

# Enforcement Case Studies

## Pretreatment Workshop

July 21, 2015

Sponsored by Colorado River Basin & EPA Region 9

Chuck Durham  
Tetra Tech, Inc.

Ann LaDuca  
Tetra Tech, Inc.

# Case #1

## Example of Illegal Discharge



Process WW discharged via stormwater outfall.mp4

# Example of Illegal Discharge



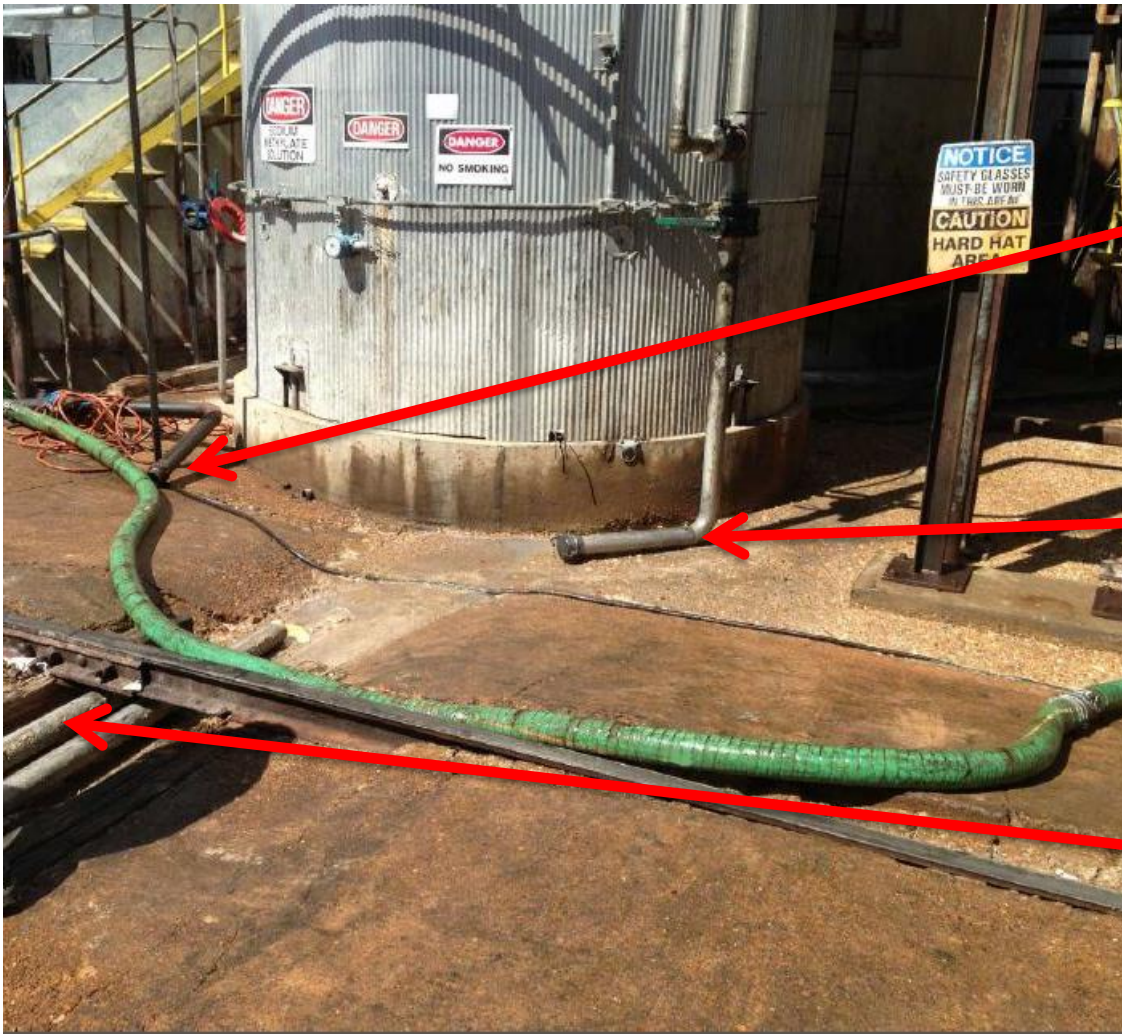
Joshua D. Balentine, Environmental Engineer  
2014 KY-TN WPC, Chattanooga, TN



