

7.1 Introduction

This chapter outlines the consultation undertaken with Government and other authorities as part of the development of the BGC Project. There has been extensive consultation with relevant authorities and agencies throughout the investigation and assessment of the groundwater contamination issue since it was initially defined in the Stage 1 Environmental Survey in 1989/90 (AGEE, 1990). This includes consultation with the EPA about the NCUA and the subsequent GCP produced by Orica in response, and with DIPNR's Natural Resources section about the management of the groundwater in the context of the *Botany Groundwater Strategy* (DIPNR, 2004).

The BGC Project is one of the outcomes of the NCUA and GCP, and this chapter focuses on the consultation carried out in respect of the BGC Project and the associated EIS.

The consultation process has identified key issues raised by the various authorities and agencies that require consideration by Orica in the development of the project and in the assessment of potential impacts as documented in this EIS.

These issues have been combined with the issues identified by other, non-governmental stakeholders, as presented in **Chapter 8**, to provide a list of the key issues of concern associated with the BGC Project, presented in **Chapter 9**.

7.2 Formal Procedures for Consultation

7.2.1 New South Wales Formal Procedures for Consultation

Under the amended SEPP 55, the BGC Project does not require development consent under Part 4 of the EP&A Act. Instead, the project is defined as an "activity" and is required to be assessed under Part 5 of the EP&A Act and its Regulation (as amended). In addition, because the proposal is considered "likely to significantly affect the environment", an environmental impact statement is required, through which the potential environmental effects can be properly assessed and considered in the decision making process.

In preparing this EIS, the requirements of the Director-General of the NSW Department of Infrastructure Planning and Natural Resources were sought, as required by Clause 73 of the Regulation. Each of the matters raised by the Director-General for consideration in the EIS is outlined in **Table 7.1**, together with the a listing of the relevant chapter of the EIS. An unabridged copy of the Director-General's requirements, dated 23 July 2004, can be found in **Appendix C**.

Table 7.1 Summary of Director-General's Requirements

Matter	Reference in EIS
Planning Matters	
<p>The EIS must assess the proposal against the provisions and objectives of relevant environmental planning instruments, including:</p> <ul style="list-style-type: none"> - Botany Bay Local Environment Plan 1995; - State Environmental Planning Policy (SEPP) No. 33 – Hazardous and Offensive Development; - State Environmental Planning Policy No. 55 – Remediation of Land. 	Chapter 6
<p>The EIS must identify the zoning of the land affected by the proposed development, and permissibility of these works within these zones.</p>	Chapter 6
<p>The EIS must outline the general scope of the remediation project, and how the subject proposal forms part of the overall groundwater remediation project. Specific comment must be made on the expected timeframes/duration for the project and the project components to which the subject project components apply.</p>	Chapter 2 & Chapter 5
<p>The EIS must provide a schematic diagram to demonstrate how the proposed works are situated within the overall context of the project.</p>	Chapter 2
<p>The EIS must provide details of any new or modified utilities and indicate the status of the creation of any necessary easements along the pipeline routes.</p>	Chapter 5
Human Health Impacts	
<p>All project components that involve the handling of contaminated materials must include an appropriate level of human health impact assessment, to demonstrate that the proposal would not result in an unacceptable carcinogenic or non-carcinogenic human health impact. Specific reference must be made to both acute and chronic exposures and relevant exposure scenarios/ exposure pathways.</p>	Chapter 24
Design, Building and Structural Issues	
<p>The EIS must include details of processes applicable to project components, including intended capacities and inter-relations with other proposed or existing processes.</p>	Chapter 5
Additional Approvals	
<p>The EIS must identify all approvals required for the proposed development and must include adequate information and an appropriate level of environmental impact assessment in order for the relevant agencies to determine whether to issue an approval/licence.</p>	Chapter 6 and throughout the EIS
Consultation	
<p>Consultation with the parties listed may be useful in the preparation of the EIS:</p> <ul style="list-style-type: none"> • Environment Protection Authority (DEC) • Council of the City of Botany Bay • Roads & Traffic Authority • DIPNR (Natural Resources) • Department of Health 	Chapter 7

