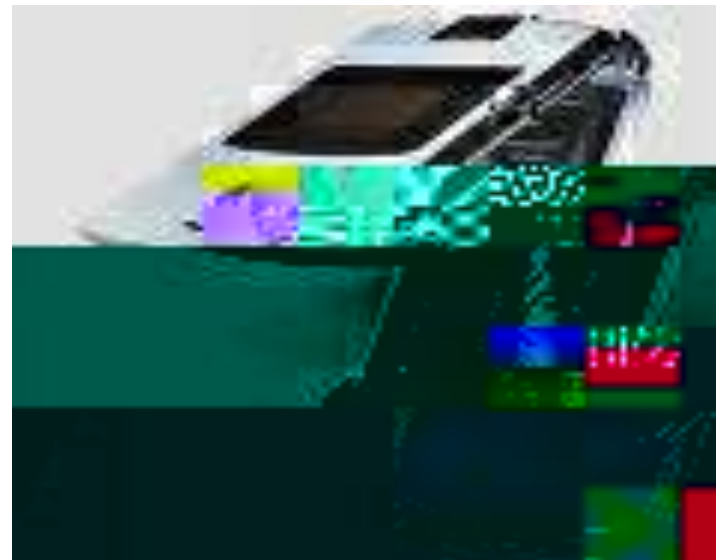


*Please!!!!*

Turn off all your electronic devices.  
Be considerate of your neighbor.



# *Best Practices for Waste Management & Minimization*

**Presented by**





# Waste Determination





# *Ask The Golden Questions !*

Is it a characteristic?

Is it a solid waste4



Is it a solid waste?

# *Ask The Golden Questions!*

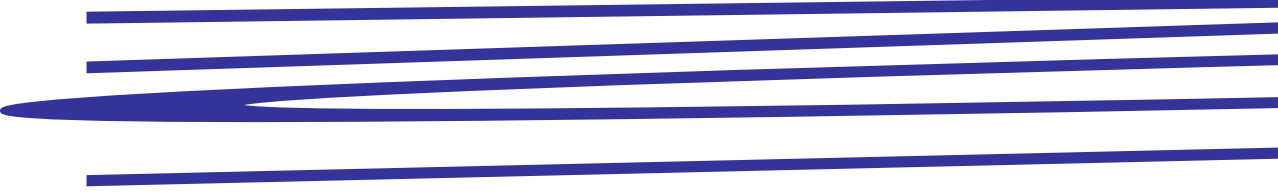
- “ Is it a solid waste?
- “ Is it a characteristic?
- “ Is it listed?
- “ Is it exempt?
- “ Asking these questions should keep mistakes in identifying hazardous waste to a minimum  
(40 CFR h262.11)





## D001

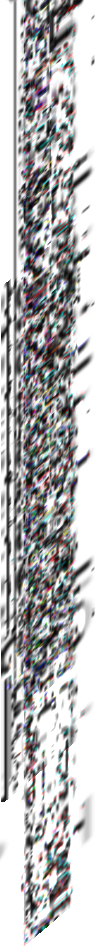
- The flashpoint is  $< 140^{\circ}\text{F}$  ( $60^{\circ}\text{C}$ )
- Is it a flammable compressed gas
- Is it a non-liquid capable of ignition through friction, absorption of moisture, or spontaneous combustion
- Paint thinner, gasoline, solvent



9101



9101





# Reactivity

- how to work with these values

- 

- how to work with these values

-

# Corrosivity

**D002**

“Require corrosion with a pH of 2 or less (2.5

or less) and does not include



*Î@IghXi' < UhufXci g'K UghYg*

“













# 7-11 Parameters



neoblasts

# *Other/Exempt Wastes Streams*

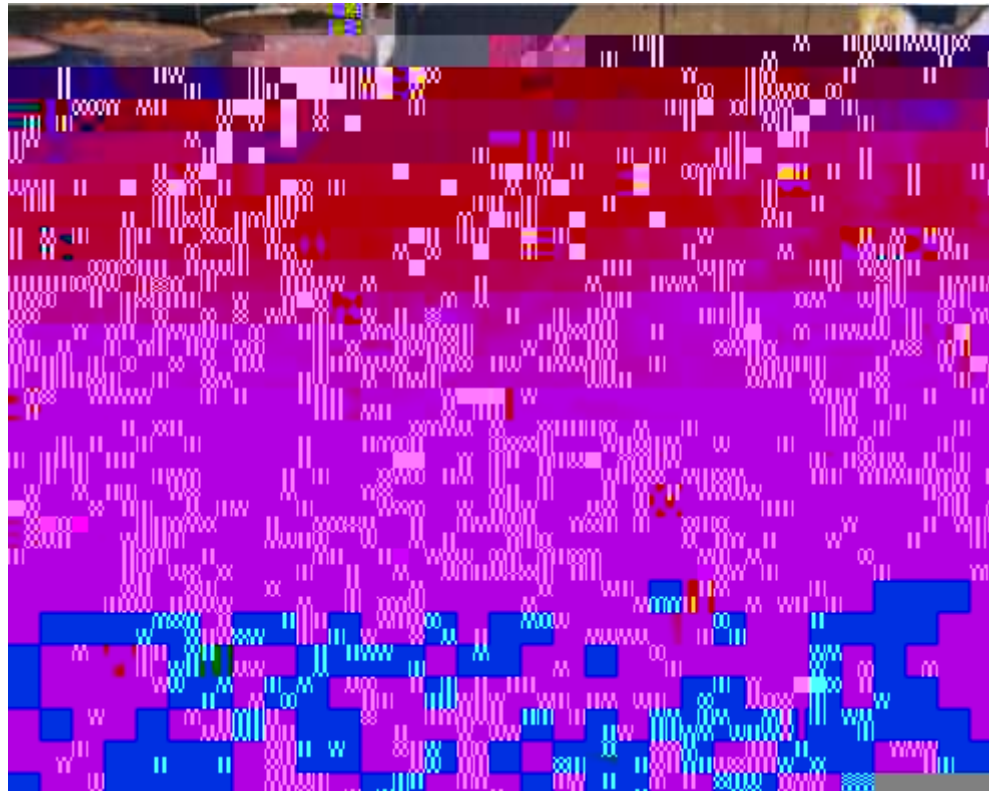
- “ Specific types of waste are not regulated as hazardous waste provided that they are managed properly. Examples include:
  - . Used Oil
  - . Oil Filters
  - .







