

***Wood Preservation
Sector
Managing Arsenic and
Chromium
A Cooperative Approach***

***Barry Munson
Environment Canada***

Outline

- *Introduction*
- *Risk Assessment/Risk Management*
- *Treated Wood Wastes in Canada*
- *Waste Management Options*
- *Summary and Conclusions*

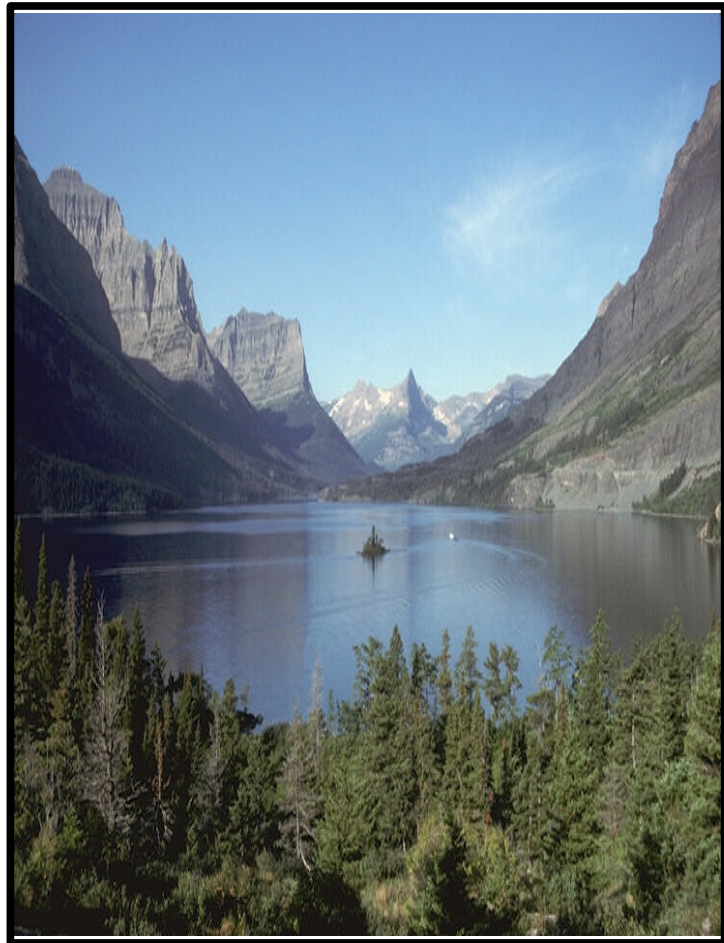
- ***Introduction***
- ***RiskAssessment/
Risk Mgmt***

- ***Treated Wood
Wastes in Canada***

- ***Waste
Management
Options***

- ***Summary and
Conclusions***

- **Working Definition :**
**“ Pressure Treated Wood
- hunk of wood with a
pesticide in it”**
- **Key Influences - Re-
evaluation, Strategic
Options Process, Public**



- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Wood Preservation *Industrial Sector*

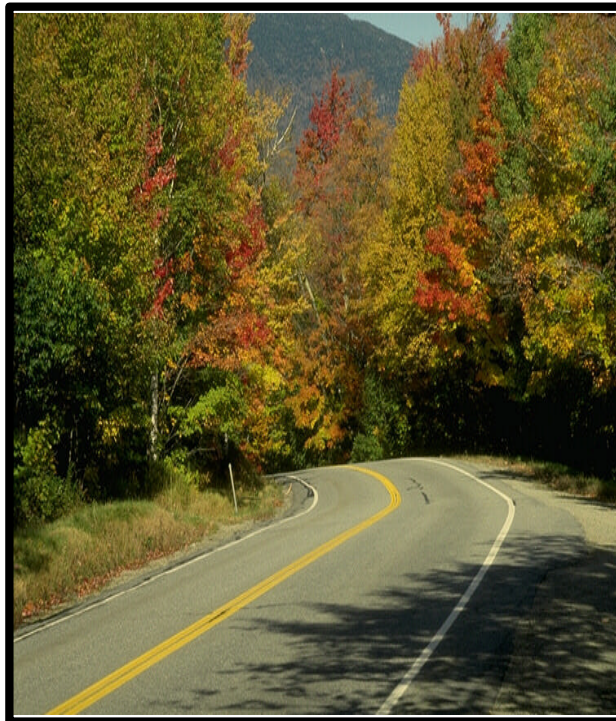
- **Chemical manufacturers**
 - ◆ 1- CCA
 - ◆ 1- creosote
- **Treatment Facilities**
 - ◆ 68
- **Treated Wood Users**
 - ◆ Industrial: ties, poles, timber
 - ◆ Consumer



- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in
Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Regulatory Framework

- **Pest Control Products Act**
- **Canadian Environmental Protection Act**



- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in
Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Pest Control Products Act

- **Registration of new pesticides**
- **Re-evaluation of existing pesticides**
- **Safety, Merit and Value**
- **Administered by the
Pest Management
Regulatory Agency in
Health Canada**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Canadian Environmental Protection Act - 1999

- **Process for the
management of toxic
substances**
- **Risk Assessment Process**
- **Risk Management
Process**
- **Toxic Substances
Management Policy**

- *Introduction*
- *RiskAssessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Risk Assessment Process

- **Priority Substances List
1 - PAHs, As, Cr,
Creosote Impreg. Waste
Matl's, Dioxins, Furans,
Hexachlorobenzene -
Schedule 1**
- **PSL 2 - Ammonia -
proposed for addition to
Schedule 1**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Risk Management Process - Strategic Options Process

- **Identify Instruments**
- **Development
Instruments**
- **Implement Instruments**
- **Direction provided by
the federal Toxic
Substances Management
Policy**
- **Criteria for selection of
instruments based on
persistence,
bioaccumulation,
toxicity (CEPA),
anthropogenic**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Risk Management Process - Strategic Options Process

- **Multistakeholder**
- **Open, transparent,
consultative**
- **Sector approach**
- **Chemical
Manufacturers**
- **Treatment**
- **Users**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Strategic Options Process

- **Strategic Options Report completed in 1999**
- **52 Recommendations - included proposed instruments and a proposed process for their implementation**
- **Implementation process a continuation of the consultative, cooperative approach adopted during the SOP**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Strategic Options Process

- **Two Steering
Committees**
- **Manufacturers-Treaters
S.C.**
- **Industrial Treated
Wood Users S.C.**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Manufacturers-Treaters

S.C.

- **Deals with issues at chemical manufacturers and treatment fac.**
- **Instrument - voluntary implementation of Technical Recommendation Documents (TRD)**
- **Consumer lumber - labeling**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Major Issues

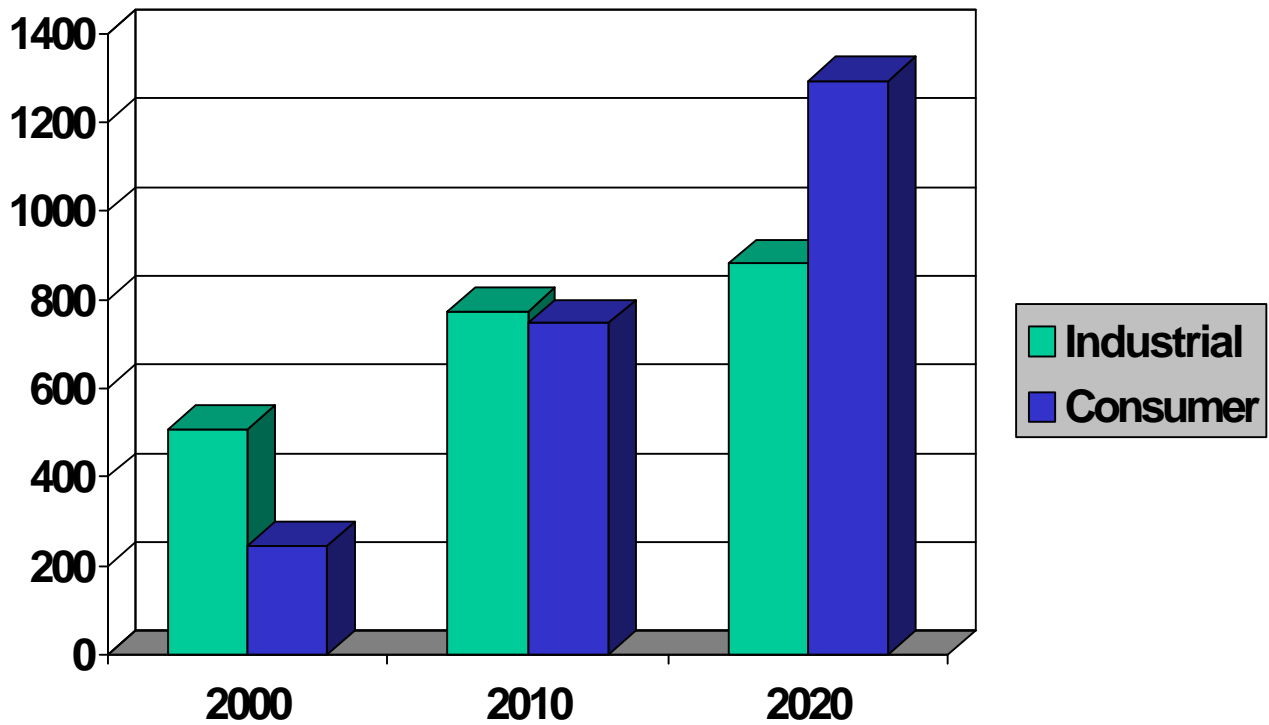
- **TRD - full
implementation at every
facility by 2005**
- **Accelerated Fixation**
- **Waste Management**

