



CROWN CORK & SEAL

Crown Cork & Seal Canada Inc.

Health & Safety Benefits of Pollution Prevention



Canadian Pollution Prevention Roundtable
Calgary - June 13, 2002

Crown Cork & Seal Canada Inc.

Crown Cork & Seal Canada Inc.

- **100 years in Canada**
- **Crown Seal = Bottle cap**
- **Our Customers are household names**
- **More than just cans...**



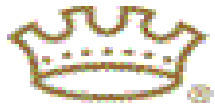


Crown Cork & Seal Canada Inc.

Introduction

- **How does Health & Safety Relate?**
- **When to use the information?**
- **CCS Experience linked to P2 Activities**
- **Conclusion**

Canadian Pollution Prevention Roundtable - June 12, 2002



CROWN CORK & SEAL

Crown Cork & Seal Canada Inc.

Summary of Pollution Prevention Activities

- **Source Reductions**
- **Process Changes**
- **Substitutions and Conversions**

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Source Reductions

- **Starting Gauges reduction – ergonomic**
- **Reduced Compound Filmweight – less fumes**
- **Reduced Inside Spray Filmweight – less fumes**
- **Lower VOC Compound – less solvent exposure**

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Process Changes

- **Line Scheduling – less changeovers/solvent use**
- **Pressure Control - inside spray machines**
- **Backwash elimination - machine conversion**

Crown Cork & Seal Canada Inc.

Process Changes

Elimination of Backwash solvent



Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Substitutions and Conversions

- **Water-based inside spray Food cans – less fumes**
- **Conversion to tin solder & glued cans – no lead**
- **Mechanical & Aqueous parts washing – air/skin**
- **Aqueous Sheet Lube – no exposure to Heptane**
- **Conversion to NGV Forklift Trucks - multiple**
- **Packaging - plastic pallets - lifting & handling**

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Substitutions and Conversions

Water-based inside spray - Food cans - fumes



Crown Cork & Seal Canada Inc.

Substitutions and Conversions

Solder to tin solder and glue - lead elimination



Crown Cork & Seal Canada Inc.

Substitutions and Conversions

Mechanical/Aqueous Parts washing



Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Substitutions and Conversions

Aqueous Sheet Lube – no exposure to Heptane



Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Substitutions and Conversions

Aqueous Sheet Lube – no exposure to Heptane



Before



After

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Benefits of NGV Forklift Trucks

Indoor Air Quality

- **Carbon Monoxide Levels <50 ppm**
- **No more smell**

Back Injury Prevention

- **Single Claim - \$150,000**
- **Workforce getting older/Female Workers**
- **2000 High Risk Lifts/Year**

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Pictures of Chatham, Ontario - Forklift Fleet



Before



After

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Pictures of Chatham, Ontario - Forklift Fleet



Compressors



Indoor Station



Indoor Dispenser

Canadian Pollution Prevention Roundtable - June 12, 2002

Crown Cork & Seal Canada Inc.

Conclusion

- **Adding to P2 merits**
- **Hidden costs of Health & Safety**
- **Sometimes hard to remember the “before”**
- **Keep an open mind to new ideas**

Canadian Pollution Prevention Roundtable - June 12, 2002