# Batteries



# *Automotive Batteries*

- ✓ **If picked up for recycling, not considered hazardous waste**
- ✓ **Keep receipts of file to document recycling**
- ✓ **If cracked, prepare a waste determination prior to disposal (D002, D008)**
- ✓ **Remember to store in a cool, dry, and safe**

# Wipers and Rags

- “ Wipers and Rags professionally laundered for reuse at a permitted facility are considered non-hazardous if:
  - . No Free g i5iqd

# *Wipers and Rags*

- “ If disposed, you must determine if they are hazardous waste:
  - . Listed solvents
  - . Toxic characteristics











# *The Forgotten Waste?*

“ Businesses often forget or are unaware that fluorescent lamps contain mercury and must be handled appropriately.

“ %̃!^^} c̃ • +  
. Ó • ã ^••^• c̃ \ c̃^ æ^ ‡ ~c̃ @ [ \ c̃  
.

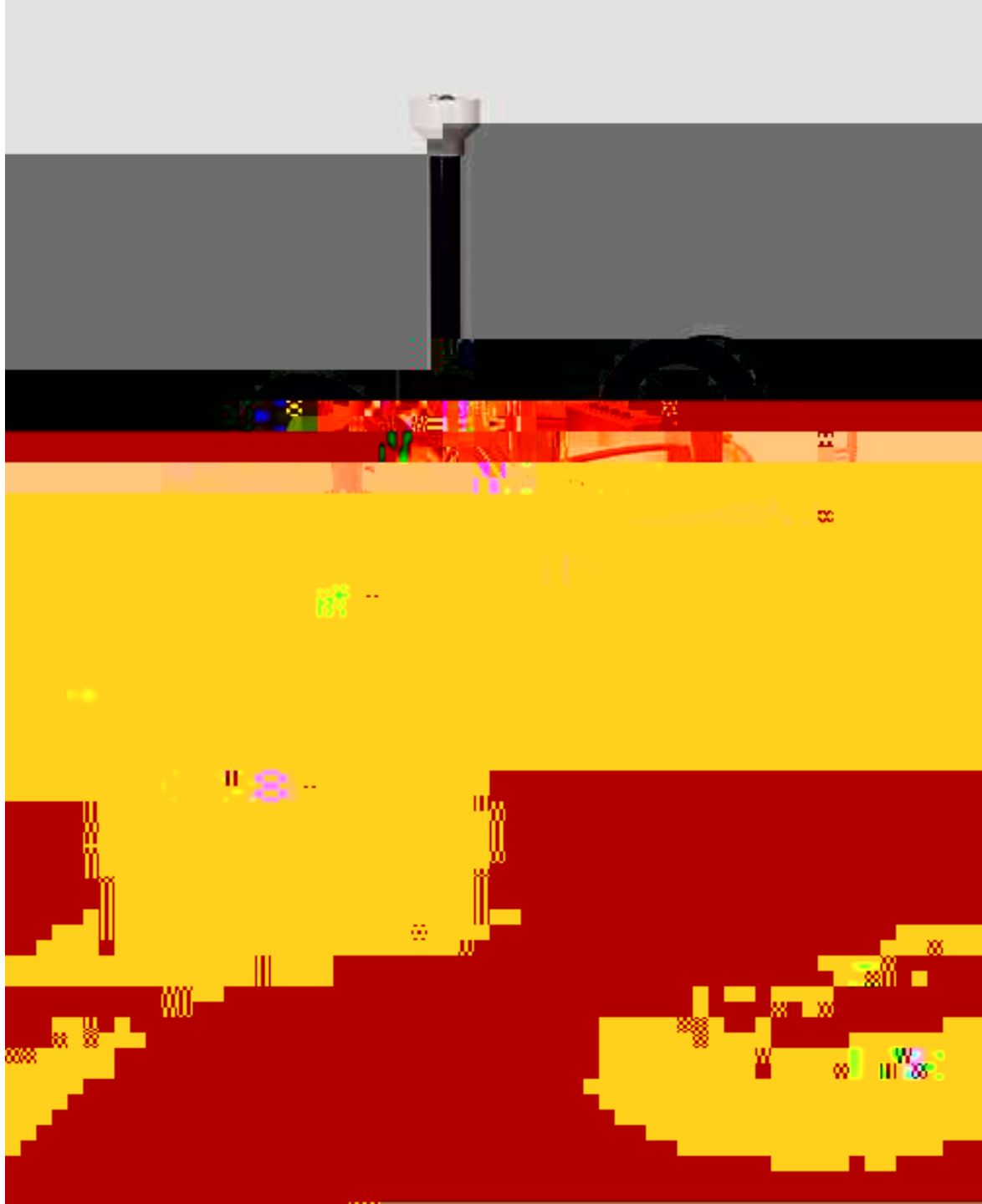


# *Bulb Crushing Determination*

" Crushed 084 tubes 0811(ari)-2e not manmagd 089(au

" Bulb crushing is com084 FdDe

te>] TJ ET BT /F4 27.984 Tf 1 0 0 1 43.226 8.51 Tr



# *Universa7 Waste Requirements*

“





- “ Mercury Containing Equipment (MCE) is:
  - . Thermm106g63 8i. TϕTÆTBT/F4 229 rg8f1 0 0 1 79

# *Nevada CRTs*

” Cathode Ray Tube (**CRT**) is:

-

# *Outdated Electro4c Eqo4uo4pment*





On-site  
Management  
~~On-site Management~~



Category

Generation  
Limit

Storage



# *Basic Responsibilities*

“ Follow proa 540 remres for labeling, storing anre disposing of hazardous waste

”

# *Container Requirements*

- ” Empty Containers
- ” Satellirm25ccumulation
- ” Labeling
- ” Central25ccumulation Area
- ” Inspections

# *Container Considerations*

- ” Compatibility
- ” Condition
- ” Closure
- ” Size
- ” Location
- ” Flammability Issues