# Example of Illegal Discharge



# Example of Illegal Discharge



Discharge Line  
to Sewer

Wastewater Tank  
Discharge Line

Storm Water  
Discharge Lines



# Identifying visible non-compliance -

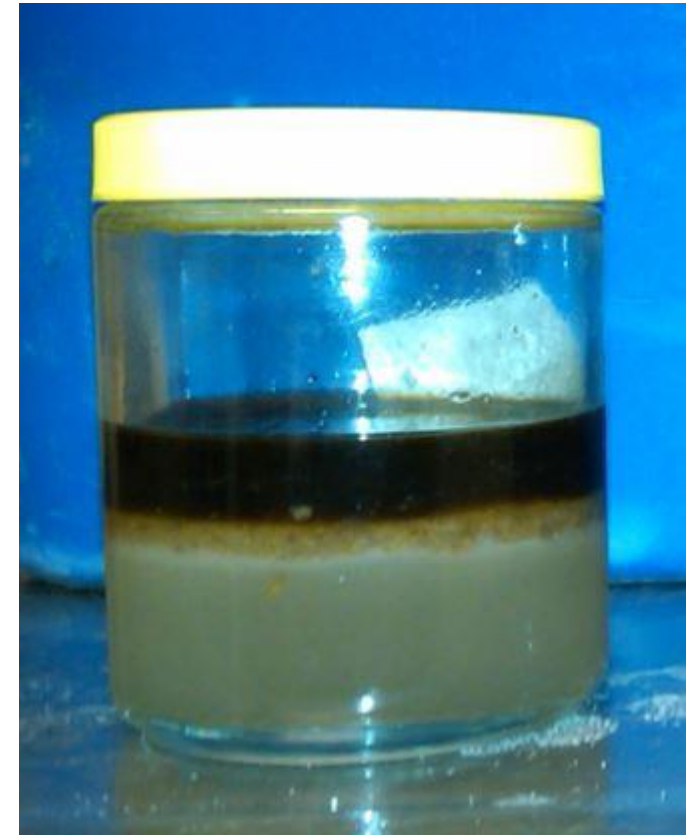






# Example of Illegal Discharge

20,000 mg/L – 33,000 mg/L Oil & Grease Samples from wastewater outfall





# Example of Illegal Discharge

## Outcome:

- More than \$120,000 cost incurred
  - Sewer cleaning, dragging, man hours, and materials
  - WWTP Primary Clarifier scum pit pumping
- Industry samples daily for Oil & Grease
- Control Authority randomly samples monthly for Oil & Grease

# Case #2

## City of San Jose, CA

### “On the Hunt!”

**Special thanks to:**

**City of San Jose**

**&**

**Santa Clara County District Attorney's Office**



# San Jose/Santa Clara Water Pollution Control Plant



- The San Jose/Santa Clara WPCP is one of the largest advanced wastewater treatment facilities in California.
  - It treats and cleans the wastewater of over 1,500,000 people that live and work in the 300-square mile service area
  - Encompassing the cities of San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.





# Possible Sources of Cyanide

- **Businesses engaged in plating printed circuit boards**
  - Use chemical and electrochemical processes to coat the item with a thin layer of metal.
  - The process involves placing the item to be coated or covered into one or more tanks with various solutions.
  - This process typically produces wastewater composed in part of the chemicals used in the metal plating including the metals.

# Express Tech, Inc.

- Express Tech is engaged in plating of printed circuit boards.
- Is permitted as a zero discharge metal finisher (40 CFR 433) by the SJ/SC WPCP.
- Express Tech uses gold as part of its plating process, along with cyanide

