

# Semiconductor Facilities



# Hazardous Waste

- Labeling

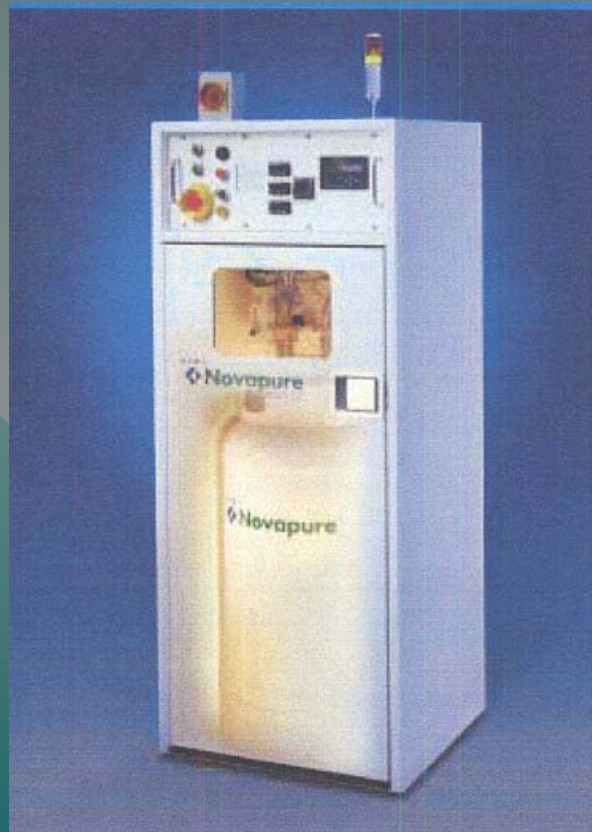
- Management of Containers

  - no spills/leaks and closed during storage
  - secondary containment
  - separate incompatibles

- Waste Determination



# Absorptive Resins





- Satellite Accumulation
- Weekly Waste Storage Area Inspections
- Daily Tank Inspections
- Keep All Disposal Records Available For At Least 3 Years
- Signed TSDf Copies Of Manifests

# Clean Room



# Gray Area



# Subfab/Pump Alley



# Support Pad



## ➤ Training

Thoroughly Familiar

Annual Refresher

Complete Training Records

- Required Emergency Equipment  
Testing & Maintenance of Equipment
- Recording & Reporting of Emergency Incidents  
Call 911!

# Emergency Response Information:

- Updated & Accurate Hazardous Materials Business Plan
- Current Emergency Coordinator Names and Phone #'s
- Submitting Changes In Plan Within 30 Days
- Posting of Emergency Information

# Uniform Fire Code

- Fire Extinguishers
- Fire Suppression Systems
- Monitoring Systems (Maintenance/Inspections)
  - Toxic Gas
  - Leak Detection
  - Flammable Gas
  - Oxygen Deficiency

# Gas Pad



# Seismic Sensors



➤ Exits/Egress Routes

➤ Unobstructed Access to:

