

**Orica Botany Groundwater Cleanup Project
Groundwater Treatment Plant EIS Workshop 1
16 June 2004 - Summary of Issues Raised
(during the workshop and post workshop participant feedback)**

*Note: This summary records in high level terms issues raised by participants at the workshop and in subsequent correspondence/discussion between participants and Orica. The contents of this summary should not be construed as admissions or implying that the issues and risks raised are accurate within the context of the Orica Botany Groundwater Project.

Subject	Issues Raised by Participants*
<p>Alternatives to building the plant Orica provided an overview of the plant and discussed what alternatives to the plant had been considered. The Environmental Impact Statement (EIS) will outline these in detail.</p>	<ul style="list-style-type: none"> • What other ways of destroying chemicals after they have been stripped (rather than using thermal oxidation) can be considered?
<p>Thermal oxidation process Thermal oxidation is being evaluated as the preferred technology because it is a robust and proven method used in other parts of the world to destroy similar volatile contaminants and can be installed within the time constraints of the Notice of Clean Up Action issued to Orica by the EPA.</p>	<ul style="list-style-type: none"> • Australia has recently ratified the Stockholm Convention that includes dioxins on its list of persistent organic pollutants (POPs). National Toxics Network and Greenpeace do not agree with using this technology as they view it as inappropriate for destroying chlorinated substances as dioxins are produced by incineration • The need to understand the expected level of compliance with emission standards for dioxins
<p>Health Risk Assessment As part of the Environmental Impact Statement, URS will consider the health risks associated with the plant construction, process and operation.</p>	<ul style="list-style-type: none"> • Protection of workers on plant • Regular health checks for workers on plant • Protection of other personnel on Botany Industrial Park • Protection of local community • Geographic boundaries for community protection – determined by sources and pathways • Important to consider cumulative impacts associated with other industrial sites • Assurances that any risk assessment is not withheld
<p>Hazard Assessment As part of the Environmental Impact Statement, URS will consider the hazards associated with the plant construction, process and operation.</p>	<ul style="list-style-type: none"> • Safety of workers • Involvement of WorkCover • Training of workers • Consider need to update existing studies in light of the proposed works
<p>Groundwater modelling Dr Noel Merrick of the National Centre for Groundwater Management at UTS is providing input on water rates and volumes to be pumped to contain the groundwater plume to ensure subsidence and other impacts are mitigated</p>	<ul style="list-style-type: none"> • Consideration of outside (beyond Orica) influences over groundwater flow (e.g., high rainfall) • Risk of subsidence • Risk of contamination of shallow residential bores • Breadth of boundaries • Assumptions • Groundwater modelling study to be publicly available

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<p>Community Consultation A comprehensive community consultation program is being implemented as part of the EIS development</p>	<ul style="list-style-type: none"> Lessons learned from HCB approval process
<p>Air quality Pacific Air & Environment will be undertaking this assessment as part of the EIS</p>	<ul style="list-style-type: none"> Considerations of cumulative effects – important not to look at site in isolation Modelling assumptions – including weather variations
<p>Treated water quality The plant is being designed to recover water and treat it to drinking water standards and to meet the ANZECC marine water guidelines</p>	<ul style="list-style-type: none"> Monitoring points Standards
<p>Construction Aker Kvaerner is designing the front end of the plant. At the time of publication, contracts had not been let for any plant components. URS will be undertaking a geotechnical assessment in relation to construction as part of the EIS.</p>	<ul style="list-style-type: none"> Dust content Spread of dust Geotechnical studies Commitment that no contracts be released prior to approval of EIS
<p>EDC Storage During the interim treatment and recovery of the groundwater in the Steam Stripping Unit, the separated chlorinated hydrocarbons (predominantly EDC) will be stored at Port Botany terminals. This material will be treated in the Groundwater Treatment Plant once it is operational.</p>	<ul style="list-style-type: none"> Security of storage Regulations Managed risks (e.g. fire, leakage) Liability for EDC waste when stored
<p>Reuse of water Orica is investigating opportunities to maximise reuse of treated water from the Groundwater Treatment Plant.</p>	<ul style="list-style-type: none"> Possibility of reusing all treated water
<p>Timeframe</p>	<ul style="list-style-type: none"> When do we expect the contamination source to be depleted? Will it be depleted within the 30 years that the plant is expected to run? Will there be operational adjustments to factor in decreasing efficiency of the plant over time? If the source is not depleted in 30 years, is there a plan B? Will the treatment enable an eventual lifting of the groundwater exclusion zone?
<p>Future workshops The workshops have been designed to involve the community in the development of the EIS prior to its lodgement and exhibition.</p> <ul style="list-style-type: none"> 20 July (to present initial findings from the EIS studies) 16 August (to review EIS findings prior to submission) 	<ul style="list-style-type: none"> allow for specific sessions to review various sections of the EIS (e.g. preferred and alternative process technologies, preliminary health and environmental study findings, groundwater modelling)