- *Introduction*
- *Risk Assessment/
Risk Mgmt*
- *Treated Wood
Wastes in Canada*
- *Waste
Management
Options*
- *Summary and
Conclusions*

Industrial Treated Wood Users S.C.

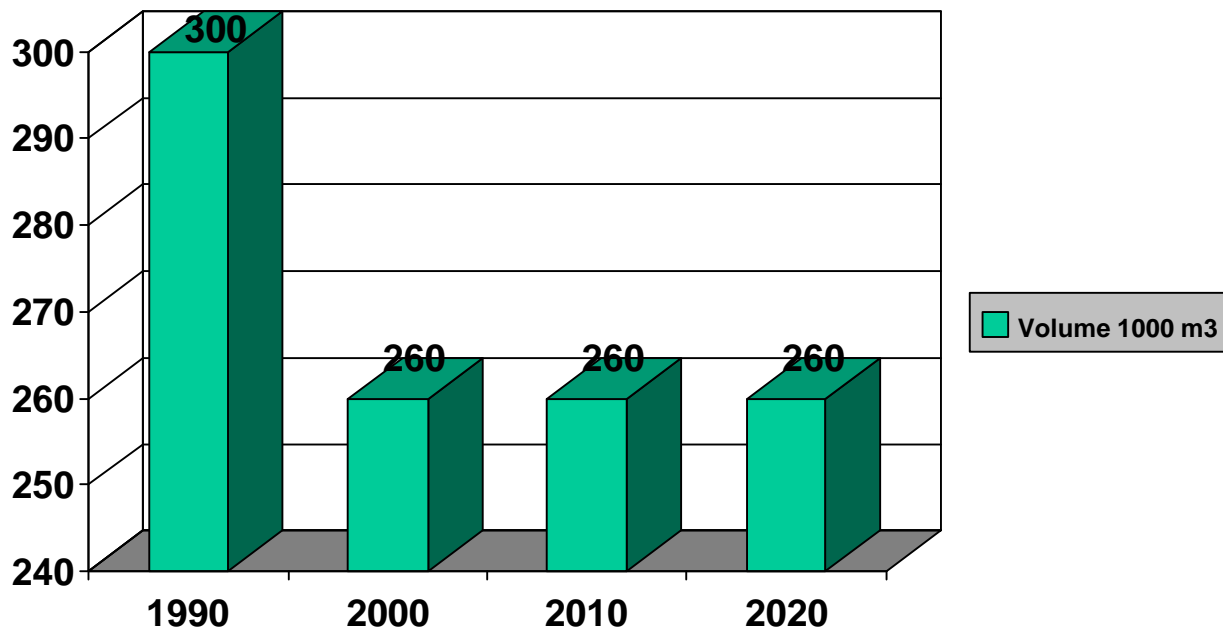
- **Users Guidance
Document (UGD) -
handling,
selection/specification,
storage, siting**
- **Waste Management**

Estimated Average Volumes of Treated Industrial and Consumer Wood Product Removals



