



The second shipment was offloaded at Ports of Auckland in January. Two mobile hoppers were successfully used to speed up turnaround time.

## Steel talks continuing

Solid Energy is continuing to talk to New Zealand Steel about renewing its supply contract so the future of the Huntly East Mine can be secured.

To help New Zealand Steel consider its options, we have imported two shipments of Indonesian coal that have been blended with local product for trials at the Glenbrook steel mill. In total, about 48,000 tonnes has been imported. At present Solid Energy supplies New Zealand Steel with about 800,000 tonnes of coal a year, a blend of coals from the Rotowaro Opencast Mine and the Huntly East Underground Mine. The current contract ends in May.

Barry Bragg, Solid Energy's Chief

Operating Officer, says the decision is New Zealand Steel's to make.

"In the final analysis it's their decision but we cannot justify the cost of further development at Huntly East Mine without a secure long-term contract to underwrite the investment. We do need to get a return on future operations."

As well as helping New Zealand Steel to see if imported coal would suit its processes, the Indonesian shipments have been a worthwhile exercise for Solid Energy, Mr Bragg says.

"Particularly given the length of time and rising costs of developing and operating new mines, it is a good exercise for us to understand more about the viability

of importing," he says. "We want to offer customers the greatest possible flexibility so we do have to consider it, especially if we are unable to develop local resources competitively and in time to meet demand.

"The price, quality and quantity of coal available, and the cost of setting up import-handling facilities are all elements of this."

While awaiting a decision from New Zealand Steel, Solid Energy is not standing still. We are working to optimise the plan to get access to and mine the north blocks at Huntly East Mine, outside the current mine licence area. We are also recruiting section managers, appointing more trainees and considering equipment options.

## Mining careers showcased at Huntly East

Principals and deputy principals of our four local high schools began their 2007 school year with a visit to Huntly East Underground Mine.

Part of a local Solid Energy initiative to build on links between the mining industry and education, senior managers from Ngaruawahia High School and the colleges of Rakaumanga, Huntly and Te Kauwhata met Huntly East Mine Manager, Paul Hunt, and went through the underground mine.

The visitors spoke to East Mine staff about their roles and learned more about the variety of mining career options available for secondary students. Careers advisors from the schools will be offered a similar visit during Term One.



Principals, deputy principals and senior staff from local high schools had a firsthand look at mining careers. Huntly East Undermanager Mark Bain (at left) and Mine Manager Paul Hunt (centre) hosted the group.

### Contact

If you would like to know more about any of the items in this Community Update, or about Solid Energy in general, please contact:

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# HUNTLY UPDATE

March 2007



## Weaver's Park use expanding

As development of Weaver's Park continues, the public facility is proving increasing popular, with a range of groups and organisations using it to as a venue for their events.

Distance and directional markers have been placed on the walking and mountain bike tracks by PLB Construction Group, while materials and transport, courtesy of Colin Slater Contractor Ltd, added new tracks to the park. Bollards installed by the Waikato District Council now mark out the first stage of what will be the main entrance car park.

The former mine site now hosts a number of annual events, including the popular Solid Energy 5 km and 10 km Run or Walk (taking place this year on Sunday, 1 April) and the North Waikato Primary Schools' Cross Country Championships in September.

During the year, local primary and secondary school teachers took part in Solid Energy's Teachers' Resource Day, learning from a variety of experts about the park and how it could be employed in different curriculum areas.

Well known British botanist and environmental campaigner Dr David Bellamy visited and said the park's juvenile wetlands are "amongst the best in the world". Primary students deemed it a "way cool" outdoor classroom during their visits.



Children from the Huntly Early Childhood Centre came with parents and other adults to help spread bark mulch around trees in the park. The event was a fundraiser for their centre.

Secondary school surf lifesavers, kayakers and waka ama paddlers joined the Hamilton Sea Cadets training on the lake, while the New Zealand School of Commercial Dive Training continues with its specially equipped barge to train and certify divers from around New Zealand, Australia and the Pacific.