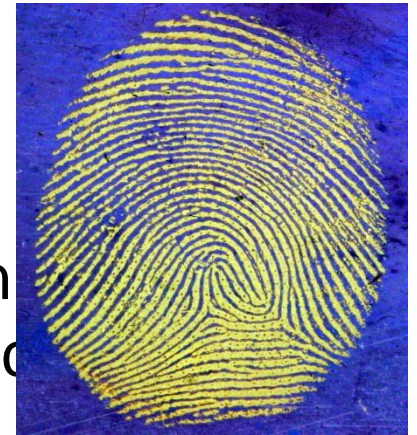


SJ/SC WPCP

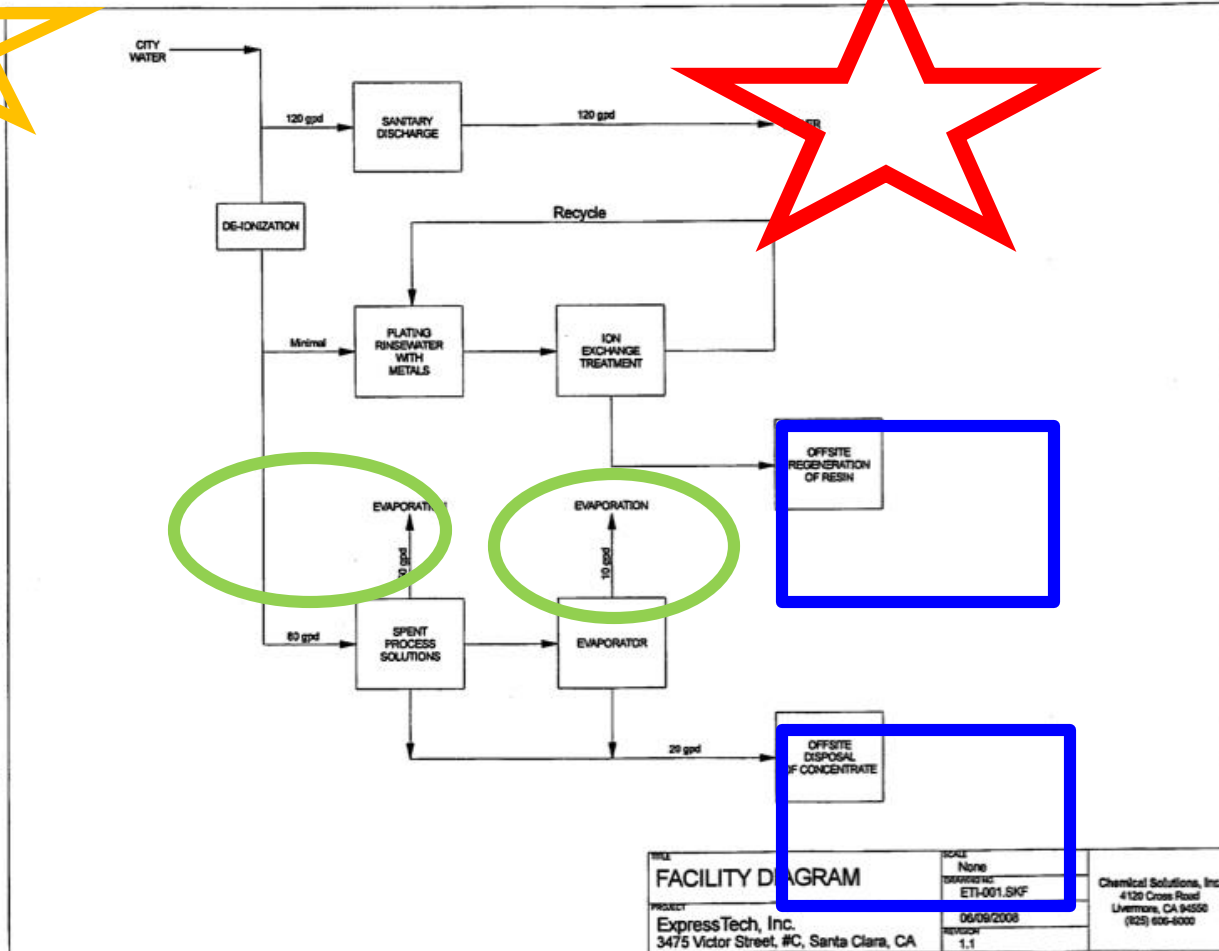
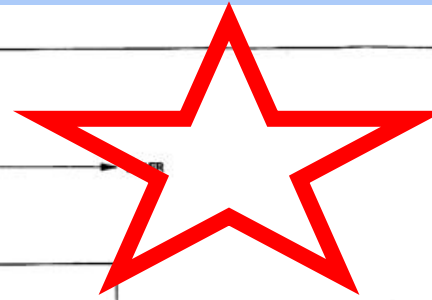


# Gold Plating

- Because of its high conductivity and corrosion resistance, gold is often used to form the electrical connections between components.
- Cyanide is also used in many gold plating baths.

