CONSTRUCTION OF
BULK LIQUIDS Berth No.2
Port Botany

FIRST ANNUAL

INDEPENDENT
ENVIRONMENTAL AUDIT REPORT

FOR CONSTRUCTION OF BULK LIQUIDS BERTH No 2

June 2012

Dickson Environmental Consulting and Audit Pty Ltd
Conducted by Julie Dickson
M Env Mgmt, CEnvP,

RABQSA Certified Lead Environmental Auditor Signed

Date:
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1 EXECUTIVE SUMMARY

Under the Minister's Conditions of Approval for the Construction of the Bulk Liquids Berth No 2 project, an annual full independent environmental audit of the construction of the project is required to be undertaken by a suitably qualified person/team approved by the Director-General. The audit was conducted by Dickson Environmental Consulting and Audit on 27 and 28 June 2012 at the project site and on 29 June at the Sydney Ports office. A follow up visit was also conducted on 7 August 2012. The purpose and scope of this audit was to undertake an:

- Assessment of compliance with the Conditions of Approval, and project commitments;
- Assessment of environmental performance against relevant environmental project criteria; and
- Assessment of environmental mitigation measures and recommendations provided in contractor's environmental management plans.

Compliance to Ministers Conditions of Approval ✓

The outcome of the audit was positive in relation to the level of compliance to the conditions of approval, with an effective compliance tracking process in place. The audit found that relevant conditions had been fully complied with by the Proponent / Principal (Sydney Ports) and by the Contractor (John Holland). For detailed findings, refer to Appendix 1 - Audit Checklist – Part 1 and section 3.1 of this report.

Compliance to project commitments (Statement of Commitments) ♦ ⛌ ☒

Whist compliance was demonstrated for the majority of commitments, a non-compliance (NC) was raised during the initial audit visit in relation to waste management and Issues of Concern (IOC) were raised in relation to the implementation of soil and water management controls. An Opportunity for Improvement was also raised in relation to spill/emergency response. For detailed findings, refer to Table 1, Appendix 1 – Audit Checklist – Part 2 and section 3.2 of this report. NC and IOCs have been followed up and closed. Refer to follow-up section below.

Assessment of environmental performance against environmental project criteria ☺ 😐 ☹

The assessment against the relevant project criteria included a review of the objectives and targets, performance indicators and commitments set in the project documentation. The review concluded that whilst there are some lag performances indicators set (no class 1 or 2 incidents, no environmental complaints and no infringements), measurable objectives and targets had not been set, tracked or reported on. Issues in relation to the adequacy of spill response were also identified. For detailed findings Refer to Table 1, Appendix 1 – Audit Checklist – Part 3 and section 3.3 of this report.

Assessment of the effectiveness of environmental mitigation measures ♦ ⛌ ☒

The assessment found that whilst controls were in place, the site inspection identified issues requiring significant attention, particularly in relation to hazardous substances management, management of potentially hazardous waste and maintenance of sediment and erosion controls and as such, non-compliances and Issues of Concern were raised. In particular, there was insufficient control over subcontractor activities to ensure that the environmental mitigation measures were adequately implemented at the time of the audit visit. For detailed findings refer to Table 1 below and Section 3.4 of this report. NC and IOCs have been followed up and closed. Refer to follow-up section below.

In summary, ***two (2) Non-compliances, five (5) Issues of Concern and four (4) Opportunities for Improvement*** have been raised as a result of this audit. Table 1 below provides a summary of the findings, and Section 3 of this report provides the detailed audit outcomes.

Follow up on Non-Compliances and Issues of Concern ✓

A follow up visit was conducted on Tuesday 7 August to follow up on the non-compliances and Issues of Concern. The follow up visit found that all non-compliances and Issues of Concern had been adequately addressed and these have now been closed out by the auditor. Refer to Table 1 and Addendum 1 for details.

Key to symbols: ✓ = *Conforms;* ♦ = *Opportunity for Improvement*; ⛌ = *Issue for Concern* ☒ = *Non Compliance*
☺= *positive, best practice outcome*; 😐 = *Neutral or not best practice outcome* ☹ = *negative outcome*

***Table 1* – Summary of Findings**

Type* & No.	Organisation	Finding	Report / checklist reference
NC # 1 ☒	John Holland	Inadequate systems were in place to minimise potential for water and land pollution from the storage and handling of hazardous substances as required under MCoA condition 6.2 b), Water Quality Management ECP and the Hazardous Substances ECP. The following specific issues were identified as requiring action: ○ Numerous examples of inadequate and inappropriate storage of hazardous substances were noted. ○ The requirement to use secondary containment for temporary storage of hazardous substances has not been complied with. It appears that this has been previously identified during weekly inspections and is a recurring issue. ○ Whist there were some spill kits located on site, they were not always adequately stocked, did not have instructions for use or list of contents, and were not always located in areas that would require spill materials nearby. ○ Spill kits were not always made available throughout relevant worksites and storage/decanting areas as required by the Hazardous Substances ECP.	Section 3.4.2
NC # 1 Follow-up ✓	John Holland	Follow-up visit findings / observations The follow-up visit found: • Significant improvement in the storage of hazardous substances • Secondary containment was observed to be used in the formal storage areas and at temporary working sites • Additional spill kits were provided at numerous locations around the site in the vicinity of areas that stored or potentially used hazardous substances. The spill kits were noted to be fully stocked, were sealed with tape, had a list of contents and a spill procedure/flow chart **Status: Closed**	Addendum 1
NC #2 ☒	John Holland	Potentially hazardous wastes are disposed of in general waste skips and may be contravention of the POEO Act and DECCW/OEH Waste Classification Guidelines. The following issues have been identified as contributing to the non-compliance: ○ A number of drums and containers that have contained dangerous goods (and containing residues) have been placed in the general waste skips. ○ No dedicated waste receptacles are provided for the storage of hazardous waste ○ There were no facilities available to wash or remove residues from drums that contained certain dangerous goods to allow containers to be legally disposed / recycled ○ The Waste Management ECP does not identify the key waste streams, their classifications, destination or information relating to who can transport certain wastes (e.g. hazardous). The Plan also does not provide adequate	Section 3.4.3 SoC 23

Type* & No.	Organisation	Finding	Report / checklist reference
		guidance actions on the relevant requirements from the Waste Classification Guidelines. ○ The induction / training program does not provide any guidance on waste classification for hazardous wastes and does not advise on the appropriate disposal of hazardous wastes or management of containers with residues of hazardous substances or dangerous goods. ○ The Waste ECP states that (item 6) "…skips and bins are to be lidded and kept closed ". The bins inspected on site generally did not have lids.	
NC # 2 Follow-up ✓	John Holland	Follow-up visit findings / observations The follow-up visit found: • Separate bins are now provided for containers which previously contained dangerous goods (see photos). No containers were observed in general waste bins • Waste is now collected by Transpacific Waste and hazardous waste and completed waste tracking forms are provided to John Holland by the supplier • The Waste Management ECP has been revised to include Attachment A – Classification and Disposal method of various waste streams. • The waste/re-use records register on Project Pack now identifies appropriate waste streams including pre-classified hazardous wastes through a drop-down menu. • The induction material now contains addition information relating to waste management • The Waste ECP has been revised to remove the requirement for skip bins to be lidded and kept closed. It was however observed that the bins containing hazardous waste were covered with a tarpaulin. **Status: Closed**	Addendum 1
IOC #1 ☒	John Holland	Sediment controls around the foreshore area and downstream from the stockpile area require improvement and ongoing maintenance to ensure that sediment in not washed into the revetment wall and Botany Bay.	Section 3.4.1 SoC 16, 26
IOC #1 Follow-up ✓	John Holland	Follow-up visit findings / observations The follow-up visit found: • Erosion and sediment controls around the foreshore area and downstream from the stockpile were observed to be well maintained and in good condition **Status: Closed**	Addendum 1
IOC #2 ☒	John Holland	The Site Environmental Plan (SEP) for the onshore facility area does not show any requirement for sediment controls on the bay side of Fishburn Road adjacent to the revetment walls. Sediment fences were noted to be in place in this area, however they were not well maintained and there was evidence of washouts from the gaps in the sediment fences into the revetment wall (see	Checklist Part 2 - SoC 26

Type* & No.	Organisation	Finding	Report / checklist reference
		photos 3-6). The SEP should be revised to reflect the sediment controls required to be installed and maintained.	
IOC #2 Follow-up ✓		Follow-up visit findings / observations The follow-up visit found: • The SEP has now been revised and includes the appropriate sediment and erosion controls **Status: Closed**	This table only
IOC #3 ☒	John Holland	There were sections of the silt curtain that were underwater at the time of the audit (high tide) which means that it would not be effective in containing pollutants (e.g. sediment or spills) at certain times of the day. (see photos 7 and 8). Actions need to be taken to ensure that there are no gaps in the silt curtain at any time.	Section 3.4.1
IOC #3 Follow-up ✓		Follow-up visit findings / observations The follow-up visit found: • The silt curtain has been adjusted to ensure it remains above water at the high tide mark. At the time of the audit, the silt curtain was observed to be afloat (not high tide) **Status: Closed**	Addendum 1
IOC #4 ☒	John Holland	Sediment fences were installed downstream of a portion of the stockpile area, however at the time of the audit, there were minimal controls downstream of the main spoil stockpile. (see photos 10 and 11) There was evidence of tracking of sediment from the stockpile area (photo 12) – a sweeper is used to clean the road around twice per week.	Section 3.4.1
IOC #4 Follow-up ✓		Follow-up visit findings / observations The follow-up visit found: • A sediment fence has been installed around the base of the stockpile and battered. **Status: Closed**	Addendum 1
IOC #5 ☒	John Holland SMEC/SPC	Whilst weekly inspections are undertaken, the inspection team needs to ensure that sediment controls are checked during weekly inspections and actioned as required. From the condition of some sediment controls in the vicinity of the revetment wall at the time of the audit, it appears that they may not have been adequately maintained for some time.	Section 3.4.1
IOC #5 Follow-up ✓		Follow-up visit findings / observations The follow-up visit found: • Sediment controls are checked during site inspections. The condition of sediment fences was significantly improved since the previous audit. **Status: Closed**	This table only

Type* & No.	Organisation	Finding	Report / checklist reference
OFI # 1	John Holland, SPC	Whilst objectives and targets have been set in the CEMP and ECPs, they are generally not measurable and they are not being tracked or reported on.	Checklist Part 3, No. 1 Section 3.3.1
OFI # 1 Follow up		Not followed up	
OFI # 2	John Holland, SPC	The Environmental Incident Frequency Rate (EIFR) that is set as a key performance indicator in the CEMP does not appear to be calculated or reported on a project basis. JH should clarify how this is measured and consider whether this target should be retained. If so, it should be calculated and reported on.	Checklist Part 3, no. 2. Section 3.3.2
OFI # 2 Follow up		Not followed up	
OFI # 3	John Holland	The references to Standards and Codes in the Waste ECP refer to the "DECC Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes" is out of date. These have been replaced by the Waste Classification Guidelines (DECCW Dec 2009). The ECP should be revised to reflect this.	Section 3.4.3
OFI # 3 Follow up ✓		Follow-up visit findings / observations The follow-up visit found: • The Waste ECP has been revised to reflect the changes **Status: Closed**	This table only
OFI # 4	John Holland	The emergency procedures relating to spills and leaks do not appear to be highly visible or readily available on site, and it is therefore recommended that they are displayed in prominent locations (e.g. – on noticeboards, in spill kits and on walls.	Checklist Part 2 SoC 14
OFI # 4 Follow up ✓		Follow-up visit findings / observations The follow-up visit found: • A spill management flowchart has been developed and is now attached to the inside of the spill kit lids and is presented at Inductions. A toolbox talk was held that outlined the issues raised during the independent audit to ensure all current personnel are aware of project requirements **Status: Closed**	Addendum 1

2 INTRODUCTION

2.1 Project Background

Sydney Ports is a “statutory State Owned Corporation” under the State Owned Corporations Act 1989 (NSW). Sydney Ports owns and manages the commercial port facilities in Sydney Harbour and Botany Bay and provides facilities to support trade growth for the benefit of the NSW economy.

