

US EPA ARCHIVE DOCUMENT



Go Green, Live Healthy, Be Safe

AZEPT 2009 Spring Conference

4/9/2009

Hsi-An Kwong

Freescale Environmental Health & Safety



Freescale Semiconductor, Inc.

- ▶ A privately owned company as of December 1, 2006
- ▶ Headquarters in Austin, Texas
- ▶ Rich history of embedded solutions goes back more than 50 years when it was a part of Motorola
- ▶ Products in automobiles, computer networks, communications infrastructure, office buildings, factories, industrial equipment, tools, mobile phones, home appliances and consumer products that touch every aspect of your daily life
- ▶ ISO 14001 certified

Corporate EHS Policy

It is the policy of Freescale Semiconductor to conduct all business activities in a responsible manner, free from recognized hazards, and to respect the environment, health and safety of our employees, customers, suppliers, partners and the community.

Rich Beyer, Chairman and CEO

Corporate EHS Policy

Key EHS Strategies to Support Our Policy

- ▶ **Excellence in Employee Health.**
Maintain a safe and healthy workplace and support our employee's work-life balance
- ▶ **Minimization of Operational Risks.**
Assess the environmental aspects, safety and health risks of our operations, activities and services
- ▶ **Waste Minimization and Resource Conservation.**
Support the reduction, reuse and recycling of waste materials
- ▶ **Continuous Improvement.**
Set and review relevant EHS goals and targets designed to ensure continuous improvement in performance
- ▶ **Supplier Business Conduct.**
Partner with our suppliers to enhance EHS performance and Freescale Semiconductor's competitive advantage
- ▶ **Product Stewardship.**
Protect the environment by partnering with our customers and suppliers in designing environmentally conscious products
- ▶ **Community Connection**
Demonstrate global EHS leadership to improve the communities in which we live

Freescal^e Tempe Site

- ▶ An 141-acre campus located by a public freeway in a neighborhood with residential and research park buildings near the site
 - Accommodating multiple research and development groups and business groups
 - A gallium arsenide (GaAs) wafer manufacturing plant that manufactures devices for radio frequency switches and power amplifier products used primarily in cell phones -- The GaAs wafer manufacturing plant ceased its operations in 2008.



Freescal e Chandler Site

- ▶ An 80-acre campus located in a neighborhood with residential and commercial building
 - A fully integrated silicon wafer semiconductor fabrication factory. The products are used in various applications such as automobiles, computer networks, communication infrastructure, mobile phones, home appliances, and consumer products.



2008 “EHS Excellence” Highlights

- ▶ Roll out “Go Green, Live Healthy, Be Safe” awareness campaign
- ▶ Improve workplace safety and environmental practices
 - Integrated into 5S
 - Facilities audits
 - Communication
 - LEAN Initiatives



▶ "Go Green" Corporate Initiatives

- Green Purchase
 - Eco-Design Supplier Assessment program for rating and selecting new suppliers
- Green Cleaning
 - Effective cleaning methods that protects human health and safety while reducing harmful impacts on the environment
- LEAN Initiatives
 - Chemicals
 - Energy
 - Water
 - Wastes

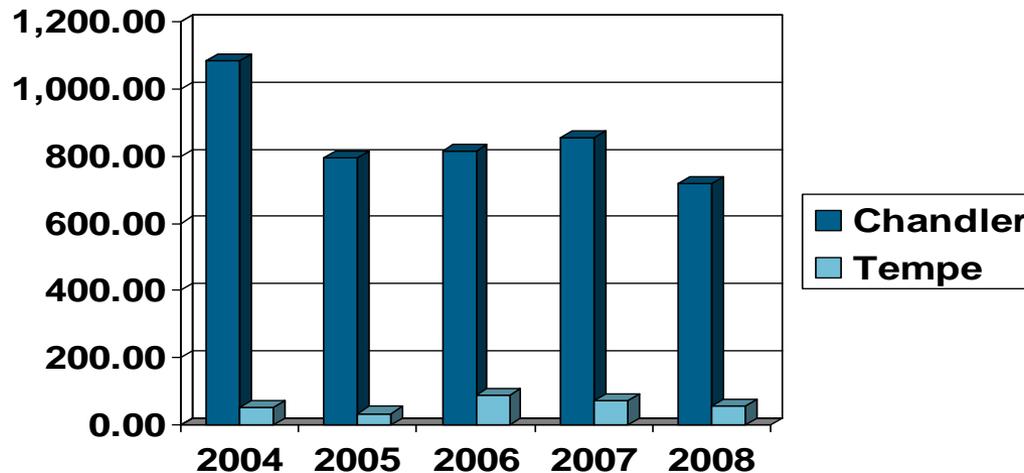


2008 Highlights - Pollution Prevention

► Copper Waste Reduction (Chandler Site)

- Formed a cross functional team to seek solution for minimizing the amount of ultrapure water in the copper sulfate waste stream
- An attitude of willing to do things differently to achieve pollution prevention results
- Resulted 75% reduction of copper sulfate waste by recipe modifications and plating sample analysis procedures.

