

MANITOBA HYDRO – POWER SMART PROGRAM
PROJECT TITLE: City of Thompson
Energy Savings Opportunities – Recycling Center

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Guy Harkin

A tour of the City of Thompson Recycling Center was conducted on September 19, 2003 to initially identify the potential for energy savings opportunities.

The following is a brief list of opportunities that were found on that day:

- Doors

The north facing single entrance door can be a great source for infiltration in the winter months. A double door system would help cut down the amount of cold air entering and a small double door vestibule would cut down the infiltration to a greater degree. The garage doors are showing signs of aging and annual maintenance should be performed to keep these doors tight in the heating season. Internal or external vestibules or curtains could be constructed to keep the wind-powered infiltration air to a minimum when the garage door is fully opened during loading/unloading operations.

- Heating

The thermostats were found to be turned down to minimums. During the heating season, employees may be tempted to turn them up to maximums and either turn them to minimums when the desired temperature is reached, or leave them on maximums altogether. It is suggested that the thermostats be disabled from manual manipulation and locked in to a pre-determined temperature. Using an automatic set-back feature would save even more heating costs by allowing a lower temperature during off-hours. The ceiling fans are excellent for circulating warm air back to ground level as long as the blades are turning in the correct direction. Keeping the heating units clean will increase the efficiency and heat output of the units.

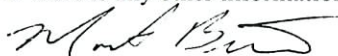
- Lighting

The warehouse lighting is newer metal halide and quite energy efficient. The office lighting is the aging T-12 variety and could be upgraded to the newer and more efficient T-8. Exit signs appear to be incandescent and may be replaced by LED units which are more efficient and last much longer. Both lighting systems can be partially funded by Power Smart.

- Hydraulic Unit

This 20 hp unit was found to be running when not in use. It is suggested that the unit could be turned off for non-use periods of 10 minutes or more, but it is very important that the O&M manual be consulted for restrictions on duty cycle and/or number of motor starts per hour. All motors have a duty cycle which must be respected in order to achieve the expected life of the machine.

If there is any other information requested, please contact your Manitoba Hydro representative.



Martin Bima
 Business Engineering Services