

ACTIVITY DESCRIPTION	2005			2006			2007			2008			2009																										
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar				
ALLIED FEEDS PROJECT																																							
SITE ESTABLISHMENT																																							
COMMISSION/POP TESTING																																							
SEAWALL/EXCAVATION																																							
DTD TREATMENT																																							
DECOMMISSION																																							
BASEMENTS/FINAL REINSTATE																																							
LEDNEZ AND HOMEBUSH BAY PROJECT																																							
ESTABLISHMENT																																							
EXCAVATE STAGE 1																																							
EXCAVATE STAGE 2																																							
EXCAVATE STAGE 3																																							
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COMMISSION/POP TEST																																							
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DECOMMISSION																																							
FINAL GRADING																																							
MARINE SEDIMENTS WORK																																							



24 hour toll free line
1800 009 414
www.rhodesremediation.com.au

NEWSLETTER

Issue 3, May 2006

In this Issue:

- US EPA visit
- DTD Plant update
- Project Activities – next 3 months

To the Community Member
Rhodes Remediation Projects
Community News

Register now for the
Odour & Health Presentation
details below

The Rhodes Community Consultative Committee (RCCC)

The RCCC is comprised of approximately 30 members from communities surrounding the Rhodes Peninsula, including Rhodes, Concord West, Homebush Bay West, 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 Planning, Health, and Environment & Conservation Departments; and Local Government Councils such as the City of Canada Bay and Ryde Councils.

The committee meets monthly, and 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

You are most welcome to join the committee or attend a meeting as an observer. For information about the next meeting, please call the Thiess Services Community Contact Line on **1800 009 414**.

Project Activities - the next 3 months

Lednez & Homebush Bay project

- Excavation and backfilling work continues throughout the site
- Material needing treatment is being stockpiled, covered, and stored, until the ITD Plant is constructed and commissioned
- Odorous material stockpiles continue being covered
- Construction of temporary sewer diversion pipeline to begin in Walker Street

- Ongoing Water Treatment Plant operations
- Additional odour control methodologies to be trialled
- Revised plans for bay works to be submitted to the Department of Planning and the DEC for review
- Continued environmental monitoring

Allied Feeds project

- Contaminated excavation work continues in the western area of the site
- Stockpiling and testing of excavated materials not requiring treatment for reinstatement on site
- Complete the DTD plant clean soil

commissioning and proof of performance testing

- Installation of additional mitigation controls for the DTD plant
- Placement of material needing treatment in the pre-treatment building
- Classification and offsite disposal of surplus waste fill to landfill
- DTD plant arrives and assembly commences
- Commence the DTD plant commissioning and proof of performance testing
- Installation of sound barriers to Walker St
- Continued environmental monitoring

Community Contact Details We value your feedback. If there is a project/remediation topic that you would like addressed in this newsletter, or you have any other questions or concerns, please let us know.

Ph: 24 hour toll free line: 1800 009 414 **E-mail:** rhodesremediation@thiess-services.com.au

Web: 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.

Welcome to the
third project
newsletter
for the Thiess
Services Rhodes
Remediation
Projects ...aimed
at keeping the
community
informed of the
remediation
activities
underway.

Professor Garry Smith and Kerry Holmes will speak about odour management and the importance of environmental monitoring in relation to health at 10.30am on Saturday, 24th June, 2006. A local venue will be announced. Register your attendance before the 14th June by calling 1800-009-414 or via e-mail to rhodesremediation@thiess-services.com.au

Professor Garry Smith is Director and Professor of Environmental Management at the Institute of Environmental Studies, University of NSW. He was a Research Fellow of the Royal Society of London, a Queen Elizabeth Fellow and Director of the Carcinogenesis Research Unit, University of NSW. In 1990 and 1995, he was a Fulbright Fellow, working in the United States with the US Environmental Protection Agency. Professor Smith worked on decontamination of the Sydney 2000 Olympics site, undertaking human and ecosystem risk assessments.