The development of the Bulk Liquids Berth No. 2 (BLB2) will ensure New South Wales has adequate berth capacity to satisfy existing and future forecast demands for the import and export of bulk liquids including chemical, petroleum and gas products. The construction of the BLB2 will also reduce demurrage costs for ships delivering or receiving the products.

Project Approval of BLB2 was determined by the NSW Minister for Planning on 20 March 2008 (Major Projects Application 07_0061). The Conditions of Approval have been modified and amended as follows:

a) By letter from the Director-General, dated 22/12/10:

b) By letter from the Director-General, dated 24/12/10:

c) By letter from the Director-General, dated 14/4/11:

d) under section 75W of the Environmental Planning and Assessment Act 1979 (EP&A Act) on 28 April 2011 (07_0061 MOD 1)

2.1.1 Project Description

The construction and operation of the BLB2 will consist of the following key relevant components:

- A central working platform and working area, with berthing face (including bollards and fenders) and pipe manifold / marine loading arm arrangements;
- Adjacent berthing dolphins on each side of the working platform designed to accommodate the maximum design length vessel;
- Two mooring dolphins on each side of the working platform (four in total);
- Walkways (catwalks) connecting the dolphins and working platform;
- An access bridge structure connecting the working platform with the shore, providing vehicle access and pipeline support structures;
- Support infrastructure including fire control facilities (pumps, foam/water monitors and associated tanks), amenities buildings and services such as water, sewer, electrical and communications;
- Berth fitout, including fire fighting monitors and operator shelter; and
- Pipelines to user facilities including support and access structures such as pipe racks and culverts.

Figure 1 – Project Location

2.1.2 Requirement for this audit

In accordance with MCoA 4.1d, a program for independent environmental auditing is required to be implemented in accordance with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing.

Environmental audits are required to be undertaken at not less than 12 month intervals (or as otherwise agreed by the Director-General) with the first audit scheduled approximately 6 months after the commencement of construction works. As stated in section 2.2, an environmental audit report will be submitted to the Director-General in the first year of operation following which a review of the requirements for the ongoing reporting of compliance status to the Director-General for the operational phase will then be undertaken in consultation with DP&I. The independent environmental audit report is required to be submitted to the Director-General within two months of each audit being completed.

This audit report is the first independent audit to be conducted on the project and has been undertaken in accordance with the requirements of MCoA 4.1d.

Condition of Approval	Reporting Requirement	Construction		Deliverable
MCoA 4. 1d	Independent Environmental Audit Report (EAR)	Initial – After 6 months from start	Subsequent – annually (or as per DG requirements)	EARs to DG within 2 months of audit completion

The project construction contract has been awarded to John Holland Pty Ltd (JH). Construction on the BLB2 commenced in mid-2011. The initial EAR is required to take place by end of June 2012. The berth is expected to be operational in mid 2013 following the construction of the Users' infrastructure/fit out. The audit was conducted over 2 days on the construction site primarily with the Construction Contractor John Holland on 27 and 28 June 2012, and interviews were held with Sydney Ports Corporation at the construction site and at their office in Windmill Street Sydney on 29 June 2012.

2.2 Purpose and Scope

The purpose of the audit was to assess compliance with project environmental criteria in accordance with the scope below:

- assessment of compliance with the conditions of approval and project commitments;
- assessment of environmental performance against relevant environmental project criteria; and
- assessment of environmental mitigation measures and recommendations provided in contractors environmental management documentation.

The scope of the audit includes the construction phase only and does not include conditions relating to the eventual users.

2.3 Methodology

In the preparation for this first audit, an audit checklist was prepared with documentation provided by Sydney Ports and the Contractor John Holland to identify the relevant MCoA requirements and modifications for the construction phase of works, and determine appropriate criteria for assessment of environmental performance.

The MCoA include conditions that are individually managed either by Sydney Ports or John Holland or collectively by the two organisations. In addition, the MCoA also included conditions relating to the eventual user of the facilities. Where the responsibility is for the user only, these conditions have not been included in the checklist for this construction phase audit. Responsibility for the management of each Condition is clearly documented the audit checklists.

The review of the effectiveness of environmental management primarily involved site inspections, interviews with key management personnel, observation of activities and review of inspection reports and other related documentation. The performance was primarily assessed against the criteria documented in the Construction Environmental Management Plan and associated Environmental Control Plans (ECPs).

A return site visit was conducted on Tuesday 7 August 2012 to follow up on actions taken to address non-compliances raised during the first audit.

2.4 Glossary of Terms in relation to findings

- ***Compliant (C)*** ✓**:** Complies with all requirements of the condition(s)
- ***Opportunity for Improvement (OFI)*** ♦**:** An opportunity identified during the audit that could assist in the improvement of environmental performance on the project.
- ***Issue of Concern (IOC)*** ☒**:** A situation observed during the audit that is not considered as good environmental practice and requires corrective action. May be considered as a minor non-compliance and will be followed up at subsequent audits.
- ***Non-compliance (NC)*** ☒**:** Does not fully comply with all requirements of the condition or does not meet appropriate environmental management standards. Non-compliances will require verification of adequate corrective action by the independent auditor within 6 weeks of the audit. Where the non-compliance is based on site observations, a return site visit will be required.
- ***Not Applicable:*** There were either no compliance issues related to the condition, is a future required action or was not applicable at the time of the audit.

3 SUMMARY OF FINDINGS

3.1 MCoA Compliance

✓

A detailed review against the Ministers Conditions of Approval was conducted using an audit checklist. Detailed findings are included in the checklist in Part 1 of *Appendix 1* of this report.

The outcome of the audit was positive in relation to the level of compliance to the conditions of approval, with an effective compliance tracking process in place. The audit found that relevant conditions had been fully complied with by the Proponent / Principal (Sydney Ports) and by the Contractor (John Holland).

3.2 Statement of Commitments (SoC)

✓ ♦ ☒ ☒

A detailed review against the twenty six (26) Statements of commitments was conducted using an audit checklist. Detailed findings are included in the checklist in Part 2 of *Appendix 1* of this report.

Whist the majority of commitments were deemed to be compliant, non-compliances were raised during the initial audit visit in relation to waste management and Issues of Concern were raised in relation to the implementation of soil and water management controls. An Opportunity for Improvement was also raised in relation to spill/emergency response.

The following findings were raised in relation to the Statement of Commitments:

SoC 14:

Requirement: Procedures for spills and leaks including notifications and clean ups would be developed

Opportunity for Improvement (OFI) #4 ♦

- The emergency procedures relating to spills and leaks do not appear to be highly visible or readily available on site, and it is therefore recommended that they are displayed in prominent locations (e.g. – on noticeboards, in spill kits and on walls).

Soc 16:

Requirement: Soil and Water Management Plan implemented during construction

Issue of Concern (IOC) #1 ☒

- Sediment controls around the foreshore area and downstream from the stockpile area require improvement and ongoing maintenance to ensure that sediment in not washed into the revetment wall and Botany Bay.

SoC 22 & 23:

Requirement: Mitigation measures to minimise waste impacts during construction would be included in the Construction Environmental Management Plan.

Requirement: All waste generated would be removed from the work area as soon as practicable and disposed in accordance with DECC waste management guidelines

Non-Compliance (NC) #2 ☒

- Potentially hazardous wastes are disposed of in general waste skips and may be contravention of the POEO Act and DECCW/OEH Waste Classification Guidelines. The following issues have been identified as contributing to the non-compliance:
    - A number of drums and containers that have contained dangerous goods (and containing residues) have been placed in the general waste skips.
    - No dedicated waste receptacles are provided for the storage of hazardous waste
    - There were no facilities available to wash or remove residues from drums that contained certain dangerous goods to allow containers to be legally disposed / recycled
    - The Waste Management ECP does not identify the key waste streams, their classifications, destination or information relating to who can transport certain wastes (e.g. hazardous). The Plan also does not provide adequate guidance actions on the relevant requirements from the Waste Classification Guidelines.
    - The induction / training program does not provide any guidance on waste classification for hazardous wastes and does not advise on the appropriate disposal of hazardous wastes or management of containers with residues of hazardous substances or dangerous goods.
    - The Waste ECP states that (item 6) "…skips and bins are to be lidded and kept closed". The bins inspected on site generally did not have lids.

SoC 26:

Requirement: Mitigation measures to minimise soil and water impacts during construction would be included in the Construction Environmental Management Plan.

Issue of Concern (ICO) # 2

- The Site Environmental Plan (SEP) for the onshore facility area does not show any requirement for sediment controls on the bay side of Fishburn Road adjacent to the revetment walls. Sediment fences were noted to be in place in this area, however they were not well maintained and there was evidence of washouts from the gaps in the sediment fences into the revetment wall (see photos 3-6). The SEP should be revised to reflect the sediment controls required to be installed and maintained.

3.3 Assessment against relevant project criteria (objectives and targets, Performance Indicators and commitments in the CEMP)

An assessment of performance against the project criteria was conducted using an audit checklist Detailed findings are included in the checklist in Part 3 of *Appendix 1* of this report.

Emoticons were used to reflect assessment outcomes. They are:
☺= *positive, best practice outcome*; 😐 = *Neutral or not best practice outcome* ☹ =– *negative outcome*

Key outcomes and findings of the assessment are provided below:

3.3.1 Objective and Targets outcomes

😐

Section 1.3.2 and Table 1.1 of the CEMP (BLB2-PLN-EMP-004 Rev 5) document the "Key Environmental Objectives" of the project. For each aspect, an objective and a target are specified. Aspects listed include: Water Quality; Spills and Hazard reduction; Air Quality; Noise and Vibration, Groundwater and hydrology, geology, topography and soils; Community; Waste; Traffic and Access; Heritage and Visual Amenity.

