



Botany Groundwater Cleanup Project

Fact Sheet 9

Updated January 2005

Fact sheets are designed to provide the community with simple and easy-to-understand information on environmental science and technology. Readers requiring greater detail should contact Orica:

- by email to info@oricabotanygroundwater.com
- by phoning our Community Feedback Line - 1800 025 138
- by writing to - Community Matters, 16-20 Beauchamp Road, Matraville 2036

Transfer Pipeline

Why do we need a pipeline?

Treatment of the Orica contaminated Botany Groundwater will involve several projects.

Orica is required by the Notice of Clean Up Action to provide containment for the primary containment area (part of Orica Southlands), which must include hydraulic containment. The Notice also requires maximised concentration reduction from the primary containment area by methods including *ex situ* (above ground) treatment. Accordingly, Orica's Groundwater Cleanup Plan proposes construction and operation of a groundwater treatment plant to treat extracted groundwater. Until this plant is constructed, however, it will be necessary to treat the groundwater at other locations. Orica has recommissioned its Steam Stripping Unit (SSU – see Fact Sheet 2) at the Botany Industrial Park (BIP). It is being used as an interim measure to treat the most contaminated groundwater from the primary containment area.

The pipeline transfers contaminated groundwater from the primary containment area at Orica Southlands to the Steam Stripping Unit, and ultimately to the groundwater treatment plant. (A second pipeline transfers contaminated groundwater from the secondary containment area near Foreshore Road to the BIP, again to the SSU as an interim measure and ultimately to the groundwater treatment plant.)

Timing of the pipeline project

The pipeline has been installed in late 2004, and will be operational for approximately 30 years. It will be used for 24 hours a day, seven days a week.

Are there any hazards or risks associated with the pipeline?

The liquid waste to be piped from Southlands is not classified as flammable, a Dangerous Good or hazardous, in accordance with Schedule 1 Part 3 of the *Protection of the Environment Operations Act, 1997*.

The design of the pipeline has taken into consideration the need to control the risk of leaks. The pipeline has been designed in accordance with the American National Standard for Chemical Plant and Petroleum Refinery Piping. On Orica land the pipeline runs above ground so that it can be easily inspected. Outside Orica land, it is not always possible for the pipe to be above ground. There has been a lot of focus on correct material selection to avoid leaks and spills, as well as on the instrumentation installed for leak detection. Potential materials were assessed on the basis of their chemical compatibility with the contaminated groundwater, their mechanical properties, weather resistance, potential leak points and leak containment under crossings.

Hazard studies were conducted at various stages of planning and construction to make sure all risks were identified and controlled.