

**Independent Monitoring Committee Task 16**

**Discussion Regarding Groundwater Monitoring South of the  
Secondary Containment Area**

18 July 2007

*The Community Liaison Committee (CLC) asks that Prof Ian Acworth meet with Paul Shepherd, Greg Dasey, Erwin Benker from the Department of Environment and Climate Change and Orica to discuss his recommendation for additional groundwater monitoring south of the Secondary Containment Line. Orica will arrange the meeting.*

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On 15 June 2007 Prof Ian Acworth (Core IMC Member, UNSW), Paul Shepherd & Sarah Deards (City of Botany Bay Council), Greg Dasey (formerly URS), Erwin Benker (Department of Environment and Climate Change) and James Stening, Steve Corish and Lucy Archer (Orica) met to discuss Task 16. This paper records the points and actions agreed at the meeting. It is provided to the CLC for their information.

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1. Existing monitoring data does not define the spatial extent of the discharge of contaminated groundwater into Penrhyn Estuary (i.e. contaminated groundwater that is already downgradient of the Secondary Containment Area [SCA] on Foreshore Road). There is a significant probability that dissolved phase chlorinated hydrocarbon (CHC) contamination from Orica's groundwater plumes exists beyond the location of the existing Orica groundwater monitoring locations in the estuary.
2. There may be implications both for ecology and for workers in the estuary during works for the Sydney Ports Corporation (SPC) development at Port Botany. It is acknowledged that the Consolidated Human Health Risk Assessment (CHHRA – URS, 2005) has already identified a potential human health impact at the estuary for recreational users or from the excessive consumption of fish by children under the age of five (with respect to HCB and mercury) .
3. Contamination already downgradient of the SCA (that cannot be practically treated) might confuse the verification and validation of future remediation strategies (i.e. possible future remedial solutions after pump and treat that may be introduced many decades from now).
4. The impact of Orica's contamination on surface water is well understood and is the key mechanism for assessing impacts to human health for the current users of the estuary.
5. Orica should bring Point 1 to the attention of SPC and suggest that they consider such contamination when planning for activity at the estuary for their Port Botany development works.
6. Orica has agreed to consider installing additional monitoring locations in the dune area at the estuary once the SPC works are completed (the locations are yet to be determined and will need to be agreed with SPC).
7. Orica has agreed to consider options for an investigation program to obtain further groundwater data in the estuary. Orica has pointed out that the benefits of such an investigation are yet to be established. Orica is to report back to the group that met on 15 June and the CLC.