Matter	Reference in EIS
<ul style="list-style-type: none"> • Sydney Water • NSW Maritime Authority (previously NSW Waterways Authority) • Sydney Ports Corporation • NSW RailCorp • Landowners whose property may form part of the development boundary. <p>It is the applicant’s responsibility to justify the extent and scope of all consultations.</p>	
<p>The EIS must outline ways in which the wider community has been consulted about the proposed development. The EIS must also provide a Community Relations Plan which includes a strategy for the distribution of information to the community throughout the life of the proposal.</p>	Chapter 8
Hazard and Risk Impacts	
<p>A preliminary risk screening must be completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) and Applying SEPP 33 (DUAP, 1994), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials to be located on the site. Specific consideration must be given to inventories of dangerous goods and hazardous materials, as well as hazards that may be posed by leaks, spills and the full or temporary failure of any pollution control measures. The proponent should also consider the cumulative risk of proposed development in the context of other development in the area.</p>	Chapter 23
<p>Should preliminary screening indicate that the proposal is "potentially hazardous," a Preliminary Hazard Analysis (PHA) must be prepared for inclusion in the EIS, as required under State Environmental Planning Policy No. 33 – Hazardous and Offensive Development. The PHA should be prepared in accordance with the Department's publications Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DUAP, 1997) and Multi-Level Risk Assessment (DUAP, 1997).</p>	Chapter 23
<p>Risk impacts associated with the transport of any dangerous goods and hazardous materials should be documented with reference to DIPNR’s draft Route Selection guidelines.</p>	Chapter 23
<p>An assessment of the cumulative risk of the proposal, taking into consideration the Botany–Randwick Industrial Area Land Use Safety Study (DUAP, 2001) must be included in the EIS.</p>	Chapter 23
<p>The EIS must include details of contingency plans for any potential failures during the operation of the development, including borefield operation, pipeline transfer system and GTP.</p>	Chapter 5 Chapter 12 Chapter 23
<p>Details of a proposed monitoring and maintenance regime to be implemented for the proposed development(s)</p>	Chapter 5 & Chapter 28
<p>Justification of the use of the proposed technology in the treatment of contaminated groundwater, including an indication of similar facilities located in Australia or overseas</p>	Chapter 4
<p>It would be beneficial to lodge any completed and relevant hazard studies with the EIS.</p>	Chapter 23

Matter	Reference in EIS
Hydrogeological Impacts	
Consideration of the draft Botany Bay Groundwater Management Strategy in the context of the proposed development	Chapter 3 & Chapter 12
The EIS must provide a clear description of the hydrogeological setting for the lands subject of the proposed development and surrounds, i.e. the Botany Industrial Park area and extending to Botany Bay should be given. A description of the subsurface geological conditions as well as aquifer characteristics is required. Water table contours with inferred flow directions should be provided.	Chapter 3 & Chapter 12
The EIS must provide a concise depiction of the extent of groundwater contamination including all known plumes and range of concentrations present is required. A description of the nearby regional ambient groundwater quality should also be provided.	Chapter 12
Impacts to the environment if the plumes from the Orica Industrial Complex are not contained should be clearly articulated. Specifically the effects on Botany Bay and any groundwater dependent ecosystems nearby should be discussed.	Chapter 12
The EIS must provide ongoing measures for the monitoring, assessment and reporting of the status of groundwater contamination, including a list of performance indicators against which the effectiveness of the proposal can be measured. Any computer modelling to predict the fate of contaminant flow should be fully described.	Chapter 5 & Chapter 12
The EIS must detail how the proposal may affect groundwater flow regimes and any management or mitigation measures that may be required.	Chapter 12
It is noted that all groundwater works (i.e. water supply bores for groundwater extraction, re-injection of treated groundwater or monitoring wells) are licensable under the provisions of Part V of the <i>Water Act</i> 1912. Accordingly, the EIS must provide a description with plans showing the layout of all proposed groundwater works.	Chapter 5 & Chapter 12
The EIS must provide a description and diagram showing the proposed design of groundwater extraction bores. The quantity to be extracted for groundwater treatment from each production bore—instantaneous pumping rates (L/s) as well as schedules of the volume (in kilolitres) on a monthly basis—should be provided. A list of indicative concentrations of contaminants in the groundwater to be treated should be included in the EIS;	Chapter 12
Details of the groundwater quality and volumes (instantaneous rates and monthly amounts) of any treated groundwater that is proposed to be re-injected into the sandbed aquifer should be provided in the EIS.	Chapter 4 & Chapter 12
Water Quality/Quantity Impacts	
The EIS must provide details on the proposed sediment and erosion controls to be implemented throughout the life of the proposal.	Chapter 11 & Chapter 14
The EIS must identify what measures would be implemented to ensure the integrity of all pipelines throughout the life of the development, including measures to detect any cracks or leakages.	Chapter 5