The transfer of Weaver's from Solid Energy to the Waikato District Council (WDC) has

been agreed. The council is now gazetting Weaver's as a recreational reserve and has taken on regular maintenance of the park. Solid Energy expects to complete final rehabilitation works over the next year. After the transfer, Solid Energy and WDC will participate in a joint committee overseeing management of the park.

An official opening for the park is likely in early 2008.

## Stockpile C set for construction



Once formed and grassed, coal stockpiles like this one formed in 2005 are difficult to identify.

The formation of a new stockpile south of West Mine Road at Huntly West Mine is going ahead now that consents have been granted by Waitako District Council.

The planning for this began in 2005 and a series of community meetings have been held since then to seek feedback and keep interested people informed about progress. The district council's consent was given shortly before Christmas and no appeals were lodged.

The third stockpile at West Mine is needed to ensure Genesis Energy has enough stock on hand for its Huntly Power Station. Once site preparations are completed, the coal will be trucked from the Rotowaro blending plant along the mine haul road.

Reuben Mills, Solid Energy's Principal Environmental and Consents Specialist, says the public input has been valuable.

"We thank everyone who made time to consider the plans and take part in the meetings and hearings that have been held," he says.

Genesis will be constructing and operating the new stockpile. When completed, Stockpile C will hold about 350,000 tonnes and cover a little over 8 hectares. It is expected it will take about eight months to complete, with the majority sitting behind a natural grassed slope, will be difficult to distinguish from surrounding rolling pastureland.

# Rotowaro Mine Development

Activity has increased at Rotowaro Opencast Mine despite poor weather in recent months, with several projects being completed or taken to the next stage.

Most notable is that motorists are now using the 80 metre long road tunnel beneath the Rotowaro Road Overpass. In the eight months it took to build the overpass drivers were diverted around the site.

The \$5 million multi-plate steel overpass is the largest of its kind in New Zealand and presented some unusual technical challenges for construction company, Brian Perry Civil Ltd, and construction

managers Jones Gray Partners.

## The overpass is:

- 80m long, 9.3m high and 12.5m wide – equal to the width of three of the biggest Komatsu 730E dump trucks
- Constructed on site using 640 7mm plates of galvanised steel held together by 32,000 bolts
- The safety barriers contain 6 tonnes of reinforcing steel and 600 tonnes of concrete.

Over the next seven-to-eight years, about 135,000 round-trips will be made by the huge dump trucks, carrying

approximately 50 million cubic metres of overburden (clay and rock removed from above the coal) from the Awaroa 4 pit to infill and rehabilitate the mined-out Township pit.

These trucks each carry up to 185 tonnes of material and are worth about \$4 million each. In September Leighton Contractors Pty Ltd (which, as HWE Mining, has the contract for Rotowaro coal extraction and overburden stripping) added two more of the machines, bringing the 730E truck fleet to 10.

## Awaroa

Expansion continues at the Awaroa 4 pit, which will continue to supply coal to Huntly Power Station for the next seven-to-eight years. Coal extraction began early in 2005. Up to 2 million cubic metres of overburden a month is being excavated, enough to cover 10 rugby fields to the height of a 10-storey building.

A successful trial in 2006 saw 32,000 tonnes of coal ash returned from the Huntly Power Station ash ponds for disposal at Rotowaro. It was brought in covered trucks and deposited and sealed in specially constructed pods in Awaroa 3, a previously worked pit.

Solid Energy plans to dispose of 1.2 million tonnes of coal ash in similar pods at Rotowaro over the next eight to 10 years.

## Waipuna

Backfilling, or infilling, of the previously-mined Waipuna pit is progressing, with most of the work expected to be completed by late 2007. The long-term, progressive rehabilitation plan for the former pit includes extensive water management ponds and channels, as well as a coal ash disposal area.

## Rehabilitation

A combination of farmland and forestry, with public access to bush walks, wetlands and a lake is the likely long-term end-of-mine use for the Rotowaro Opencast operation.

The rehabilitation involves backfilling the mined area, contouring the land to reflect the surrounding countryside, and replacing, spreading and levelling soil, and replanting. Native species will be planted alongside streams, ponds and wetlands, and on steeper slopes. These will be complemented by larger plantations of exotic trees.

Solid Energy expects to retain an interest in the land for some time after mining ends in order to manage rehabilitation work and its maintenance, as well as managing coal ash placement on the site.