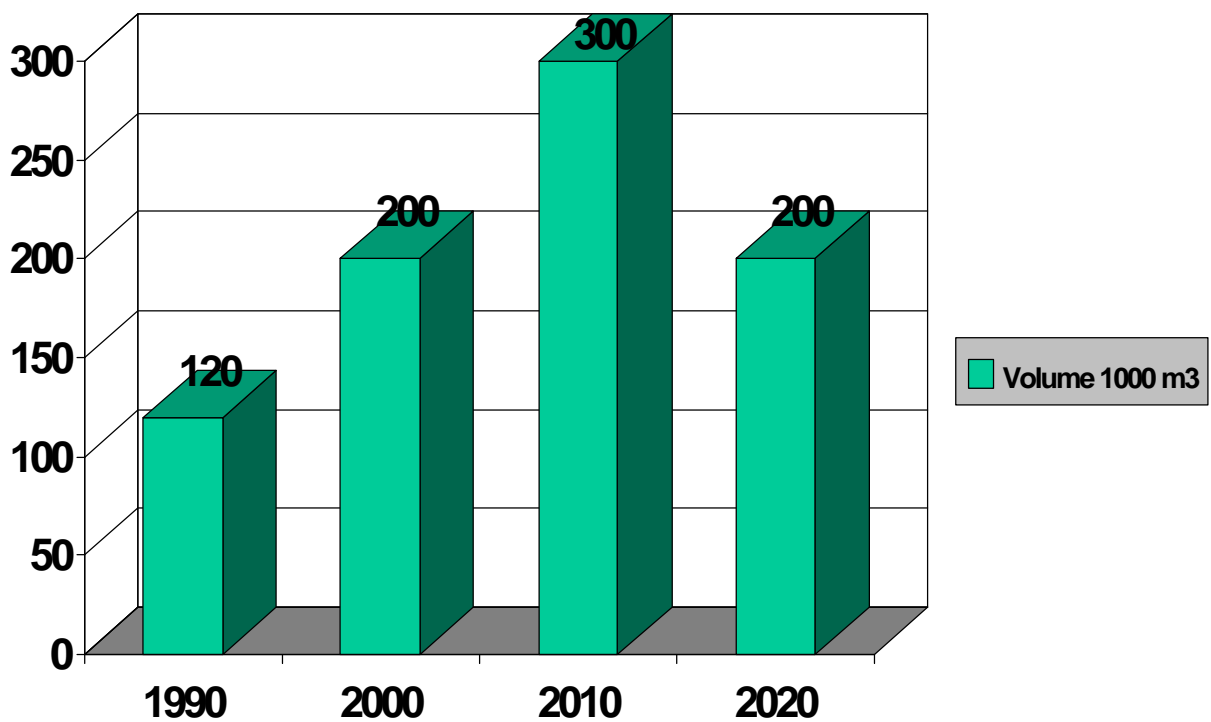
Creosote

Estimated/Reported/Projected Volumes of Treated Industrial Wood Products Removed from Service