# *Hazardous Waste Containers*

- Label

- in its original

- with no modification



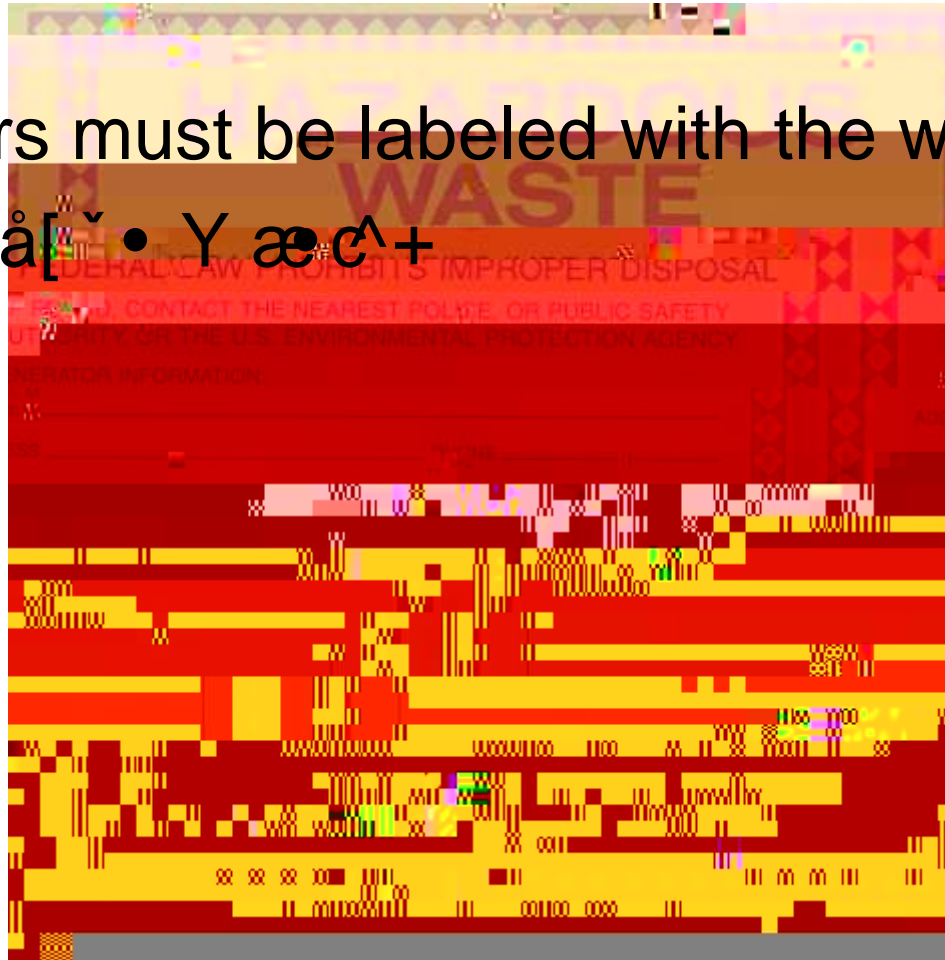
# *Empty Containers*

- “ Empty Containers:
  - . Good faith effort (**all material that can be removed is removed**)
  - . Less than 1 inch of residue
  - . 3% or less by weight of total capacity
  - . **Í PÎ** listed must be triple-rinsed

# Container Labeling

Containers must be labeled with the words:

- Hazardous Waste











# *Central Accumulation Area*

- ” Properly handling
- ” Access control
- ”
- ” Waste segregation
- ” Protection from the weather
- ” Additional requirements for LQG

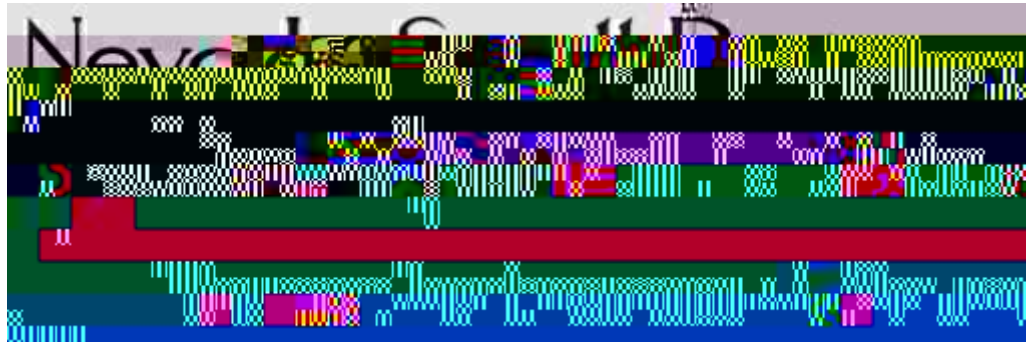
# Storage Area Record Inspection Requirements

Inspect hazardous waste storage areas at least **weekly** to:

- . Detect leaking and deteriorating containers
- . Ensure that containers are labeled, dated, and closed
- . Ensure wastes are not accumulated for longer than (SQG . 180 / LQG - 90 days)
- . Ensure all emergency equipment is present and in good working order
- . Ensure that incompatible wastes are separated
- . Two way communication