Kerry Holmes is a Director of Holmes Air Sciences, a consulting firm specialising in air quality assessments. She has an honours degree from the University of Adelaide, majoring in chemistry and mathematics, and a PhD in chemistry from Lancaster University. She has held research and teaching positions at the University of Adelaide, University of WA, University of NSW, University of Sydney and the Ludwig Institute for Cancer Research. During that time she published over 40 articles in refereed journals including the Lancet and Science, in the field of immunology, cancer research and physical chemistry.



THE CLEAN UP CONTINUES

Thiess Services commenced remediation works at two neighbouring sites on Walker Street, Rhodes, in 2005. 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 past chemical manufacturing works on the former Lednez/Union Carbide site.

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

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, community members, NSW Health, as well as with State Government regulators including the Department of Environment and Conservation (DEC) and the Department of Planning.

Did you know?

- On the Lednez site, 360,000m³ of earth is being excavated. That's enough soil to fill 115 Olympic swimming pools! Of this, 97,000m³, or 27%, requires remediation treatment.
- On the Allied Feeds site, 116,000m³ of earth is being excavated and treated, or enough to fill over 37 Olympic swimming pools.

The United States EPA visits Rhodes

The United States Environmental Protection Agency (US EPA) has significant experience in regulating large scale remediation projects that use thermal treatment processes. Recently, John Gilbert, Environmental Engineer with the US EPA, was invited to Australia by the Department of Environment and Conservation (DEC). John will share his knowledge with the DEC and provide expertise during the DTD plant's commissioning and Proof of Performance testing.



Above: John Gilbert, United States EPA (l), chats to John Coffey, DEC (r), on site.

Farewell... Barbara Ferry-Smith, Community Liaison Officer Introducing... Catherine Fletcher

After working on the Rhodes Remediation Projects for a year, Barbara Ferry-Smith, Community Liaison Officer, recently returned to Brisbane. Barbara has been employed by Thiess Services for 18 years, and after a European holiday with her husband Ray, she will commence a new position with Thiess Services at Rocklea in Queensland.

Members of the Rhodes Community Consultative Committee thanked Barbara for her contribution to the group at the

meeting held on 29th March. Catherine Fletcher, the newly appointed Community Liaison Officer, was introduced to the group. Catherine is looking forward to the responsibilities of her new role, having worked in a similar position on the Westlink M7 motorway project. When not talking to community members about building roads or cleaning up soil, Catherine enjoys dining out with friends and family, watching drama and documentary films, or indulging her passion for travel.



Above: Barbara Ferry-Smith (l) and Catherine Fletcher (r).

DTD Plant Update: Getting Ready

Train commuters and Rhodes residents may have noticed that construction of the new 'directly heated thermal desorption' (DTD) plant on the former Allied Feeds site is now complete. The DTD plant will be used to heat soil excavated from the site to destroy the contaminants within it.

The plant's soil pre-treatment building, located in the south-eastern corner of the site, measures 35m wide x 115m long x 12m high. Above the building's rooftop, a small section of the plant's thermal oxidiser and rapid quench cooling system can be seen. More visible is the plant's 30m high emission stack.

Commissioning the DTD Plant

The DTD plant was 'commissioned' when all of its mechanical and electrical components were fully constructed and each individual component had been completely tested. This involved many weeks' work by the plant's Engineers and their support team. They had to make sure that its conveyor belts ran properly, its motors turned and its instrumentation was correctly calibrated.

Heat was then introduced into the DTD plant, without the presence of soil, as the plant had to be initially 'tuned' under these conditions. Tuning occurs at many stages of the commissioning process. It broadly refers to the manual adjustment of variables in the control system so that the plant will operate automatically under a range of conditions.

Clean Soil Shakedown

With component testing complete, soil was introduced into the DTD plant for the first time. Approximately 1,200 tonnes of clean material, sourced from off site, is being used to test the capabilities of the system. At this stage, any material handling issues will become evident. Modifications to the conveyor belts may be made to make sure that they don't spill any soil. The plant will be brought up to a 'steady state' and its burners will be turned on.

