

Construction Environmental Management Plan Demolition and Remediation of the Intermodal Logistics Centre at Enfield – Stage 1B

8st December, 2008



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ABBREVIATIONS

title	abbreviation
The Australian and New Zealand Environment Conservation Council	ANZECC
Australian Standard	AS
Construction Environmental Management Plan	CEMP
Condition of Approval	CoA
Department of Environment and Climate Change	DECC
Department of Planning	DoP
Environmental Assessment	EA
Environmental Control Map	ECM
Environmental Planning and Assessment Act	EP&A Act
Enviropacific Services	EPS
Intermodal Logistics Centre	ILC
Inspection and Test Report	ITR
Preferred Project Report	PPR
Remediation Action Plan	RAP
Roads and Traffic Authority	RTA
Separable Portion	SP
Sydney Ports Corporation	SPC
Sinclair Knight Merz	SKM

1.0 Background

1.1 Introduction

This Construction Environmental Management Plan (CEMP) has been prepared by Enviropacific Services for the Demolition and Remediation of the Intermodal Logistics Centre (ILC) at Enfield, on behalf of Sydney Ports Corporation (SPC). The CEMP provides a system and procedures to address and manage potential environmental impacts associated with the demolition and remediation phases of the project.

The CEMP addresses the applicable requirements of:

- The conditions of Project Approval (05_0147) issued by the Minister for Planning on the 5th September 2007 under Part 3A of the Environmental Planning and Assessment Act (EP&A Act)
- The Statement of Commitments contained in Chapter 21 within the Project Environmental Assessment (EA) prepared by SKM (October 2005)
- The Statement of Commitments contained in Chapter 4 of the Preferred Project Report (SKM, June 2006)
- AS/NZS ISO 14001:2004 - Environmental Management Systems – Requirements with Guidance for Use;
- The (former) Department of Infrastructure, Planning and Natural Resources document: Guideline for the Preparation of Environmental Management Plans (2004);
- Applicable New South Wales and Australian environmental legislation.

This CEMP outlines the key steps to be taken by all site personnel (Enviropacific and their sub-contractors), to manage the environmental hazards and risks associated with the project and to effectively minimise the potential for environmental harm. All Enviropacific and sub-contractor personnel engaged on the Project will be required to comply fully with the requirements of this CEMP in order to limit the potential for environmental harm and regulatory non-compliance.

This CEMP is submitted on behalf of Enviropacific by SPC to the Department of Planning (DoP) for approval. No demolition works will commence until SPC has received DoP's approval in writing of the CEMP. Remediation works will not commence until SPC has received DoP's approval in writing of the CEMP and the Remedial Action Plan (RAP) for remediation works has been endorsed by the Site Auditor and submitted to DoP. If interim remediation activities are required prior to completion of the RAP, these will be undertaken only after the Site Auditor has endorsed these activities and in accordance with any Site Auditor's requirements. Any interim remediation activities endorsed by the Site Auditor will be reported to DoP.

Enviropacific and Coffey Environments have worked together on numerous projects in the past and submitted their tender for the project as a joint submission. Enviropacific as principal contractor will be responsible for the following:

- Site Establishment (including environmental controls)
- Demolition works
- Remediation and associated earthworks (excavation, landfarming, offsite disposal, reinstatement)

Coffey Environments will be responsible for all tasks necessary to investigate, manage and verify that the demolition and remediation Works have been completed in accordance with the requirements of the CoA. Additionally, Coffey Environments will have the responsibility to investigate, specify, manage and verify, including the provision of all verification reports necessary, to obtain Site Audit Statement(s) from the Site Auditor, and that any contaminated areas have been remediated to a standard consistent with the intended land use.

1.2 Project Description

The proposed ILC at Enfield comprises the development of a new intermodal logistics centre, associated road and rail infrastructure works, services and environmental enhancement works (for details refer to SPC's CEMP Framework).

The Demolition works involve the demolition of structures, pavements and redundant rail infrastructure. Remediation works involve the excavation, landfarming, capping or offsite disposal of contaminated material identified as part of the (Remediation Action Plan) RAP prepared by Coffey Environments. Further details are provided in Section 1.2.2.

1.2.1 Location

The ILC site is located on the site of the former Enfield Marshalling Yards site at Strathfield South. The site covers an area of 60ha and is approximately 0.5km wide, and 2km in length. The site extends from the intersection of the Hume Highway and Roberts Road in the north to the intersection of Punchbowl Rd and Cosgrove Rd.

The proposed works will be undertaken on land owned by Sydney Port Corporation, namely:

- Part Lot, 2 DP1006861
- Lot 101, DP1001498
- Lot14, DP1007302.

A layout of the site and surrounding streets are shown below in Figure 1.

