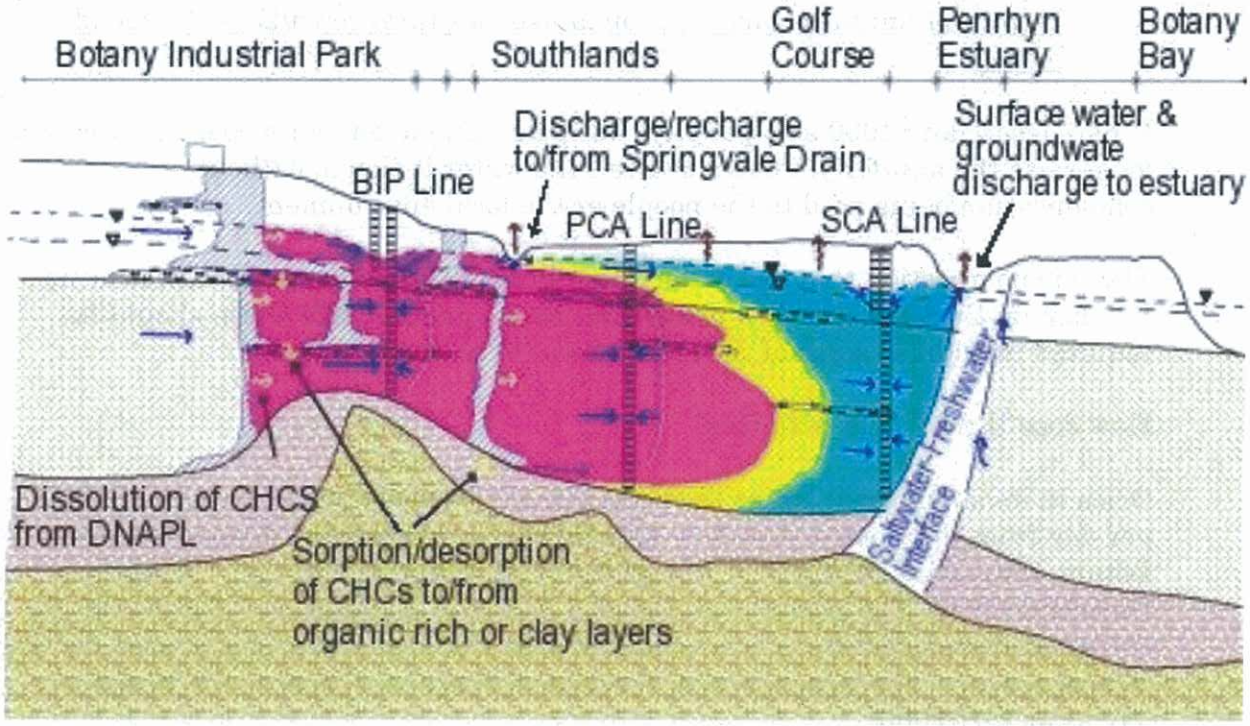
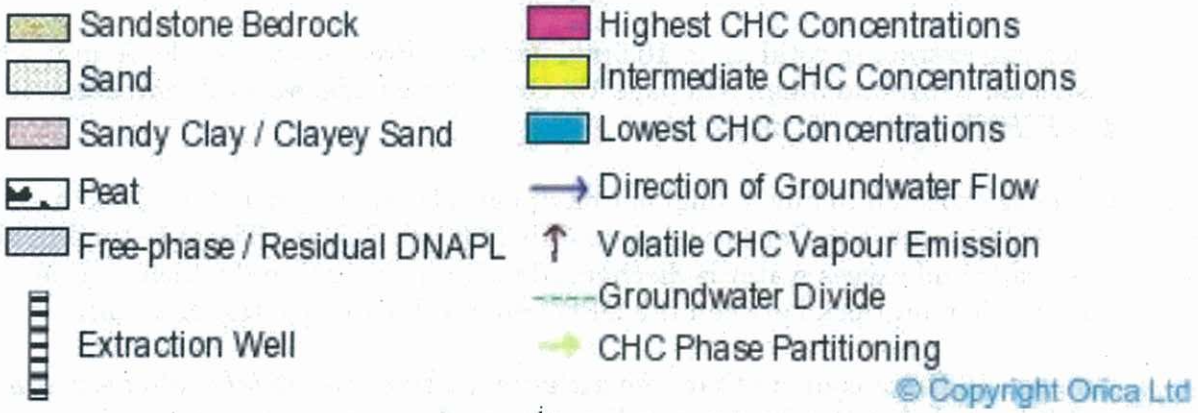
SUBMISSION TO IPART: REFERENCE 10/384 :15/1/11