A review of the documented objectives and targets found that whilst they provide a general overview of required project outcomes and processes, they are generally not measurable. There does not appear to be any specific programme in place to track or report on the achievement of these objectives and targets.

Opportunity for Improvement (OFI) # 1

- The objectives and targets set against these aspects provide a general overview of required project outcomes and processes and are generally not measurable. There does not appear to be any specific programme in place to track or report on the achievement of these objectives and targets.

  As the setting of measurable objectives and targets and implementation of a programme to achieve them is a requirement of ISO 14001, consideration should be given to the setting and tracking of key project environmental performance criteria in the future.

Also refer to Part 3 of the audit checklist in Appendix 1

3.3.2 Performance Indicators outcomes

😐

Three performance indicators have been set for the project within the CEMP. They are:

- Environmental Incident Frequency Rate (EIFR)
- Environmental Complaints
- Infringements and Penalties

Opportunity for Improvement (OFI) # 2

- Whilst it appears that incidents would be reported through the monthly reports, there was no evidence that the EIFR is calculated or reported on at a project level. The contractor John Holland should clarify how this is measured and consider whether this target should be retained. If so, it should be calculated and reported on.

There have been no environmental complaints that can be directly attributed to the project and there have been no infringements to date. Complaints and infringement (if any) are reported monthly.

For detailed findings Refer to Appendix 1 – Audit Checklist – Part 3 and section 3.3 of this report

3.3.3 General Project Commitments from CEMP

Environmental Inspections 😐

Environmental inspections are undertaken weekly in conjunction with the safety inspection, and the inspection team generally comprises the PER, the project Safety Rep, supervisor (s) an engineer and a SMEC representative (on behalf of SPC).

Inspection findings are recorded on the inspection checklist and corrective actions are transferred onto a corrective action checklist (front page of checklist) which is then provided to the relevant subcontractors who are required to undertake corrective actions. Responses to the corrective actions are to be provided to JH and generally, these are followed up at subsequent inspections.

A review of the inspection checklist file found that whilst many issues appear to be closed out, there were examples where there was no close out recorded. On the checklist dated 20/06/12, sediment controls were identified as an issue, however this was not transferred onto the corrective action sheet.

The site inspection conducted during the audit found a number of issues that will require corrective action, particularly relating to hazardous substance management (refer to non-compliance # 1). It appears that some of these issues have been an ongoing concern. The follow up process needs to be improved to ensure better management of environmental risk.

Environmental Monitoring ☺

Three pieces of equipment requiring monitoring equipment were on site. Calibration certificates were observed to be in date. All were due for recalibration in 2012.

Noise and water quality monitoring results were sighted on Project Pack records register.

Monthly Environmental Report ☺

A written Environmental Report is required to be compiled each month by the PER and included in the Project Monthly and communicated as required. A review of reports found that the Project Monthly Report is prepared monthly and submitted to Sydney Ports within Annexure G – Section 5.11 – Environmental Issues reports against the stated criteria. Sighted report dated May 2012. No adverse environmental impacts, complaints or infringements were reported for the month. Information was also provided on issues raised at JH and SMEC ER inspections, revision of plans, and JH internal audit.

Reporting of Environmental Incidents ☺

There have been no reports of any major (Class 1 and Class 2) environmental incidents. Incident reports in relation to five minor oil spills were reviewed. The reports indicated that all were minor in nature and were cleaned up.

Environmental Emergency Response ☹

A review of emergency plans relating to spills found that they were not fully adequate as they were not highly visible or readily available to all relevant site personnel. (Refer to OFI #4).

Spill kits were not always fully stocked or located in appropriate locations. The kits also did not have any instructions for use or lists of contents to assist in ensuring they are adequately stocked. (Refer to NC #1)

A check on a foreman's vehicle found that a portable kit was kept on board.

Corrective Actions ☹

As noted under “Environmental Inspections” a number of issues raised during inspections in relation to subcontractor activities and subsequently closed were noted to recur on a regular basis. (Refer to NC #1). Recurring breaches of environmental requirements by subcontractors need to be escalated and appropriate actions taken to ensure compliance.

Complaints Management ☺

There have been no environmental complaints to date

Energy Reporting ☺

Subcontractors are required to report on energy and fuel usage, and JH provide this and their own data to senior management for reporting under the NGER Act.

3.4 Assessment of Effectiveness of Mitigation Measures

The effectiveness of mitigation measures was assessed primarily through site inspections, interviews with key management personnel, observation of activities, reviews of monitoring results and assessment against key mitigation measures documented in the Construction Environmental Management Plan (CEMP) and associated Environmental Control Plans. For details on methodologies adopted for undertaking this component of the audit, refer to *Section 2.3 – Methodology*.

The site inspection involved a visit to all active areas of the project including perimeter controls and observation of activities being undertaken.

Overall, the assessment of the project site found that there were some areas where good environmental practices were implemented, however there were also are a number of areas identified that require improvement. As such, two non-compliances and several Issues for Concern have been raised against some of the key environmental aspects. The findings relating to specific areas of environmental management are detailed below.

3.4.1 Erosion and Sediment Control

An Erosion and Sediment Control Environmental Control Plan (ECP) BLB2-PLN-ECP-002 Rev 5 was in place at the time of the audit. Site Environmental Plans (SEPs) were also in place for the on-shore facility and off shore work area (BLB2-JH-SEP-001 and 004 respectively).

The following positive observations were made in relation to erosion and sediment control:

- Drains were generally well protected from ingress of sediment. On the day of the audit, the controls were being temporarily removed to allow the road sweeper to clean the road, and it was noted that the controls had been replaced later in the day. (see photos 1 and 2)
- Road is regularly swept to minimise potential for off-site sediment tracking and dust generation;
- Weekly inspections of the worksites are undertaken by the Project Environmental Representative and representatives from the project including SMEC (on behalf of SPC) and project supervisors.
- A Temporary concrete wash-out pit is in place near the hazardous substances storage container at the rear of the site (photo 13)

Overall, erosion and sediment controls were observed to be in place, however a number of the controls were in need of maintenance, and there was evidence of failure of some of the controls to contain sediment from entering Botany Bay via the revetment wall. Refer to Issues of Concern below:

Audit outcomes

Issues of Concern (action required):

- Sediment controls around the foreshore area and downstream from the stockpile area require improvement and ongoing maintenance to ensure that sediment in not washed into the revetment wall and Botany Bay.
- The SEP for the onshore facility area does not show any requirement for sediment controls on the bay side of Fishburn Road adjacent to the revetment walls. Sediment fences were noted to be in place in this area, however they were not well maintained and there was evidence of washouts from the gaps in the sediment fences into the revetment wall (see

photos 3-6). The SEP should be revised to reflect the sediment controls required to be installed and maintained.

- There were sections of the silt curtain that were underwater at the time of the audit (high tide) which means that it would not be effective in containing pollutants (e.g. sediment or spills) at certain times of the day. (see photos 7 and 8). Actions need to be taken to ensure that there are no gaps in the silt curtain at any time.
- Sediment fences were installed downstream of a portion of the stockpile area, however at the time of the audit, there were minimal controls downstream of the main spoil stockpile. (see photos 10 and 11) There was evidence of tracking of sediment from the stockpile area (photo 12) – a sweeper is used to clean the road around twice per week.
- Whilst weekly inspections are undertaken, the inspection team needs to ensure that sediment controls are checked during weekly inspections and actioned as required. From the condition of some sediment controls in the vicinity of the revetment wall at the time of the audit, it appears that they may not have been adequately maintained for some time.

3.4.1.1 Photographs – Erosion and Sediment Control

Photo 1
Example of good drain protection measures (however, additional sandbags should be used to hold geofabric down

Photo 2
Drain well protected from sediment ingress adjacent to storage container

Photo 3
Sediment controls in place adjacent to revetment wall – gap in fence in foreground.

Photo 4
Sediment deposited in revetment wall – appears to be result of washout from sediment fence

3.4.1.1 Photographs – Erosion and Sediment Control

Photo 5
Sediment fence – protection is not continuous

Photo 6
Sediment fence in place – requires maintenance

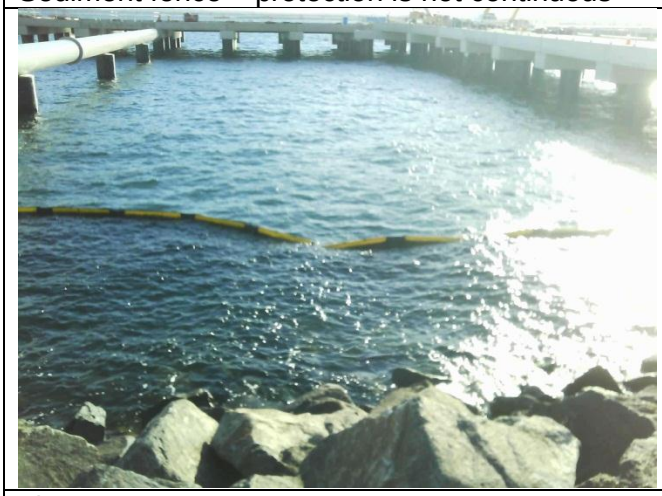

Photo 7
Gap in silt curtain at high tide

Photo 8
Showing silt curtain around work area and silt fence in need of maintenance

Photo 9 – Sediment controls in place below carpark area – in good condition and well maintained

Photo 10
Sediment controls downstream from stockpile area (protection provided for small stockpiles of road base material) in good condition and well maintained

3.4.1.1 Photographs – Erosion and Sediment Control

Photo 11
Main stockpile area – no downstream sediment controls

Photo 12 – exit from stockpile area. Tracking of sediment evident.

Photo 13
Concrete washout pit

3.4.2 Water Quality / Hazardous Substances Management

☒

A Water Quality ECP (BLB2-PLN-ECP-009 Rev 5) and a Hazardous Substances ECP (BLB2-PLN-ECP-008 Rev 6) were developed for the project. These issues are assessed under a single section of this report as many of the issues are interrelated.

The following positive observations were made in relation to water quality and hazardous substances management:

- A change in piling methodology appears to have resulted in lower impacts on water quality in Botany Bay.
- Silt curtains installed
- A hazardous substances container was provided on site (see photos 14 and 15)
- The hazardous substance storage by Smithbridge subcontractors was adequate.
- It was noted that spill materials were available in one of the supervisor's vehicles.