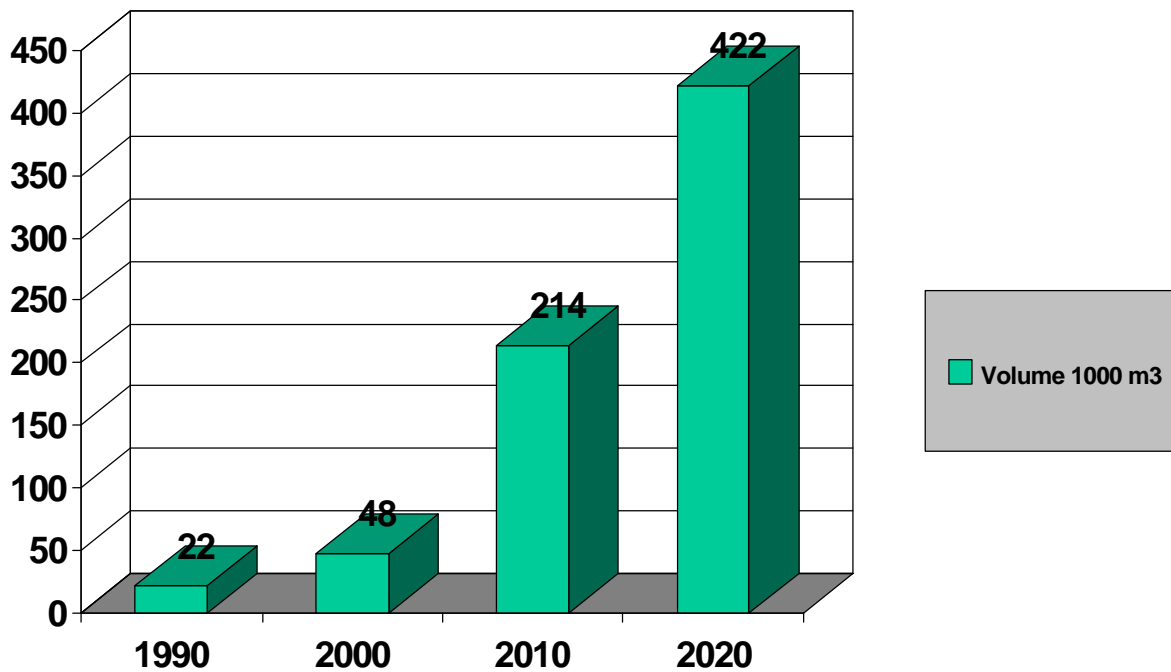
Pentachlorophenol

Estimated/Reported/Projected Volumes of Treated Industrial Wood Products Removed From Service



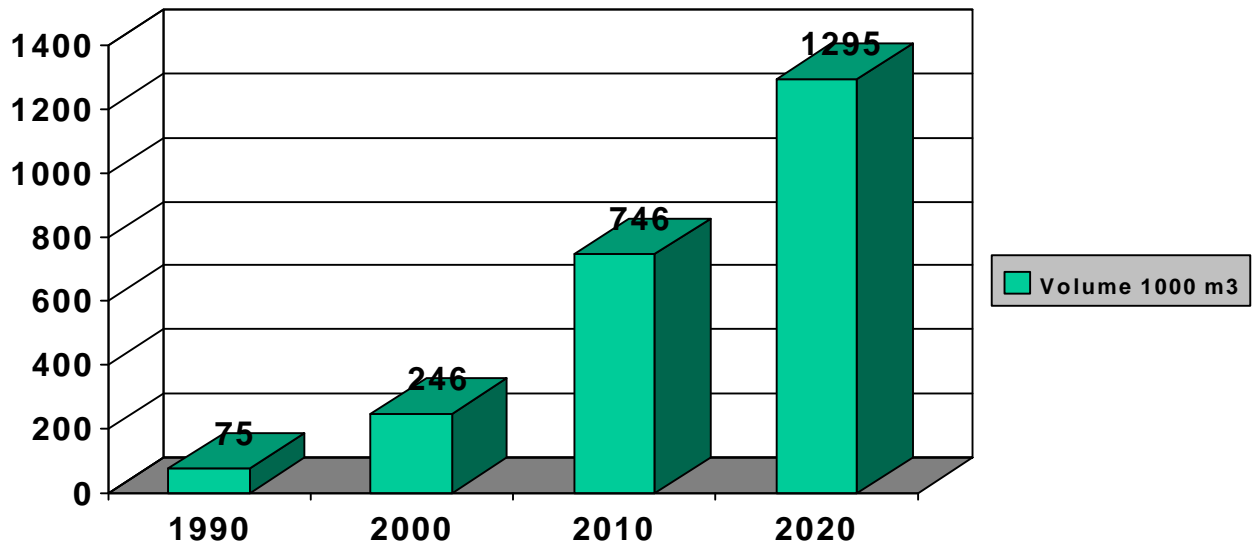
CCA

Estimated/Reported/Projected Volumes of Treated Industrial Wood Product Removed From Service



CCA

Volume of Waste Treated Consumer Products (Estimated)



- *Introduction*
- *RiskAssessment /Risk Mgmt*
- *Treated Wood Wastes in Canada*
- *Waste Management*
- *Summary and Conclusions*