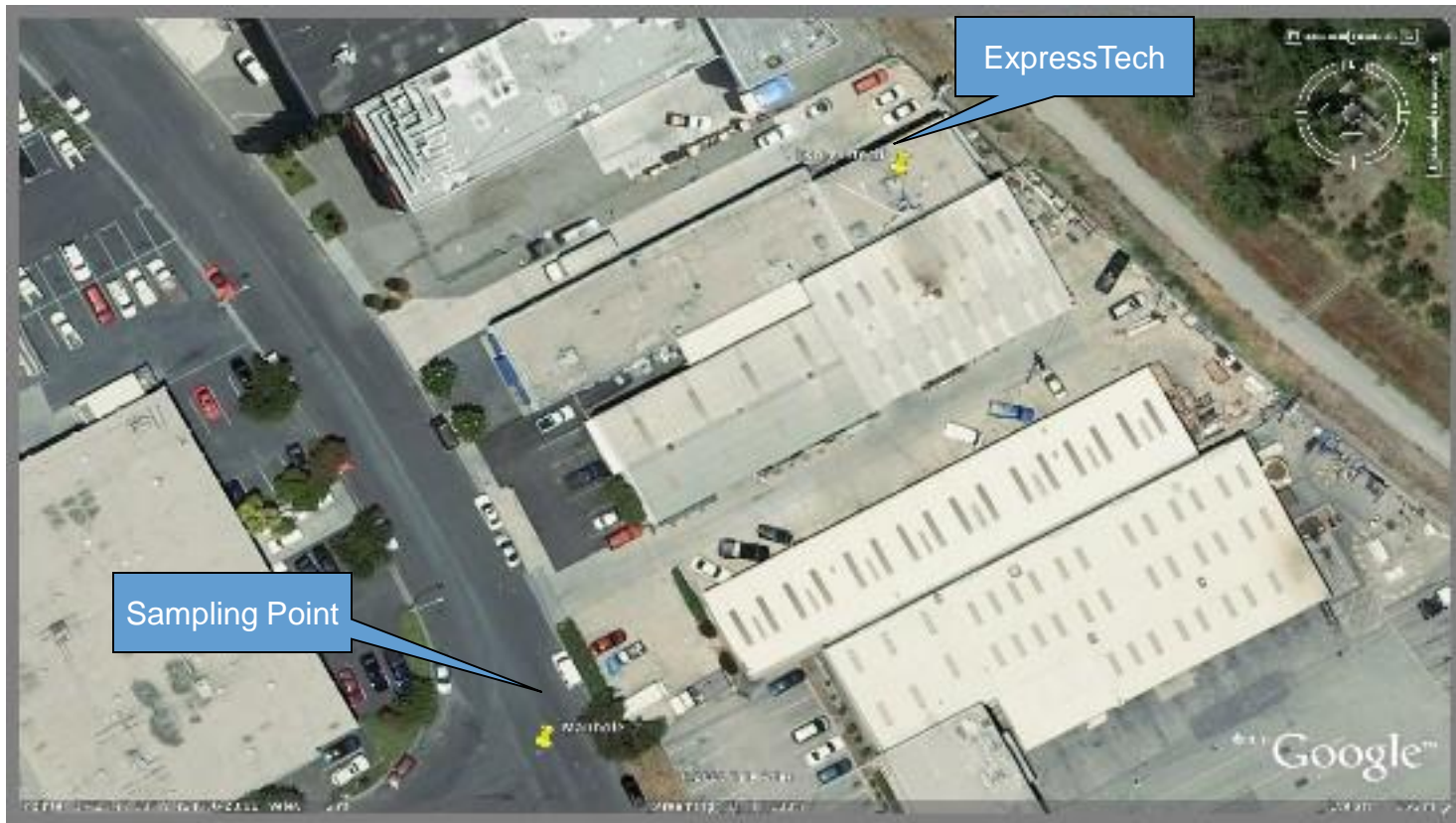


# Water Flow As Reported



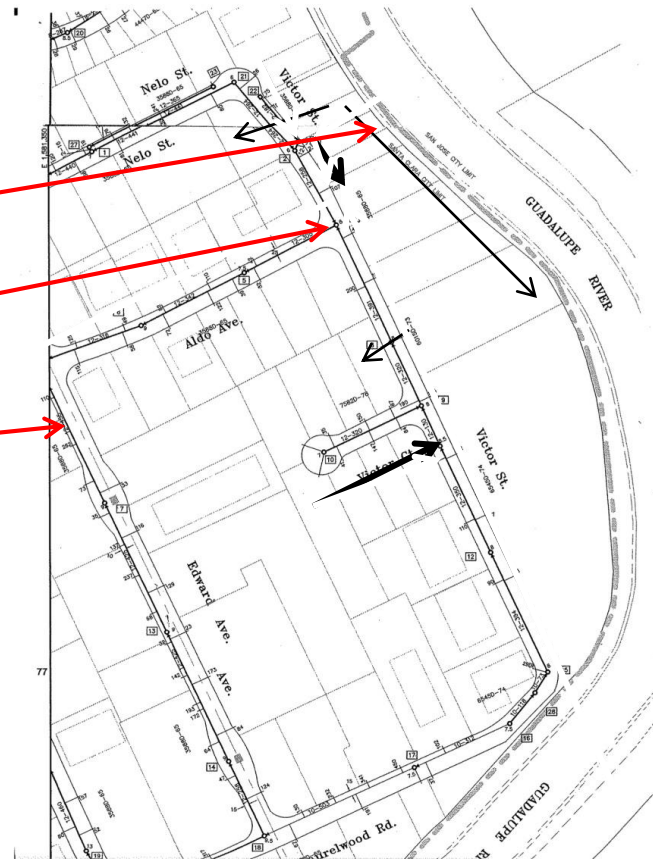


# Express Tech Sampling



# Sewer Map

- Express Tech
- Sampling Point
- Flow



# Express Tech Sampling 2005

- Between May and August twelve 5-day composite samples collected in sanitary sewer downstream of facility
- Analysis showed elevated Cu and Ni
- Listed for further surveillance sampling