Fire Extinguishers

Electrical Panels

Exits

Alarm/Monitoring Panels

Emergency Shutoffs

## ➤ Labeling

Consistent

Visible At A Reasonable Distance

Name (not symbols) of Hazardous Materials

Concentration

Hazard Class

## ➤ Hazardous Materials

Storage

Use

Compatibility

Quantities



# Valve Boxes



# Tool Tie-ins



Tool tie-ins



## ➤ Permits

New Systems/Construction

Closure of Tools/Systems or Entire Facilities

## ➤ Extension Cords

# Liquid Hydrogen



# Waste Minimization SB 14 Plan

- >12,000 kg/year generator
- >3,100 gals hazardous waste treated

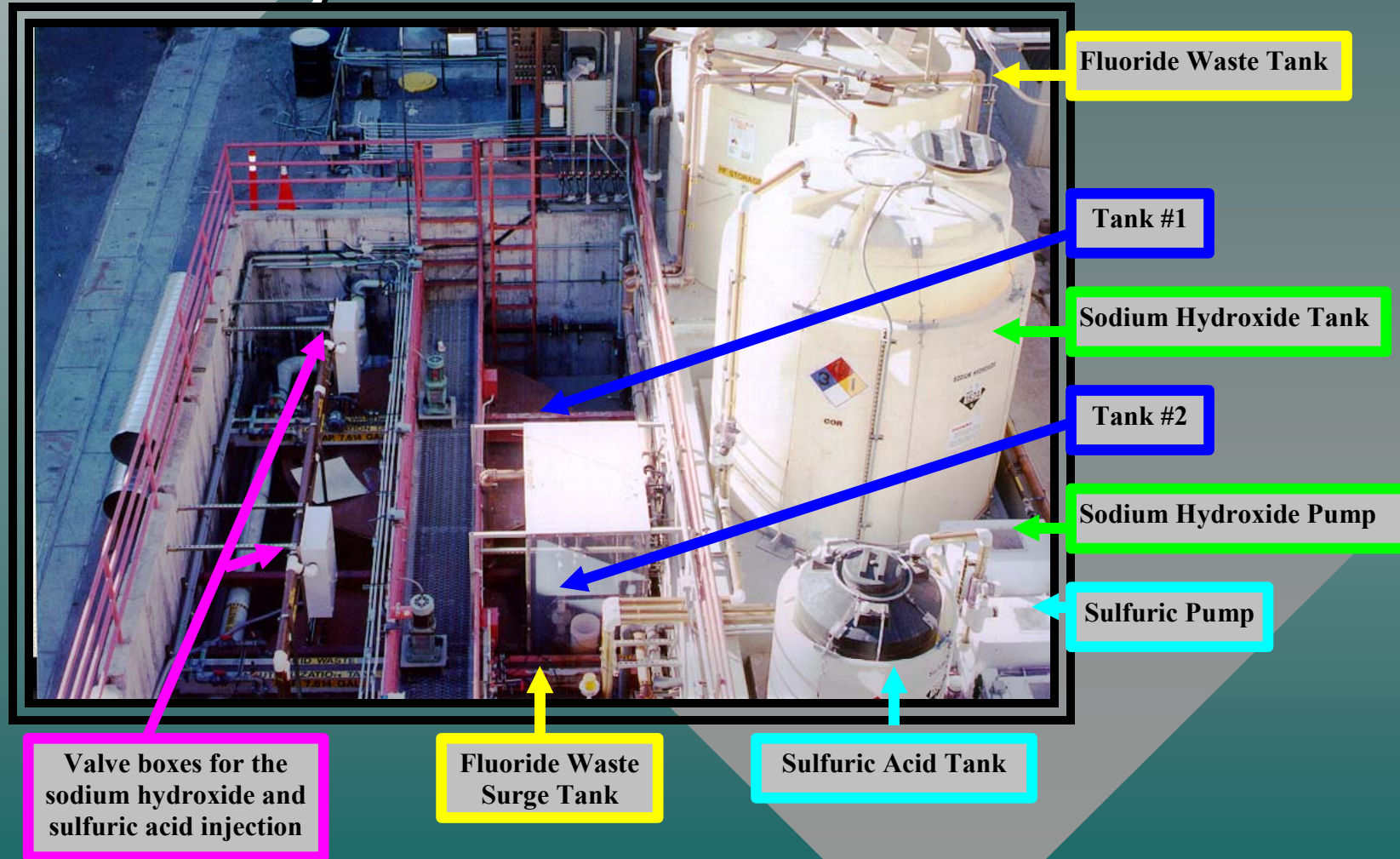
\*Summary Report to DTSC due September 1, 2003\*

# Tiered Permit

- 5 Year Certification On Tank Systems By Registered P.E.
- Closure Cost Estimates Updated Annually For Inflation (March 1<sup>st</sup>)
- Certain Financial Assurance Mechanisms Updated Annually  
e.g. Corporate Quantities

- Annual Renewals Of All Forms For Permit by Rule Facilities
- Failure To Notify When Doing On-Site Treatment of Hazardous Waste
- New Treatment Systems or Significant Changes Require Reevaluation by P.E.

# AWN System



# CalARP

- New Processes, Large Quantities of Chemicals May Require A Risk Management Plan Prior To Site Implementation

# Acknowledgements

- Photographs:
  - Analog Devices
  - LSI Logic
  - Applied Materials
  - Vishay-Siliconix