

Dear Friends and Neighbours

On September 1, Keephills 3, the 495-megawatt gross (MW) coal-fired generating facility began commercial operation. The joint venture facility owned by TransAlta and Capital Power uses the same supercritical boiler technology as Genesee 3. Both companies independently market and dispatch their share of the unit's electrical output to the Alberta electric grid.

During construction of the Keephills 3 facility, one of the largest and busiest construction sites in Alberta over the past five years, Capital Power achieved one of the best safety records in the industry, with less than one lost time incident per 1.7 million hours worked.



Steel piping network inside Keephills 3.

In October, Capital Power was recognized for its safety performance in 2010 by the Canadian Electrical Association receiving the President's Award of Excellence for Employee Safety (bronze level) for our Canadian Operations.

Capital Power would like to congratulate two young researchers who both successfully defended their Master's thesis recently at the University of Alberta. Both Javier Rodriguez-Alvarez MSc. and Jordana Fair MSc. carried out their reforestation research at the Genesee Mine under the supervision of Dr. Simon Landhausser.

Javier's study, "Impact of seedling characteristics, out-planting time, and container size on early establishment of aspen (*Populus tremuloides*) on reclamation sites" looked at selecting and planting aspen tree seedlings in a single tree species reforestation environment. Jordana's research "The potential of forest floor transfer for the reclamation of boreal forest understory plant communities" looked at the various plant species that grow after forest soil has been taken from an existing forest to an area being reclaimed in the mine.

George Greenhough, Manager, Environment and Land Services said, "We are very pleased that both Javier and Jordana carried out their research here at Genesee. "Their work will provide valuable insight into Capital Power's goal to create forested areas within the reclaimed areas of the mine."

Lastly, with cold winter temperatures falling to freezing or below, we remind everyone to stay safe this winter by taking caution against hazards including slippery roads and walkways in order to avoid potential accidents and injuries.

Tim Wisdom

TIM WISDOM, Plant Manager
Genesee Generating Station, Capital Power

Walleye Transfer Project



In late October, Alberta Sustainable Resource Development carried out a project on the Genesee Cooling Pond to capture and transfer walleye to Lake Wabamun, a recreational lake located about 65 kilometres west of Edmonton.

The Department of Fish and Wildlife are re-introducing the predatory fish to Lake Wabamun to improve the lake's ecosystem as part of a six-year project. Since the Genesee Cooling Pond has a population of walleye it made sense to contribute to this worthwhile initiative.

Both nets and fishing rods were used to capture the fish. A relatively small quantity of walleye was caught and the vast majority was all large sized mature fish. It appears that they are not spawning in the cooling pond as no young fish were captured. The presence of mature fish in limited numbers also indicates that the screening equipment that was installed in 2007 is working to limit the uptake of minnows into the cooling pond from the North Saskatchewan River.

Genesee Viewpoint Signage

Stop by and take a look. This summer a series of interpretive signs were installed in the public viewing area located north of the plant off of Hwy 770. The locally produced signs are meant to be an educational point of interest overlooking plant and mining operations, and hopefully provide answers to some of the common questions we hear about the Genesee operation.



Genesee Mine Application

In early October, the Genesee Mine submitted an application to amend the existing Genesee Mine approvals to the Energy Resources Conservation Board (ERCB) and to Alberta Environment (AENV). The Mine will be directed by the ERCB and AENV on how (where and when) to provide public notice on the application. Notice will be placed in local newspapers and hard copies of the application are available for review at the following locations:

- Village of Warburg Office
- County of Leduc Office
- County of Parkland Office
- The Genesee Mine
- Genesee Land Management Office (outside main gate of GGS)
- Village of Thorsby Office

An interactive CD of the entire Application is also available. Please contact Community Consultation (**780-848-8474** or **PublicConsultation@capitalpower.com**) to have a copy mailed to you.

What's Next?

Once notice is published, the public has 30–60 days to review the application and submit their concerns. These concerns and questions are the responsibility of the Applicant to address. At the same time, the ERCB and AENV undertake a technical review of the application. If additional information or clarification is required, they will submit questions to the Genesee Mine. This thorough review and submission of additional information can normally take about a year to complete. Once the review is completed and any public statements of concern have been received and understood, the ERCB can determine whether the issuance of a Permit is in order, or, if additional information and discussion is required. This can be in several forms, including a hearing if necessary.