# Express Tech Sampling 2007

- Between January and March composite samples collected from 4 a.m. to 7 a.m.
- Analysis showed elevated Cu, Ni and Cr also detected presence of Au
- Between September and December new sampling protocol to test STLC for haz waste
- Analysis showed hazardous waste levels

# Zero Discharge

# Certified!



San Jose/Santa Clara Water Pollution Control Plant  
Watershed Protection Group, Source Control Section  
170 W. San Carlos St., San Jose, CA 95113 (408) 277-3700

## ZERO DISCHARGE CERTIFICATION STATEMENT



NAME OF FACILITY: ExpressTech, Inc.

MAILING ADDRESS: 3475 Victor St, #C Santa Clara, Ca  
95054

ZERO DISCHARGE ADDRESS: 3475 Victor St, #C Santa Clara, Ca  
95054

PHONE NUMBER: (408) 748-1010

## ZERO DISCHARGE CERTIFICATION STATEMENT

Based on my inquiry of the person or persons directly responsible for managing compliance with industrial waste discharge requirements, I certify that to the best of my knowledge and belief, this facility does not discharge industrial wastewater to the sanitary sewer system from processes conducted at this facility.

I further understand that an annual inspection, as well as any necessary non-routine inspections, may be conducted by an Environmental Inspector from the San Jose/Santa Clara Water Pollution Control Plant. During those inspections, I shall make available copies of waste manifests and any other records that support zero discharge of industrial wastewater (e.g., sludge manifest records, chemical solution replenishment records, and water bills).

CERTIFYING OFFICER:  
SIGNATURE Ernest Najer DATE 4/26/06  
PRINT NAME AND TITLE Ernest Najer, President

EXECUTIVE OFFICER:  
SIGNATURE Ernest Najer DATE 4/26/06  
PRINT NAME AND TITLE Ernest Najer, President

# Zero Discharge, My Foot...





# Informant calls from 2007

- July and August informant calls and notifies that Owner is dumping material that should be hauled.
  - Specifies times that dumping occurring.
  - Identifies the discharge location.
  - Reveals how the connection is hidden.
  - Warns City about security cameras on-site.

# Express Tech Sampling 2008

- Between February and April composite samples collected from 4 a.m. to 7 a.m.
- Analyzed for 12 metals including copper and nickel, pH and cyanide.
- Results showed numerous haz waste violations and Au present in almost all

# Express Tech Sampling 2008

- Between August and October composite samples collected from 4 a.m. to 7 a.m.
- Analyzed for Cu, Ni, 12 metals, pH and cyanide
- Results showed numerous discharge violations and Au present in almost all



# Express Tech Surveillance



- Goal: Determine which potential source was operating during time of discharges
- Who: DA Investigator
- When: Between 3 a.m. and 6 a.m. on six days in August 2008
- Results: Express Tech was the only one of the potential sources operating at the time

# Express Tech Search Warrant

Served OCT 8, 2008-  
03:20 by SCDA and  
SCPD

SJ Environmental  
Services Dept staff  
assisted with sampling  
and technical advice

SUPERIOR COURT OF CALIFORNIA  
SANTA CLARA COUNTY JUDICIAL DISTRICT  
SAN JOSE FACILITY

## SEARCH WARRANT

**THE PEOPLE OF THE STATE OF CALIFORNIA**  
**To Any Sheriff, Policeman Or Peace Officer In The County Of Santa Clara:**

Proof by affidavit having been made before me by Glenn Bytheway, that there is probable cause to believe that the property described herein may be found at the locations set forth herein and that it is lawfully seizable pursuant to Penal Code Section 1524 as indicated by "x" in that it:

- was stolen or embezzled;
- was used as the means of committing a felony;
- is possessed by a person with the intent to use same as a means of committing a public offense, or in the possession of another to whom he/she may have delivered same for the purpose of concealing or preventing its discovery;
- constitutes evidence tending to show that a felony has been committed or that a particular person has committed a felony;

more particularly described below and property used in the commission of felony violations of California Health and Safety Code Section 25189.5(b) and Water Code Section 13387(a)(4) will be located on the premises described below;