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Regarding: *Orica Australia Pty Ltd application for a network operator's licence and a retail supplier's licence for the Groundwater Treatment Plant at Botany NSW made under the Water Industry Competition Act 2006.*

Orica has contaminated the Botany Aquifer, described as the biggest chemical spill in Australia. See background:

http://www.smh.com.au/news/National/Botany-pollution-fears-grow/2005/03/31/1111862533886.html

http://sixtyminutes.ninemsn.com.au/stories/tarabrown/259409/a-deadly-legacy

It paid less than $1000 as a penalty. Residents impacted by its operations can no longer use the aquifer yet Orica can sell the water it cleans without compensation being paid to the people or the local environment.

There is no question that the water shouldn't be flushed down the sewer or into Brotherson Dock but surely a prosperous serial polluter like Orica should be required to address some of the debt it owes to the environment.

How does IPART deal with this?

Orica in its submission states that it is already licenced to extract up to 9.5mgl per day from the Botany Aquifer. This figure is comprised of 6.3mgl from the Botany Industrial Park (BIP); 1.8mgl from Southlands(PCL) and 1.4mgl from Foreshore(SCL). The licence was issued 17/6/2008. In addition 1.6mgl a day is extracted from street front bores under 3 Test Bore licences. This is used for the cooling towers. The Groundwater Treatment Plant was licenced for 15mgl per day as at 21/1/2006.

Orica can extract in total up to 10.9mgl per day. Previous to the clean up it was restricted to around 3mgl. On page 13 Orica states ***the water licences issued by the DIPNR (sic) are in perpetuity.***

Qenos is expected to buy 4.4mgl per day(page 11). Since April 2007 Orica has been selling water to Qenos and since July 2007, to Solvay. There is 1mgl held in storage and excess water is discharged to Bunnerong Canal which empties into Brotherson Dock between the DPWorld and Patrick container terminals.

On page 16 Orica confirm that ***The water is to serve industrial customers, it is not intended that this business will serve any domestic customers.***

Those industrial customers, including the Orica ChlorAlkali operation, have received 'grants' from the NSW government to participate. On February 17, 2007 the NSW Government announced that it would allocate $10million for the Orica Recycling Project. These are subsequent grants. [ii]

Orica Australia Pty Ltd.
Reusing Treated Groundwater
Funding: $157,218

This project supported Orica's Groundwater Clean Up Project at Botany Industrial Park by modifying the ChlorAlkali Plant to use recycled water. Water is one of the main raw materials used at the plant to make chemical products for water purification and manufacturing. Orica has now modified its processes at the plant to use the treated water for manufacturing. Pipelines have been installed to transfer the water from the Groundwater Treatment Plant and the water reticulation system was modified to accept the new treated water supply. The project is saving 165.5 million litres of water a year.

Qenos Pty Ltd
Minimising Mains Water Consumption
Funding: $1,068,500

This project will create a new customer for treated water from Orica's Groundwater Treatment Plant at Botany by modifying the Qenos Olefines and Alkatuff plants to be able to use recycled water. Polyethylene manufacturer Qenos will blend the treated water with mains water to use it in the cooling towers at each of the company's two plants in the Botany Industrial Park. Water savings will also be made at Qenos' nearby Alkathene plant with the installation of new water-efficient equipment and changing processes to improve efficiency. The project will save around 922 million litres of water a year.