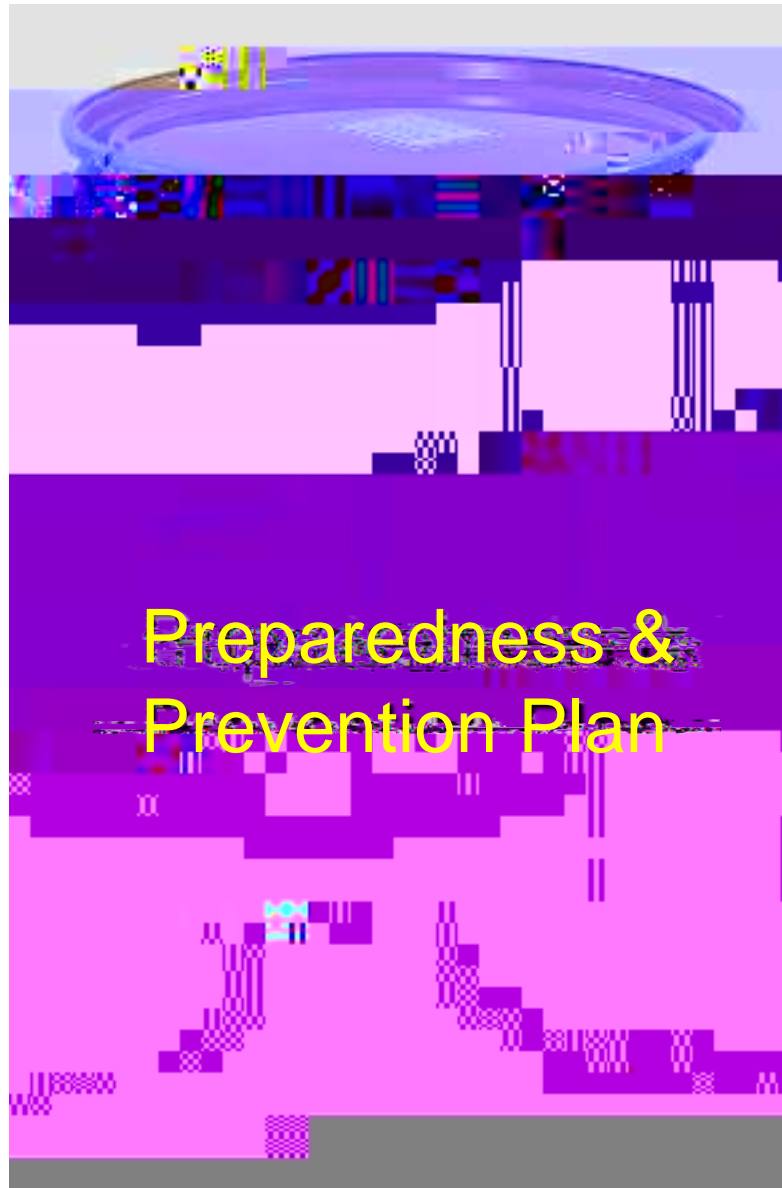




**2010**

# Hazardous Waste Compliance Calendar

ASSISTING NEVADA BUSINESSES WITH  
ENVIRONMENTAL MANAGEMENT AND



# Preparedness & Prevention Plan









# *Required Equipment*

- “ All facilities are required to have:
  - . Internal commi 61 07i86(to ha)-5IT4ss7QBT/FT4s





# *Arrangements with Authorities*

- “ SQG regulated facilities may test out of this requirement based on:
  - . Whether waste is accumulated on-site
  - . Types of wastes accumulated on site
  
- “ Contact BEP for additional 2.2 aorreon

# *Arrangements with Authorities*

” Familiarize police, fire department, and emergency response teams with:

-

# *Employee Training*

- “ SQG facility employees must be familiar with:
  - . Proper waste handling procedures
  - . Emergency procedures



# *Employee Training*

” LQG facility must:

- . Identify hazardous waste management responsibility in personnel files
- . Provide training within 6 months of hiring or promotion
- . Provide annual refresher training
- . Keep detai41 TBT415f-2(in)-2(in)-2(r15f-ecpr)-3he
- .

# EP ID# and Deactivation

EPA ID# &

Deactivation













# Manifest Requirements

# *Manifest Requirements*

- ” Who must use them
- ” What to use them for
- ” How the process works
- ” How to fill them out
- ” Biennial Hazardous Waste Report







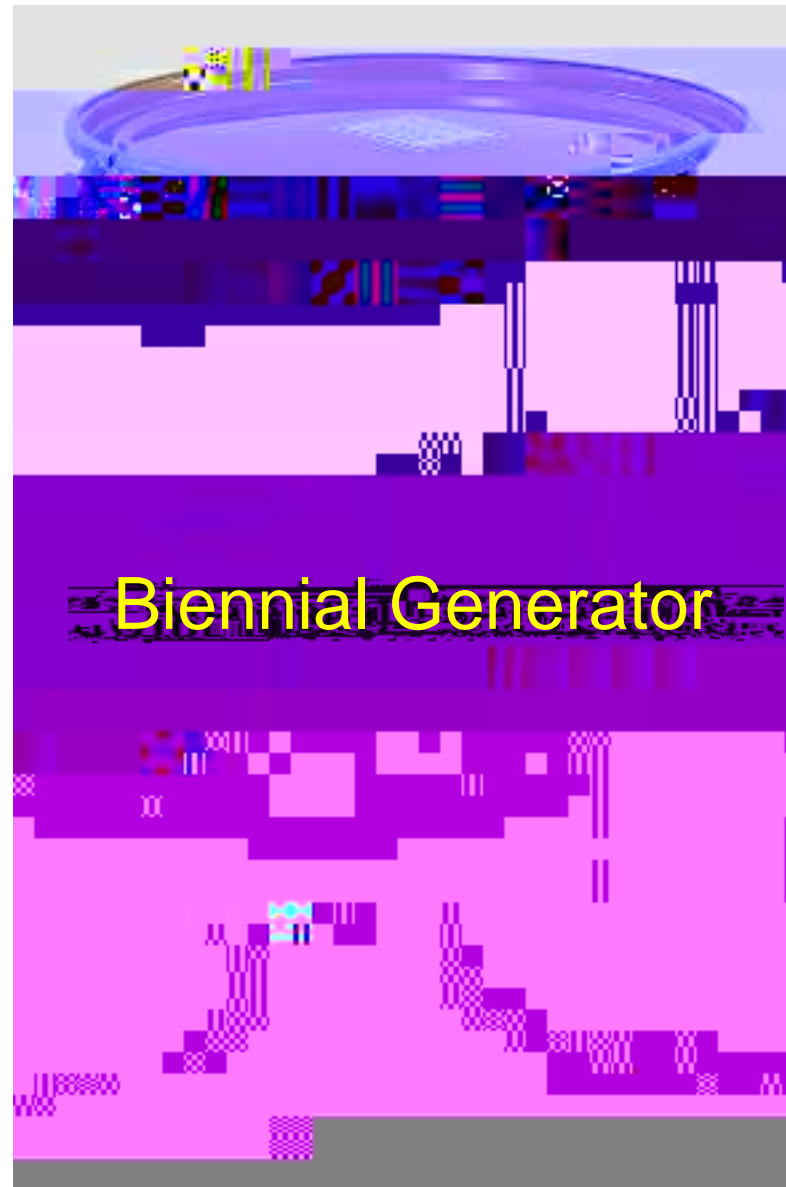
















# Recordkeeping Review

## “ Operational Records

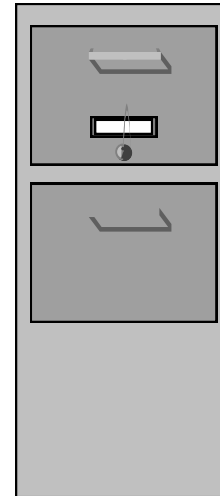
- . Waste Determination
- . Training Records
- . Inspection Records

