

Orica Botany Groundwater Survey

Community Liaison Committee

Newsletter

First Edition

July 1999

This is the first edition of a newsletter which aims to keep the Randwick and Botany communities informed about progress of the activities associated with the Orica (formerly ICI Australia) Groundwater Stage 3 Remediation Program. This newsletter has been prepared by Orica on behalf of the Community Liaison Committee and is being distributed to Orica's industrial and residential neighbours.

Historical Background

The Botany Groundwater Survey commenced with a Stage 1 'snapshot' understanding of Orica-sourced contaminants in soil, surface water and marine biota in and around the site. This work was reported in 1990. This was followed by a Stage 2 detailed investigation of the nature and extent of the contaminants identified in Stage 1 and how they could be addressed. The Stage 2 report was released in August 1996. Both reports are available in Pagewood Library.

The key findings of Stage 2 included:

- Evidence of contaminants linked to past industrial activities were found in shallow and deep groundwater.
- Confirmation that shallow groundwater contamination exists, primarily chlorinated hydrocarbons, with the high levels mainly east of Springvale Drain on Block 1 of the Orica Southlands Site. (See drawing)
- Investigations showed that Springvale Drain has a key role in helping prevent the spread of contaminants. However, work needed to be done to prevent the drain transporting contaminated sediments to Penrhyn Estuary.
- Conclusion from a comprehensive Human Health Risk Assessment that contamination "has not created any unacceptable risk to human health" as per standards used by

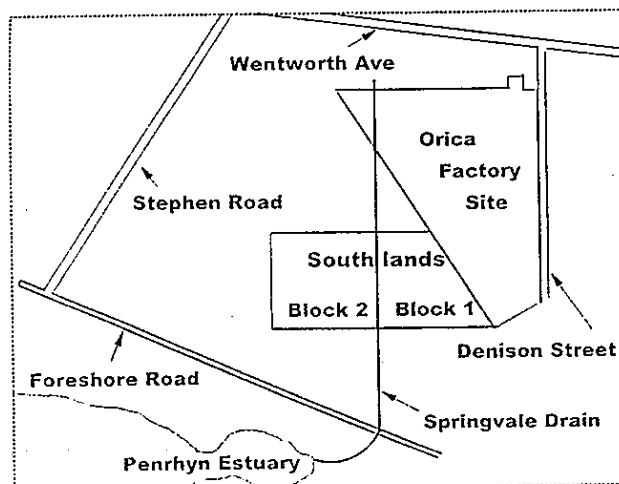
regulatory authorities around the world including the US EPA.

- Evidence of some Mercury and HCB in fish in Penrhyn Estuary. However, the levels recorded were accepted by the Department of Health as not representing a threat to public health

Stage 3 Remediation Program

Following the release of the Stage 2 report, a five year Remediation Plan was issued by ICI Australia in November 1996 with the objective of reducing the contaminant load to the environment, particularly Penrhyn Estuary, by 50% in the shallow groundwater. The Plan included a number of specific modules :

- Installation of a Pilot Scale Reactive Iron Barrier to trial this innovative technology.
- Repairs to the Orica Stormwater Pipes to reduce the contamination into Springvale Drain impacting on Penrhyn Estuary.
- Realignment of Springvale Drain to prevent sediments in the existing drain from being flushed with stormwater to Penrhyn Estuary.
- Monitoring of the contaminants in soil, surface water and marine biota to continue to understand the movement of contaminants.
- Develop an understanding of the role for bioremediation as a potential technology.



Community Liaison Committee

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

The Committee has met regularly to receive progress reports and have questions answered by the consultants carrying out the work. At the start of the Stage 3 Remediation Program, it was recommended that the Committee should have an independent Chair. Professor Ronnie Harding from the UNSW Institute of Environmental Studies accepted the position in early 1997.

The first four meetings were held at Botany Town Hall on 28 November 1996, 17 April 1997, 11 December 1997 and 30 November 1998.

Meeting Five

Meeting Five was held on Wednesday 10 February 1999 at Orica Administration Building. Prior to the meeting, the Committee visited the Orica Southlands site to inspect the installation of the Pilot Scale Reactive Iron Barrier. The Pilot Scale Barrier has been installed to evaluate its performance as a remediation technology for the chlorinated hydrocarbons which resulted from historical activities at Orica's former Solvents Plant which closed in 1991. The Committee witnessed some of the iron being installed and received presentations on the technology, its installation and the evaluation of its performance.

At the meeting itself, John Vogan, from Environmental Technologies Inc., who are the suppliers of the Iron Barrier Technology, made a more detailed presentation on the technology and

its development throughout the world. John highlighted that this was the first application of the technology in the southern hemisphere.

Community representatives raised the question about the sale by Orica of some of the businesses which operate on the site and the possible impact this may have on their commitment to finance this remediation program. Bruce Gotting from Orica explained the new arrangements at Botany, including details on which businesses were being sold. The formation of the Botany Industrial Park to maintain the safety, health and environmental operating standards of the total chemical complex was also reported. Orica retains full responsibility for the groundwater remediation program and remains totally committed to its objectives.

In the report on progress of the remediation program, Orica's project manager, Peter Russell, explained that the proposed Stormwater Pipe Repairs were on schedule and that the first phase would be implemented over the next 6 months. UngROUTED stormwater pipes have been identified as a means of contaminated groundwater leaving the Orica site via Springvale Drain and impacting on Penrhyn Estuary.

The project involving the realignment of Springvale Drain was also progressing with construction work due to be completed this year. This will stop contaminated sediments in the drain continuing to be washed towards Penrhyn Estuary.

The Orica progress report was finalised with a summary of the forward program for the current year and the rest of the 5 year program to 2001.

Meeting Six and Seven

Meeting Six was held on Friday 28 May 1999 and will be reported in the next newsletter.

Meeting Seven will be held at Botany Town Hall on Wednesday 25 August 1999 commencing at 1pm. If you wish to enquire further about the Committee or the meetings, please contact Orica on its Community Hotline on 1800 025 138.

Distribution : This newsletter is distributed throughout the suburbs neighbouring the Orica Botany Site including Banksmeadow, Botany, East Botany, Pagewood, Hillsdale and Matraville