

Orica Botany Groundwater Survey Community Liaison Committee Newsletter

Issue 4

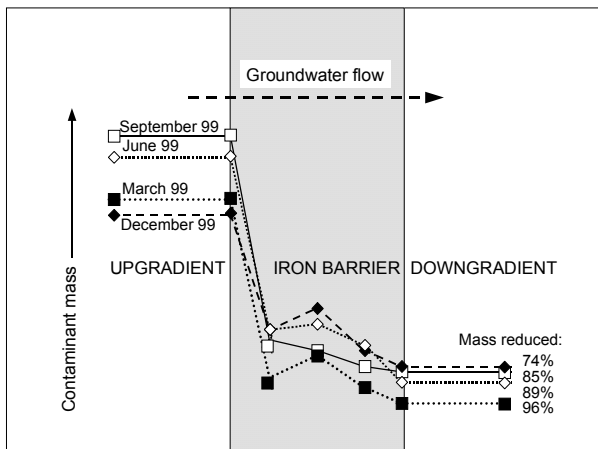
April 2000

Summary of Meeting No. 9

Meeting No. 9 of the Community Liaison Committee was held on Wednesday 29 March 2000 at Botany Town Hall.

Pilot Scale Reactive Iron Barrier

The reactive iron barrier's performance continues to be monitored. The latest data is from month nine. Month twelve samples were being taken at the end of March.



Once again John Vogan (EnviroMetal Technologies, Inc., Canada) has reviewed the data. Despite appearances in the graph, he says the performance is not degrading and is consistently good. The variation is due to changes in field conditions. Other reaction parameters show good consistency. When all the data is collated and evaluated, pre-design work will commence for the full scale barrier.

Monitoring Program

Orica is regularly monitoring surface water, groundwater, air and marine organisms to track improvements and watch for any changes in environmental conditions.

No significant changes to the chlorinated hydrocarbons (CHCs) in groundwater have been detected since July 1999.

However there has been a significant reduction in CHC concentrations in the surface water in Penrhyn Estuary. This has been attributed to the repairs to the Orica stormwater pipes and the subsequent elimination of contaminated groundwater discharge to Springvale Drain via the stormwater pipes. A report will be issued to EPA NSW when monitoring is completed.

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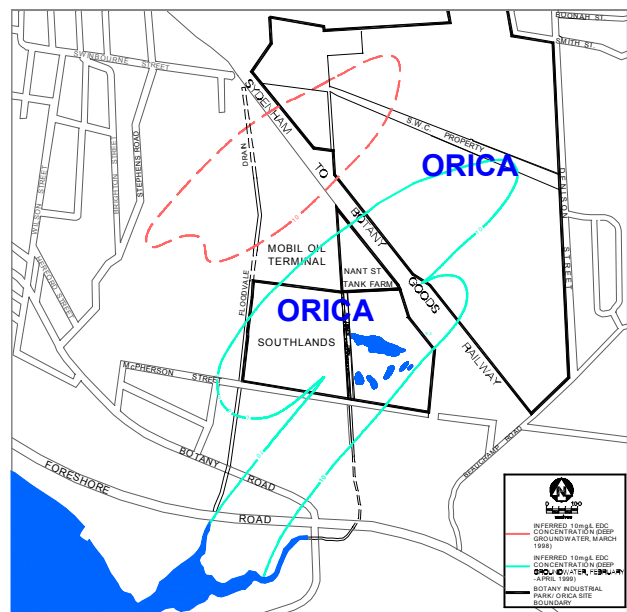
Focus on the Orica/EPA Voluntary Remediation Agreement

Orica and EPA NSW signed a Voluntary Remediation Agreement on 24 February 2000. But what is this Agreement and what does it mean?

Voluntary Remediation Agreements are legislated under Sections 19 and 26 of the Contaminated Land Management Act 1997. As the name suggests, they form a legally binding agreement between the environmental regulator (EPA NSW) and the party responsible for the contamination described in the Agreement (in this case Orica) that outlines the courses of action the responsible party must take to achieve the agreed remediation targets.

The Agreement between Orica and EPA NSW picks up all of the modules of the 5 Year Plan (which runs to December 2001). It also provides for the development of a further 5 Year Plan, labeled "Stage 4" by the EPA. Under the Agreement Orica is required to make periodic (including annual) reports to the EPA. The first one is due in February 2001.