## “ Waste Disposal Records

- . Manifests
- . Land Disposal Restrictions
- . Tolling Agreements

## “ Preparedness and Prevention Records

- . Preparedness and Prevention Plan
- . Contingency Plan
- . Required Postings







# WHAT is P2 ?

## Source Reduction



# WHAT is P2 ?

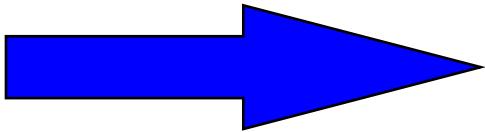
## Material Substitution



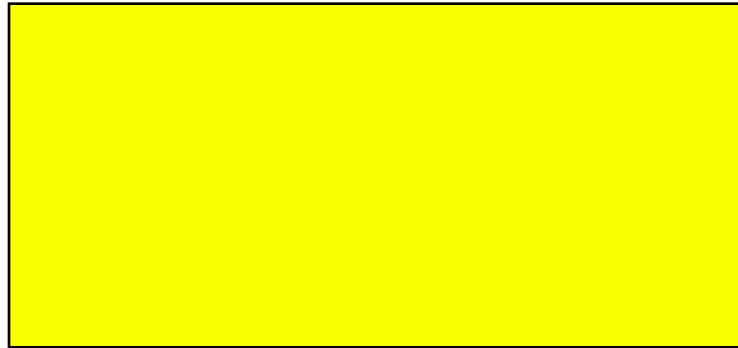
Products or services that have a lesser or reduced effect on human health and the environment when compared with

*Emissions*

**Input**

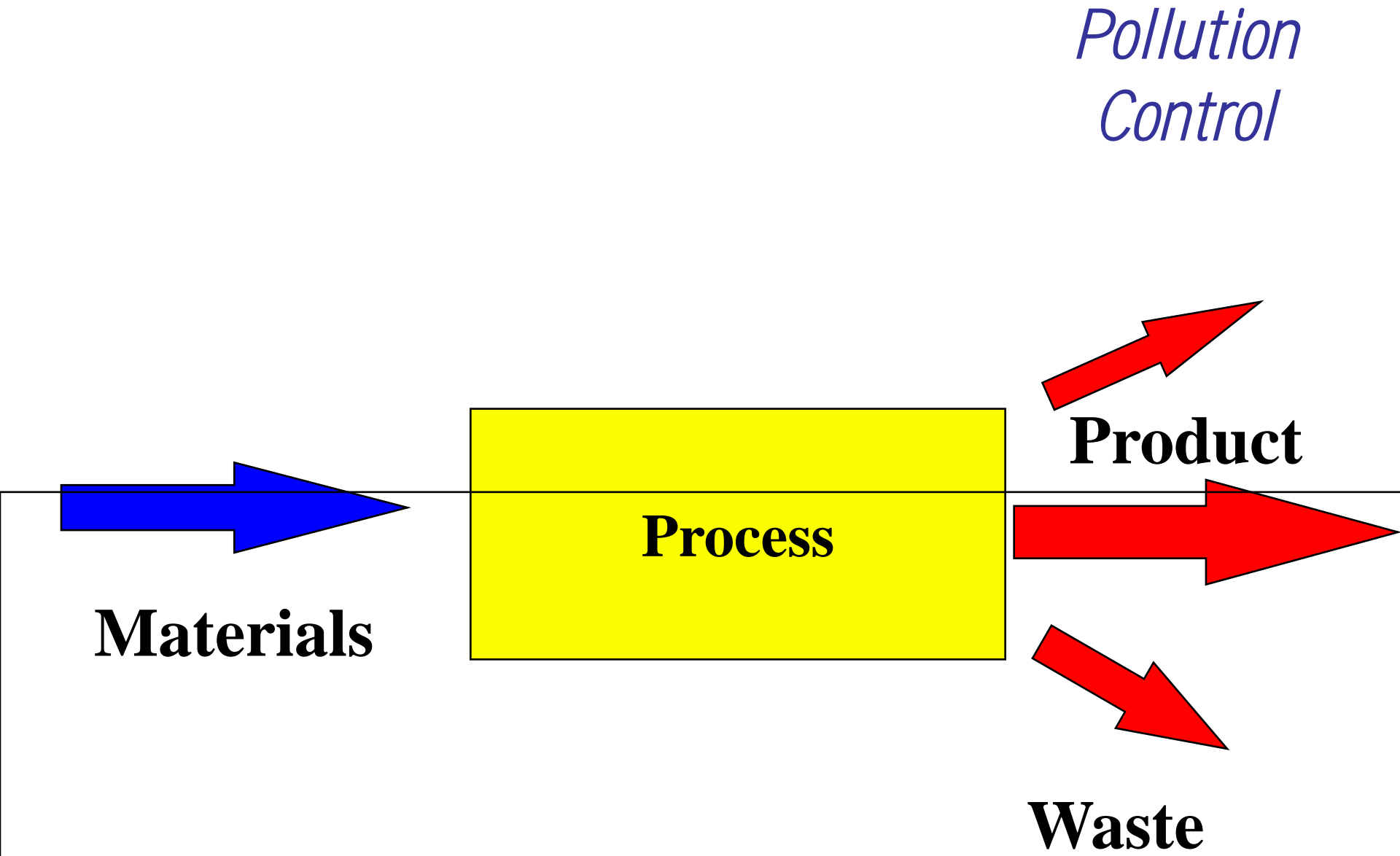


**Materials**

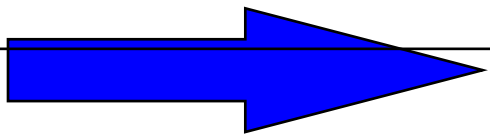


**Product**

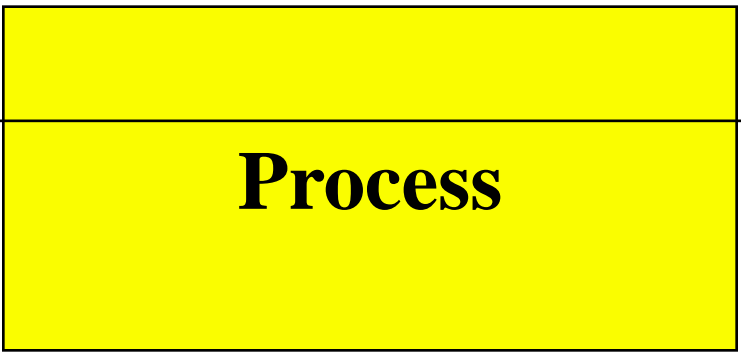
**Waste**



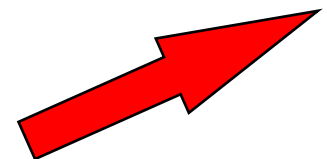
*Pollution  
Control*



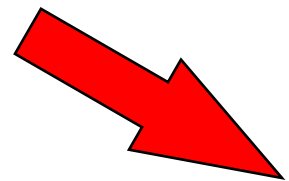
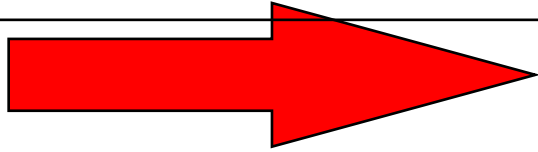
**Materials**