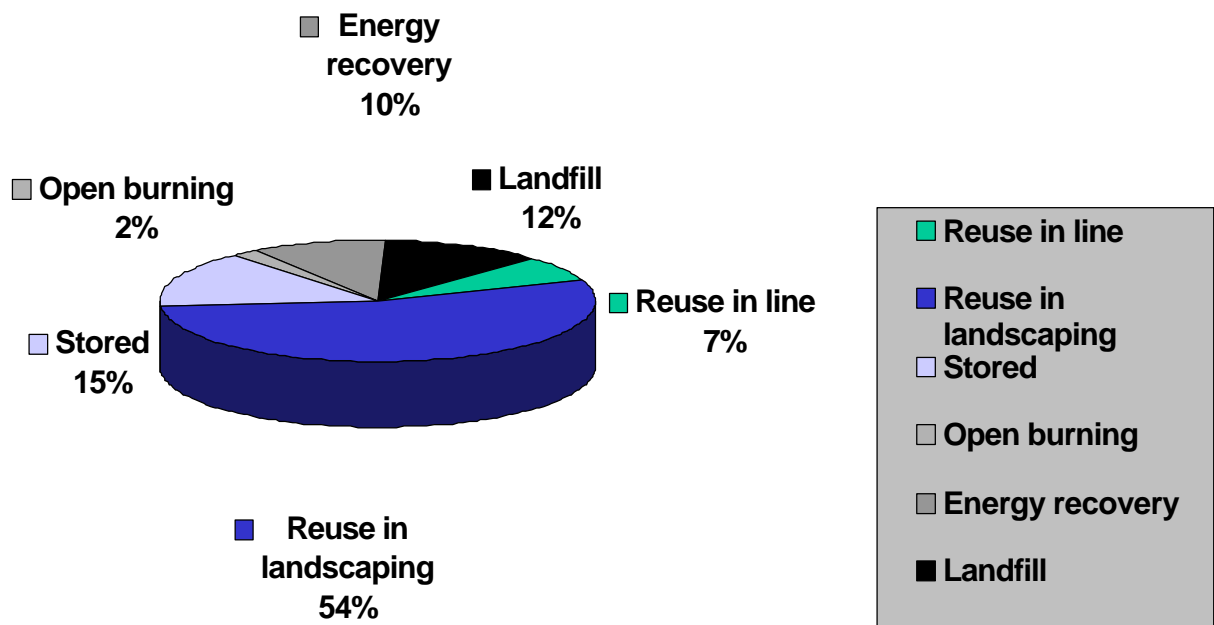
Landfilling

- **Current option of choice**
 - ◆ 30% industrial wastes
 - ◆ 100% consumer wastes
- **Controls becoming more stringent - design, construction, operation, monitoring**
- **Impacts of wood wastes unknown/uncertain**



