



project receiving approvals from the EUB, Alberta Environment and Parkland County, excavation of the facility footprint is underway. We are working to minimize the impacts of construction activities where ever possible. We will continue to update you on construction plans as we move forward.

More information on the K3 project can be found at: www.epcor.ca/communities/Alberta/initiatives/keephills3, calling 1-877-636-7823 (toll free) or emailing Keephills3@TransAlta.com.

Mine Trucks Getting New Mufflers

Two of the new mine hauler trucks are getting noise abatement muffler systems installed at the end of April. The mine is committed to reducing noise from the mining operations to minimize impacts to area residents. The mine works regularly on noise reduction solutions. Noise reduction systems are designed individually for each truck which requires a few months time from testing to implementation.

Prairie Mine plans for Dragline Crossing

Currently the Genesee mine has been digging for coal on the east side of Highway 770. Over the past two years, preparations have been underway preparing sections on the west side (west field) of Highway 770 for coal removal for use at the Genesee Generating Station. In late 2007, Prairie Mines (formerly Luscar) will walk one of their draglines (M8200) across Highway 770 to start mining in the west field. The dragline weighs approximately 8 500 000 pounds. Extensive plans and engineering designs are being prepared to ensure the safety of the community and the integrity of existing infrastructure and the equipment. Up to a 24-hour detour of Highway 770 is anticipated. Dates and times will be provided once they are determined.

Mining Moves to the West Field

The Genesee Station runs on coal provided from the Genesee Mine. One of the new areas to be mined, within our existing mine licence permit area, is on the west side of Highway 770, northwest of the cooling pond – the west field. In addition to the dragline crossing, two miles of RR33, between roads 502 and 504, will be closed in late 2007. EPCOR is working with Leduc County to determine ways to minimize impacts to the community.

Community Connections

As a neighbour, the Genesee Generating Station is committed to staying connected with the community. Recent and upcoming activities include:

EPCOR Community Advisory Task Group (E-CATG) for the Genesee Operations

The first meeting of our new advisory group, the E-CATG, was held on February 27th at the Warburg Fire Hall. 12 participants make up the new group and will provide input over the next two years, until December 2008. A summary of the meeting was distributed to the community in early April. If you didn't receive a copy, please contact (780) 848-8474 or visit www.epcor.ca.

Community Presentations about Genesee Operations

Trevor Grams, Station Manager, Gary Fulmore, Genesee Business Services Manager and Community Liaisons Megan Young and Tricia Johnston presented to the Villages of Warburg and Thorsby, Warburg Hutterite Colony, Leduc Fish and Game Association, Warburg Economic Development Committee, Genesee Agricultural Society, and area school principals in March about some of the Genesee operation initiatives in 2007.

St. Johns First Aid Training – FULL

EPCOR offers subsidized St. John's First Aid Training to the local area community (\$10 per participant). The spring course, scheduled for May 26-27 at the Genesee Community Hall, is currently full. To get added to the list for the fall course, please contact 848-8474.

EPCOR Participates in Warburg Canada Day Celebrations

For the fourth year in a row, EPCOR will be joining the Warburg Canada Day Celebrations on Saturday, June 23rd. Drop by the EPCOR tent for a visit.

Genesee Heritage Park Opens

Leduc County will be opening the Genesee Heritage Park on Friday, May 18th until October 30th. Prior to opening, Leduc County must complete a park assessment which requires minimal snow cover. EPCOR donated the park to Leduc County in 2006. The pond is stocked with Rainbow Trout – we wish you a successful and enjoyable summer of fishing and fresh air.

Genesee Station Connection

April 2007



Dear Friends and Neighbours:

It is hard to believe we are now officially in spring and the first quarter of the year has come and gone. With the change in season, the Genesee Station is working to complete some projects and ramp up for the summer months ahead.

Over the winter we put a strong emphasis on improving our Genesee land management practices and introducing new guidelines developed with input from the community. In March, we advised all our land lease patrons of their opportunity to renew. The majority of the leases are now available for five year terms.

Continuing on our commitment to improve land practices, we are hiring a Vegetation Management Consultant to work with the station, the mine and the community to develop a three-year vegetation management plan. Further details are provided in the article, 'Genesee Station embarks on Three Year Vegetation Management Plan' below.