At the time of the audit, the piling works were complete, and therefore protection measures for this activity were not observed. It is understood that there was minimal impact on water quality during pile driving activities, as no drilling was required. A contingency plan was in place to manage water quality should the piling methodology need to change to include drilling, however this situation did not arise.

The Water Quality ECP required that water quality monitoring was to be conducted daily during works affecting Botany Bay on both the construction and port side of the silt curtain. Due to the change in methodology for piling (ie- no drilling) the decision was made that daily water quality water monitoring was not required as the works were "not affecting Botany Bay". Water quality monitoring was conducted on 15 May 2012 during piling and results indicated that water quality parameters tested were within required limits. Visual water quality checks were conducted during weekly inspections (recorded on checklist) and less formal daily checks were also undertaken (not generally recorded).

As noted under the sediment and erosion control section, a concrete wash out pit was installed to manage alkaline, concrete laden water.

During the site inspection conducted during the audit, a number of issues in relation to the storage and management of hazardous substances across the project site were identified as requiring significant attention. Some of these issues had also been identified during internal site inspections and appear to be an ongoing issue on the project. As a result of this, a non-compliance was raised in relation to hazardous substances management. Details are recorded below.

Audit outcomes

Non-compliance (action required - JH) and verification of close out (by auditor) required

- Inadequate systems were in place to minimise potential for water and land pollution. The following specific issues were identified as requiring action:
    - Numerous examples of inadequate and inappropriate storage of hazardous substances were noted. In photos 18 and 19, the drums were located in a position where if spilt or leaked, the contents would flow directly to Botany Bay. In photo 21, this pallet of Class 9 substances was identified in an inspection as requiring action (noted as stored in unbunded area), and appears to have been moved to another area (now closer to the Bay). Photo 23 shows storage of substances close to the water without any secondary containment or any spill kits in the near vicinity.
    - The Hazardous substance ECP (item no 9) requires that "for temporary storage, all hazardous substances are to be stored in spill pallets, bunded containers or other

containment devices". This requirement has not been complied with. It appears that this issue has been identified several times during weekly inspections, and appears to be a recurring issue with some of the subcontractors.

- Whist there were some spill kits located on site, they were not always adequately stocked, (see photos 16 and 17), did not have instructions for use or list of contents, and were not always located in areas that would require spill materials nearby. It appears that the contents of the spill kits are used by contractors / subcontractors as general material for clean-up of the work area. Spill kits should be reserved for emergency spill situations only
- The Hazardous Substance ECP (item no 17) requires that "spill kits (marine and /or offshore) types will be made available throughout relevant worksites and storage/decanting areas. Drip trays will be used when decanting from large to small containers". As noted above, spill kits were not always available at relevant worksites.

3.4.2.1 Photographs – Water Quality and Hazardous Substances

Photo 14
Bunded, ventilated storage container for hazardous substances

Photo 15
Inside the container. MSDSs were generally held for the substances stored. No spill kits were in close proximity to the container

Photo 16
Spill kit near the foreshore – contents depleted

Photo 17
Showing inside of spill kit from adjacent photo – contents depleted

3.4.2.1 Photographs – Water Quality and Hazardous Substances

Photo 18
At the time of the audit inspection, 3 of these drums were stored in front of this metal box –one empty and two more than half full.

Photo 19
Showing proximity of this area to Botany Bay. There were no barriers / bunding secondary containment between the drums and the water.

Photo 20
Showing contents of the drums (Class 9 Dangerous Good)

Photo 21
Further drums of Class 9 substance stored without secondary containment.

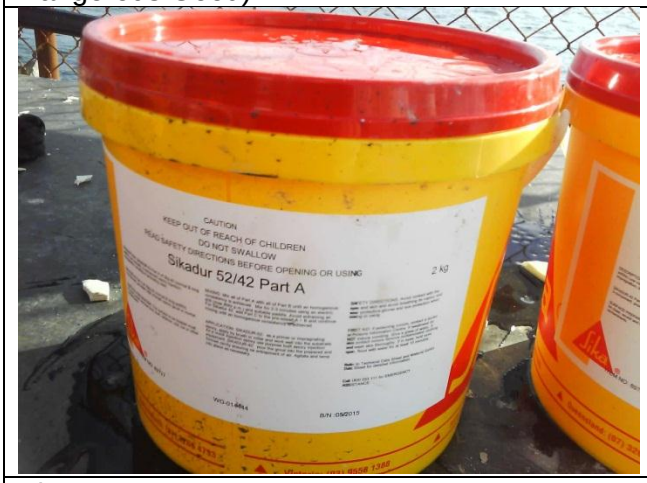

Photo 22
Further example of hazardous substances stored without secondary containment near water.

Photo 23
Hazardous substances on working area. There was no secondary containment and no spill kits in the near vicinity

3.4.2.1 Photographs – Water Quality and Hazardous Substances

	
Photo 24 Spill kit better stocked. No list of contents or instructions in kit. Recommend that list and instructions be added to the kit.	Photo 25 Example of acceptable storage of hazardous substances (plastic tubs used as secondary containment within unbunded container)

3.4.3 Waste Management

♦ ☒

The requirements for Waste Management are addressed in ECP BLB2-PLN-ECP-001 – Waste Management.

The following positive observations were made in relation to waste management:

- Waste skips and bins are provided on site for disposal and recycling of waste, with general waste, cardboard, comingled receptacles observed. The waste contractors remove waste from site and separate into recyclable and non-recyclable waste streams.
- Reports are provided by the waste contractors on waste separation and wastes are recorded in a register
- Concrete wash-out pit is in place and waste concrete is removed and sent to a recycling facility
- Skips provided for general waste and recycling

The site inspection conducted as part of the audit found that waste management practices in relation to containers that have contained dangerous goods requires improvement. As a result of this, a non-compliance was raised in relation to waste management. Details are recorded below

Audit outcomes

Non-compliance (action required (JH) and verification of close out (by auditor) required:

- Potentially hazardous wastes are disposed of in general waste skips and may be contravention of the POEO Act and DECCW/OEH Waste Classification Guidelines. The following issues have been identified as contributing to the non-compliance:
  - A number of drums and containers that have contained dangerous goods (and containing residues) have been placed in the general waste skips. A number of the containers were open and contained residue, and some were sealed and also contained product. (see photos 27,28 and 29).
  - No dedicated waste receptacles are provided for the storage of hazardous waste
  - There were no facilities available to wash or remove residues from drums that contained certain dangerous goods to allow containers to be legally disposed / recycled
  - The Waste Management ECP does not identify the key waste streams, their classifications, destination or information relating to who can transport certain wastes (e.g. hazardous). The Plan also does not provide adequate guidance actions on the relevant requirements from the Waste Classification Guidelines.
  - The induction / training program does not provide any guidance on waste classification for hazardous wastes and does not advise on the appropriate disposal of hazardous wastes or management of containers with residues of hazardous substances or dangerous goods.
  - The Waste ECP states that (item 6) "…skips and bins are to be lidded and kept closed". The bins inspected on site generally did not have lids.

Opportunity for Improvement

- The references to Standards and Codes in the Waste ECP refer to the "DECC Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes" is out of date. These have been replaced by the Waste Classification Guidelines (DECCW Dec 2009). The ECP should be revised to reflect this.

3.4.3.1 Photographs – Waste Management

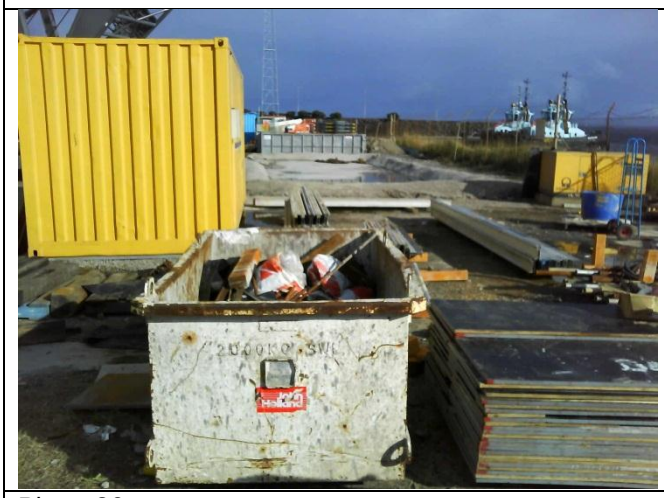

Photo 26
General Waste bin (no lid)

Photo 27
Empty drums with residues within the general waste skip

Photo 28
Example of drum that contains residue in the general waste skip.

Photo 29
Further drums placed in general waste skip. This drum was approximately half full – dangerous good class 3 container (not opened to check contents)

3.4.4 Air Quality and Dust Management

✓

The requirements for air quality and dust management are contained within the Air Quality and Dust Environmental Control Plan BLB2-PLN-ECP-004 – Rev 2.

At the time of the audit there had been significant rain, and dust was not an issue. The Air Quality and Dust ECP provides mitigation measures in relation to dust management, and this includes enforcement of speed limits, spraying disturbed areas including stockpiles with water, and sweeping of sealed roads.

The following positive observations were made in relation to dust and air quality management:

- Roads were sealed, and are swept twice weekly to minimise tracking of material and dust generation. A road sweeper was observed to be operating on Fishburn road during the audit inspection
- Water is said to be used to dampen disturbed areas as required. Dust suppression was not required during the audit due to ongoing rain events.
- No visible emissions from plant and equipment were observed during the site inspection.

Tracking of sediment and was noted during the inspection and a stockpile did not have sediment controls installed. Refer to Erosion and Sediment Control section of this report.

3.4.4.1 Photographs – Dust and air quality management

	
Stockpile. Due to wet weather at the time of the audit, dust control measures not required.	Fishburn Road. Sweepers are used twice weekly to remove accumulated dirt to minimise tracking and dust generation

3.4.5 Construction Noise Management

✓

The requirements for construction noise management are contained within the Construction Noise Environmental Control Plan BLB2-PLN-ECP-003 – Rev 4.

The BLB2 project is located in a heavy industrial area with neighbours that generate significant noise emissions themselves. The nearest residential receiver is located 1.7 km from the construction site, and it is considered that the noise impacts from the project are minimal. Noise goals were set for the project, and this is addressed in detail within the MCoA checklist in Appendix 1.

Piling works would have generated significant noise as piles were driven, not bored, and noise monitoring was conducted at the time. The noise monitoring found that background noise was generally high near the residential receivers, and piling noise could not be detected. At the time of the audit, the construction activities involving piling had ceased.

During the site inspection, there were no activities that appeared to contribute significant noise emissions in the area. All project activities are conducted within the approved working hours as per the MCoA.

A complaints register is in place, however no noise complaints have been received since the commencement of the project.

3.4.6 Contaminated Land and Acid Sulphate Soils

✓

Contaminated Land is addressed in Environmental Control Plan BLB2-PLN-ECP-005 Rev 3 and Acid Sulphate Soils are addressed in BLB2-PLN-ECP-007 Rev1.