Creosote

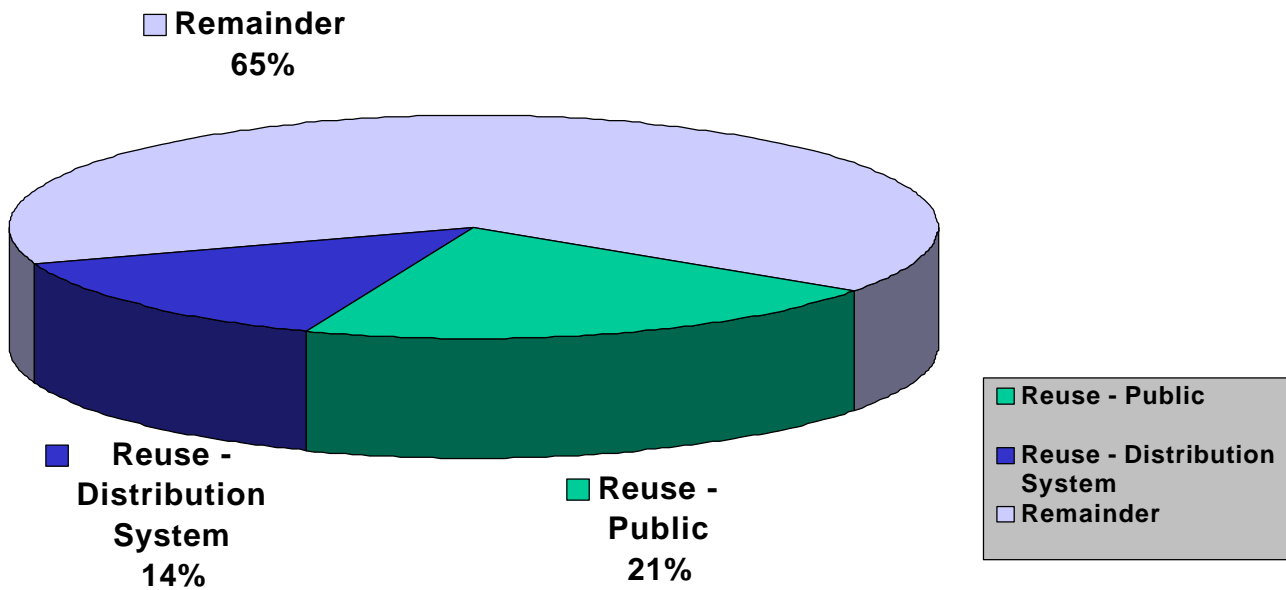
Industrial Waste Disposal End Points



Pentachlorophenol

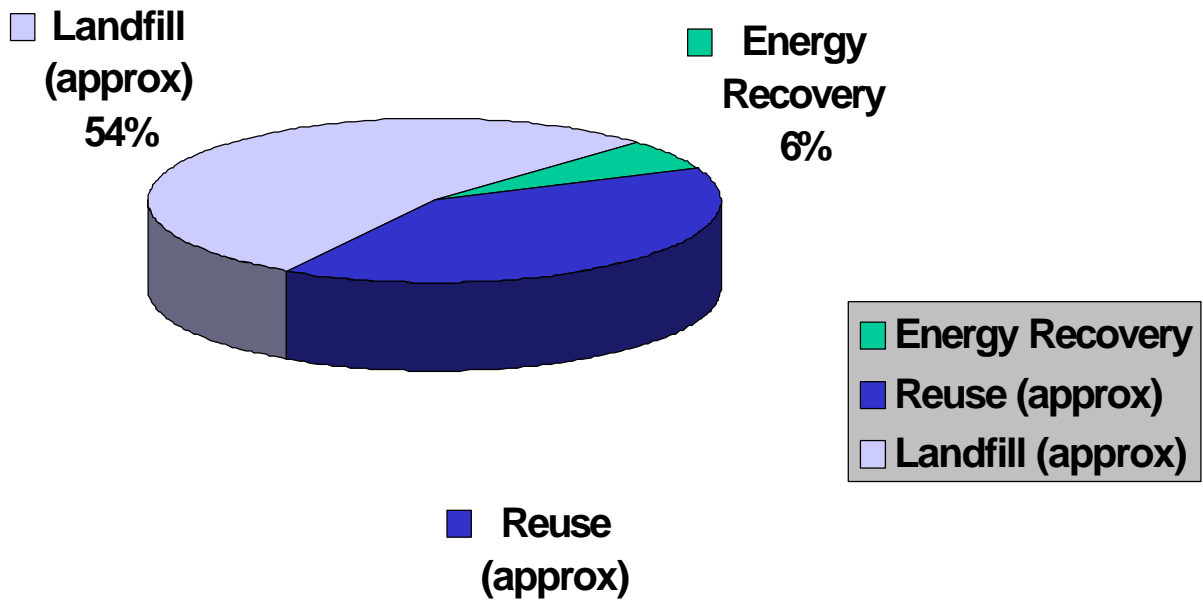
Industrial Waste Disposal End Points

- energy recovery
- fiber recovery
- storage
- landfill
- unknown



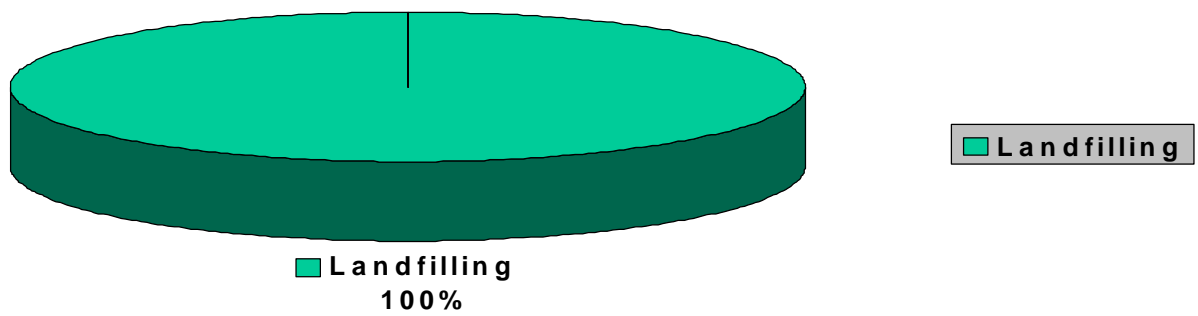
CCA

Industrial Waste Disposal End Points

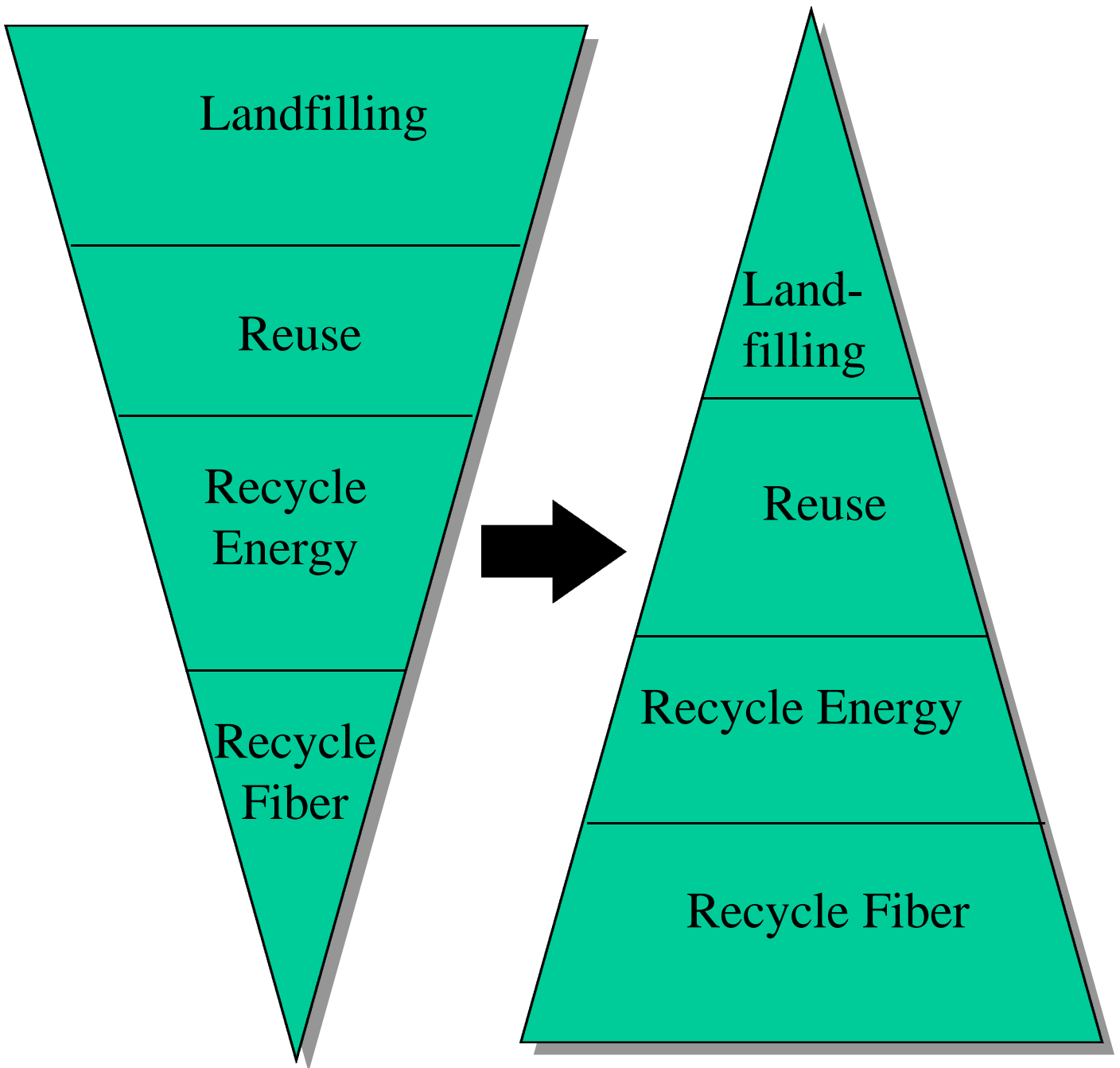


CCA

Waste Treated Consumer Products - Disposal Options



GOAL



- *Introduction*
- *Setting the Stage*
- *Treated Wood Wastes in Canada*
- *Waste Management Options and Barriers*
- *National Waste Management Strategy*
- *Summary and Conclusions*

- **Most Significant Issues:**
- **Cooperative vs Regulatory Approach**
- **Results of the Re-evaluation**
- **Solutions to managing waste treated wood**
- **There have been successes and the prognosis is good**
.....