Hazardous Waste Generated (Tons)

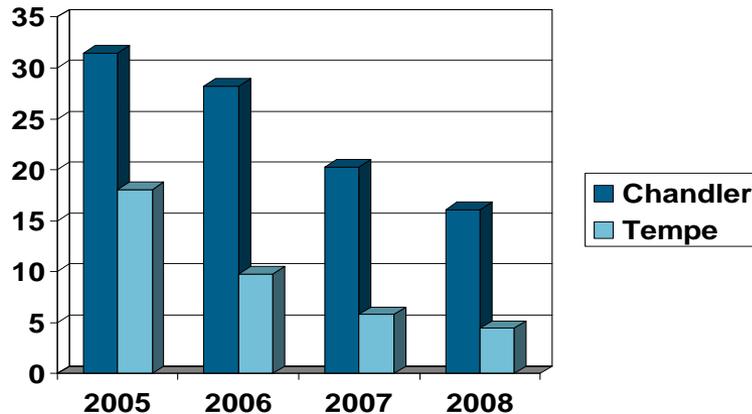


2008 Highlights - Pollution Prevention

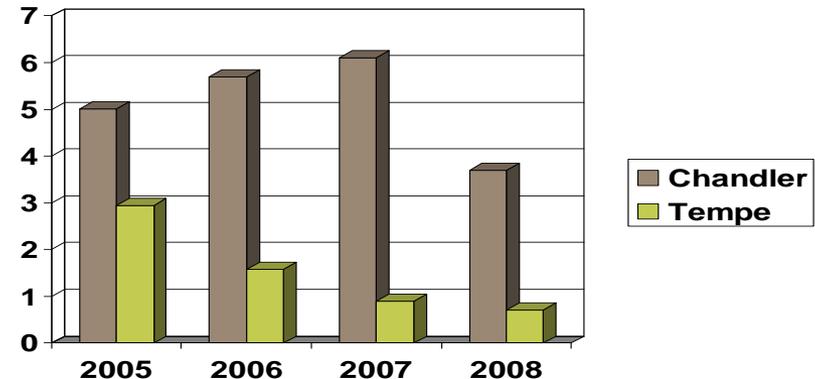
► Ethylene Glycol Reduction (Chandler Site)

- Implemented a process modification to replace ethylene glycol with a non-organic solvent cleaning material, which reduced ethylene glycol usage by 295,374 pounds during 2008 as compared to that in 2007.
- The chemical reduction efforts contributed to decrease of air emissions in 2008: Volatile organic compounds emissions were reduced by 20% and Hazardous Air Pollutants emissions dropped by 38% from 2007 levels.

VOC (Tons)



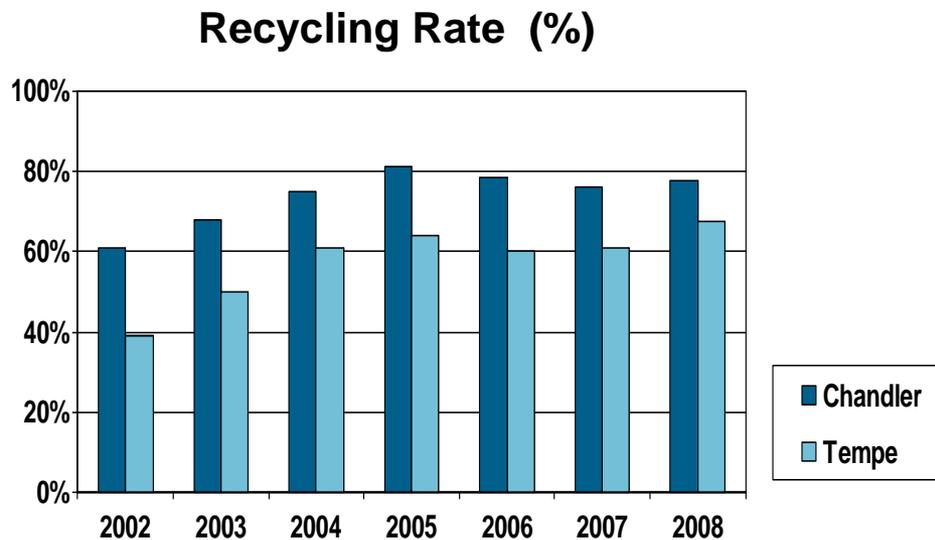
HAP (Tons)



2008 Highlights - Recycling Culture

► Recycling

- Increased local recycling centers in office areas in late 2007
- Promote recycling practices and improve general awareness



Thank you !

