



12TH CANADIAN POLLUTION PREVENTION ROUNDTABLE

June 10-12, 2008
Edmonton, Alberta

Crowne Plaza- Chateau Lacombe





9.2 “Zeal to Heal”

Kady Cowan, Energy Steward,
University Health Network
(2008 P2 Award Winner- Organization)



University Health Network

Toronto General Hospital Toronto Western Hospital Princess Margaret Hospital

CCME P2 Award Presentation

Canadian Pollution Prevention Roundtable

Edmonton - June 12, 2008

VITALS

- University Health Network - Toronto, Ontario
 - Toronto Western Hospital (TWH)
 - Toronto General Hospital (TGH)
 - Princess Margaret Hospital (PMH)
- 4.5 million ft²
- 700 beds
- 12, 000 staff, 1800 volunteers
- 1 million ambulatory visit / year
- 230,000 inpatient days / year



IMAGING - TWH



University Health Network

IMAGING – TGH



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IMAGING - PMH



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Energy and Water 2007

- 122 million kWh
- 4.6 million m³ natural gas
- 298 million lbs steam
- 604,000 m³ water
- 68,000 tonnes CO₂ e
- \$23 million on all utilities



Courtesy Benjamin S. Carson, Sr., M.D. and Keith Weller



Waste 2007

- 11,000 kg per day non hazardous waste
- 3000 kg is recycled – blue box and beyond
- Hazardous waste
 - Biomedical 554,000 kg
 - Chemical 29,500 kg
 - Pharmaceutical 5000 kg



Brief Summary of our P2 Successes

- Environmental Policy
- Environmental Management System
- Two full-time positions in the Energy and Environment Department



Chemical Phase Out

- In-house recycling of alcohols and xylenes since 2000
- Ethanol recycling since 2005
- Mercury free substitute for B5 fixative
- Fewer items being sterilized with Ethylene oxide
- Stopped the use of pesticides in 2001
- Eliminated printing and imaging chemicals
- Vendors reformulated cleaning products on our request to eliminate NPEs
- Anesthetic gas recycling



Mercury Phase Out

- Reduced the number of Mercury blood pressure cuffs from 1500 to 100
- No new mercury containing items purchased at UHN



Biomedical Waste Reduction

- 26% of the waste being treated as biomedical waste was actually non-hazardous
 - Awareness program at large
 - Department specific training
 - Assessment of receptacle placement
- By 2004 only 5.5% of non-hazardous waste was getting into this stream
- Savings of 89,000 Kg and \$35,000 / year



Waste Reduction

- Use of totes instead of boxes for shipping
- Awareness and training
- Convene waste groups at each site to meet monthly



Energy Conservation and Efficiency

- TLC – Thermostats, Lights and Controls
“Care to Conserve”
- Steam Heat Recovery system PMH
- The audit and repair of steam traps at TGH
- Innovative lighting control system
- Boiler economizers at TWH
- EnviroTower for chiller
- Fan scheduling
- Savings 27,500 GJ and \$384,000



Green Procurement Policy

- Used in RFPs and includes
 - Supply re-usable products
 - Limit packaging
 - Assessing products for hazardous materials
 - Implement a “take-back” program



Construction and Design guidelines

- Renovation, construction and large equipment projects
- Reduce PVC and vinyl
- Tabulating energy costs
- Energy star electronics
- Etc...



Awareness

- 3000 employees trained every year
- Green team 170 members
- Newsletters
 - Talkin' Trash
 - Bright Ideas
- Support alternative commuting option for staff
- Sharing the information far and wide



Contact

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Because healthcare should not
create health problems



University Health Network