Matter	Reference in EIS
The EIS must detail the potential for changes to sediment transport and associated water quality impacts along the length of the Bunnerong Canal, the potential for increased sedimentation of the Canal as well as the potential impacts associated with the transport of any contaminants bound to the sediment as a result of the proposed development.	Chapter 14
The EIS must also address the potential for impacts from the proposed development on port-related activities which occur at the Bunnerong Canal outlet.	Chapter 14
The EIS must address potential impacts to tidal flushing and current flows in Brotherson Dock.	Chapter 14
The EIS must provide details of the monitoring program to determine the quality of waters at all discharge points.	Chapter 5, Chapter 14 Chapter 28
Land and Soil Management	
The EIS must consider the suitability of the site for the proposed infrastructure with respect to the presence of any soil contamination. Should any contaminated soils be identified that may be affected by the proposed works, the EIS must provide appropriate management and mitigation measures to address this.	Chapter 11
The EIS must fully detail the potential for the proposed development to lead to further contamination of the soils or groundwater; Measures to minimise the potential for soil contamination should be provided, in addition to rehabilitation measures should contamination occur.	Chapter 11
The potential presence of any Acid Sulphate Soils (ASS) or potential ASS should be considered, with details of the appropriate mitigation and management measures outlined for any activity that may affect those areas of the site. This includes consideration for the impact of reinjected oxygenated water on ASS and details on any monitoring program to ensure minimal risk.	Chapter 11
Details of proposed measures to manage soil slurry generated during any drilling, including procedures to detect any levels of soil contamination and measures to manage, treat and/or dispose of this material.	Chapter 11 Chapter 13
Traffic and Transport Impacts	
<p>A Traffic Impact Study (TIS) must be included as part of the EIS. The TIS should include details of expected traffic movements to and from the proposed development site with specific consideration of:</p> <ul style="list-style-type: none"> - traffic generation during construction and operation including, site access points, hours of traffic movement and proposed traffic routes (particularly measures to avoid any residential areas and sensitive land uses, where relevant); - impacts from any works carried out along the median strip of Foreshore Road with regards to the flow and safety of traffic along that road. Consideration of potential impacts on the flow and safety of pedestrians at Foreshore Road and the surrounding road network as a result of the proposed works; - proposed routes for any dangerous goods or hazardous materials transport (a Route Evaluation Study may be required, as detailed in the Department's publications Applying SEPP 33 and draft Route Selection); 	Chapter 16

Matter	Reference in EIS
<ul style="list-style-type: none"> - the capability of proposed routes (including road and intersection capacity) to handle predicted traffic movements associated with the proposal. Any road upgrades that may be required should be noted with a summary of consultations with the RTA and Council (where relevant) in relation to those upgrades; - the cumulative impacts of traffic generated by the proposal, particularly the contribution that the traffic increases would make to existing traffic conditions in and around the site. 	
Waste Management	
The EIS must identify the quantity and type of waste generated by the proposal during construction and operation and how this waste would be stored and handled on site, and collected, reduced, reused, recycled, or disposed of, in accordance with the EPA's guideline Assessment, Classification and Management of Liquid and non-liquid Waste.	Chapter 15
Details of how purged groundwater would be handled and managed, identification of the likely content of this substance, and how it would be appropriately treated and/or disposed of	Chapter 11, Chapter 14 & Chapter 15
Identification of any materials/ waste that may be stored at the site, and how these materials/waste would be appropriately stored and managed to mitigate any potential impacts on the environment	Chapter 5, Chapter 15 & Chapter 23
Air Quality	
The EIS must assess the predicted air quality impacts associated with the construction and operation of the propose development. The air quality assessment must identify all fugitive and point source emissions and must assess these parameters from a project-specific perspective in accordance with the EPA's Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (2000) and draft policy Assessment and Management of Odour from Stationary Sources in NSW (2000), where relevant;	Chapter 22
Measures such as the design of the pipeline(s) must be detailed in the context of minimisation of fugitive emissions from the proposal	Chapter 5 & Chapter 22
Noise Impacts	
The EIS must assess the predicted noise impact resulting from all noise sources during construction and operation, including road traffic noise. The noise assessment must be undertaken in accordance with the EPA's Industrial Noise Policy (2000) and Environmental Criteria for Road Traffic Noise.	Chapter 17
In relation to construction noise, the noise assessment must be undertaken in accordance with the Construction Site Noise guidelines from the EPA's Environmental Noise Control Manual.	Chapter 17
Consideration of potential impacts resulting from vibration generated during any drilling activities	Chapter 17