At the end of February, I participated, along with Mike Peck, Mine Manager, at the first meeting of the EPCOR Community Advisory Group (E-CATG) for the Genesee Operations. I enjoyed meeting the 12 participants and listening to their feedback. The group has chosen two other meeting dates (April 24th and October 30th) and will be advising on specific topics with regards to the Genesee Operations. The E-CATG is one way EPCOR learns about the priorities and interests of the area communities. A summary from the first meeting was mailed to the community about two weeks ago.

In March, we wrapped up a series of community presentations conducted to share information about the Genesee operations with our neighbours and highlight initiatives ahead in 2007. Some of the organizations and groups we met with included the Villages of Warburg and Thorsby, the Genesee Agricultural Society, the area school principals and the Leduc Fish and Game Association.

If you have any suggestions or concerns to improve our business practices, our communication or our outreach, please contact **Megan Young or Tricia Johnston at (780) 848-8474 / myoung@epcor.ca or tjohnsto@epcor.ca**.

TREVOR GRAMS, Genesee Plant Manager, EPCOR

Ontario Minister Impressed with G3



Photo Caption: On the roof at Genesee, left to right: Gary Fulmore, Manager, Genesee Business Services; Sandra Pupatello, Ontario Minister of Economic Development and Trade; Valerie Poulin, Chief of Staff to the Minister; George Mandrapilas, Sector Competitiveness Branch, Ministry of Economic Development and Trade; Fernando Traficante, Sector Competitiveness Branch, Ministry of Economic Development and Trade; David Lewin, Senior Vice-President, IGCC Development.

Sandra Pupatello, Ontario Minister of Economic Development, toured Genesee 3 and was impressed by the supercritical power generation process and the size of the operation.

The Minister and her staff were especially interested in the potential for the gasification of coal and the front-end engineering design study for an integrated gasification combined cycle (IGCC) plant being undertaken by EPCOR and the Canadian Clean Power Coalition.

The Ontario tour was the latest in a long list of visits by federal and provincial leaders and officials from across the country who wanted to see for themselves Canada's most advanced coal-fired power generation plant.

Genesee Station Embarks on Three Year Vegetation Management Plan

The Genesee Station is taking a more proactive approach to the vegetation management on EPCOR owned land in the Genesee area. After completing our land use review this past winter, we realized the need to improve our vegetation management practices; by incorporating long-term planning, being strategic and seeking advice from experts. And that is exactly what we are doing. We



We'd love to hear from you!

If you have suggestions about how EPCOR can participate in your community, or if you have questions or comments, please contact our Community Liaisons, **Tricia Johnston** or **Megan Young** at **(780) 848-8474**.

have hired a vegetation management consultant, Milo Mihajlovich with Incremental Forest Technologies Ltd., who will help us develop a three-year plan. In 2007, the main tasks are to take a complete inventory of the land and land processes, consult the community for input on vegetation concerns and best practices in the area, review reclamation requirements, and identify and address problem areas.

We are hosting an open discussion with Milo on Wednesday, May 2 from 6:30-9:00 p.m. to get community feedback. If you would like to attend please call 848-8474.