**Process**



**Product**



**Waste**





# *Benefits of P2*



# *Benefits of P2*

## Environmental Protection

Cleaner air and water

Conserve natural resources

Reduce pollutants entering the environment

# *Seven P2 Techniques*

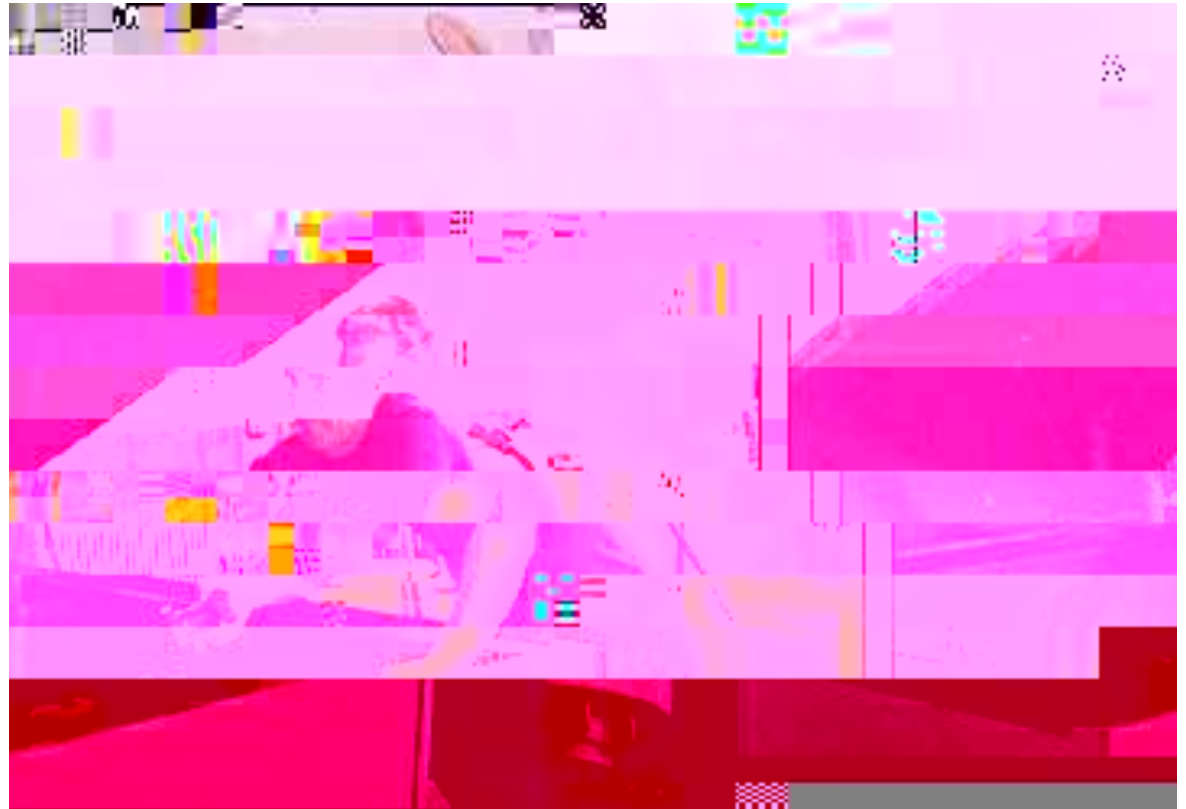
- “ Policy/Procedural Change
- “ Equipment Modification
- “ Material Reuse
- “ Material Substitution
- “ Process Efficiency Improvements
- “ Improved Housekeeping
- “ Inventory Controls



# *Equipment Modification*

## **Technique 2**

Replacing solvent degreasers with aqueous parts washers.





# *Equipment Mod./ Material Reuse*

## **Technique 2 and 3**

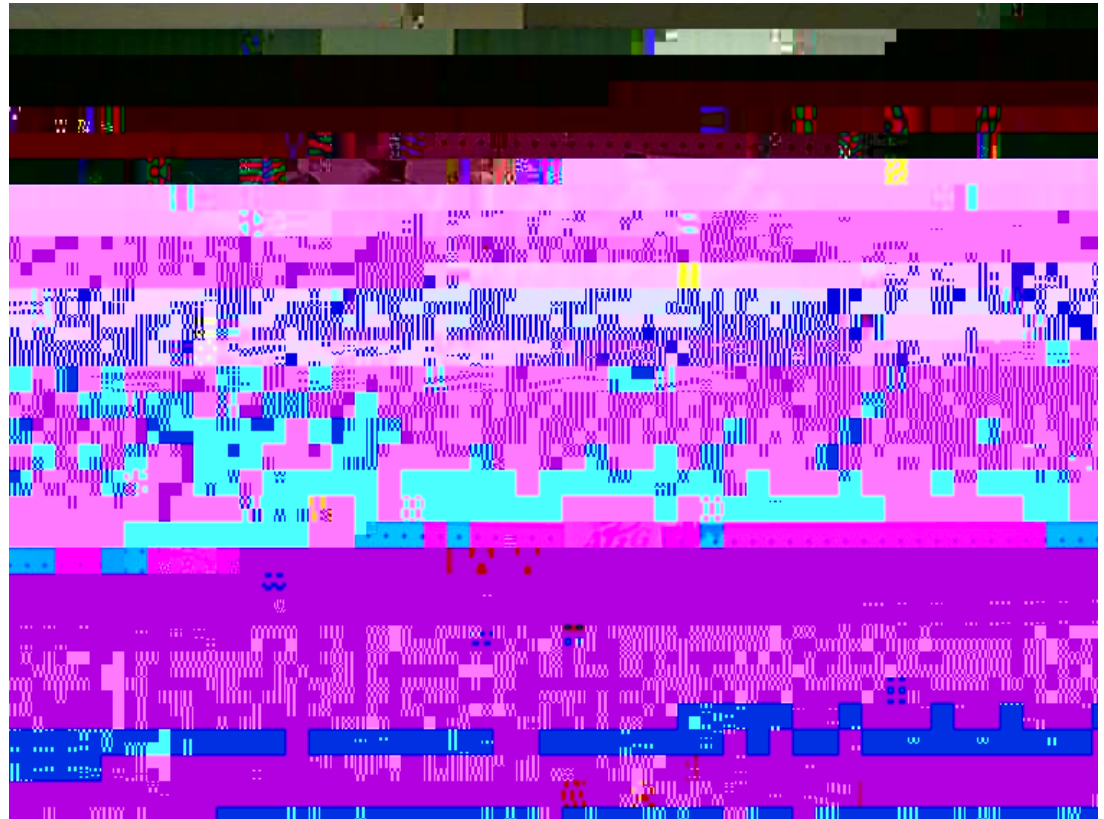
Using a  
distillation/recovery  
u029.1t(us) .22dB Tn/recovery