## Mangakotukutuku Stream success



The Mangakotukutuku Stream diversion at Awaroa 4.

Diverting a section of the Mangakotukutuku Stream to allow access to coal in the Awaroa 4 pit is complete and research suggests the waterway is providing a supportive environment for aquatic life.

The diversion adds 400 metres to the stream. To ensure the new section could provide the same kind of environment as the original waterway, the new course was excavated and engineered so it meanders and properly aerates the water. The bed was lined with stones and gravel to help with this.

A whakanoa blessing was held with local iwi in June last year to mingle the waters of the original stream and the diverted section.

Before the diversion was made, fish in the section being changed were trapped and moved downstream. Species for recreational and iwi customary fishing were surveyed, with students from Huntly and Rakaumanga Colleges helping.

They found significant populations of fish and freshwater crayfish, and

a good number of banded and giant kokopu – a rare species. The table below shows species and numbers found in the survey.

This information was compared to earlier surveys in the stream and indicated the natural and diverted watercourses are equally supporting giant kokopu, says Charles Mitchell, an aquaculture expert who carried out the survey.

The results confirm that streamlife within the mine site is diverse and abundant and confirms the good water quality.

## Species

Shortfinned eel	172
Longfinned eel	45
Giant kokopu	13
Banded kokopu	14
Crans bully	20
Common bully	2
Goldfish	3
Perch	1
Koura (crayfish)	97
<b>Total</b>	<b>367</b>

# Rotowaro washery upgrade completed

The washery upgrade at Rotowaro Opencast Mine is complete and has been commissioned. The changes increase both capacity and quality and makes the plant capable of processing up to 150 tonnes of coal an hour.

A year ago Solid Energy began investigating how best to augment the washery. It had been processing up to 90 tonnes an hour. This was by a fairly basic single-stage jig system which did not deal adequately with the fine material (under 4 mm) which makes up about 35% of the mine's production.

Now the plant has a three-stage process. The raw feed first passes across a new large screen that separates all material under 4 mm. The larger material is then cleaned through the original plant's jig.

The finer material is fed through a unit, which separates and cleans material between 1.5 mm and 4 mm. Anything under that is run through a bank of a dozen spirals which wash out any remaining clays.

Although the yields are not expected to increase significantly, the plant will recover more genuinely fine clean coal. Around the end of November, Solid Energy's contractors at Rotowaro, HWE Mining Ltd, began training on the new equipment. The washery is also expected to clean stockpiled material.



The upgraded washery can process up to 150 tonnes an hour.



## Breaker operating

A new rotary breaker has been installed and commissioned at Rotowaro.

The machinery, a large cylindrical screen which revolves and breaks the mined coal down into smaller pieces as well as removing unwanted material such as old mine timbers and rock, sits at the head of the blending plant.

Trucks bring coal from the pits and dump it into hoppers which feed the breaker. The machine was built locally and replaces a breaker which was nearing the end of its operational life.

# Coal Seam Gas

Five wells drilled in the North Huntly Coalfield in 2006 will help Solid Energy determine whether it will move to the commercialisation of coal seam gas (CSG) as an energy source.

Coal seam gas (or coal bed methane) is largely the same as conventional natural gas and occurs naturally in coal seams. It can be used as an energy source for industry and electricity generation or fed into gas transmission systems to add to other gas resources. With increasing pressure to develop new sources of energy for electricity generation and industry, CSG could make a significant contribution to New Zealand's energy needs in the next five to 10 years.

In 2004 we first discussed exploring potential CSG resources in the Waikato. Work done in 2005 delivered enough positive results to support the next stage of drilling. Coal Bed Methane Ltd – a joint venture between Solid Energy and Resource Development Technology LLC, an independent United States gas and oil company – took that next step by drilling five appraisal wells which are providing information about the quantity



An appraisal well flaring gas.

and quality of gas flows in the area.

Analysis of that will lead to decisions about whether to go ahead with a commercial development, its scope and how the gas would be distributed. These decisions are not expected before the end of 2007 and any field development could be expected to take from five to seven years. Production wells would run for approximately eight to 12 years.