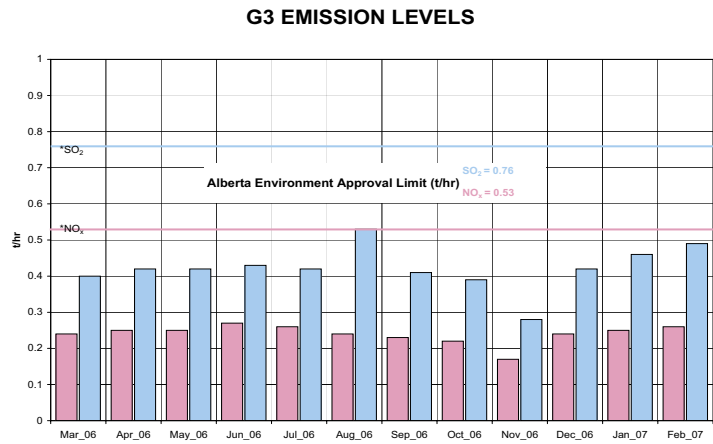
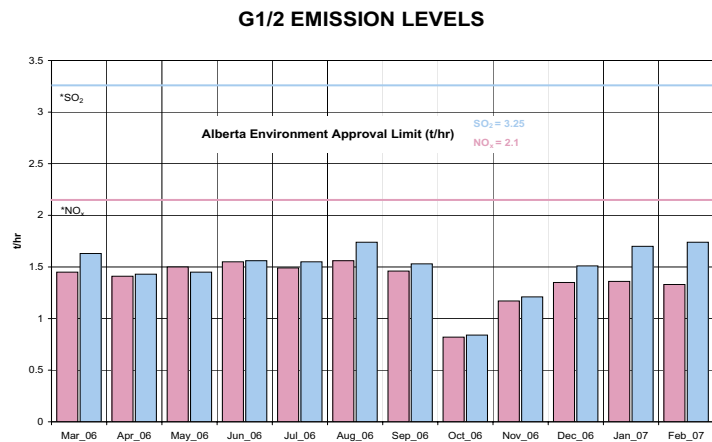
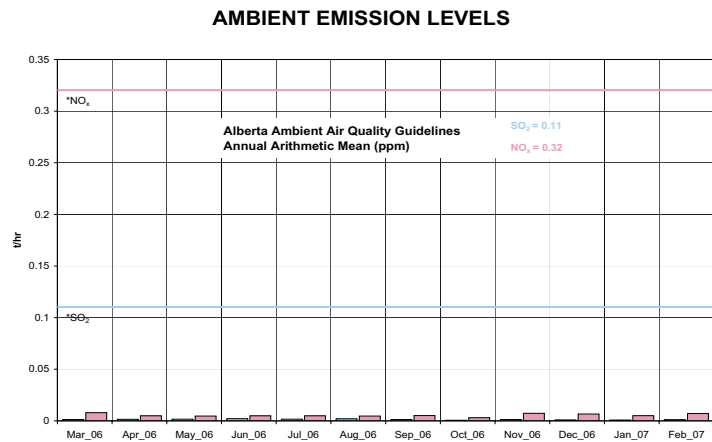
Genesee Environmental Report Card

Genesee Continues to Perform Well

As part of our ongoing commitment, we are pleased to provide you with our recent environmental performance results. The following graphs show:

- ambient air quality as measured by the Genesee ambient air monitoring trailer
- stack emissions for stack one (for generating units 1 and 2)
- stack emissions for stack two (for generating unit 3)

Measurements are compared to either guidelines or approval limits as set out by Alberta Environment, which Genesee continues to operate below maximum levels set for ambient air quality guidelines as well as stack approval limits.



*Sulphur Dioxide (SO₂): a strong smelling, colourless gas that is formed by the combustion of fossil fuels. In high concentrations, SO₂ is known to be harmful to vegetation and human health. SO₂ is soluble in water and excessive levels can lead to sulfuric acid deposition or acid rain.

Nitrogen Oxides (NO_x): the term used to describe NO (nitrogen oxide), NO₂ (nitrogen dioxide) and other nitrogen oxides. The major sources of man-made NO_x are high-temperature combustion processes, such as those occurring in automobiles and power plants. When concentration is high, NO_x is of concern because it contributes to ground-level ozone or smog. Genesee 3 approval limits are based on a 720 hour rolling average.

Note: All results are converted to reference standard conditions so as to be comparable to other coal fired plants in Alberta and elsewhere, and are dry concentrations corrected to 50% excess air; ppm: parts per million. An example of the quantity of Sulfur Dioxide and Nitrogen Oxides measured at ambient air sites in parts per million would be equal to approximately 1/100th of a grain of salt per breath of air. G3 has separate approval limits from G1 and G2 for its stack emissions. G3 approval limits are in terms of a mass emission rate (i.e. tonnes per hour). To be consistent for all units, we have shown G1 and G2 emissions and limits in tonnes / hour as well.

Mercury Emissions to be Reduced at Genesee



Photo Caption: All three units at Genesee will be outfitted with mercury capture technology. The Keephills 3 power project, being developed by EPCOR and TransAlta, will also be equipped to meet the Canadian-wide standard for mercury.

The Genesee Generating Station is poised to receive state-of-the-art emissions control technology designed to capture at least 70 per cent of mercury from coal. Emission reductions on this scale pose a considerable challenge since the mercury concentration in flue gas is extremely low—about one part per billion.

“To understand the challenge, imagine that there are 30 billion ping pong balls in the Houston Astrodome, and only 30 of these are mercury,” said Diane Hollman, Manager, Environmental Issues. “To capture 70%, you would need to find and remove 21 of these balls—and since the flue gas flow is continuous, you’d have to capture them all before the next 30 billion arrived.”



Capturing mercury emissions is comparable to plucking 21 shaded ping pong balls out of 30 billion white ones—all before the next batch of shaded balls arrive.