In addition, specific requirements of other authorities (EPA, Sydney Ports Authority, RTA, NSW Maritime Authority, Council of the City of Botany Bay) form part of the Director-General's Requirements and are summarised in **Table 7.2** (and included in full in **Appendix C**).

Table 7.2 Statutory and other relevant authorities comments and requirements

Comment/Requirement	Reference in EIS
Environment Protection Authority (DEC)	
Objectives of the proposal, including the size and type of the operation, the nature of the processes and the products, by-products and wastes produced	Chapter 3
Description of the proposal including the production process, cleaner production actions, and construction works	Chapter 5 and throughout the EIS
Demonstrate that the planning process and subsequent development incorporates the objectives and mechanisms for achieving Ecologically Sustainable Development.	Chapter 29
Consideration of alternatives and justification for the proposal	Chapter 4
Provide an overview of the affected environment to place the proposal in its local and regional environmental context.	Chapter 2 & Chapters 10–26
Provide an overview of the methodology used to identify and prioritise issues, and a summary of the outcomes of the process including all issues identified including local, regional and global impacts (eg increased/ decreased greenhouse emissions), and key issues which will require a full analysis (including comprehensive baseline assessment).	Chapter 9
<p>For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.</p> <p>Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts:</p> <ul style="list-style-type: none"> - Air Quality Impact Assessment - Noise & Vibration Assessment - Water Quality Impact Assessment - Soil Contamination Assessment - Flora & Fauna Impact Assessment - Heritage Assessment. 	<p>Chapter 22</p> <p>Chapter 17</p> <p>Chapter 11, Chapter 12, Chapter 13 & Chapter 14</p> <p>Chapter 11</p> <p>Chapter 20</p> <p>Chapter 21</p>
Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.	Chapter 26
<p>Describe any mitigation measures and management options proposed to minimise identified environmental impacts associated with the proposal including an assessment of their effectiveness and reliability and any residual impacts after these measures are implemented, including:</p> <ul style="list-style-type: none"> - air and vibration - water - waste and chemicals - soils. 	Chapters 10–25 & Chapters 27–28

Comment/Requirement	Reference in EIS
Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).	Chapter 6
Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under DEC licences or approvals (eg outline of an environmental management plan).	Chapter 27 & Chapter 28
Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.	Chapter 30
City of Botany Bay Council	
Groundwater Treatment Plant to be decommissioned once it is no longer required for groundwater clean up, and an estimate of the timeframe for the operation of the plant to be included in the EIS.	Chapter 5
Detail the effectiveness of the Pump & Treat process in containing the contaminated plumes.	Chapter 12
Detail the appropriateness of the proposed technology for handling/processing the groundwater, and provide specific examples of where this technology is being used in Australia and elsewhere.	Chapter 4
Monitoring and impacts of water and air emissions	Chapter 13 & Chapter 22
Cumulative impacts of emissions on surrounding environment	Chapter 22 and Chapter 26
Human health impacts of GTP operation	Chapter 24
Impacts of discharged water entering into the channels and the impacts on the Bay of this water, to include investigation into all possible uses for this treated water within the BIP	Chapter 13
Risks and issues with the proposed disposal of the waste material created as a result of the GTP, specifically issues with the reuse/disposal of HCl	Chapter 15
Details of the hazardous material to be stored outlining its classification, volumes and locations	Chapter 23
Evidence that materials used for the bioremediation trial will not adversely affect the operation of the GTP	Chapter 12
Issues raised by the community during the consultation process should be adequately addressed in the EIS.	Chapter 8
Road and Transport Authority (implemented as part of works already undertaken on Foreshore Road)	
Orica must obtain RTA consent under Section 138 of the <i>Road Act</i> 1993, before commencement of any construction work within the Foreshore Road median and comply with any conditions imposed by such consent.	Chapter 5 & Chapter 6
NSW Maritime Authority (previously NSW Waterways Authority)	
The proposed method of construction of containment measures including controls to prevent any pollutants from entering Botany Bay	Chapter 12
An assessment of the impact of the containment measures on the groundwater plumes over time	Chapter 12
Proposed monitoring of the quantity and quality of groundwater flows downstream of containment lines	Chapter 12 & Chapter 28