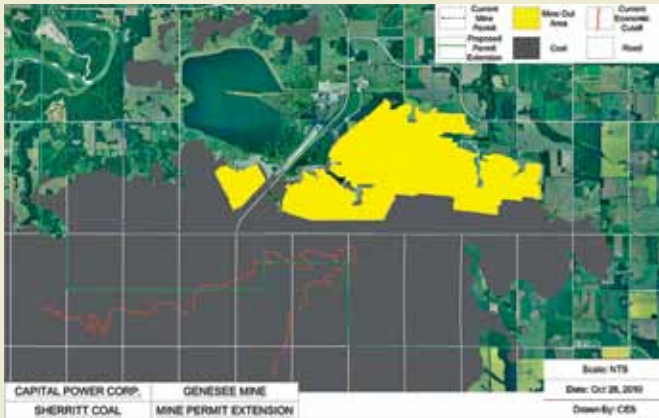
The Genesee Mine would like to thank all of the area residents and other stakeholders for their patience and participation during the process over the past year to build the application. The Genesee Mine will continue to remain active in the local community and welcomes additional comments and questions at any time.

PUBLIC COAL SALES

Many people rely on coal as an economical source of fuel for heating their homes or for greenhouses. Again this winter, public coal sales are available at the Genesee Power Station by appointment only on Saturday mornings. Please contact, Lorne or Sharon Lawrence at **780-789-2117** to book an appointment.

The coal is sold in "mini bulk" bags containing a minimum of one tonne of coal at a cost of \$45 including GST per bag. The lump coal is screened and is approximately three inches in size and larger.

Genesee Mine Q&A



2011 Genesee Mine Coal Limits.

We will continue to answer your questions regarding the proposed Genesee Mine Extension Project in the newsletter and through special newsletter insert editions. Following are some of the questions we have heard regarding the proposed Project.

Can PMRL (Genesee Mine) oppose a development outside of the proposed permit area?

Yes, however would only do so if that development impacted the ability to purchase or develop land that is required for the Genesee Mine.

When will residents be reimbursed for dry wells?

Capital Power has a well replacement policy in place; refer to section 3.9.3.4 of the Capital Power Land Use Guidelines at www.capitalpower.com. Capital Power's Water Replacement Policy, in place since 1982, addresses local area residents concerns over the potential for mine activities to adversely affect local area water wells. The policy recognizes that mining activities have the potential to disrupt aquifers that provide water for local residents. The policy ensures that Genesee area residents near mining activities are not without water as a direct result of the Genesee

Power Project. The Water Replacement Policy was based on part of the 1982 Leduc County Development Agreement, and continues to be honoured by Capital Power. Details of the program can be found in the 2007 Land Use Guidelines.

What will be used after there is no more coal?

The three Genesee units are configured to run on coal. CPC has no plans currently to retrofit the existing units to burn anything else or add additional generation. The application for the Genesee Mine Extension is intended to secure enough coal to run the existing three Genesee units for the remainder of their operational lives.

Is there land outside the permit area that contains coal?

Yes. The grey area on the map on this page shows coal present in the Genesee area which extends well beyond the current and proposed Genesee Mine boundaries. All of the coal inside the red line is not economical to mine and was therefore not included in the proposed Genesee Mine permit boundary.

How do we know you will follow through on what you say you are going to do when you apply for a new mine licence? Is there any recourse for the public if promises are made by Sherritt during the regulatory process and not kept?

If the proposed mine extension is approved, there will be a number of conditions that the mine will be required to meet as part of its approval. The mine must prove to the regulators that those conditions are being met, and they can impose penalties on the operations if they are not followed through on. Those reports form part of the public record that is submitted to the ERCB and to AENV on a regular basis. In addition to those, the Genesee Mine conducts regular updates to the community through the CATG and Genesee Synergy meeting structures. Capital Power and the Genesee Mine are committed to being a good neighbour. Developing and maintaining trust with our local neighbours is achieved in part by following through on our commitments, and making reasonable efforts to 'make it right' if something is missed.

Mining Operations Effect on Groundwater in the Genesee Area

Statistics of Groundwater Chemistry in Coal Seams – Major Ions

Data Source/ Parameter	Expected Maximum (mg/L)	Alberta Drinking Water Guidelines
Observation Wells (n=16) Reclaimed Areas		
Calcium	30	No guideline
Sodium	530	200
Bicarbonate	1370	No guideline
Sulphate	112	500
Chloride	44	230
pH	8.8	6.5-8.5
Total dissolved solids	1280	500
Domestic Water Wells (GIC) (n=47) Pre-Mined Areas		
Calcium	60	No guideline
Sodium	550	200
Bicarbonate	1200	No guideline
Sulphate	410	500
Chloride	106	230
pH	9	6.5-8.5
Total dissolved solids	1350	500

Bold = Exceeds Alberta Drinking Water Guideline

A number of area residents have asked how underground water is being and will be affected if the mine continues to advance south. As part of the environmental assessment work required for the application, a number of tests and models were run in the area to gain a thorough understanding of existing underground water levels and movements, and determine how it is effected as surface stripping occurs. Full details on the water reports can be found in the Genesee Mine Extension application, but answers to some key questions are below.