EPCOR’s mercury reduction initiative is being prepared long in advance of the Alberta regulation deadline that requires Alberta’s coal-fired generating stations to make cuts by January 1, 2011. The proposed technology will be submitted before April 1, 2007 to Alberta Environment, which set the 70 percent reduction target based on the capabilities of today’s available technology.

“This control technology is not in commercial use on power plants anywhere else in Canada,” Diane said. “By cutting mercury emissions, we’re reducing the contribution to global mercury emissions, not just locally.”

When burned, coal produces mostly “elemental” mercury, which enters the global pool and remains in the atmosphere for an estimated one to four years, as opposed to other forms that are deposited more locally. EPCOR’s approach for capturing the mercury at Genesee is to inject enhanced activated carbon powder into the flue gas. The mercury binds to the carbon, which is then collected by the existing particulate control equipment and small amounts are deposited as part of the fly ash. Fly ash is then returned to the mine above the ground water level. Mercury binds very tightly to activated carbon and studies have shown that potential for leaching is low.

Under the plan, installation of the equipment would begin in 2009 and be completed by the beginning of 2010. That would give EPCOR a full year to commission and troubleshoot the equipment before it would be required to perform under the regulation that is effective in 2011. The proposal also includes plans to install new equipment for continuous mercury monitoring. Additional measures for mercury control will be added if needed.

A Solution Years in the Making

In 2002, Alberta power generators, including EPCOR, began 39 weeks of intensive coal and ash residue sampling, emissions testing and technology reviews. EPCOR, ATCO and TransAlta then embarked on a program to find the best solution, piloting the technology from 2004 – 2006 and launching slipstream and full-scale testing in 2006.

For more information on the Mercury Emissions Regulation visit: <http://www.canlii.org/ab/laws/regu/2006r.34/20061113/whole.html> for the AR 34/2006 – Mercury Emissions from Coal-Fired Power Plants Regulation.

For information on mercury, visit the Environment Canada “Mercury and the Environment” webpage www.ec.gc.ca/MERCURY/EN/index.cfm

Report Wildlife

As part of EPCOR’s Wildlife Monitoring Program, the Wildlife Complaints Monitoring program was implemented to monitor wildlife complaints and related issues in the Genesee region. All complaints are recorded on a Public Complaints Log and will be used to determine areas of concern. Contact (780) 848-8474 to report any wildlife complaints.

Congratulations Paula!

Paula Schnick, Genesee Land Services Coordinator, has moved to a new position in EPCOR. She will be working in the Edmonton office with the Major Projects Group. We wish her all the best. We expect to announce her successor in the next issue.

Road to Champions – EPCOR Youth and Sports Excellence Awards

Applications are being accepted from the Genesee area for the Road to Champions – a program to support excellence among youth at the local level in communities where EPCOR has operations and employees.

The Sports Excellence Award is a contribution directed to a sports organization in EPCOR’s operational communities to assist with the development of sports excellence. The organization receiving the funds (up to \$5,000) must be offering programs in athlete development in any summer or winter Olympic sport and be located in one of the eligible communities. Communities in the Genesee area do qualify.

Youth Excellence Arts & Culture Award is an opportunity for one youth aged 8-25 in each of the eligible communities to be awarded a grant up to \$2,500 from EPCOR. The award is directed to youth demonstrating excellence in the category of Arts & Culture. (Sports initiatives are not eligible for the Youth Excellence Arts & Culture Award.)

Applications will be accepted from March 15th to April 30th. Please watch for local advertisements or check the EPCOR website at www.epcor.ca for more information.

What’s Ahead?

EPCOR and TransAlta proceeding with the Keephills 3 Power Project

Building on the success of Genesee 3, EPCOR is pleased to partner with TransAlta to begin construction of the 450-megawatt generating facility, Keephills 3, adjacent to the existing Keephills power plant, north of the river.

Keephills 3 will use supercritical coal-fired technology – the best available technology economically achievable for use with sub-bituminous coal. Replacing Alberta’s older power plants (like Wabamun 4) with today’s best technology leads to a dramatic and immediate reduction in the emissions from power generation, and is part of the pathway to zero-emission power generation.

EPCOR and TransAlta will be equal partners in the ownership of Keephills 3. EPCOR is responsible for construction and TransAlta will be responsible for operating and maintaining the facility upon completion, scheduled for 2011. The power generated from Keephills 3 will be dispatched to the Alberta electricity grid. With the