### YOU ARE THEREFORE COMMANDED TO SEARCH:

THE PREMISES known as: Express Tech, Inc. (hereinafter "Express Tech"), located at 3475 Victor Lane, Unit C, Santa Clara, Santa Clara County, California,

And further described as a single story industrial building, concrete block construction, white in color with blue trim, with the numbers "3475" in the front of the building and signs with the name Express Tech Unit "C" on the front and side of the building. These signs have

# The Illegal Sewer Connection



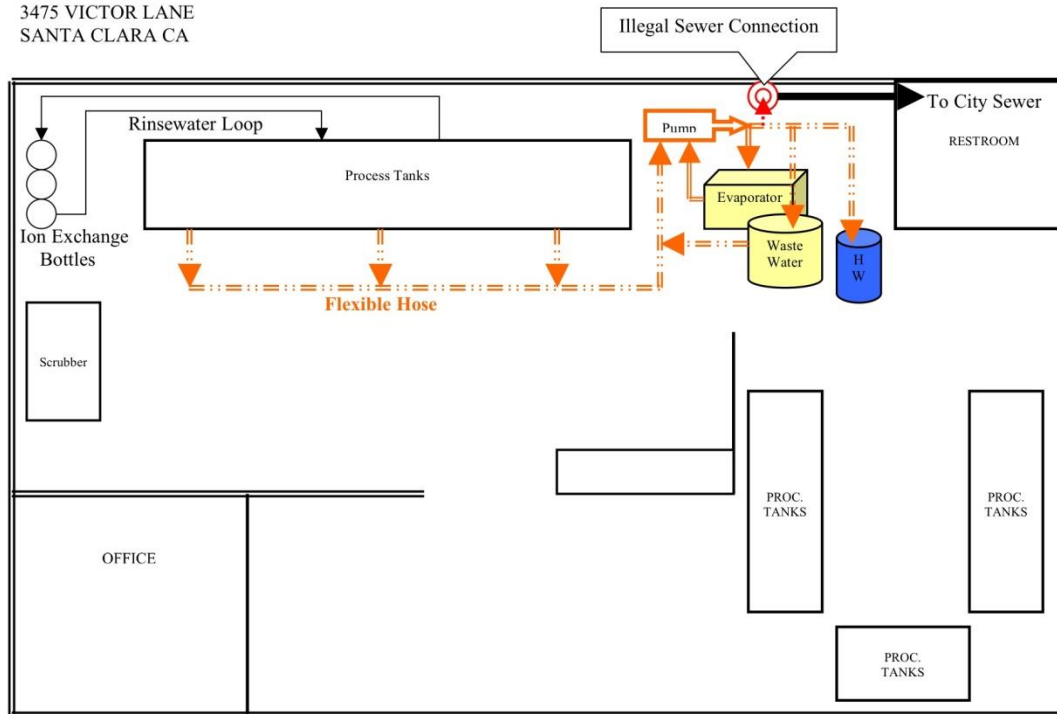


# The Illegal Sewer Connection



# The Facility

EXPRESS TECH  
3475 VICTOR LANE  
SANTA CLARA CA



JOHN PEDERSEN, REA

NOT TO SCALE

# The Treatment System



- White poly tanks with heating element
- Vented to scrubber
- Vacuum pump on top connected flexible hose
- Holding tank

# The Illegal Sewer Connection





# Sampling Illegal Connection



# Bathroom



# Wastewater Holding Tank



# Filters In Dumpster





# Vent in Break Room



# Floor of Break Room Under Vent



# Dye Test



# Dye Test





# Total Cost To SJ/SC WPCP

- Lab Cost \$38,126
- Labor \$68,536
- Total \$106,662

# The On Site Investigation

1. Interviews of all employees on site
2. Sampling of all liquids
3. Interview of Ernest Najjar
4. Document search
5. Seize DVR
6. Dye test from illegal connection to sampling point

# Ernest Najjar Statement

**Q.** Is it possible somebody dumped into the sewer line?

**A.** They'd better not. They know better.

**Q.** What if they're doing it anyway?

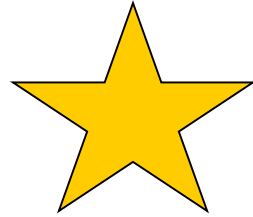
**A.** Well, if they are, they're gone.