Environmental impacts relating to contaminated land and acid sulphate soils would be most likely to arise due to boring/drilling of piles in Botany Bay. The piling method was originally planned as bored/ drilled piles, however, this was changed to driven piles following consultation with Department of Planning and others.

Minimal disturbance occurred to the sea bed during piling operations and therefore, there was minimal potential for contaminants to be liberated into the water column, and there was no sediment that may contain contaminated soils of acid sulphate soils that needed to be stockpiled or disposed of.

4 APPENDIX 1 – Audit checklist

List of contents of appendix:

- Part 1 - Minister's Conditions of Approval (MCoA);
- Part 2 - Statement of Commitments (SoC), and
- Part 3 - Performance against project criteria

Audit Checklist – for Construction of Bulk Liquids Berth No 2, Port Botany
Part 1 - Ministers Conditions of Approval (MCoA)

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
1		**ADMINISTRATIVE CONDITIONS**						
		Terms of Approval						
1.1	JH/SPC	The Proponent shall carry out the project generally in accordance with the a) Major Projects Application 07_0061; b) Bulk Liquids Berth No. 2 – Port Botany: Environmental Assessment dated November 2007 and prepared by Sinclair Knight Merz Ltd; c) additional information provided by Sinclair Knight Merz Pty Ltd to the Department titled Failure Frequency of the Port Botany Bulk Liquids Berth 2 Marine Loading Arms (letter dated 18 December 2007); d) Response to Submissions Report prepared by Sinclair Knight Merz Pty Ltd and dated 26 February 2008; and e) the conditions of this approval	The project is progressing in accordance with the required documents ***Status: In progress***	**C**				
1.2	JH/SPC	In the event of an inconsistency between: a) The conditions of the approval and any document listed from condition 1.1a) to 1.1d) inclusive, the conditions of the approval shall prevail to the extent of the inconsistency b) Any document listed from condition 1.1a) to 1.1d) inclusive, and any other document listed from condition 1.1a) to 1.1d) inclusive, the most recent document shall prevail to the extent of the inconsistency	Noted ***Status: In progress***	**C**				
1.3	JH/SPC	The Proponent shall comply with any reasonable requirement(s) of the Director- General arising from the Department's assessment of: a) Any reports, plans or correspondence that are submitted in accordance with this approval; and b) The implementation of any actions or measures	Noted Requirements of the Director-General provided in the following documents have been added into the Compliance Tracking System to ensure they are complied with.	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
		contained in these reports, plans or correspondence	- Letter to Marika Calfas from NSW Planning, dated 22/12/10 (ref: S07/00205) - Letter to Marika Calfas from NSW Planning, dated 24/12/10 (ref: S07/00205) - Letter to Ryan Bennett from NSW Planning & Infrastructure, dated 14/4/11 (ref: 11/03374-1) - Letter to Ryan Bennett from DP&I, dated 30/05/11 (ref: 11/03374-1) In accordance with the request from DP&I (letter dated 7/12/11), Sydney Ports has placed the CEMP and the associated Environmental Control Plans on the Sydney Ports Corporation website. ***Status: In progress***					
		Limits of Approval						
1.4	SPC	This approval shall lapse after five years after the date on which it is granted, unless the works the subject of this approval are physically commenced on or before that time	Noted. The works commenced in September 2011 ***Status: Complete***	**C**				
		Statutory Requirements						
1.6	JH/SPC/Users	The proponent shall ensure that all Licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on site at all times during the project.	No EPL required (confirmed by DECCW/OEH that licence not required for construction). No specific environmental permits required for construction. Harbour Master Approval (by SPC) – dated 6 May 2011 valid May 2011 – June 2013 subject to conditions. SACL approval for crane heights dated 18/08/11 subject to conditions. Copy of the Approval is posted on the construction site SQERM Notice Board and electronic copies including modification and letters	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
			are kept on the project files. ***Status: In progress***					
		Compliance						
1.7	JH/SPC	The Proponent shall ensure that employees, contractors and subcontractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	Compliance tracking system has been set up and is actively managed by Sydney Ports to monitor compliance with conditions of approval relevant to Sydney Ports and John Holland. CEMP and Environmental Control Plans incorporate the requirements of the Approval relevant to construction. All staff and subcontractors are required to undertake an induction prior to commencement of work. Sighted Site Induction Register -372 inducted to date. Sighted Site Environmental Induction presentation which covers key issues from ECPs. ***Status: In progress***	**C**				
1.8	JH/SPC	The Proponent shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	Noted ***Status: In progress***	**C**				
		Utilities and Services						
1.9	JH/SPC	Prior to commencement of construction, the Proponent shall identify (including, but not limited to the position and level of service) all public utility services on the site, roadway, footpath, public reserve or any public areas that are associated with, and / or adjacent to the site, and/or likely to be affected by the construction and operation of	The following utility and service providers were contacted to determine location of utility services prior to commencement of construction: Energy Australia (Ausgrid); Jemena; Optus; Savcor; Sydney Water; and Telstra.	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
		the project.	All utilities and services have been identified on service location maps for the project (BLB2-REQ-DRG-0007-11) through Dial B4 You Dig, service location and JH Surveyors. Sydney Ports also undertook a dial before you dig search . (Worley Parsons) ***Status: Completed***					
1.10	JH/SPC	The Proponent shall consult with the relevant utility provider(s) for those services identified under condition 1.9 and make arrangements to adjust and/or relocate services as required. The Proponent shall bear the full cost associated with providing utilities and services to the site, and restoring any public utilities that may be damaged during the proposed works.	Consultation undertaken with Ausgrid for diversion of light poles and work undertaken on 28 August 2011 and Dec 12. Application prepared by JH and sent to Sydney water for Watermain Connection. Submission sent, but had not been approved at the time of the audit. The SPC Issues tracker document provides evidence of consultation to date. ***Status: In progress***	**C**				
1.11	JH/SPC	Prior to the commencement of construction works that may affect services/utilities; the Proponent shall provide documentary evidence to the Director-General that the requirements of the relevant utility provider(s) have been met.	Documentary evidence submitted to DP&I 23 August 2011 in relation to light pole relocation.by SPC letter by Oliver Smith to DG sighted. Sighted letter from DP&I dated 19/09/11 stating that the Department is satisfied that the condition has been met in relation to the temporary removal of light poles. ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
2		**SPECIFIC ENVIRONMENTAL CONDITIONS**						
		Hazards and Risk						
2.1		***Pre-construction***						
2.1	SPC	One month prior to the commencement of construction of the project (except for preliminary works such as survey, fencing minor adjustment to public utilities/services and test evacuation works), or within such period otherwise agreed by the Director-General, the Proponent shall prepare and submit for the approval of the Director-General, the following studies:	See below					
a)	SPC	a) A **Fire Safety Study** covering the relevant aspects of the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines* and the NSW Government's *Best Practice Guideline for Contaminated Water Retention and Treatment Systems.* In addition to approval by the Director-General, approval for this study shall also be obtained from the Commissioner of the NSW Fire Brigades;	Letter to submit FSS for DG Approval sent 14/02/11. The DG has approved the FSS as per the letter dated 14/04/11.Amendments were requested by Commissioner of FRNSW and further correspondence occurred. Full details of correspondence indicating this condition has been satisfied are contained within the SPC Compliance Tracking System. ***Status: Completed***	**C**				
b)	SPC/Users	b) A **Hazard and Operability Study**, chaired by and independent and qualified person approved by the Director-General prior to the commencement of the study. The study shall be carried out in accordance with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 8 – HAZOP Guidelines*. The study report shall be accompanied by a program for the implementation of all recommendations made in the report. If the proponent proposes to defer the implementation of the recommendation, full justification must be included;	HAZOP Study submitted on 14/02/11. The DG has approved the HAZOP Study as per the letter dated 14/04/11. Extensions of time were granted and correspondence relating to the implementation program and methodologies for piling occurred. Changes to fire fighting systems were made and the final relevant HAZOP report was received on 12/12/2011. Full details of the correspondence are contained within the SPC Compliance Tracking System. ***Status: Completed***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
c)	SPC/Users	c) A **Final Hazard Analysis** prepared in accordance with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis;* and	Letter to seek the Agreement of DG for submission of the FHA 1 month prior to the BLB2 User's commencement of construction sent 14/02/11. The DG has agreed to the submission of the FHA at least one month prior to the Users' commencement of construction as per the letter dated 14/04/11. ***Status: In progress***	**C**				
d)	SPC/Users	d) A **Construction Safety Study** prepared in accordance with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 7 – Construction Safely Study Guidelines.* Because the construction period exceeds six months, the "commissioning" portion of the study may be submitted two months prior to the commencement of commissioning. Construction, other than of preliminary works, shall not commence until approval had been granted by the Director-General.	Letter to seek the Agreement of DG for submission of the FHA 1 month prior to the BLB2 User's commencement of construction sent 14/02/11. The DG has agreed to the submission of the FHA at least one month prior to the Users' commencement of construction as per the letter dated 14/04/11. ***Status: In progress***	**C**				
		Air Quality Impacts						
		Odour						
2.3	JH/SPC/Users	The Proponent shall not permit any offensive odour, as defined under section 129 of *the Protection of the Environment Operations Act 1997*, to be emitted beyond the boundary of the site unless as otherwise permitted by an Environment Protection Licence.	Noted Odour is not a significant issue on the project. A Work Risk Assessment (WRA) was conducted prior to commencement of construction and before preparation of management plans. Odour was not identified as a significant issue.	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
			Reporting monthly through Compliance tracking Register- No recorded adverse odour issues for reporting period (monthly) ***Status: In progress***					
		Dust Emissions						
2.4	JH	The Proponent shall undertake the project in a manner that minimises or prevents dust emissions from the site. Including wind-blown and traffic generated dust. Should visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.	Dust emissions are addressed in Air Quality and Dust ECP. Section 5.1, no. 16 reflects the requirements of this condition including cessation of works if required. There has been no cessation of works due to dust to date. Road sweepers are used to keep roads clear, and water is sprayed on disturbed areas. Traffic is confined to designated access roads. ***Status: In progress***	**C**				
		Noise Impacts						
		Construction Noise Impacts						
2.5	JH	To mitigate construction noise impacts associated with the project, the Proponent shall only undertake construction activities that are audible at any residential receptor during the hours listed below; a. all works undertaken on Mondays to Fridays shall only be carried out between 7:00am to 6:00pm; b. all works undertaken on Saturdays shall only be carried out between 8:00am and 1:00pm; and c. no construction works shall occur on Sundays or public holidays.	Works are generally carried out between these hours. Where specific night works are planned, approvals are gained (Also see 2.6 below) The nearest sensitive receptor is located 1.7 klms away from the construction site ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
		This condition does not apply in the event of a direction from police or other relevant authority for safety or emergency reasons c). *Note: 'safety or emergency reasons' refers to emergency works which may need to be undertaken to avoid loss of life, property loss and/or to prevent environmental harm.*						
2.6	JH/SPC	The hours of construction activities specified under condition 2.5 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction specified under condition 2.5 shall be; a. considered on a case-by-case basis; b. accompanied by details of the nature and need for activities to be conducted during the varied construction hours; and c. accompanied by sufficient information for the Director-General to reasonably determine the activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site	There has been no out of hours work conducted to date on the project. Noise monitoring has been conducted at sensitive receptors prior to commencement of construction Monitoring at Location A and 6 on 24/10/11 (before piling) 20/12/11, 23/01/12 (during piling) and 23/03/12 (after piling) Letter sent by JH to SPC to clarify exceedances of noise goals. Sighted "Sound Monitoring clarification Report dated 22/02/12 (18 pages). Letter states that noise monitoring results obtained before and after piling demonstrates no potential impacts on local residents. SPC/SMEC sent letter to DG for justification. Note: Modification Request: BLB2 07_0061 MOD 1 (April 2011) allowed piling on Saturdays between 8.00am and 1.00pm ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
		Construction Noise Impacts – Driven Piles						
2.7	JH	Notwithstanding Condition 2.5, no audible piling activities are permitted to occur on the weekend or public holidays (*Note: Relaxation to permit piling from 8:00am to 1:00pm on Saturdays)*	CoA 2.7 has been deleted pursuant to Modification of Minister's Approval 07_0061 MOD 1, dated 28 April 2011, allowing pile driving activities on Saturdays in accordance with CoA 2.5. ***Status: Closed (deleted)***					**NA**
2.8	JH	The use of driven piles is permitted during the construction hours prescribed in condition 2.5 and in accordance with condition 2.7 and 6.2(d).	Sighted letter to DoPI, dated 10/03/11 and modification no. 07-0061 Mod 1 dated 28/04/11 modification report. A letter to the Department of Planning regarding piling issues was sent 24 Nov 2010. DoP responded with a letter, dated 22 Dec 2010, allowing pile driving but placing additional time restrictions on the activity. A subsequent letter was sent to DoP (23 Dec 2010) seeking reconsideration of its position on construction hours and respite periods. DoP responded (24 Dec 2010) agreeing that piling activities may be carried out as per CoA 2.5 subject to the provisions of CoA 2.7. ***Status: Completed***	**C**				
		Soil and Water Impacts						
2.12	SPC	The proponent shall ensure that all stormwater on the working platform is directed to a stormwater treatment unit/pollutant trap capable of removing gross pollutants, oil, grease and sediments, prior to it being discharged to Botany Bay.	Addressed in design. Infrastructure was under construction at the time of the audit. ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
2.13	SPC	The Proponent shall ensure that all oil and grease or other pollutants in the wastewater storage tank and the stormwater treatment unit is regularly collected and disposed of off-site at a waste management facility lawfully permitted to accept this waste.	Future requirement: Users will be required to deal with spilt material when operational, Ports will deal with Stormwater. ***Status: Future requirement***					**NA**
4		**COMPLIANCE MONITORING AND TRACKING**						
		Compliance Tracking Program						
4.1	SPC/JH	The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The program shall be submitted to the Director-General for approval prior to the commencement of construction. The program shall relate to both construction and operational stages of the project and shall include, but not necessarily be limited to; a. provisions for periodic review of the compliance status of the project against the requirements of this approval; b. provision for periodic reporting of compliance status to the Director-General; c.) provisions for specific reporting requirements as required by conditions 4.2 and 4.3; d. a program for independent environmental auditing at least annually, or as otherwise agreed by the Director-General, in accordance with ISO 190011:2002 – Guidelines for Quality and/or Environmental Management Systems Auditing; and e. mechanisms for rectifying any non-compliance identified during environmental auditing or review or compliance.	A Compliance Tracking System has been implemented to track compliance across all phases of the project by SPC and satisfies the requirements a) to e). Compliance Tracking program was approved by DoPI June 2011 14/06/11 (Sighted letter Daniel Keary for DG) Two Compliance tracking reports have been submitted to date (SPC commitment and agreed by DoPI-6 Monthly reporting). Initial report was prepared 3 months after commencement of construction. Aug 2011. Nov 2011 and May 2012. November report approved 7/12/11 – satisfies condition. The Contractor (JH) maintains a Compliance Tracking Register and prepares monthly reports with the Register as an attachment and forward to SPC on a monthly basis. Parts d) and e) are specifically addressed below: d) This checklist and accompanying audit report	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
			is part of the requirement for the independent annual environmental audit. e) JH has an Operations Management system OMS) to raise non-conformances and are also raised in the Project Pack. Sighted completed Audit Report (form JH- 3F- 21A –electronic) Correction Action section of report is used to report a completed action. If NCR is raised further actions are required. Provisions for attachment of documents. Non-compliances raised during this first environmental audit were followed up by the independent auditor through a second site visit on 7 August 2012 to verify that adequate actions have been undertaken to rectify the issues. ***Status: In progress***					
		COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT						
5.1	SPC/JH	Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request	The Environmental Assessment and other key Project Documents are made available on the Sydney Ports website (CEMP and ECPs). Requests by the public for any documents required under the Approval will be forwarded to Oliver Smith and Ryan Bennett and will be provided as required (subject to confidentiality). ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key C ✓	O ♦	IOC ☒	NC ☒	NA
		Complaints Procedure						
5.2	SPC/JH	Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation): a) A telephone number on which complaints about construction and operational activities at the site may be registered; b) A postal address to which written complaints may be sent; and c) And email address to which electronic complaints may be transmitted. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public, and which clearly indicates the purposes of the sign.	a) Telephone number on front gate and website (see photo below) b) Postal address on front gate notice c) Email address on front gate notice and web site  ***Status: In progress***	**C**				
5.3	SPC/JH	The Proponent shall record details of all complaints received through the means listed under condition 5.2 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to; a. the date and time, where relevant, of the complaint; b. the means by which the complaint was made (telephone, mail or email); c. details of the complainant that were provided, or if no details were provided, a note to that effect; d. the nature of the complaint; e. any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant; and	Complaints Register is on the Project Pack server compliments/ complaints One complaint has been received, though it could not be confirmed that it was attributable to the BLB2 project. The complaint related to wheel marks on a grass verge outside the compound of ACFS on 14/02/12. As a gesture of goodwill, JH repaired the wheel marks on 15/02/12. Process in place to receive complaints if required. The Register provides fields to record these details should a complaint be received.	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
		f. if no was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken I The Complaints Register shall be made available for inspection by the Director-General upon request.	***Status: In progress***					
6		**ENVIRONMENTAL MANAGEMENT**						
		Construction Environmental Management Plan						
6.1	JH	Prior to the commencement of construction of the project, the Proponent shall prepare and implement a **Construction Environmental Management Plan** to outline environmental management practices and procedures to be followed during the construction of the project. The plan shall be prepared in accordance with *Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004)*	CEMP has been prepared with initial date of 29/06/11 and submitted to Sydney Ports on 30/06/2011. Several revisions have been undertaken following Sydney Ports review with final approval by Sydney Ports on 1/09/2011. Latest version at the time of the audit was Rev 5 dated 16/04/12 (updated to incorporate current project status and organisational chart. The CEMP is being implemented by John Holland and verified by SMEC on behalf of Sydney Ports. Whilst a CEMP is in place, the assessment of environmental mitigation measures against the requirements of the CEMP identified some non-compliances and Issues of Concern. For detailed findings, refer to Table 1 in the executive summary and sections 3.4.1 and 3.4.2 of the main report. ***Status: In progress***	**C**				
6.2	JH	As part of the Construction Environmental Management Plan for the project, required under condition 6.1 of this approval, the proponent shall prepare and implement the following:						

