
	Develop sampling plan		
	Submit web-ARF		
	Coordinate staff availability and travel		
	Prepare sampling supplies and vehicles		
	Review site plan with supervisor		
	Hold pre-site visit briefing		
Include (Y/N)		Due Date	Completion Date
Perform field work			
	Travel to site		
	Site safety meeting		
	Perform inspection warrant		
	Perform inspection		
	Perform sampling event		



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# Lean Six Sigma Program – Progress

- Evaluated all the backlogged cases
- Refined Case Tracker and condensed into 4 steps
- Trained staff to use Case Tracker and entering steps into Daily Log for audits
- EnviroStor 180-day report developed



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# Performance Metrics: Ongoing cases and data management

Calendar Year	Cases active at beginning of the calendar year	Cases Opened in Calendar Year	Total Cases open during calendar year	ACTIVE CASES			Cases closed- No Enforcement Action by DTSC	Current Active Caseload	Cases handled in-house Administrative	Cases Referred Civil	Cases Referred Criminal
				Enforcement Investigation	Prosecutor Assist	Toxic Assist					
2014	296	37	333	260	45	28	101		1 City Attorney	3 Attorney General 2 District Attorney	1 Attorney General 1 District Attorney
2015	232	83	315	255	36	24	229		2 DTSC	0	2 District Attorney
1 <sup>st</sup> Quarter 2016	86	35	121	102	12	7	55	<b>66</b>	0	0	1 District Attorney
<b>TOTAL</b>									3	5	5



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# OCI and EERD Case Profiles



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# Electro-Forming, Richmond, CA

- DTSC OCI Investigator and Contra Costa DA Investigator engaged in investigation and surveillance activities
- Enough evidence was gathered to support probable cause for a search warrant



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# Electro-Forming, Richmond, CA

- Search Warrants simultaneously executed at Electro-Forming and Patigler's home
- A number of regulatory and law enforcement agencies were involved
- Documents and computers seized
- 27 samples were collected from drums, tanks, totes, floor drains, and trash cans
- Employees were interviewed



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# Determination of Risk to Human Health & Environment

- Greatest Threats posed by Electro-Forming:
  - 6900 gallon polyethylene tank containing high levels of cyanide
  - Incompatible chemicals stored next to each other
  - Nitric acid stored next to cyanide
  - Hazardous waste stored in drums, tanks, and other containers in deteriorated/corroded condition



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# Attorney General's Office Complaint & Temporary Restraining Order

- Complaint filed August 8, 2013
- DTSC obtains a default judgement against EFC for \$ 8.9 million
- Temporary Restraining Order granted by the Court to require:
  - removal of hazardous waste from property by 3<sup>rd</sup> party
  - cease violating hazardous waste laws
- The court issued a preliminary injunction order to force Patigler to cease illegal hazardous waste activities



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# Criminal Conviction

- On February 18, 2015, Patigler pled guilty to 9 misdemeanor hazardous waste violations and EFC to 4 felonies
- Patigler was sentenced to 3 years (sentence stayed conditioned on compliance with probation terms)
- 5 years probation
- 200 hours community service
- \$50,000 fine
- EFC – 5 years probation, \$250,000 fine
- Jointly liable for restitution to DTSC for laboratory, scientist and investigator costs in the amount of \$228,424.10.



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# Patigler Sentenced to Jail

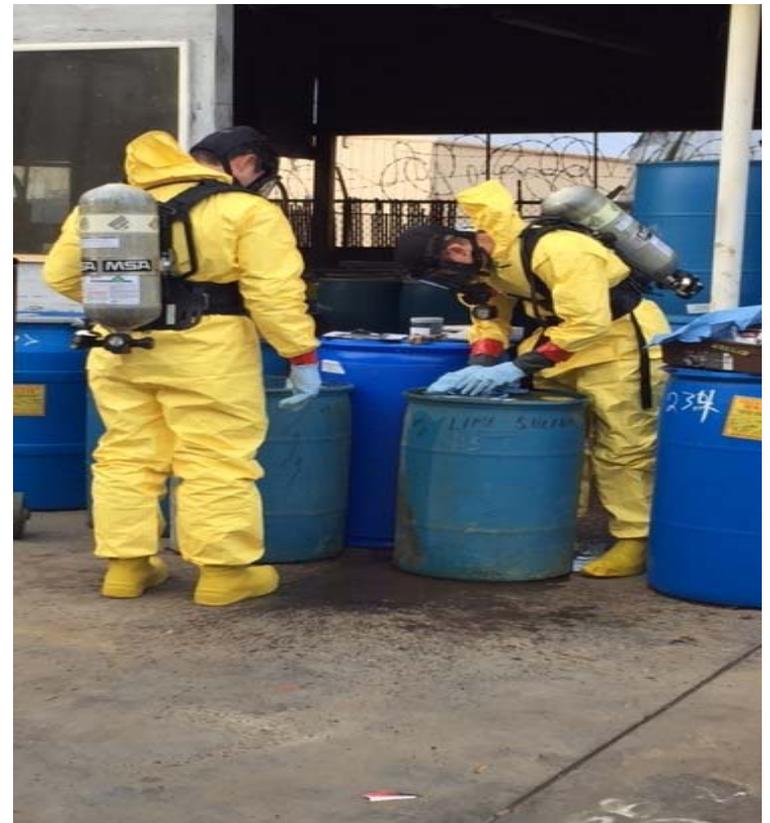
- Violated terms of Probation:
  - Continued to operate
  - Did not remove waste from site
- The Court found Patigler in violation and she was ordered to self-surrender herself to the Contra Costa County Sheriff's Department November 2015 and is currently serving her sentence.