How has the water level changed in the reclaimed areas?

Water levels within and around the active mining areas (including reclaimed areas) are constantly being monitored by a network of piezometers. A number of additional tests were conducted as part of the water study for the Genesee Mine Extension application.

In general, underground water levels vary depending on the proximity to the pit being actively mined. Water levels are lower the closer you are to the active pit, and slowly increase and level off to normal levels about two kilometers from the active pit.

The active pit is considered to be the area where mining operations are taking place (earth removed and coal seams being accessed). The ground water level in the active pit generally sits around 730 meters above sea level. Ground water levels within a 2 km radius around active pits are generally between 740-750 meters above sea level. Since all of the reclaimed areas are still within 2 kms of the active pits, the water levels are generally around 740 meters above sea level, but as the mine continues to move south, the water level is expected to increase to the original levels in the reclaimed areas which is about 750 meters above sea level.

Part of the regulator requirements for the mine involves a water management plan which is intended to ensure ground water levels are able to naturally return as close as possible to pre-mining levels.

It is important to note, that all studies and monitoring are completed within the Genesee coal seam, so the elevation numbers above only apply to water within the coal seam. Areas outside of the coal seam are not typically monitored for the purposes of the mine, so water levels may be naturally different than levels within the coal seam, and vary for different reasons.

What is the quality of the water like before and after mining in the area?

Water quality is within the expected levels for this area. Our results are compared with domestic water wells (wells off site) that have not been mined, and observation water wells (wells on site) within the active mining area. Water quality tends to stay fairly consistent before, during and after mining. Post-mining water quality has been returning to what it was before it was mined.

In general the water quality in this area is characterized as being salty (sodium & bicarbonate). There are high concentrations present both in domestic water wells, and in the observation wells on site. Total Dissolved Solids (TDS) are also high in the natural water quality. Due to these naturally occurring conditions, the Alberta Drinking Water Guideline deems that untreated groundwater in the coal seams is not desirable for human consumption. The untreated water does meet the Alberta Drinking Water Guideline for livestock consumption. Water testing is available through the Leduc Public Health Center, **780-980-4644**.

A Visit with the 8750 Dragline at Genesee Mine

The Genesee Mine operates two draglines 24 hours a day. The Marion 8200 operates in the West Field and the Marion 8750 operates in the East Field. The photos and descriptions below provide an up-close look at the Marion 8750 which was commissioned in 1995. It was made by Marion, shipped in pieces from Milwaukee Wisconsin and was assembled on site. To date it has logged approximately 113,000 hours of operating time.



Meet the 8750 Marion Walking Dragline. It runs on power supplied by Genesee Generating Station. The working weight of the 8750 is approximately 15,200,000 lbs and the “shoes” of the dragline are 17’ wide and 84’ long.



This is the bucket of the 8750. It scoops approximately 88 cubic metres of material with each bucket load and is large enough to park two small cars in it.



Cameron Smith, Sr. Engineer Manager with Prairie Mines Royalty Ltd. is approximately 6’3” tall and he is standing at the center of the base of the 8750.



This is the 8750’s operator seat. The operator works a 12 hour shift with one other individual (the oiler) who is responsible for maintaining the dragline’s complex machinery. The dragline does not stop for breaks so the operator and oiler take turns operating the machine during their shift; it is fully equipped with supplies for the 12 hours.



This is the tri-structure of the 8750. The picture was taken from the roof of the dragline. The tri-structure is approximately 212 ft. tall. The hoist ropes that lift the bucket up and down are 1035’, the drag ropes that drag the bucket in are 625’.

Genesee Station Environmental Performance

The following graphs show the most recent environmental performance results:

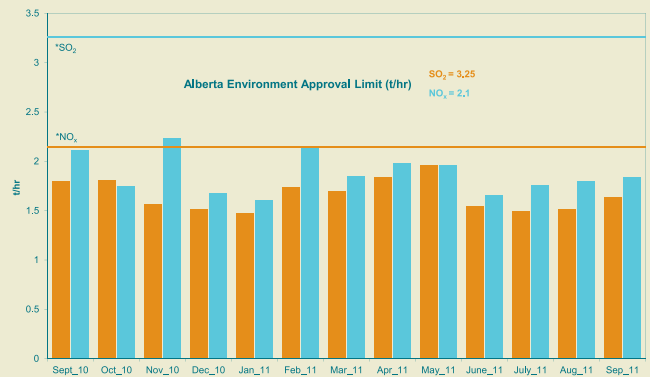
- Ambient air quality as measured by the Genesee ambient air monitoring trailer;
- Stack emissions for stack one (for generating units 1 and 2);
- Stack emissions for stack two (for generating unit 3).

