

# **Reducing Mercury Sources** Council of Athabascan Tribal Governments



**Challenge:** Fluorescent lighting has mercury ingredients which, if not disposed of properly, are toxic and dangerous to human health. Removing this product from residential homes and commercial facilities will reduce the health hazards from mercury and still provide a positive lighting environment and reduces energy costs.

#### **Project Objective**

The Council of Athabascan Tribal Governments (CATG) rewired lighting fixtures to replace fluorescent light tubes and compact fluorescent light (CFL) bulbs with "LED" lamps in two residential homes and one community facility each in three villages in the Yukon Flats Region.

### **Results and Benefits**

- The residences and offices showed significant reduction in energy used.
- Raised community awareness of uncontrolled dumping of hazardous waste in community landfills. Reduced the amount of materials in the communities that could become hazardous waste if dumped in the landfill.

### **Lessons Learned**

- Take small steps and use a simple approach to allow the local community to address major environmental issues and witness success over time.
- Don't plan a huge project if you don't understand the financial commitment.
- Hire an individual who is certified and qualified to do electrical wiring.
- Don't assume that all wiring in a home was done by certified and qualified electrician. We found a light fixture chassis that was hot!
- Use proper electrical tools to ensure a safe work environment, and practice safe work ethics.
- Do a thorough assessment of light fixtures you will be rewiring. There are different types of light fixtures out there.
- Create an inventory of material needed for the project to ensure sufficient supplies and materials are available.
- Be prepared for unexpected events that can cause delays; don't let this discourage you.

CATG Finance Department confirmed that converting fluorescent lamps to LED lamps saved CATG Clinic close to \$60,000 per year.



## Community Environmental Demonstration Projects

Funding and technical support provided by Zender Environmental through the Community Environmental **Demonstration Grant** Program. Grants were small US EPA-funded, Alaska-based projects for innovative, locallyled ways to better the health of tribal members and their environment. The Community Environmental Demonstration Grant Program was made possible with the Alaska Tribal Multi-Media Grant from the US EPA.