Comment/Requirement	Reference in EIS
Proposed contingency measures for groundwater contamination control if needed subsequent to installation of containment measure	Chapter 12
Quantitative description of the air and water discharges from the proposed groundwater treatment plant together with an evaluation of their compliance with existing permissible contaminant concentrations	Chapter 13 & Chapter 22
Proposed monitoring program for water quality of discharged water at discharge point and Brotherson Dock	Chapter 13 & Chapter 28
Part 3 A permit for works within 40 metres of the Mean High Water Mark	Chapter 5 & Chapter 6
A detailed description of construction activities that would occur within 40 metres of Botany Bay including filling, excavation, clearing of vegetation and storage of material	Chapter 5
An outline of the measure proposed to manage potential environmental impacts during construction	Chapter 27
Sydney Ports Corporation	
As SPC owns Bunnerong Canal, into which Orica proposes to discharge treated groundwater, SPC approval is required for this discharge activity, anticipated in the form of a licence agreement.	Chapter 6
Assessment of potential impacts associated with increased flows in Bunnerong Canal, e.g. potential for changes to sediment transport, potential for increased sedimentation of the Canal, potential impacts on port-related activities which occur at the Canal outlet; and proposed monitoring and mitigation measures to address these impacts, where required.	Chapter 14

In addition to the above, Clause 72 of the Regulation to the EP&A Act lists the matters that must be included in the contents of an EIS. These matters, together with the relevant chapter of the EIS that gives consideration to the issues, are summarised in **Table 7.3**.

Table 7.3 Statutory requirements for EIS

EIS Guideline Requirements	Reference in EIS
Summary of EIS	Executive Summary
Objectives of activity	Chapter 5
Alternatives	Chapter 4
Consequences of not proceeding	Chapter 4
Justification of proposal	Chapter 30
Description of proposal	Chapter 5
Description of environment	Chapters 10-26
Analysis of impacts	Chapters 10-26
Safeguard measures	Chapters 10-27
ESD measures	Chapter 29
Summary of safeguards	Chapter 27 & Chapter 28
Approvals required	Chapter 6

7.3 Consultation with Statutory Authorities

7.3.1 Planning Focus Meeting

A Planning Focus Meeting (PFM) was held at Orica's offices on the BIP on 3 June 2004. The objectives of the meeting were to introduce members of the project team to the statutory and other relevant authorities, and to provide an outline of the BGC Project to those stakeholders to enable them to consider the particular issues of concern.

In addition, as part of the PFM, a site inspection of the then proposed location for the GTP was carried out.

Prior to the PFM, a briefing paper was prepared and sent to the proposed attendees, outlining the details of the BGC Project to enable informed comment at the meeting.

Representatives of the following organisations attended the PFM:

- Department of Infrastructure, Planning and Natural Resources (DIPNR);
- Environment Protection Authority (EPA);
- NSW Health;
- South East Sydney Public Health Unit (SESPHU);
- Council of the City of Botany Bay (CCBB);
- Sydney Ports Corporation (SPC);
- NSW Waterways Authority (now NSW Maritime Authority); and
- Sydney Water Corporation (SWC).

At the PFM, DIPNR provided an overview of the anticipated assessment process, based on the proposed amendment to SEPP 55, as subsequently gazetted on 30 July 2004. The details of this amendment are presented in **Chapter 6**.

Orica provided an outline of the BGC Project, including the GTP, containment lines and extraction wells, the pipeline alignments to the plant, and the likely outputs of treated groundwater, waste and air emissions from the plant.

Specific matters raised in relation to the BGC Project were discussed during the meeting.

7.3.2 BGC Project Scope

Subsequent to the PFM and the issue of the DGRs, the proposed total capacity of the GTP was increased to 15 ML/day to maximise the effectiveness of the hydraulic containment. As a result, the size of the proposed location for the GTP, as discussed at the PFM, was deemed inadequate for the increased footprint. The current GTP site location was therefore selected, to provide the space required.

Orica requested confirmation from DIPNR that the DGRs remained current, given the increase to 15ML/day and the change to the site location. DIPNR confirmed this in a letter dated 1 November 2004. This letter is included in **Appendix C**.

