



Adelaide Brighton Cement Ltd

Birkenhead

community news



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Welcome to Birkenhead Community News

Our community newsletters are one of the ways we keep you up to date with what is happening at Adelaide Brighton Cement.

In this edition, we update you on the Cement Mill 7 project and some of our ongoing environmental improvement initiatives, from revegetation to our use of alternative fuels and raw materials.

If you want to find out more or to get in touch with us, you can visit our website at www.adelaidebrightoncommunity.com.au or email us at BirkenheadCommunity@adbri.com.au.

During our normal business hours of 8.30am and 5.00pm, you can reach us on the main switchboard number 8300 0300. For matters that arise after hours, please contact our Community Hotline on 8300 0520.



Community Website

Have you logged on to the Adelaide Brighton Community website yet? Launched earlier this year, the new website is an online resource which allows you to stay up to date with what's happening at our Birkenhead plant.

You can access information about our latest improvements, local community programs and information on sponsorship and donations.

The website provides information on the Community Liaison Group, including the latest meeting dates and details on how to get involved.

Find us online at www.adelaidebrightoncommunity.com.au and let us know what you think!



OLD SHIPLOADER



NEW SHIPLOADER

Cement Mill 7 Project

The Cement Mill 7 project, part of the Birkenhead Plant's \$60 million upgrade, is on schedule to be completed at the end of the year. The new cement mill will provide additional milling capacity and allow us to supply the growing demand for "green" cement – increasingly being specified in building projects.

The completion of Cement Mill 7 will allow us to cease trucking clinker from Birkenhead to our Angaston Plant. This will result in the reduction of 50 truck movements per week from the northern end clinker gantry shed.



What does it involve?

The \$60 million upgrade includes:

- Installation of a third cement mill (Cement Mill 7). This will provide additional capacity that will allow us to manufacture cement using other carbon friendly cementitious materials (by-products from other industries) in place of the primary cement material manufactured through the kiln process.
- Upgrade to the ship loading facilities at the Birkenhead wharf to incorporate the best available dust collection technology with improved environmental performance. This was completed in mid 2012.
- Expansion of the existing Brightonlite shed to incorporate a new raw material feed system. This will allow us to relocate certain raw material open stockpiles undercover.
- Installation of a slag dryer and storage facility (slag is a by-product of the steel making industry which replaces primary cement materials and reduces the carbon footprint of the cement manufactured).

These works are situated on the riverside of the site, which means you won't see them from the Victoria Road side.

We are continuing to consult with the community on this project through the Community Liaison Group to ensure that all views are taken into consideration.

Noise and emissions modeling

As part of the project all noise and emissions have been modeled by external consultants to ensure there are no environmental impacts on the local community.

Modelling included the current licensed emissions point (4A and 4B stack), the new slag dryer stack, cement mill exhausts and fugitive dust sources such as stockpiles. This involved using real data from the plant and theoretical models where new equipment installations planned, such as the slag dryer.



Schroder Park Open Day

Visitors are always welcome to come and spend some time at Schroder Park Wetland. For anyone interested in native wildlife, the flourishing wetland is home to a variety of birds, reptiles, insects and aquatic life such as local frog species.

In October we hosted a Schroder Park Open Day where Landscaping / Earthcare Consultant, Nick Fewster, took students and teachers from Portside Christian College through the wetland, giving them the opportunity to experience and learn about a unique natural environment.

"Constructed in 2001 the Schroder Park Wetland, situated at the southern end of the Birkenhead plant, was designed to filter and clean stormwater from the Adelaide Brighton Cement site. Plantings at the wetland were carefully selected to replicate the same plant communities that grew in the region prior to European colonisation. 11 years on the plants are providing a natural oasis for visitors and an important food source and habitat for local fauna species.

Students were guided around the wetland to learn about the flora and fauna and the processes that improve water quality at the site. Students analysed water samples taken from the wetland to examine the array of aquatic life. Many tadpoles were present as well as an assortment of aquatic macro invertebrates. The discovery of the pollution sensitive Caddis Fly Larva was a particular highlight indicating that the wetland system was in good health." – Nick Fewster



If you are interested in visiting Schroder Park Wetland, email us at birkenheadtours@adbri.com.au or phone **8300 0300**.



Conserving Water

At Birkenhead, we are continuously looking for ways to improve our stormwater recycling, which reduces our use of mains water.

We have a comprehensive management program in place that includes six main catchment areas strategically placed around the site to maximise the volume of stormwater recycled.

As well as stormwater, we capture water run-off from our truck washes that is also recycled on site.

Water that contains traces of silt is typically treated through sedimentation, catchment and filtration systems, including surface and underground sumps, settling ponds and reeds that improve the water quality.