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ⊠	NA
	JH	a) a **Construction Traffic Management Protocol** to detail how vehicle movements associated with the project will be managed during construction. The Protocol shall specifically address the movement of heavy and/or oversize loads to and from the site, the management of construction traffic, and any restrictions to the hours of heavy vehicle movements to avoid road use conflicts with other port users. The Protocol shall detail the expected routes to the site for construction traffic with the intention that all residential areas are avoided. b)	A Traffic Management Plan BLB2-PLN-TMP-006 was prepared on 28/06/11 (Rev 0) and submitted to Sydney Ports on 30/06/12. Reviewed and updated TMP submitted to Sydney Ports on 26/10/11 and approved 2/11/11. The TMP is being implemented by John Holland and verified by SMEC on behalf of Sydney Ports. ***Status: In progress***	**C**				
	JH	c) a **Construction Water Management Protocol** to outline specific mitigation measures that would be implemented as part of the project to minimise the impact of construction on water quality including piling activities and the handling of chemicals, fuels and concrete. The Protocol shall include the use of appropriate stormwater controls, in accordance with Managing Urban Stormwater: Soil and Construction (Landcom, 2004) and shall outline specific measures that will be implemented at the site to avoid sediment-laden stormwater from entering Botany Bay.	A Water Quality Environmental Control Plan (BLB2-PLN-ECP- 009) is in place and approved by Sydney Ports. Latest version at the time of the audit is Rev 5 dated 12/06/12. Information relating to piling activities and controls is included on the Marine Management plan BLB2- PLAN-MWMP-008. A Hazardous Substances ECP (BLB2-PLN-ECP-008) is also in place. Whilst the documentation in relation to this condition is deemed to be compliant, Non-Compliances and Issues of Concern relating to the implementation of construction water management are raised under the section "Assessment of effectiveness of environmental mitigation measures" to avoid duplication. Refer to Table 1, Sections 3.4.1 and 3.4.2 of the report and Addendum 1 for further detail. ***Status: In progress***	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ⊠	NC ☒	NA
	JH	d) where surface excavation is required below 1 meter or where soil testing prior to the commencement of construction identifies the presence of acid sulphate soils, the Proponent shall prepare and implement an **Acid Sulphate Soil Management Plan** prepared in accordance with guidance provided in Acid Sulphate Soil Manual (Acid Sulphate Soil Management Advisory Committee, 1998	An Acid Sulphate Soil ECP (BLB2-PLN-ECP-007) has been prepared and submitted to SPC on 26/07/2011 and approved on 01/09/11. In accordance with the ECP, excavation material from the culvert works tested and no ASS present. Two soil samples recovered from the drainage trenches were sent for ASS analysis and verification on 20/12/2011. ***Status: In progress***	**C**				
	JH	e) a **Construction Noise Management Plan** to outline construction noise mitigation, monitoring and management measures to be implemented to minimise noise impacts during construction of the project. The Plan shall include, but not necessarily be limited to: i. details of construction activities and a schedule for construction works: ii. identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly residential areas; iii. where the relevant construction noise goals contained in the Noise Management Guideline – Construction Noise (formally published as Chapter 171 of the Environmental Noise Control Manual) are predicted to be exceeded at sensitive receivers, provision for the application of all practicable and reasonable noise mitigation measures to seek to achieve the relevant construction noise goals; iv. procedures for notifying residents of construction activities that are likely to effect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints;	Construction Noise Management Control Plan (BLB2-PLN-ECP-003) prepared and submitted to DP&I on 19/08/11. A letter from DP&I (14/10/11) confirms that the Noise ECP meets the requirements of CoA 6.2d. The plan addresses each of the requirements in the following sections of the ECP. i) Section 8 ii) Section 7 iii) Section 4.1 performance criteria iv) Section 5.1 – Actions 9 and 10 v) Section 5.1 The ECP was updated (dated 27/03/12) to reflect the current noise management levels and the updated version was provided to DP&I for their records on 17/04/12. Sound level monitoring carried out in accordance with the ECP indicates piling works were inaudible at all four monitoring receptors and dominant noise was external environmental. The ECP was	**C**				