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# Emergency Response



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# Comcast

## **Comcast Oakland/improper hazardous material disposal.**

Jeffrey Cash

**Sent:** Tuesday, September 28, 2010 7:27 AM

**To:** Ask CEPD

I've just read the article about Target being sued over improper handling and disposal of hazardous waste. I am an employee of Comcast here in Oakland, and they are doing exactly the same thing, and have been doing so for years. I've attempted to notify the city of this but they seem less that interested. Can you help?

Sincerely,  
Jeffrey Cash



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# Interview

- (Field Tech) Service center
  - Batteries
  - E-waste



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# Dumpster Inspection



- Two 40-yard roll-offs
- 3-day time frame since last pickup

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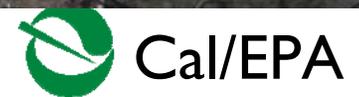


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# Waste Inspection Summary

- 20,000+ items recovered from waste inspections of 31 facilities:
  - 5,400+ Batteries, including:
    - Alkaline, lead acid, nickel-cadmium, lithium-ion.
  - 6,300+ Splitters
  - 3,450+ Remote Controls
  - 2,400+ Power Adaptors
  - 2,000+ Devices with PCBs, including:
    - Drop amplifiers, cable filters, circuit boards, modems, computers/computer peripherals, etc.
  - 470+ Taps
  - 140+ Fluorescent light tubes



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# DTSC E-Waste Testing

Comcast Cable E-Waste	
Splitters	Test Result
SVI SV-SG	TCLP: <b>Pb-15.4 (C)</b>
SV-3G	TCLP: <b>Pb-5.38</b>
SVI SV-4G	TCLP: <b>Pb-18.8</b>
Evolution EV01-SP-2	TCLP: <b>Pb-32.2 (C)</b>
Evolution EV01-SP-4	TCLP: <b>Pb-49</b>
Genesys II PCT-NGNII-3SB	TTLIC: <b>Pb-3380</b>
Genesys II PCT-NGNII-3S	TTLIC: <b>Pb-2030</b>
Holland DPD2	TCLP: <b>Pb-124</b>
Holland DPLS-2AR	TCLP: <b>Pb-16.3</b>
Dish DP Plus Separator 123254	TCLP: <b>Pb-65.9</b>
Remote Controls	
Comcast Universal (Silver)	TCLP: <b>Pb-17.3</b>
AT&T TCI-200C	TCLP: <b>Pb-33</b>
Drop Amplifiers	
Commscope SV-A15PRSm	TCLP: <b>Pb-92.7</b>
SVI SV-A15PRS	TCLP: <b>Pb-15.4 (C)</b>
Electroline EDA 2400	TCLP: <b>Pb-102</b>
Taps	
Scientific-Atlanta #17	TCLP: <b>Pb-201</b>
Regal RMT 104 #23	TCLP: <b>Pb-242</b>
General Instrument 23H	TCLP: <b>Pb-149</b>
Regal RLDC10-8	TCLP: <b>Pb-12</b>

Power Adapters	
AC Bell WA8077	STLC: <b>Zn-1622</b>
Challenger HK-X122-U12	STLC: <b>Zn-325, Sb-22.6</b>
Challenger HK-R104-A06	STLC: <b>Zn-251</b>
Multi-switches	
ADC SignalOn N-NSF32M0	TCLP: <b>Pb-77.5</b>
Zinwell 3x4 SAM-3402	TCLP: <b>Pb-43.2</b>
Zinwell Wide-band 6x8 WB68	TCLP: <b>Pb-7.26</b>
Circuit Boards	
Circuit Board (No ID #)	TTLIC: <b>Pb-67,500</b>
T-JP three pin	TTLIC: <b>Pb-65,400</b>
BCS-75	TTLIC: <b>Pb-42,000</b>
BCS-7504	TTLIC: <b>Pb-16,800</b>
410011-001-RA	TCLP: <b>Pb-678</b>
Cable Filters	
Arcom FRP-AA (A)/FFF	TCLP: <b>Pb-29.4</b>
Devices w. Circuit Boards	
Linksys WN Adapter GWMP54G	TCLP: <b>Pb-45</b>
<b>TOTAL ITEMS FAILED:</b>	<b>32</b>



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# Firsts

- First hazardous waste disposal enforcement case in US, where E-waste was the primary waste of concern.
- First enforcement case in CA and US to conduct analytical testing of E-waste.



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# Final Judgment and Permanent Injunction

(December 2015)



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# Final Judgment and Permanent Injunction

(December 2015)

- Monetary Component = **\$25.95 million**
  - Civil Penalties (HWCL and B&P) = **\$17,850,000.00**
  - Prosecutor/Agency Investigation Costs = **\$ 2,000,000.00**
  - Supplemental Environmental Projects = **\$ 3,000,000.00**
  - Public Service Announcements = **\$ 2,250,000.00**
  - Comcast's Additional Remedial Measures = **\$ 700,000.00**



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