# The Follow-up Investigation

1. Additional interviews
2. Review seized documents
3. Process DVR to recover data
  - a. Computer Forensic Lab
  - b. Crime Lab
4. Review security camera video
5. Organize all evidence into manageable form

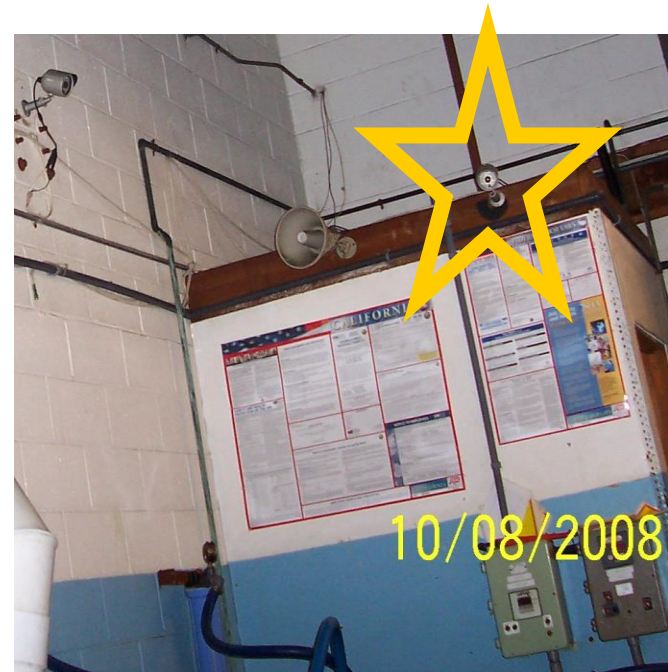


# The Star Witness



Ernest Najjar

“...I have a camera here, it should show everything in the facility.”



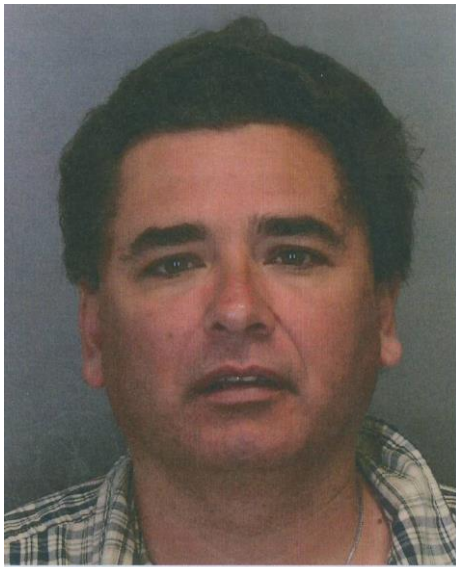
[F:\TDEC Training - 2015\Final Video.wmv](#)

# The Charges

- WC 13387(a)(4), Violation of WDR
- HS 25189.5(b), Disposal of Haz Waste
- PC 374.2, Illegal discharge to sewer
- PC 115, Filing false documents

# Sentence Ernest Najjar

- 3 years probation
- 1 year county jail  
(electronic monitoring)
- Pay fines in excess of  
\$36,500.00



# **Sentence Express Tech, Inc.**

Civil penalties and investigative costs  
in the amount of \$113,500.00 to the  
Water Pollution Control Plant and the  
Santa Clara County District  
Attorney's Office