Measurements are compared to guidelines and approval limits set by Alberta Environment. Genesee continues to operate below maximum levels set for ambient air quality and stack approval limits.

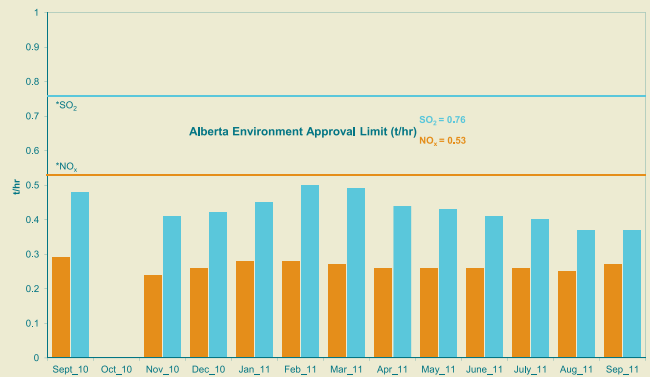
AMBIENT EMISSION LEVELS



G1/2 EMISSION LEVELS



G3 EMISSION LEVELS



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.

In the Community

Edmonton Oilers

In September, Genesee employees **Harold MacDonald**, **Russell Liba** and **Colin Huber** had the chance to hang out with Edmonton Oilers goalie **Devan Dubnyk**, and teach others about the importance of safety—what a great day's work!

Capital Power's support of the Edmonton Oilers Hockey Club is a fundamental part of our Head Office Community Investment Program. Capital Power and the Edmonton Oilers have teamed up this season to teach us that safety is not a game through a series of public service announcements which are featured on Sportsnet, the Oilers' website, shown in-arena during home games, and on Oilers radio broadcasts throughout the 2011–12 season.

Annual United Way Campaign

Capital Power's annual United Way Campaign took place in October. Genesee employees contributed more than \$15,000 which was matched dollar-for-dollar by the company, and raised additional dollars through special event fundraising. All together more than \$35,000 was raised which will contribute to important social issues in the Greater Edmonton Region which includes Leduc and Parkland County.

Supporting Local Community Initiatives

Sherritt Coal's Genesee Operations annually contribute to many community-based initiatives. Sherritt recently matched and contributed the proceeds from its annual golf tournament to the Warburg Family and Community Support Service (FCSS) and the Warburg Fire Department.

Sherritt provided \$1,500 to FCSS which delivers important social programs and services in the community and \$1,000 to the Warburg Fire Department which provides essential fire and rescue services to the western portion of Leduc County.

All You Want in a Career

Are you, or is someone you know, interested in working at Capital Power? We provide careers that offer professional growth, new challenges, recognition and long-term satisfaction. For more information on starting a career with Capital Power and to view current job opportunities, visit our website at **www.capitalpower.com/careers**. Capital Power is an equal opportunity employer. Sherritt Coal wants you to start now, grow professionally and emerge as a leader in the coal mining industry, where there are opportunities in a number of work areas. For more information about Sherritt's Coal business, or to view all current job opportunities, visit **www.sherritt.com**.



GENESEEE CONTACT INFORMATION

Below are some contact numbers if you have questions or comments about our operations, community outreach or our land management practices:

Generating Station Reception
780-848-8300

Community Consultation, Jennifer Lowry
780-848-8474
PublicConsultation@capitalpower.com

Manager, Environment & Land Services,
George Greenhough
780-969-8618

Genesee Guardhouse
(24-hour Security)
780-969-8505

Capital Power Website
www.capitalpower.com

We are proud community members and appreciate receiving feedback from our neighbours about how we can improve our business practices, communication and our outreach.

To help us keep our records up to date and ensure you continue to receive this newsletter, please contact Capital Power Genesee Community Consultation if you are moving, if your contact information changes, or if you prefer we do not store or use your personal information.

Capital Power respects your right to privacy. Any personal information Capital Power collects about you, including your name, address, phone number and email address, will only be used to contact you for the purposes of the consultation process. For further information, please see Capital Power's Privacy Policy at **www.capitalpower.com**.