MCoA No	Auditee SPC/ John Holland	MCoA Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ♦	IOC ☒	NC ☒	NA
		and v. a description of how	updated (dated 27/03/12) to reflect the current noise management levels and the updated version was provided to DP&I for on 17/04/12. ***Status: In progress***					
		Operation Environmental Management Plan						
		ENVIRONMENTAL REPORTING						
7		**Incident Reporting**						
7.1	JH/SPC	The Proponent shall notify the director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 12 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Director-General within 24 hours of any incident or potential incident occurring. A further detailed report shall be prepared and submitted following investigations of the cause and identification of necessary additional preventive measures. The detailed report is to be submitted to the Director-General no later than 14 days after the incident or potential incident.	Noted. An incident register has been created. There had been no incidents that have required reporting to the DG or EPA at the time of the audit. Some (5) minor oil spills reported on the OMS (Operations Management System) All were classified as minor incident –Small quantities. No investigation required. If required an incident investigation report would be undertaken (part of the Management System requirements) ***Status: In progress***	**C**				

Part 2 - Statement of Commitments

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
		GENERAL						
1	SPC/JH	Development will be carried out generally as described in *Bulk Liquids Berth Terminal No. 2,Port Botany, Environmental Assessment*, prepared by Sinclair Knight Merz and dated September 2007.	Refer MCoA Condition 1.1	**C**				
		SERVICES						
2	SPC/JH	Liaison will be undertaken with SPC and the relevant utility and service providers regarding timing of connections to the services, location of services and utilities on the site.	The following utility and service providers were contacted to determine the location of services and utilities prior to construction commencing: Energy Australia (Ausgrid); Jemena; Optus; Savcor; Sydney Water; Telstra. Meeting held with Ausgrid at BLB1 site on 13/12/2011 to discuss the inspection of the new 11kV cable installation and connection.	**C**				
3	JH	Liaison will be undertaken with utility and service providers to confirm the location of services and utilities prior to construction commencing.	See MCoA Conditions 1.9, 1.10 The following utility and service providers were contacted to determine the location of services and utilities prior to construction commencing: Energy Australia (Ausgrid); Jemena; Optus; Savcor; Sydney Water; Telstra.	**C**				
4	SPC/Users	Liaison will be undertaken with relevant petroleum distributors that could potentially be impacted in regards to timing of connections with the integrated bulk liquids pipe distribution network.	An Interface Agreement with Vopak (Vopak Terminals Sydney Pty Ltd and Vopak Terminals Australia Pty Ltd) was executed on 16 May 2011. Liaison continues with Vopak regarding the relocation of their pipelines in the pipeline corridor. Relocation of Vopak pipelines completed 2/12/2011.	**C**				

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
		NOISE MANAGEMENT						
5	JH	Audible construction activities at residential land uses will occur: a. Monday to Friday, 7 am to 6 pm; b. Saturdays, 7 am to 5 pm; and (inconsistent with MCoA) – MCoA prevails over this. c. Sundays and Public Holidays (only as the construction schedule requires) d. No audible work outside these hours unless approval is obtained from the DECC prior to works being undertaken	See MCoA Condition 2.5, 2.6	**C**				
6	JH	Mitigation measures to minimise noise during construction would be included in the Construction Environmental Management Plan.	See MCoA Condition 6.2 (d)	**C**				
		Contamination						
8	JH	In the event that contaminated groundwater/soil is discovered during construction, a groundwater/soil management plan would be developed;	No contaminated groundwater or soil has been encountered. (no excavation to water table), therefore no groundwater/soil management plan has been required to be developed.	**C**				
9	JH	Appropriate disposal of any contaminated water or soil in accordance with DECC waste management guidelines	Contaminated water appears to be disposed of appropriately. Sighted records indicating that contaminated water that was collected within a bund was removed (8/05/12) and Client Work Sheet Form 3610 from Worth Recycling (8/05/12) No contaminated soil encountered or removed.	**C**				
		HERITAGE						
10	JH	In the event of an item of Aboriginal or European heritage significance being discovered during construction, works in the area would cease and the appropriate authority contacted	No Heritage issues encountered	**C**				

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
		WATER QUALITY						
11	SPC/Users	The working platform and manifold areas would be bunded and would drain to wastewater storage tank. All water collected in the manifold area would be assessed, treated and/or disposed of at an appropriately licensed liquid waste management facility. Water from the working platform would initially be assessed to determine whether it is unpolluted and suitable for release to Botany Bay – or requires disposal at an appropriately licensed liquid waste management facility.	Addressed in design This condition relates to design of the stormwater management system and the infrastructure for this was under construction at the time of the audit.	**C**				
13	SPC	An oil boom facility would be readily available to be deployed rapidly from the nearby Brotherson Dock and brought to BLB2 in the event of a spill.	Present as part of the existing emergency oil spill response team located in Brotherson Dock. Visit to facility was undertaken as part of the audit.	**C**				
14	JH/SPC	Procedures for spills and leaks including notifications and clean ups would be developed	Emergency Procedures are briefly addressed within the project induction, (general, the 4 C's) and a spill flow chart in contained within the Marine Management plan. The emergency procedures relating to spills and leaks do not appear to be highly visible or readily available on site, and it is therefore recommended that they are displayed in prominent locations (e.g. – on noticeboards, in spill kits and on walls.		**O**			
16	JH	Soil and Water Management Plan implemented during construction	Erosion and Sediment Control is addressed inECP-002. Some issues were identified during the site inspection and actions are required to improve the controls. Refer to Table 1 in executive summary and Section 3.4.1 of the report.			**IOC**		
		AIR QUALITY						
17	JH	Mitigation measures to minimise dust during construction would be included in the Construction Environmental Management Plan	Addressed in CEMP and Air Quality and Dust ECP BLB2-PLN-ECP-004 and documents dust mitigation measures.	**C**				

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
			Primary measures employed include water spraying with hoses, use of road sweeper, imposition of speed limits on site and covering of loads and stockpiles. At the time of the audit, conditions were wet and no dust control measures were required.					
		VISUAL AMENITY						
18	JH	Mitigation measures to minimise visual impacts during construction would be included in the Construction Environmental Management Plan.	Visual amenity is listed as a key environmental objective in the CEMP with a target of "no complaints due to visual amenity".	**C**				
		SECURITY						
19	SPC	A review of both the existing security assessment and the approved MSP would be undertaken to ensure appropriate security measures are maintained.	The Maritime Security Plan (MSP) for the Port and BLB1 has been prepared and approved by the Department of Transport and Regional Services. As stated in the Port Operating Protocol, in order to ensure effective integration with the MSP, the Contractor's project manager and nominated site security officer shall, prior to mobilising and establishing on site, undergo an induction by the Sydney Ports Corporation's Maritime Security Manager on the requirements of the MSP (completed). Annexure N (Site Access Plan) and Annexure O (Port Operating Protocol) were sighted.	**C**				
20	SPC/JH	Government issued personal identity (ID) cards including Maritime Security Identification [MSIC] cards which require the applicant to have undergone a number of background security checks) would be a pre-requisite for any personnel to gain access to BLB2.	The Port Operating Protocol (POP), states that other than the master of any Construction Vessel or supervisor of any Works Under Contract (WUC), for Contractor's activities within the Marine Works Area (MWA), possession of a MSIC will not be required. For Contractor's activities outside the MWA, possession of a valid MSIC will be required by Contractor's personnel and agents, or they will be	**C**				

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
			required to be under constant supervision by a valid MSIC holder. The Contractor is to ensure that the master of any Construction Vessel or supervisor of any WUC within a Maritime Security Zone is in possession of a valid MSIC or under constant supervision by a valid MSIC holder. The Site Access Plan states that the Contractor's personnel working within the Land Site do not require Maritime Security Identification Cards (MSIC).					
		WASTE MANAGEMENT						
22	JH	Mitigation measures to minimise waste impacts during construction would be included in the Construction Environmental Management Plan.	Mitigation measures relating to waste are documented within BLB2-PLN-ECP-001 Waste Environmental Control Plan Rev 2 17/08/2011). Mitigation measures include the requirement to classify and dispose of wastes in accordance with the DECC (EPA) guidelines. Refer to SoC 23 below and NC #2.				**NC**	
23	JH	All waste generated would be removed from the work area as soon as practicable and disposed in accordance with DECC waste management guidelines *(Assessment, Classification and Management of Liquid and Non-Liquid Waste 1995).*	The requirements of this commitment and the ECP have not been fully complied with. The ECP does not provide sufficient detail on waste classification requirements to ensure compliance. Not all wastes are appropriately classified or necessarily disposed of in accordance with the guidelines. (refer to NC #2)				**NC**	
		CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN						
24	JH	The Applicant will prepare a Construction Environmental Management Plan at least a month before construction work commences. The CEMP would address issues, impacts and mitigation measures associated with construction.	CEMP prepared as required. Refer to MCoA.	**C**				

SoC No	Auditee SPC/ John Holland	SoC Requirement	Comments, observations, discussion Evidence, supporting documentation	Audit Outcome * See footer for key				
				C ✓	O ◆	IOC ⊠	NC ☒	NA
		Navigation and Shipping						
25	SPC	As required by the *Management of Waters and Waterside Lands Regulations NSW (C167)* the written permission of the harbour master will be obtained prior to construction to ensure the impact on commercial shipping is minimised.	A request for Harbour Master approval was made by Sydney Ports on 2 May 2011 and permission was obtained on 6 May 2011 in accordance with clause 67 of the *'Management of Waters and Waterside Lands Regulations'.* Approval is valid May 2011 - June 2013 subject to conditions.	**C**				
		Soil and Water						
26	JH	Mitigation measures to minimise soil and water impacts during construction would be included in the Construction Environmental Management Plan.	Erosion and Sediment Control ECP BLB2-PLN-ECP-200 (Rev 5 20/06/12) and a Water Quality ECP BLB2-PLN-ECP-009 (Rev 5 12/06/12) have been prepared. Some issues in relation to the adequacy of the Site Environmental Plan and sediment and erosion controls were identified during the audit. Refer to Table 1 in the executive summary and section 3.4.1 of the report and MCoA 6.2			**IOC**		