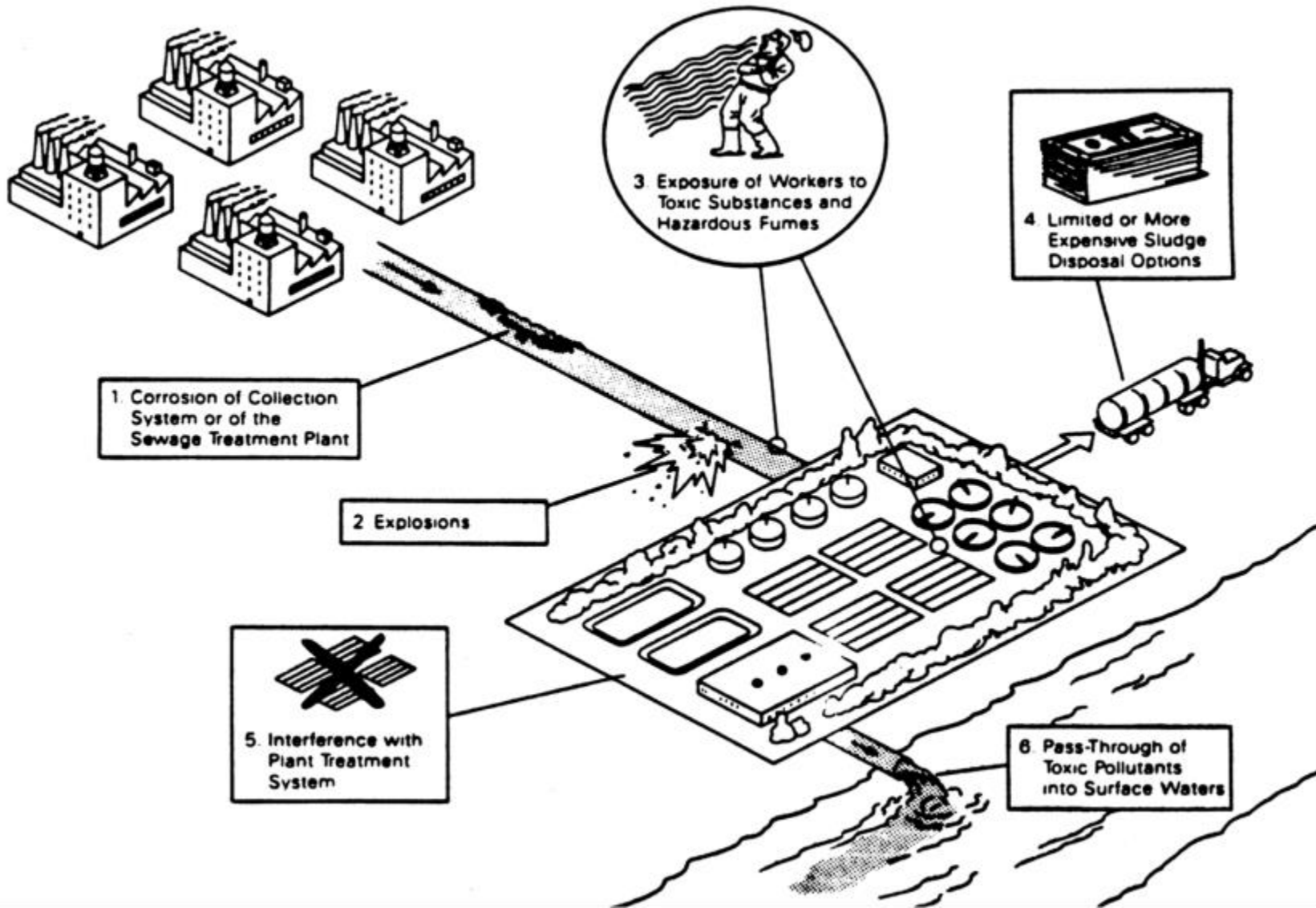


CASE #3

# SEWER IMPACTS

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Controlling the Impact of Prohibited  
Discharges from non-traditional SIUs



# What Happens When Sewer Line Get Clogged???

- Sewer Backups

- Toilets
- Sinks
- Bathtubs
- Basements

- Sewer Overflows



# What Happens When Pumps Fail???

- Pump Damage
- Sewer Backups
- Sewer Overflows





# Increased Maintenance

- Pump stations and sewers are collecting:
  - Rags
  - Gloves
  - Towels
  - Wipes

	<b>Cleaning Events</b>		
<b>Year</b>	<b>Manholes</b>	<b>Pump Stations</b>	<b>Total</b>
2012	9	25	34
2013	12	53	65
2014	11	17	28











































Children can't drink  
alcohol and drink  
Keep children away  
from alcohol. Do not  
mix with even a  
small amount of liquid.  
First Aid: If you  
swallow 7 or more  
to 10 low alcohol content  
beverages, call your  
doctor immediately for  
treatment.

5 U.S. GALLONS















# Sewer Use Ordinance

- Rules and Regulations for all Sewer Users
  - Legal Authority for Humboldt Utilities
- Prohibits Discharge of Solids
  - Rags
  - Gloves
  - Towels
  - Wipes
- Interference



# Sewer Use Ordinance

1. Advise the Users of the impact of the contribution on the POTW
2. May develop Best Management Practices to implement Local Limits and the aforementioned requirements

**It's a Toilet,  
Not a Trashcan!**





# Potential Outcomes

1. Facilities develop internal procedures that eliminate solids being discharged
2. POTW can issue permits with BMPs and reporting requirements
3. POTW can revoke the facilities right to discharge to the sewer

# Administrative Fees

1. Cost Recovery
2. Civil Penalties
3. Criminal Penalties

# Cost Recovery Fees

- Sewer Line Maintenance
  - Cleaning
  - Flushing
  - Repair
- Pump Station Maintenance
  - Cleaning
  - Repair
  - Replacement
- Employee Overtime Expenses





# Civil and Criminal Penalties

- Civil Penalties
  - \$10,000 per day per violation (maximum penalty)
  - Actual Damages Incurred
  - Attorney's Fees
  - Court Costs
  - Additional Expenses for Litigation
- Criminal Penalties
  - Class E Felony
  - Incarceration
  - \$25,000 Penalty (maximum penalty)

# Closing

1. Issues Resolved At-Will
2. Escalation of Enforcement Action
3. TDEC Involvement
4. SNC Publication