

FIELD TRIPS

Ministry of Environment, Air Quality Monitoring Stations

Have the Regional Air Pollution Meteorologist or other Ministry of Environment representative introduce students to the air quality monitoring equipment. Students will be invited to see the monitoring station up on the roof of the Plaza 400 Building located on the corner of 4th Avenue and Queensway Street. This tour provides an opportunity for students, grades 4 to 12, to see the type of technology used to give hourly updates on air quality levels in the city. Contact Dennis Fudge, Air Pollution Meteorologist at 250.565.4210 or Dennis.Fudge@gov.bc.ca

UNBC's Bioenergy Centre

Take your students on a tour of the University of Northern British Columbia's award winning bioenergy project. Wood waste from the local sawmill is converted into energy to heat the university campus. This system allows for a reduction in fossil fuel consumption by 85%. A tour takes about an hour when students come with questions. For the best learning experience, it may be helpful for the class to have a brief discussion beforehand about energy and to consider the following:

1. What heats your home in the winter? (furnace, electric baseboards, wood stove, etc.)
2. What kind of fuel is used to heat your home? (natural gas, electricity, firewood, wood pellets, etc.)
3. What happens to the fuel when it is burned or used?

To book a student tour contact Amanda Drew, Energy Technician at 250.960.5790 or Amanda.Drew@unbc.ca Further information about the Bioenergy Centre can be found on the UNBC website: <http://www.unbc.ca/green/energy.html>



UNBC's Bioenergy Plant, photo provided courtesy of the University of Northern British Columbia

City of Prince George, District Energy System

District energy systems generate heat in a central location and distribute it through insulated piping to surrounding buildings, eliminating the need for individual natural gas boilers in each facility. Planning for the Prince George Downtown District Energy System (DDES) began in 1999. The system, inaugurated in 2012, will generate heat for institutional, corporate, and City-owned buildings in the downtown core. It will also achieve the additional objectives of reducing reliance on fossil fuels, keeping energy

dollars in the community, and reducing the amount of particulate matter entering the Prince George airshed. As a result of the upgrades, including the electrostatic precipitator:

- Emissions of particulate matter from wood combustion will be reduced by 30.7 tonnes per year, equal to removing 5,110 woodstoves from the airshed.
- Truck traffic will be reduced by 300 trucks per year (52,500 km/year), reducing particulate matter emissions by approximately 70 tonnes per year.

Take students from grades 10 to 12 on a tour of the Downtown District Energy System. For more information or to book tour contact Kristy Brown, CTech City of Prince George, at 250 561-7518 or kbrown@city.pg.bc.ca

Recycling and Environmental Action Planning Society (REAPS)

REAPS assists residents, businesses and institutions in waste reduction and choosing green practices. It was started with the mandate of fostering environmental stewardship in the region. Details about presentations and workshops from REAPS can be found on their website: <http://www.reaps.org>

To book a field trip to the REAPS site call (250) 561-7327 or email Terri McClymont, Executive Director, terri@reaps.org

The Exploration Place Museum

The Exploration Place Museum located next to Fort George Park offers a school program specifically exploring air quality and the impacts poor air quality have on health. This field trip activity is most appropriate for primary or intermediate students. Canfor Pulp and Paper Partnerships in partnership with The Exploration Place has established an Interactive Display that youth can use to explore the background and monitoring of air quality in Prince George. To book a field trip to the museum or for more information go to the Online Booking Form at <http://www.theexplorationplace.com/kid-s-programs/class-field-trips>

If your school is located within 5 kilometers of The Exploration Place, consider taking students to the museum on a bike ride. Attending the school program could become a day event, promoting active transportation by bicycling both ways and refueling with a picnic in Fort George Park.

Walking Tour

Take a walk with your students either through the neighborhood around the school or at another local location of your choosing. As you walk together encourage students to observe contributors to poor air quality. They should make a mental note of emitters as well as behaviors that were being practiced to reduce emissions. Invite them to write a brief report about their observations and allow for time as a class to discuss what was observed.