# *Material Substitution*

## **Technique 4**

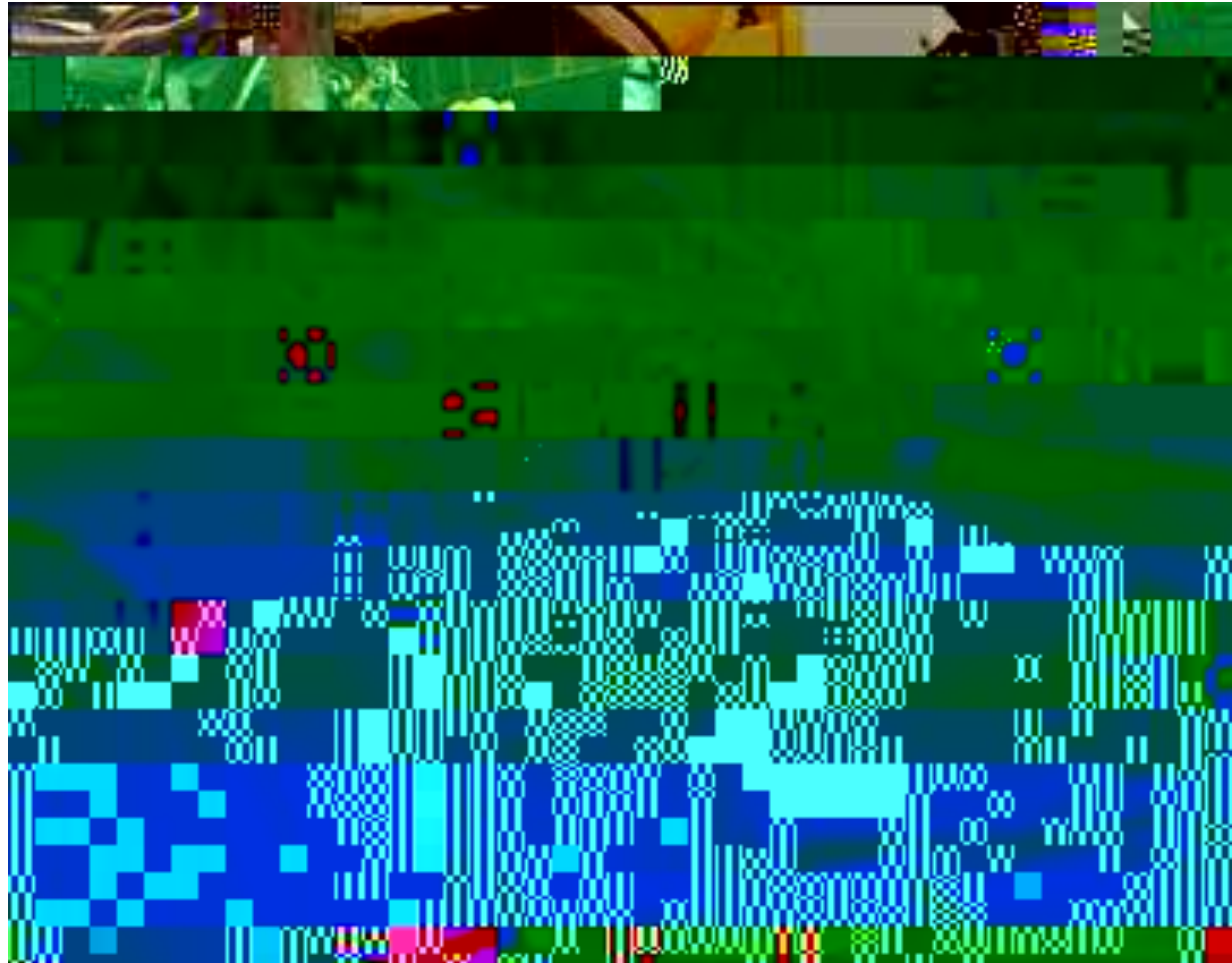
Purchase  
Environmentally  
Preferable  
Products