Solvay Interox Pty Ltd
Utilisation of Treated Ground Water for Non-potable Production Applications
Funding: $200,000

Treated groundwater from the Botany Groundwater Project is now piped to Banksmeadow to be used in cooling towers and boilers at the Solvay Interox site. The project provides a new market for the top grade treated water being cleaned by Orica at a Groundwater Treatment Plant in the Botany Industrial Park. The project installed a 1km pipeline between the treatment plant and the Solvay site with connections to cooling towers, a demineralised water plant and boilers. It is saving 172.9 million litres of water a year. [iii]

I am confident that residents who formerly had access to bores would like to see their names listed similarly details of the grants received and water saved.

It is environmentally responsible to avoid using potable water but is there any compensation for the residents who have lost access to their bores? NO. Is there any major Environmental Project to compensate for environmental losses? NO.

IPART asks the question (page 16):

Have you identified and addressed any other public interest considerations in developing your proposed activity?

Orica's response:

> *A range of feedback has been received in response to the sharing of information about Orica's water re-use plans and activities over recent years. Whilst some CLC members support the reuse of water and can see the environmental benefits of limiting the discharge of good quality water to stormwater drains, others see the inequity of Orica being able to sell Treated Water accessed as part of the groundwater cleanup (given that access to bores in the area has been prohibited by the State Government in response to contamination of the groundwater resource.)*

There is no record of CLC members opposing the reuse of water, but there are CLC members and others who believe that Orica owes the Banksmeadow/Botany environment a debt. It is disingenuous to imply that those who see the inequity in this are in opposition to water reuse. It simply isn't true. The point is:

Orica hasn't been fined (less than $1000 is not a fine it didn't go anywhere in paying the salary and other costs for the process);

It has polluted the Botany Aquifer, the most significant in this region, and residents no longer have access to water;

It has received generous grants for the recycling operation;

It's licence to extract water is in perpetuity and it is expected that the cleanup of the aquifer will take more than 100 years;

It hasn't provided an environmental offset for the environmental (and social) damage it has wrought.[iv]

On page 17 IPART asks the following:

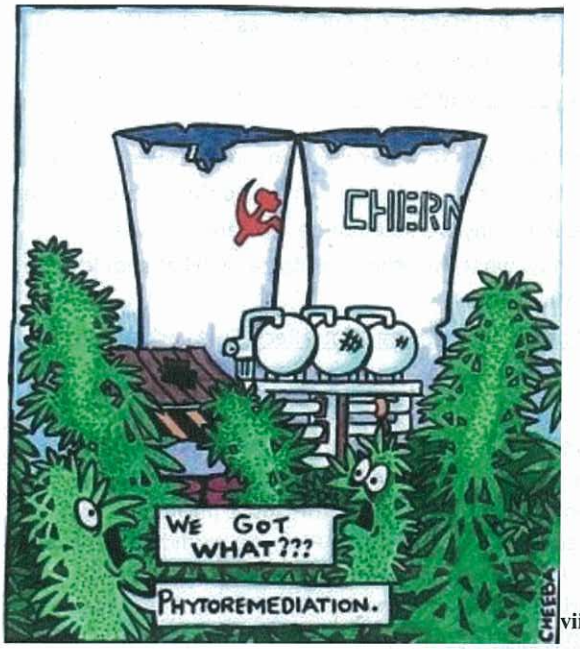
Describe the stakeholder consultation you have undertaken, and any future public and government consultation that will be undertaken.

