

### Continued from page 1

auditor accredited by the NSW Department of Environment and Climate Change (DECC) scrutinises the "validation" report for the particular residential lot or recreational area. Validation reports are detailed reports produced in accordance with guidelines published by the DECC. They are prepared by specialist consultants and include all of the chemical analysis results obtained during soil testing after DTD treatment. Final certification is provided by the auditor in the form of a site audit statement. Recently, validation of the future Meredith Avenue

road reserve and the adjacent foreshore was completed. Validation of the residential development Lot 104 and the future Shoreline Avenue, which follows the original shoreline, will be completed over the next

three to four months. By October, Lot 103 and the surrounding roads will have received their site audit statements so that they can be handed over to the client.

After all remediation work has been finalised, Thies Services will "decommission" the site facilities and complete the reinstatement of the site to the final ground levels required for development. Thies Services will then demobilise from the site in accordance with an approved environmental management plan. Under the current schedule, this will occur by June 2009.



Above: Dark, treated soil is backfilled across a clean and natural, excavated surface

## The Rhodes Community Consultative Committee (RCCC)

The RCCC is comprised of approximately 20 residents from communities surrounding the Rhodes Peninsula including Rhodes, Concord West, Homebush Bay, Liberty Grove, Meadowbank, West Ryde and Melrose Park. An additional 20 members represent developers and remediators working in the area; State Government Departments such as the Department of Planning, the Department of Health, and the Department of Environment & Conservation; and Local Government Councils such as the City of Canada Bay Council and Ryde Council.

At monthly meetings the committee is presented with updates and data on the remediation and development projects by the proponents involved. The RCCC has an independent Chairperson, **Mr John Kent**. John's contact details are 0419 497 033 or [jk@wwsydney.com](mailto:jk@wwsydney.com). You are most welcome to join the committee or attend a meeting as a visitor.

For information about the next meeting, please call the Thies Services Community Contact Line on **1800 009 414**.

## Project Activities - the next 3 months

### Lednez & Homebush Bay project

- Undertake DTD treatment plant commissioning trials and Proof of Performance testing;
- License full scale operations;
- Commence full scale thermal treatment operations;
- Start depleting stored soil requiring thermal treatment;
- Continue Stage 3 excavations;
- Progress Stage 3 backfilling operations;
- Progressively validate Stage 3 area;

- Construct sections of seawall in Stage 3 area;
- Install sewer in Stage 3 area;
- Continue environmental monitoring;
- Continue bay works excavation and reinstatement (southern stage).

### Allied Feeds project

- Achieve NSW DECC accredited Site Auditor sign-off and client handover for residential Lot 103 and the adjoining roads;
- Excavate contaminated soils from the southern site boundary for thermal treatment;
- Process soil for thermal treatment in the

- pre-treatment building;
- Continue full scale thermal treatment operations;
- Test excavated surfaces and treated materials;
- Progressively backfill validated areas to the final development site ground levels;
- Demolish and reconstruct the southern section of the seawall;
- Treat all water in the water treatment plant;
- Install stormwater trunk drainage;
- Monitor the environment including compliance testing of DTD plant and pre-treatment building stack emissions.

## Community Contact Details

We value your feedback. If you have any questions or concerns, please let us know.

**Ph:** 24 hour toll free line: 1800 009 414 **E-mail:** [rhodesremediation@thies-services.com.au](mailto:rhodesremediation@thies-services.com.au)

**Web:** [www.rhodesremediation.com.au](http://www.rhodesremediation.com.au) **Post:** 40 Walker Street, or PO Box 3064, Rhodes NSW 2138

**Thank you for your cooperation and patience during these environmental remediation works.**

**Rhodes**  
REMEDICATION  
PROJECTS

Homebush Bay and the former  
Lednez and Allied Feeds sites

**Thies**  
services

24 hour toll free line  
**1800 009 414**  
[www.rhodesremediation.com.au](http://www.rhodesremediation.com.au)

# NEWSLETTER

## September 2008, Issue 12

To the Community Member:  
Rhodes Remediation Projects Community News

## Achieving Milestones: The Allied Feeds Project

**More than 75% of the contaminated soil on the Allied Feeds Project site has now been thermally treated. This milestone was reached in August. At current production rates, the project is scheduled to achieve its treatment completion goal in February 2009.**

Directly heated thermal desorption (DTD) is being used to reduce dioxin contamination levels in the soil to less than one part per billion. This will make the soil safe for future residents and recreational users of the land.

The DTD plant production rate has been above target over the last four months. Experts from the USA continue to oversee the plant's operations and so far, more than 130,000 tonnes of material has been treated. Typically, the soil is treated at 520°C to 540°C and up to 20 tonnes per hour is processed.

Since the DTD plant was refurbished and recommissioned in late 2007 and early 2008, all stack emissions have been below the environmental licence limits.

**"The stack emission testing performed in July recorded a result of 0.0092 nanograms per cubic metre for dioxins and furans," explains Justin Taylor, Senior Project Manager. "This is more than ten times below the stack licence limit of 0.1 nanograms per cubic metre."**

Other parts of the Allied Feeds Project are also progressing well. Along the foreshore of the site a 330 metre seawall is being built to replace the existing seawall, which has become degraded after many decades of tidal activity. Attractive sandstone boulders and a concrete kerb form the new seawall and only 90 metres remains to be constructed.

A stormwater drainage system, which includes a gross pollutant trap, is also being built on the site from Walker Street to Homebush Bay. The drainage system will pick up stormwater from both Walker Street and the new site development, and will eventually be handed over to the local council. These works commenced in July and are scheduled for completion later this month.

Local residents will know that some of the development lots have already been handed over to the client, Meriton, and construction of apartments is underway on a residential lot adjacent to Walker Street.