# *Material Substitution*

## **Technique 4**

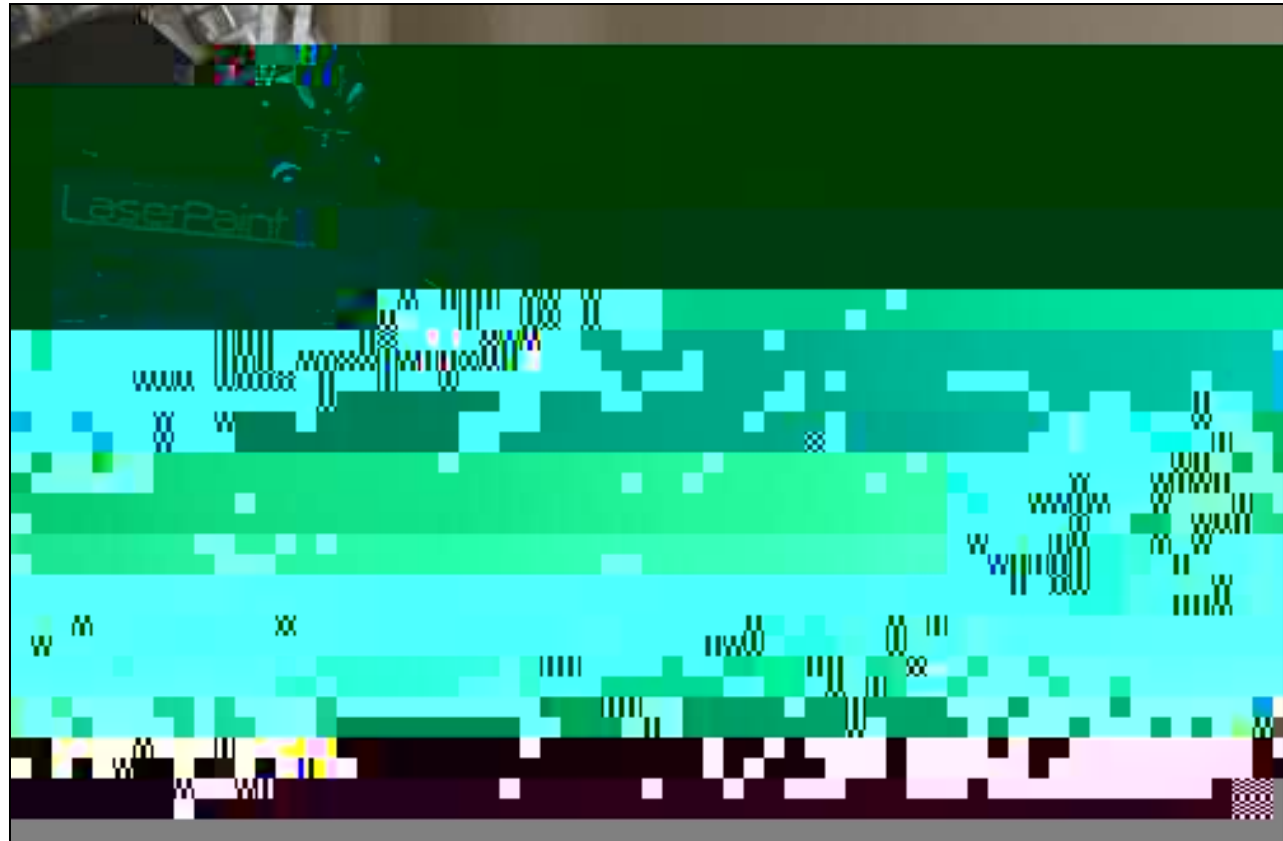
Replace aerosol solvents with compressed air sprayers and citrus-based cleaners for cleaning and degreasing.

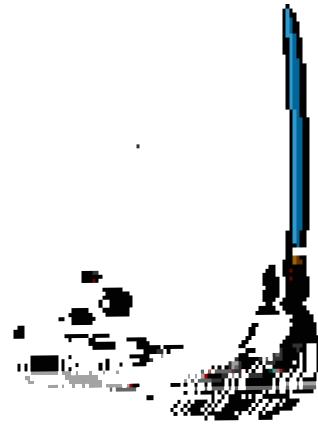
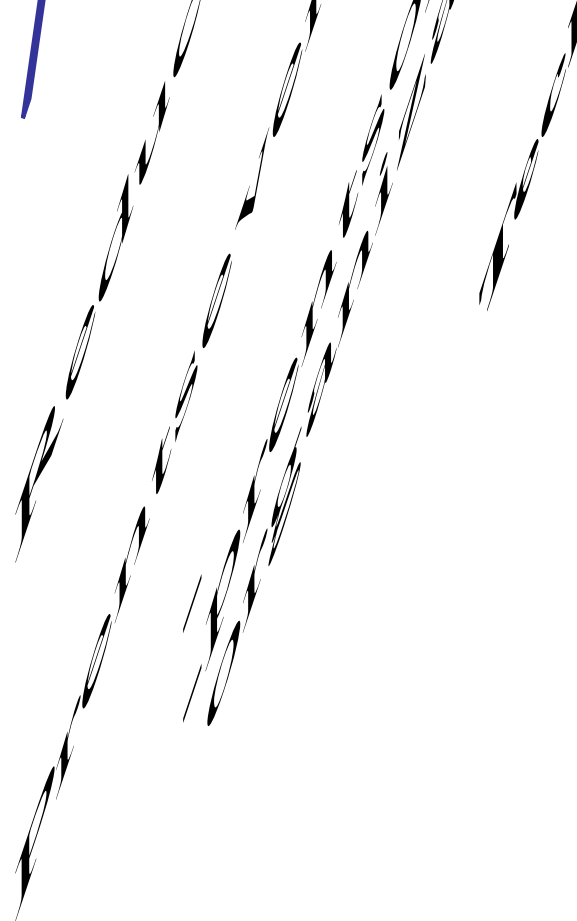


# *Process Efficiency Improvements*

## **Technique 5**

Laser guide  
for spray gun





*Inventory Co738 o73rols*

---

# *Potential Benefits*

---

---

“

# *Waste Minimization in Your Shop*

- “ Purchase less hazardous material.
- “ Use it more efficiently.
- “ Reduce waste management cost.
- “ Reduce insurance costs.
- “ Reduce labor, recordkeeping, reporting and regulatory requirements.
- “ Feel good and make more money.





# *Facility Material and Energy Flow*



# *What does this mean?*

- “ Utility cost for a business is \$2.56 per square foot.
- “ In the business world that means we

# *Energy Audit*

“ Many facilities have found that conducting an energy audit will result in significant benefits.

“ As much as 30% . depending upon

^ [ ~ | ~ æ & ã ã ^ q ^ } ^ | \* ^



# *Energy Summary*

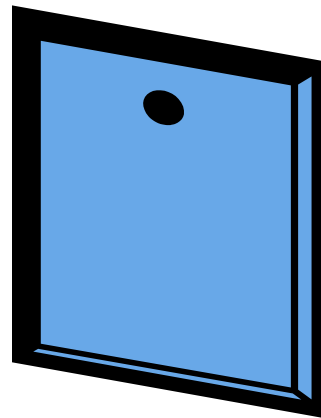
- “ Green building.
- “ Energy efficient lighting, controls, HVAC.
- “ Energy Star equipment.
- “ NV Energy Sure Bet Rebates incm g6.m9rgy \$



# *Energy Awareness*

**Please remember to switch  
off lights and equipment  
before going home.**

**SWITCH OFF**



# *Water Awareness*





# *Small Changes Big Savings*

- “ Using a comprehensive guide on how to reduce water use in business will save money on water bills.
- “ It tells the user how to:
  - . Measure their use of water
  - . Review their use and associated cost
  - . Understand how to improve their water efficiency and implement the improvement
- “ Monitor the resulting use and prevent deterioration.
- “ There are basic steps to help businesses towards better management of their water costs.



# *The Big Question*