Orica's response:

> *A detailed workshop on potential recycling initiatives looking forward was held on 24 October 2006 and attended by representatives from the then Department of Energy, Utilities and Sustainability(DEUS – now part of the NSW Office of Water) and the NSW Cabinet and Premier's Office. A brainstorming session with interested community members was held in advance to identify key questions to be addressed in the workshop presentations.*

I attended that workshop[v] and I also attended the 'brainstorming' session beforehand. I and others at that meeting pointed out the unfairness and suggested that Orica could provide an environmental offset. At that time Orica had only recently proposed to develop its Southlands site. This is where the primary containment line is located and where bioremediation trials have been and are being conducted. Southlands is 18ha of floodplain, originally Melaleuca swamp vegetation that has been dumped on but never developed other than as market gardens. Orica proposed to fill and cap for warehousing.

Others have proposed revegetation for a phytoremediation project [vi]



[vii]

Under the EPA (of DECCW) licence Orica is required *"to maximize the reuse of Treated Water from the Groundwater Treatment Plant.."* There is no question that it should be allowed to do so but I contend that there should be provision to require Orica to provide an acceptable environmental offset.

[i] Note diagram from Orica – see link
http://www.oricabotanytransformation.com/index.asp?page=117&project=27

[ii] http://www.environment.nsw.gov.au/grants/recyclingprojects.htm#s2

[iii] http://www.wme.com.au/categories/water/sept4_08.php **Question marks for key players**
.....Orica is now producing 4ML a day of highly treated groundwater from beneath its industrial facility in Botany thanks to a state requirement to clean up the contaminated site. It's currently supplying neighbouring Qenos, Solvay Interox and its own Chlor Alkali plant, but they're only taking 2ML and the company is keen to find further options. It is losing patience with the lack of progress on the bottom section of the grid, which could link Botany up to Sydney Airport and open the way to Redfern, Green Square and the lower end of Parramatta Rd.

"We want some clarity on the institutional arrangements and the cost of delivering water to the grid," said a key consultant to Orica, Ross Fraser. "Plus we need a timetable on when the grid will be delivered."

Qantas last year investigated possible uses for non-potable demands at the airport and in December applied for a state grant of more than $100,000 to put the recycled water options into play. It received in-principle approval, but hasn't heard a word since, leaving it uncertain of achieving a corporate goal to reduce water use by 25 per cent.

Many industry players are trying to determine the government's vision for the grid given water shortages are no longer an immediate driver. With former Water Minister Nathan Rees replacing Iemma as premier at the start of September, maybe some vision will return.

[iv] There are plenty of people in this area who will say that the toxic waste didn't all leach into the aquifer and that a significant quantity was dumped there. The total estimated contaminant mass ranges between 9,600 and 19,400 tonnes, with 14,500 tonnes being considered the best approximation of contaminant quantities in each phase. The breakdown of the different phases (all best guestimates) is 1,500 tonnes for dissolved phase, 3,000 tonnes for sorbed phase and 10,000 tonnes for DNAPL, or free-phase. See http://www.oricabotanytransformation.com/index.asp?page=117&project=27 for details.

[v] At one point at the workshop a resident asked if it would be alright to water his lawn with greywater. The representative from Premiers and Cabinet said it would because they had recently relaxed the rules then one of the DEUS representatives raised his hand and said that in Botany it would not be advisable. It was instructive to watch how one arm of government didn't know what the other was doing on what should have been a well-coordinated matter. Link to Orica report on Workshop - http://www.oricabotanytransformation.com/files/pdf/Workshop/Recycling/WaterRecyclingWorkshopReport24Oct06.pdf

[vi] Consultation on this project took place from mid 2006 to mid 2009 and during that time neither flood nor traffic issues were adequately addressed. The RTA never attended one meeting. The Department of Planning commissioned traffic and flood studies - these were given to the proponent but the public (including local businesses) were not allowed access and won't be allowed access until after the Planning verdict is delivered. If favourable to Orica it is unclear whether under Part 3A there is an opportunity to make an appeal and in any case it would be expensive. Planning have been considering their verdict for over 15 months. At this link I have posted details including a submission. http://laperouse.info/?p=1021

[vii] http://www.appliedphytogenetics.com/apgen/projects.htm