Treated and captured water is then used to irrigate gardens around the site or recycled into our wetlands / stormwater catchment areas, including Schroder Park and our southern wetland areas. The continuous supply of quality recycled water to our wetlands and gardens ensures the healthy ecosystem is maintained all year round, allowing plants and wildlife to flourish.

We have a study underway aimed at identifying ways we can further enhance our stormwater management and water recycling on site.

2012 Earthcare / Rehabilitation Program

A key part of our Environment Improvement Program is a comprehensive rehabilitation, vegetation and landscaping program at the Birkenhead Plant.

The Birkenhead Plant covers a sizeable land area, including lawns and extensive areas of shrubs and trees. We are committed to rehabilitating and maintaining these sites to provide shade, amenity, habitat, biodiversity, site boundary buffering, water collection and purification, carbon dioxide uptake and community involvement.

Key rehabilitation activities in 2012 have included:

- 200 metre planting of mature trees along the southern most boundaries to provide a screen when entering the Le Fevre Peninsula.
- 300 metre planting of mature trees along the Port River (north/east) to provide a screen of the raw material stockpiles along the river.
- Comprehensive site-wide weed eradication, removal of dead trees and mulching.
- Development of areas along Victoria Road on the western boundary of the Birkenhead Plant with the planting of mature Bottle Brush and Banksias.
- Planting of 250 trees at Schroder Park in conjunction with local school groups.

In total, approximately 500 mature trees and scrubs have been planted and irrigated in 2012.





Alternative Fuels and Raw Materials

We use Alternative Fuels and Raw Materials (AFRMs) at the Birkenhead plant as part of our commitment to sustainability and reducing carbon emissions.

AFRMs have a wide range of benefits, from reducing our use of natural resources at Birkenhead, cutting NOx emissions and minimising the site's greenhouse gas footprint.

Alternative fuels are energy rich materials and replace gas as a source of thermal energy in the cement manufacturing process. At the Birkenhead Plant we substitute gas usage with a Processed Engineered Fuel, typically commercial and industrial demolition waste and primarily timber based.

Alternative raw materials are by-products or industry wastes rich in iron, silica, alumina or calcium carbonate, which can be used to supplement traditional limestone and clay input materials. At Birkenhead, we use carbon powder to substitute natural gas in the clinker kiln and slag to displace a portion of limestone and clay in cement manufacture.

The use of AFRMs reduces the volume of materials disposed of as landfill while reducing the burden on non-renewable energy sources. The use of alternative raw materials also provides substantial reductions in greenhouse gas emissions from the cement manufacturing process.

Cement Kiln Dust

Cement kiln dust (CKD) is a by-product of the cement manufacturing process. Traditionally CKD has been sent to landfill, which has negative environmental and economic impacts. As part of a broad program of changes aimed at improving our environmental performance and reducing our carbon footprint, we have conducted a number of trials to find a better way to use and dispose of CKD.

Read more about our use of AFRMs at www.adelaidebrightoncommunity.com.au.





Annual Shutdown Update

Kiln maintenance shutdowns are a critical part of our overall plant performance and reliability program. Each year we undergo a major maintenance shutdown at our Birkenhead Plant.

The total duration of this planned shutdown is dependant on the scope of works required. During this time we carry out necessary maintenance to ensure the continued efficiency of operations.

Earlier this year we had a major shutdown for 26 days, during which we completed the following projects:

- Internal maintenance of 4A / 4B electrostatic precipitators
- Grinding table and tyre replacement inside Raw Mill 4A
- Extensive kiln bricking and refractory replacement
- Cooler bag filter compartment modifications, including replacement of 200 bag filters
- Main fan Non Destructive Testing (NDT), balance, vibration checks and general maintenance to improve efficiency
- Rapid raise door installation (Cement Mill 1 shed).

In between shutdowns we strive to minimise stoppages as part of our broader efforts to reduce any impacts our operations could have on the environment and surrounding communities.

Next Community Liaison Group Meeting

The next meeting is scheduled for **Monday, 3 December 2012 at 7:00pm** – for venue details, please log onto our website or call us on 8300 0300.

Birkenhead Facts

Adelaide Brighton Cement (Birkenhead) is part of the Australian construction materials group, Adelaide Brighton Ltd.

The Birkenhead Plant commenced operation on its current site in 1914. Its location adjacent to the deep water of Port of Adelaide allows access to shipping facilities, good proximity to customers and labour resources.

The Birkenhead Plant current production is approximately 1.3 million tonnes of cement per annum.

Economic modelling on 2010 financial data reveals Adelaide Brighton Cement contributes approximately \$303 million per annum to Gross State Product in South Australia.

Ongoing investment puts the Birkenhead Plant in the top tier as the most energy efficient cement plant in Australia.



Adelaide Brighton Cement Ltd

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