



## Botany Groundwater Cleanup Project

Progress Update for CLC

Steve Corish

15/9/2009

### Groundwater Treatment Plant (GTP)

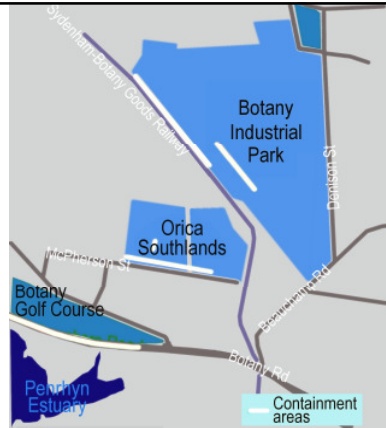
- Treating approximately 5 million litres per day
- Reusing about 3 million litres per day
- As of 30 June, a total of 5.6 billion litres of groundwater treated and 702 tonnes of contaminants destroyed
- SCA line cleaned or "pigged" in Southlands
- Planned annual shutdown
  - November 2009
  - Normal maintenance plus...
  - Replacement of heat exchanger - Detailed planning underway

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### Hydraulic Containment

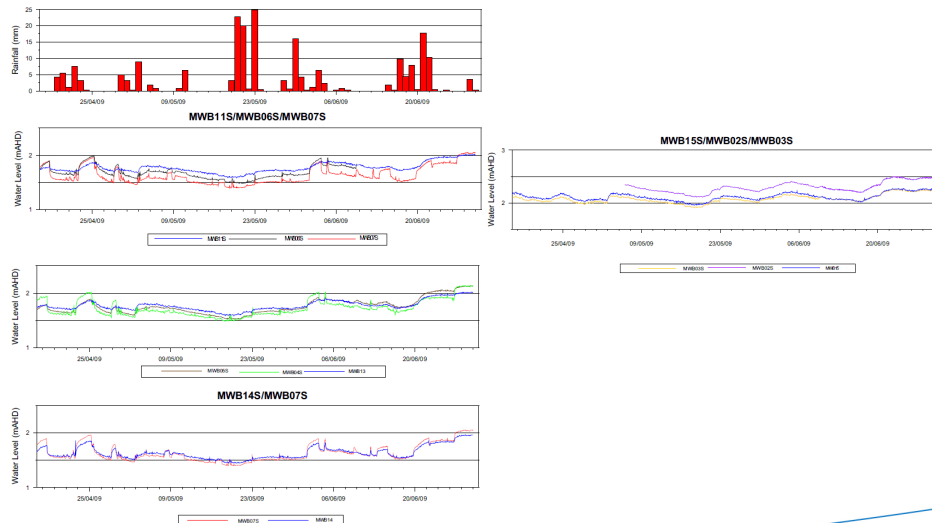
- Secondary Containment Area (SCA)
  - Containment achieved
- BIP Containment Area
  - Achieved at priority areas
- Primary Containment Area (PCA)
  - Containment achieved
  - Study of shallow containment complete
  - Greg Dasey (URS) to provide further explanation



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### Shallow Aquifer Containment at PCA – Fig A.37 of Attach A of latest progress report (URS)



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## Chemical Monitoring

- Results largely consistent with previous monitoring rounds
- Some historical maximum observed upgradient of the SCA
  - associated with migration of central EDC plume towards the containment line
  - this groundwater will be eventually be intercepted at the SCA
- Conclusions of Consolidated Human Health Risk Assessment (2005/2006) do not change



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## Other Current Activities

- Groundwater Injection & Recovery (GIR)
  - Injection and monitoring wells in place
  - Pipe work and control equipment in place
  - Ready for trials as soon as filters are delivered later this week
- Voluntary Management Proposal
  - Orica drafting documentation
  - Groundwater Remediation and Management Plan (GRAMP)
  - Details proposed monitoring, reporting and review timeframes
  - Includes continuation of current CLC, IMC and communication tools
  - Replaces old Groundwater Cleanup Plan (2003)



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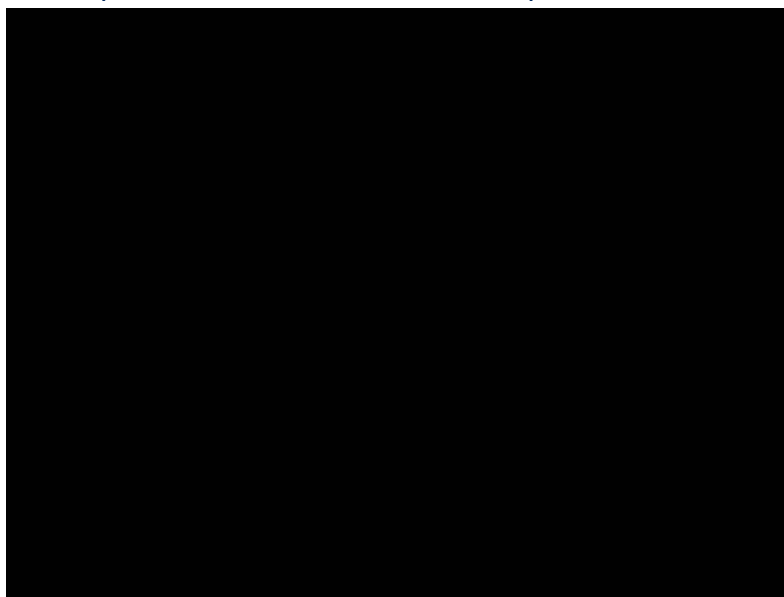
## Pollution Reduction Program (PRP) Update

- PRP to **reduce ammonia concentration in treated water**
  - Chloramine is used to control fouling
  - Ammonia is generated when the chloramine is removed before treated water is discharged to the environment
  - Significant improvements in reducing ammonia concentration
  - Latest report submitted to DECCW 29 June
  - Range of initiatives underway
  - Next report due December 2009
- PRP to improve compliance with **treated water temperature limits**
  - Pipe heats up in hot weather
  - Has led to some exceedances of the upper temp limit
  - One low temp exceedance in cold weather
  - Latest report submitted 29 June
  - Orica proposes to install a shroud to cover the above ground pipe to prevent the water heating up in hot weather
  - Await feedback from DECCW

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## Prof B Kueper's Presentation Webcast – preview of draft



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