The Agreement defines the relevant land and contaminants, the lifetime of the Agreement, its objectives, and the principal program features. The map below shows the affected land. Under the Agreement Orica has undertaken to notify all affected land owners and users.



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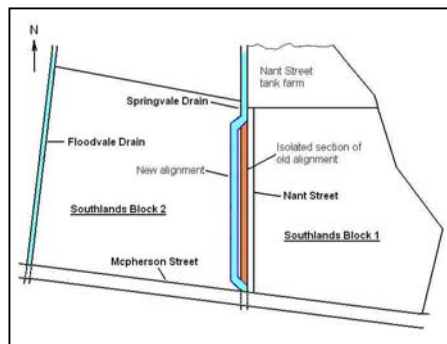
Orica Stormwater Pipes' Repairs

Lining of both pipes has been completed. Grouting of the final section was scheduled for completion by early April. Groundwater flow into the pipes has ceased.

Springvale Drain Realignment

Work to construct a new section of Springvale Drain in Southlands 10 m to the west to bypass contaminated sediments in the existing alignment was completed in March 2000. A new trash rack has been installed in the Macpherson Street end of Springvale Drain. (The meeting was followed by a tour of Orica Southlands to inspect the completed realignment.)

Contaminated sediments in the isolated section of the drain can be assessed for remediation now.



EDC Plume Containment

Groundwater monitoring has shown that a body of ground-water containing high concentrations of ethylene dichloride (EDC, a product formerly manufactured by Orica) has extended to an area beneath Southlands.

Orica has conducted field trials at Southlands to evaluate installation and pumping controls to contain the plume. Laboratory trials have also been carried out to assess the need for pre-treating the groundwater before pumping into an air stripper to remove the CHCs.

Orica will prepare a proposal for a full scale system design for EPA NSW and DLWC to review.

EDC Plume Investigations

Orica is also conducting further investigations into the source of the EDC plume (focussing on the former manufacturing plant) and northern extent of the plume (in the area where drums of EDC waste were previously stored). The process requires staged installation of monitoring points.

Further Remediation Research

The microcosm studies of EDC-contaminated groundwater and soil from Orica Southlands are continuing under the direction of Dr David Major (Geosyntec Consultants) at the

University of Waterloo, Canada. A progress report showed promising results for shallow and diluted deep groundwater where biodegradation has been detected.

Professor Bob Gillham's work at the University of Waterloo, Canada to evaluate treating EDC in groundwater with a nickel-plated iron reactive barrier has not produced encouraging results. The work has been discontinued on his recommendation.

Voluntary Remediation Agreement

This is described in more detail in "Focus On ..." on page 1.

Groundwater Management Plan

The Department of Land and Water Conservation (DLWC) is going to develop a Groundwater Management Plan for the Botany Aquifer. A committee representing all affected users (including the CLC) will be formed to review the Plan when it has been drafted. The DLWC will present details of their proposal at the next CLC meeting. β

About this Newsletter

This is the fourth issue of this newsletter. It aims to keep the Randwick and Botany communities informed about progress of the activities associated with the Orica (formerly ICI Australia) Botany Groundwater Stage 3 Remediation Program. The newsletter is prepared by Orica on behalf of the CLC following each quarterly meeting of the CLC.

Who's on the Committee?

The CLC was formed at the start of the Survey to involve the community in the process. It comprises representatives from **government** (Environment Protection Authority (EPA), Botany Bay City Council, Randwick City Council, Department of Land & Water Conservation (DLWC), South Eastern Sydney Public Health Unit, National Parks & Wildlife Service, Freightcorp and Sydney Ports Corporation), **local residential groups** (BBPPC, BEREPA and Botany Environment Watch), and **industry** (Orica, Amcor Packaging and Solvay Interox). The independent Chair for the Committee is Assoc. Prof. Ronnie Harding from UNSW Institute of Environmental Studies.

Who Receives this Newsletter?

This newsletter is distributed throughout the suburbs neighbouring Orica's Botany Site including Banksmeadow, Botany, East Botany, Hillsdale, Matraville and Pagewood.

Meeting No. 10 will be held at Botany Town Hall in late June/early July 2000, starting at 1 p.m. If you wish to enquire about the CLC or its meetings, please call Orica's Community Hotline 1800 025 138.