Before an area of the site can be handed over to the client, an independent site

*Continued page 4*



Above: Remediation of the former Allied Feeds site in June.

## Cleaning Up Homebush Bay

Remediation of a portion of eastern Homebush Bay has been underway since May 2008. A total of 7.5 hectares will be cleaned up over the next seven months. This involves the removal of the top half a metre of existing sediment and its replacement with clean material, forming a cap.



Above: Removal of sediment is performed on a floating barge by an excavator fitted with a "clam-shell" bucket.

### THE CLEAN UP CONTINUES

Thiess Services has been contracted to remediate two neighbouring sites at Walker Street, Rhodes. The sites are known as the former Lednez/ Union Carbide site and the former Allied Feeds site. Both sites require remediation (a clean-up of the soil) as a result of previous land reclamation using wastes from chemical manufacturing on the former Lednez/ Union Carbide site. Remediation works commenced in 2005.

**For more details on the history of these sites, to view environmental information or to download copies of the newsletters, visit [www.rhodesremediation.com.au](http://www.rhodesremediation.com.au)**

Strict environmental controls and standards are being implemented on both sites to ensure the health and safety of workers and the community. All work is being undertaken in close consultation with Local Government and community members, as well as with State Government agencies including the Department of Environment and Climate Change, NSW Waterways, the Department of Planning and NSW Health.

Sediment in Homebush Bay is contaminated with a variety of chemicals including polycyclic aromatic hydrocarbons, dioxins and organic chemicals. They originated from past chemical manufacturing activities on the neighbouring Lednez/Union Carbide site, which is also being remediated.

Previous investigations in Homebush Bay have shown that levels of dioxin in fish are above those recommended for human consumption. A commercial and recreational fishing ban is currently in place in Homebush Bay. The remediation process will improve the environmental condition of the bay by addressing the areas of sediment with the highest contaminant loadings. The present fishing ban will remain in place until data has been gathered to support its removal. Completion of the current remediation will increase the possibility of this occurring.

The remediation will also allow the eastern foreshore of the bay to be safely used for recreational activities.

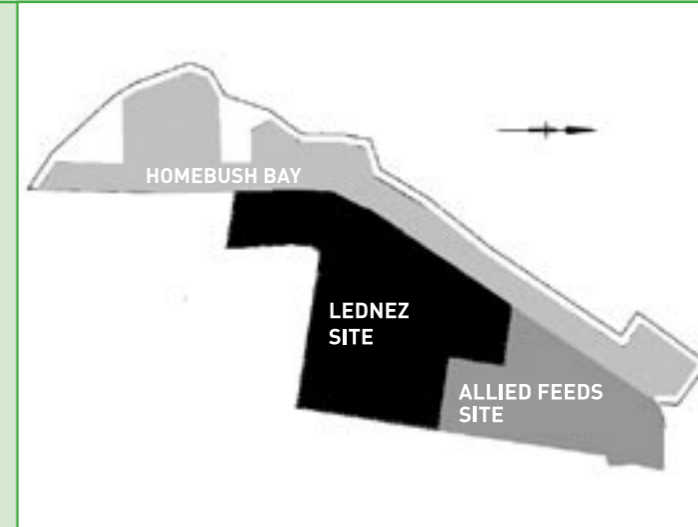
**"The removal of sediment is performed on a floating barge by an excavator fitted with a specially designed 'clam-shell' bucket. This style of bucket reduces the amount of sediment lost during excavation. The sediment is loaded into a hopper on the barge which then feeds it to a pump. The pump pushes the dredged material through a steel pipeline and discharges it into pits on the Lednez site," explains Kate Cole, Senior Project Engineer.**

Once on the Lednez site, the sediment is independently tested for chemical constituents to determine its treatment requirements. Sediment reporting high levels of contamination is sent for treatment

in the thermal (DTD) plant prior to reuse in a backfill area on the land site. Sediment of lower contamination, that contains levels of chemicals below the site reuse criteria, can be reused on the site without thermal treatment (after being amended with lime to neutralise potential acid sulfate soils). A global positioning system is used to guide the excavator operator during the entire excavation process.

After an area of the bay has been excavated, "geofabric" is placed on top followed by half a metre of clean material. This forms a cap and prevents contact with the remaining sediments by fish and other Homebush Bay aquatic life.

Sediment is removed from the bay inside a series of purpose designed "silt curtains." These silt curtains essentially form a seal with the bed of Homebush Bay and the top of the water. An engineered window at the top of the silt curtains allows tidal movement in and out of the sediment remediation area, away from the excavating operation. The silt curtains prevent the movement of potentially contaminated particles to other parts



Above: Project sites, including the 7.5 hectare Homebush Bay clean-up area.

of the remediation area and to other parts of Homebush Bay.

"The amount of turbidity needs to be reduced as much as physically practical during remediation," says Kate Cole. "We have to reduce the potential for chemicals to 'adsorb' or



Above: Excavated bay sediment is pumped into pits where it is tested for chemical constituents.

'attach' to floating sediment particles in the bay and reduce the possibility of particles migrating to other bay areas."

Thiess Services continuously

monitors the levels of turbidity in Homebush Bay via purpose-built buoys which are installed with a remote alarm system. The system sends warnings via SMS text messages to engineers on land whenever levels of turbidity change significantly. If a message is received, rectification measures can be implemented before the turbidity increases beyond

acceptable levels. These include the use of additional silt curtains, changes in the area of excavation or the use of chemical flocculants (chemicals that cause suspended particles to drop out of a solution).

Water samples are also collected

regularly and analysed for chemicals of concern with all results reviewed by the Department of Environment and Climate Change and the Department of Planning.