Part 3 – Assessment against relevant project criteria (Objectives, Targets, Performance Indicators and commitments in the CEMP)

Metric	Performance Indicators / Targets	Assessment	Audit Outcomes See footer for key			
			☺	😐	☹	NA
1. Objectives and Targets	Objectives and targets are set against the following environmental aspects in Section 1.3.2 and in Table 1.1 the CEMP: • Water Quality; • Spills and Hazard reduction; • Air Quality; • Noise and Vibration, • Groundwater and hydrology, • geology, topography and soils; • Community; • Waste; • Traffic and Access; • Heritage and; • Visual Amenity	The objectives and targets set against these aspects provide a general overview of required project outcomes and processes and are generally not measurable. There does not appear to be any specific programme in place to track or report on the achievement of these objectives and targets. As the setting of measurable objectives and targets and implementation of a programme to achieve them is a requirement of ISO 14001, consideration should be given to the setting and tracking of key project environmental performance criteria.		😐		
2. Environment Frequency Rate	**Target:** Nil Class 1 or 2 Incidents (EIFR = No. of Incidents X 1,000,000 divided by the man-hrs worked)	Whist it appears that incidents would be reported through the monthly reports, there was no evidence that the EIFR is calculated or reported on at a project level. JH should clarify how this is measured and consider whether this target should be retained. If so, it should be calculated and reported on.		😐		
3. Environmental Complaints	**Target: 0**	There have been no environmental complaints that can be directly attributed to the project. Complaints (if any) reported monthly.	☺			
4. Infringements and Penalties	**Target: Nil**	There have been no infringements to date. Infringements (if any) reported monthly.	☺			

Metric	Performance Indicators / Targets	Assessment	Audit Outcomes See footer for key			
			☺	😐	☹	NA
	General Project Commitments from CEMP					
5. Environmental Inspections	Environmental inspections completed weekly, actions appropriately completed	Environmental inspections are undertaken weekly in conjunction with Safety and the HSR every Wednesday with participation with a SMEC representative. The majority of actions are documented as closed out with some minor exceptions within the inspection checklists. However, it was noted that a number of issues identified during site inspections regularly recur in subsequent inspections, particularly in relation to temporary storage of hazardous substances (refer to non-compliance # 1).		😐		
6. Environmental Monitoring	All equipment checked/calibrated as required All required environmental monitoring conducted and records kept. Register kept up to date.	3 pieces of equipment requiring monitoring equipment were on site. Calibration certificates for the noise meter and water quality meter were observed to be in date. All due for recalibration in 2012. Noise monitoring results were sighted within Project Pack.	☺			
7. Monthly environmental report	Written Environmental Report compiled each month by PER and included in the Project Monthly report prepared and communicated as required including: • a status of environmental activities such as monitoring and surveillance of controls, inspections and testing and incidents associated with the work during the preceding month; • complaints, infringements and penalties incurred; • a status of Environment implementation and document preparation/approval; • status of all non-conformances and corrective actions; • the results of Environment reviews and audits (internal and external) undertaken during the preceding month	Project Monthly Report is prepared monthly and submitted to Sydney Ports within Annexure G – Section 5.11 – Environmental Issues reports against the stated criteria. Sighted report dated May 2012. No adverse environmental impacts, complaints or infringements were reported for the month. Information was provided on issues raised at JH and SMEC ER inspections, revision of plans, and JH internal audit.	☺			
8. Environmental Incidents /	Environmental incidents reported and investigated appropriately.	Yes –sighted register -5 minor oil spills were reported and were cleaned up.	☺			

Metric	Performance Indicators / Targets	Assessment	Audit Outcomes See footer for key			
			☺	😐	☹	NA
9. Emergency Response	Adequacy of response plans, spill kits, communication of requirements etc.	Emergency procedures relating to spills are not highly visible or readily available on site. (Refer to OFI #4). Spill kits were not always fully stocked or located in appropriate locations. The kits also did not have any instructions for use or lists of contents to assist in ensuring they are adequately stocked. (Refer to NC #1) A check on a foreman's vehicle found that a portable kit was kept on board.			☹	
10. Corrective Actions	Corrective Actions adequately documented, and actioned	As noted under "5. Environmental Inspections" a number of issues raised during inspections in relation to subcontractor activities and subsequently closed were noted to recur on a regular basis. (Refer to NC #1) Recurring breaches of environmental requirements by subcontractors need to be escalated and appropriate actions taken to ensure compliance.			☹	
11. Complaints management	Complaints dealt with adequately and in accordance with section 3.3.10.2 of the CEMP	No complaints requiring action	☺			
12. Energy Reporting	Energy usage reports from Contractor and subcontractors	Energy data is recorded on the JH form 3F-29A "Subcontractor energy, water and waste report". Sighted May 2012 subcontractor energy reports for Smithbridge, Corroseal, and Zoomwave.	☺			

5 ADDENDUM 1 – Results of follow up audit 7 August 2012

A follow-up audit / site inspection was undertaken to determine whether appropriate actions had been undertaken to address the non-compliances and Issues of Concern raised at the initial independent environmental audit.

This addendum provides additional detail including photographs to provide evidence of action taken to close the non-compliances and Issues of Concern

5.1.1 Hazardous Substances Management – NC #1

A site inspection was conducted as part of the follow-up audit and there was noted to be significant improvement in the storage and handling of hazardous substances. The follow-up visit found:

- Significant improvement in the storage of hazardous substances across the site;
- Secondary containment was observed to be used in the formal storage areas and at temporary working sites;
- Additional spill kits were provided at numerous locations around the site in the vicinity of areas that stored or potentially used hazardous substances. The spill kits were noted to be fully stocked, were sealed with tape, had a list of contents and a spill procedure/flow chart.

Status: Closed

5.1.1.1 Follow up Photographs – Hazardous Substances Management

Photo 1
Hazardous substances storage container with spill kit (bunded)

Photo 2
Secondary containment for paints and chemicals being used by subcontractors

Photo 3
One of several fully stocked spill kits now on site in appropriate locations.

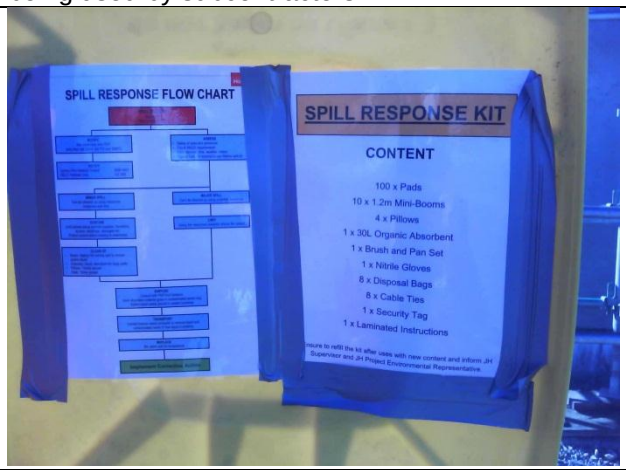

Photo 4
Spill response procedureand list of contents attached to inside of spill kit lid

5.1.2 Waste Management – Hazardous waste – NC #2

A site inspection was conducted as part of the follow-up audit and there was noted to be significant improvement in the management of potentially hazardous waste. The follow-up visit found:

- Separate bins are now provided for containers which previously contained dangerous goods (DGs) (see photos). No DG containers were observed in general waste bins;
- Waste is now collected by Transpacific Waste and hazardous waste and completed waste tracking forms are provided to John Holland by the supplier;
- The Waste Management ECP has been revised to include Attachment A – Classification and Disposal method of various waste streams. Signage is also posted near the hazardous waste bins;
- The waste/re-use records register on Project Pack now identifies appropriate waste streams including pre-classified hazardous wastes through a drop-down menu;
- The induction material now contains addition information relating to waste management; and
- The Waste ECP has been revised to remove the requirement for skip bins to be lidded and kept closed. It was however observed that the bins containing hazardous waste were covered with a tarpaulin.

Status: Closed

5.1.2.1 Follow up Photographs – Waste Management

Photo 5
New waste bins for containers that have contained dangerous goods. Tarpaulin is used to keep out rain.

Photo 6
Well defined and protected storage area for the waste

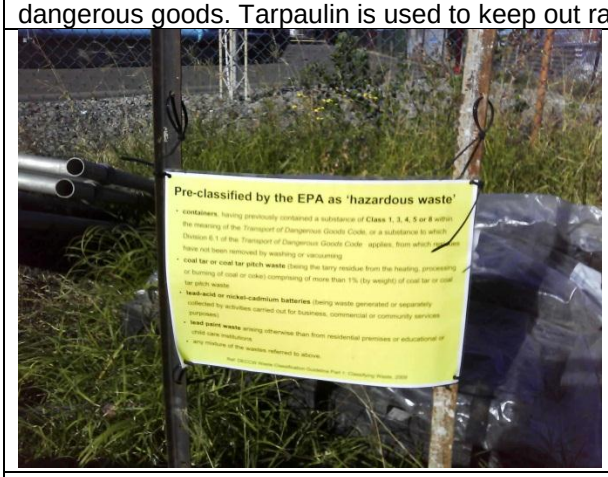

Photo 7
Signage posted near the waste storage area to provide guidance on legal disposal requirements

Photo 8
General waste skip – no incompatible / hazardous waste within

5.1.3 Sediment and Erosion Control – IOCs #1 - 5

A site inspection was conducted as part of the follow-up audit and there was noted to be significant improvement in erosion and sediment control. The follow-up visit found:

- Erosion and sediment controls around the foreshore area were observed to be well maintained and in good condition
- The SEP has now been revised and includes the appropriate sediment and erosion controls
- The silt curtain has been adjusted to ensure it remains above water at the high tide mark. At the time of the audit, the silt curtain was observed to be afloat (not high tide)
- A sediment fence has been installed around the base of the stockpile and battered.
- Sediment controls are checked during site inspections. The condition of sediment fences was significantly improved since the previous audit.

5.1.3.1 Follow up Photographs – Sediment and Erosion Control

Photo 9
Improved sediment controls in the vicinity of the revetment watll and foreshore.

Photo 10
Silt curtain floating above surface with no gaps. (adjustments made by diver on anchoring)

Photo 11
Sediment controls in place in vicinity of small stockpiles

Photo 12
Sediment fence installed at foot of large stockpile. Stockpile battered.