

# **Environmentally Preferred Products**

**Local Government Energy Partnerships**

**Association of Bay Area Governments**

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**Ed Ciminello**

**GE Consumer and Industrial - Lighting**

# Evaluating Environmental Aspects of Lamps

## ☞ Increase Energy Efficiency

- By far, the most important environmental aspect
- Reduces Energy Use and associated pollutants

## ☞ Increase Lamp Life

- The second most important environmental aspect.
- Still far less important than energy efficiency.

## ☞ Reduce Lamp Materials

- Smaller lamp diameters – T12 > T8 > T5
  - Less glass, phosphor, and metals, including less mercury
- The third most important environmental aspect
  - Less important than lamp life.

# ENERGY EFFICIENCY (Top Three Ideas)

## (1) Linear Lamps

### ☛ Advanced T8 Lamp Technology – Reduced Wattage

- Lamp and Ballast System Replacement of Existing T12 system
  - 28 Watt **ULTRAMAX** T8 lamps and **ULTRAMAX** Ballasts
- Lamp Replacement Only of existing T8 System
  - 30W T8 lamp on existing instant start ballasts

### ☛ Advanced T8 Lamp Technology – Higher Lumens

- 32 Watt T8 lamp with 3100 Lumens and Long Life 24K – Super T8
  - Lighting Redesign or Reduction in number of lamps per fixture

### ☛ T5 Lamp Technology

- Standard or High Output Lamps in Metric Lamp Lengths
- Fixture Replacement – Indirect or Direct/Indirect best application

# ENERGY EFFICIENCY

## (2) Medium Screw Based Products

### ☛ ENERGY STAR COMPACT FLUORESCENT LAMPS

- Replace most medium screw-based Incandescent lamps with GE ENERGY STAR Compact Fluorescent lamps
  - Reduces Energy Consumption by up to 75%
  - Greatly Increases Lamp Life
- A-line Lamp Replacements
- Globe Lamp Replacements
- Decorative Lamp Replacements
- Reflector Lamp Replacements.
  - New Dimmable Products now available.



# ENERGY EFFICIENCY

## (3) Metal Halide Lamps

### ☛ Pulse Start Metal Halide Lamps

- Increase Energy Efficiency
- Greatly Improved Lumen Maintenance
- Requires Ballast Change

### ☛ Ceramic Metal Halide Lamps

- Greatly Improved Color
- Improved Lumen Maintenance
- Can Replace Incandescent Reflector Lamps
  - Need New Fixture
- Requires Ballast Change

# Increase Lamp Life (Top Three Ideas)

## ☛ Linear Fluorescent Lamps - XL

- XL – Extend Life to 24,000 hrs (from 20,000 hrs)
  - Available in 2', 3' and 4' Standard T8 Lamps
  - Available in SUPER T8 high lumen T8 Lamps

## ☛ Linear Fluorescent Lamps - SXL

- SXL – Super Extended Lamp Life to 30,000 hrs (from 20,000 hrs)
  - Available in 4' T8 Lamp

## ☛ CFL Lamp Technology

- Increase CFL Lamp Life to 12,000 hrs
  - Standard Life CFL lamp life also available at 8,000 hrs

# Reduce Lamp Materials

## ■ Linear Fluorescent Lamps

- GE ECOLUX LAMPS greatly reduce mercury content
  - **Lowest TCLP** (Toxicity Characteristic Leaching Procedure) **test results** in the industry
    - No probability of leaching if landfill disposed.
    - All lamps should be recycled in CA by state law
      - » Small quantity exemption (30 lamps/mo) may be eliminated on Feb. 9<sup>th</sup>, 2006
  - Available in 2', 3', 4' & 8' T8 and T12 Lamps
  - Available T5 Fluorescent Lamps
  - Available in pin-based Compact Fluorescent lamps
  - Available in High Pressure Sodium Lamps

## ☛ Linear Fluorescent Lamps

- Move from T12 to T8 to T5 lamps

# Questions?

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