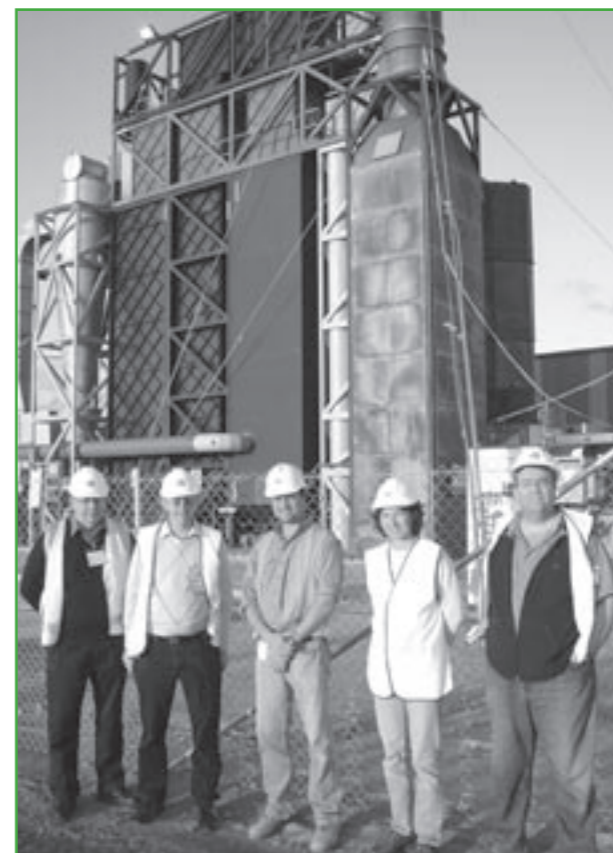
"We call this stage the 'clean soil shakedown'," explains Richard Giles, Project Engineer. "Towards the end of the shakedown we must successfully

run clean soil through the plant for at least 24 hours without any processing faults. We heat up the clean soil as if it was contaminated, we treat the off-gases to the normal temperature, we cool the gases down in a rapid quench, we filter them with the bag-house filter and we use the scrubber as if contaminated gases are being treated."

A report detailing the outcomes of the 24-hour clean soil shakedown is produced for the Independent Environmental Expert. If he is satisfied, he will certify that the engineering team is ready to test the plant using contaminated soil. The Independent Environmental Expert's certification must be counter-signed by the Department of Planning, as well as by the Department of Environment and Conservation (DEC).

Contaminated Soil Shakedown

The 'contaminated soil shakedown' is a process that identifies the most efficient temperature for treating the different soil types found on site. Five rotary dryer temperature conditions are generally tested for each soil type.



Above: Richard Giles, Project Engineer (centre), with members of the Rhodes Community Consultative Committee, viewing the exterior of the DTD plant.

"We will be treating a variety of contaminated lime and fill blends, determining the temperature required to treat each blend, whilst satisfying the approved soil re-use criteria for the site," says Richard Giles. "After treating all of the different material types, one rotary dryer temperature that can successfully treat every soil matrix will be established."

During this phase, the emissions stack is also tested for several hours whilst treating some of the most highly contaminated material found on site. This provides the assurance that the emission system is working properly and the gas discharge quality is complying with the emission criteria set by the DEC.

What is POP Testing?

'Proof of Performance' or POP testing takes place after the contaminated soil shakedown. While a stack emission test is carried out, each material type is processed at the optimum rotary dryer temperature determined during the contaminated soil shakedown. Once again, a report is prepared for the Independent Environmental Expert seeking certification of the DTD plant. If the Expert, the Department of Planning

and the DEC approve the test results, the DTD plant is finally considered ready to commence full-scale operations.

Allen Beaudin, chief Construction and Operations Engineer, was brought out from the United States specifically to construct and commission the DTD plant for the former Allied Feeds site. Whilst he says that the plant is fairly standard, he believes that the commissioning and POP testing phases are crucial.

"You go through a period of confidence-building in the plant and the people who will operate it. It's important that there's internal and external scrutiny every step of the way. By the end of the POP testing period, you're satisfied that the DTD plant can successfully treat all types of contaminated material found on site."