The revised scope for the BGC Project and approvals process is described in **Chapter 6**.

The EIS considers all operational elements of the BGC Project.

7.3.3 Consultation With Statutory and Other Relevant Authorities During EIS Preparation

During the development of the BGC Project and preparation of the EIS, all relevant authorities were contacted for detailed discussions of the works and the associated potential impacts or issues to be considered and addressed. The key matters discussed are listed in **Table 7.4**. This table also identifies the relevant chapters of this EIS in which those matters are discussed.

Table 7.4 Key matters discussed with statutory and other relevant authorities

Authority	Matters Discussed	Reference in EIS
DIPNR (Planning)	Overall project scope, approvals process, and DGRs Confirmation that the DGRs remain applicable in light of the revised approvals approach and associated scope of the EIS	Chapter 5 & Chapter 6
	Preliminary Hazard Analysis parameters	Chapter 23
DIPNR (Natural Resources)	Installation and operation of extraction wells	Chapter 5 & Chapter 12
	Proposed volumes for extraction, based on containment requirements	Chapter 12
	Proposed pumping rates/quantities to replicate groundwater model predictions	Chapter 5 & Chapter 12
	Proposed monitoring locations and monitoring regime, to include baseline monitoring, automatic water level measurement, conductivity monitoring, production rates, and regular reporting of results	Chapter 12 & Chapter 28
	Predictions in groundwater model to assess effectiveness of hydraulic containment	Chapter 12
	Monitoring network to assess potential settlement/subsidence	Chapter 12 & Chapter 28
	End-use of treated groundwater	Chapter 5 & Chapter 13
	Impact on ecosystems potentially affected by changes to groundwater regime, e.g. Lachlan Swamps/Botany wetlands, Foreshore Beach, Penrhyn Estuary	Chapter 12 & Chapter 20
Environment Protection Authority	Treatment technology selection	Chapter 4
	Air quality assessment including parameters, model selection, scenarios and methodology	Chapter 22

Authority	Matters Discussed	Reference in EIS
	Health risk assessment including parameters, model selection, scenarios and methodology	Chapter 24
NSW Department of Health	Health risk assessment and methodology and parameters to be used including consistency with other risk assessments in and around BIP for example the HCB Waste Management Plan Human Health Risk Assessment (Car Park Waste) (URS, 2000)	Chapter 24
	The following information was reviewed and agreed by DEC and NSW Health before proceeding: <ul style="list-style-type: none"> - health based screening criteria; and - exposure profiles for each category of exposed person – i.e. tables that list relevant values for the parameters needed to calculate exposures such as, for example, how many days a person is at the location, how much they breathe, how much time each day they are there, how much they weigh. 	Chapter 24
Council of the City of Botany Bay	Approvals process	Chapter 6
	Potential impacts	Throughout the EIS
	Treatment technology selection	Chapter 4
	Access agreements for transfer pipelines and works on Council lands	Chapter 6
NSW Maritime Authority	Transformer installation works and use of land for drilling activities Requirements for Part 3A permit	Chapter 6
	Effectiveness of proposed hydraulic containment	Chapter 12
Sydney Ports Corporation	Discharge to Bunnerong Canal and potential associated impacts	Chapter 14
	Cumulative impacts of the proposed Port Botany Expansion	Chapter 26
NSW Fisheries	Potential impacts to Penrhyn Estuary from anticipated reduced flows of groundwater and surface waters, i.e. benthic communities, aquatic vegetation, sea grass, and potential knock on effects on other aquatic species	Chapter 20
	Potential cumulative impact on ecology with proposed Port Botany expansion and anticipated changes resulting from the project	Chapter 20 & Chapter 26
NSW National Parks and Wildlife Authority (part of the DEC)	Terrestrial ecological impacts associated with hydraulic containment	Chapter 20
Sydney Water Corporation	Quality and quantity of proposed discharges to sewer, and revisions to existing Trade Waste Agreement	Chapter 13
	Land use agreements of installing secondary pipeline beneath the SWSOOS	Chapter 6
Roads & Traffic Authority	Access to RTA property, and design of works in Foreshore Road and Botany Road	Chapter 6
	Traffic management during construction	Chapter 16
NSW RailCorp	Agreement for access to land for installation of primary and secondary pipelines	Chapter 6