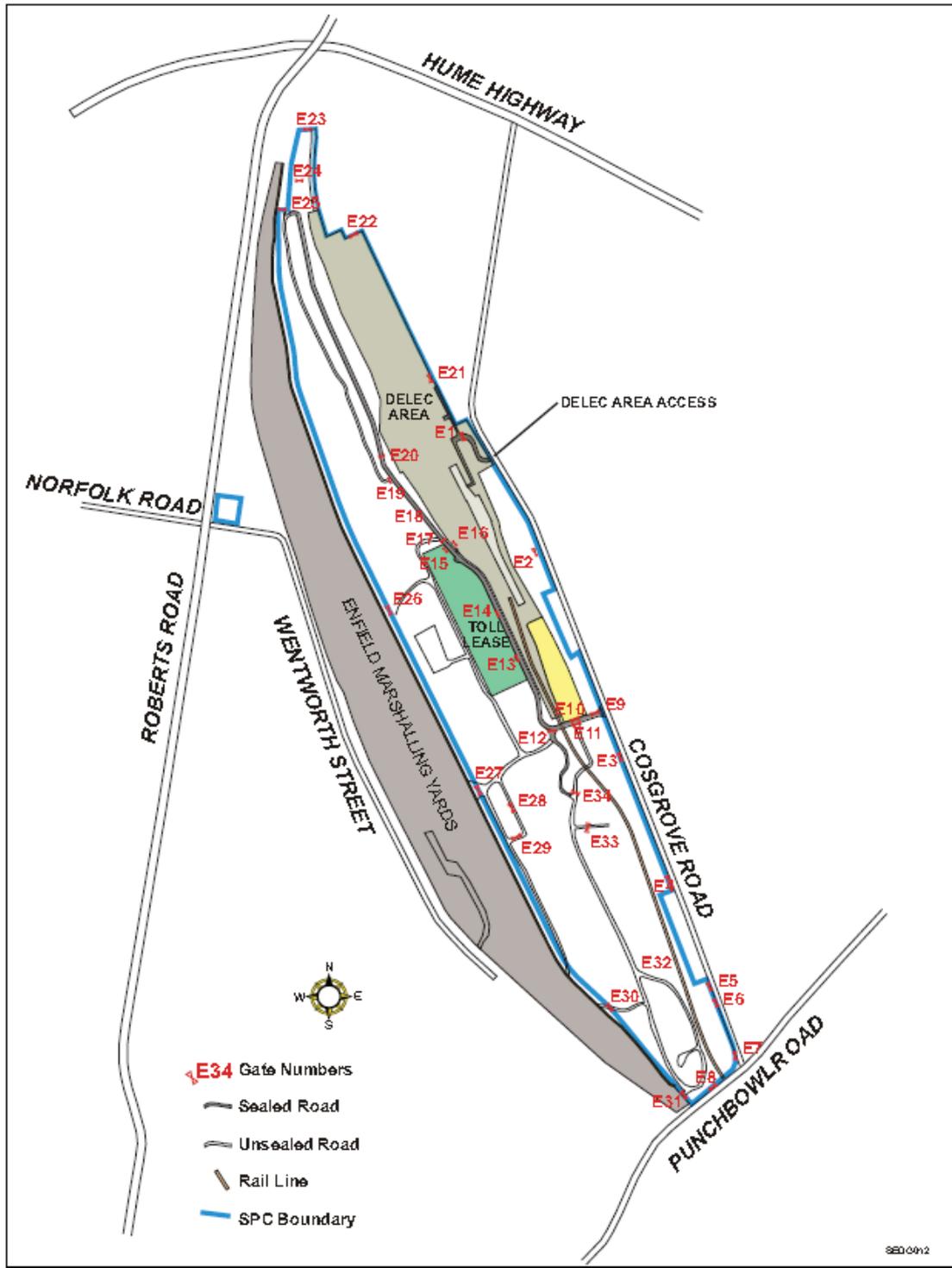


Figure 1- Site Layout

1.2.2 Project Activities

A description of activities and timing that will be undertaken as part of the works is described in Table 1 below. The demolition and remediation works constitute Stage 1B of the construction activities referred to in SPC's CEMP Framework.

Table 1 - Construction Program

Activity	Description	Timing (indicative)
Preparation of RAP	<ul style="list-style-type: none"> ▪ Preparation of the RAP, site auditor assessment and approval 	November 2008 – Late February/March 2009
Preparation of CEMP	<ul style="list-style-type: none"> ▪ CEMP to be approved by DoP before any demolition works commence 	December 2008
Site Establishment	<ul style="list-style-type: none"> ▪ Establish site office facilities. ▪ Construction of wheel washes at site entrance off Cosgrove Road. ▪ Temporary Fencing will be installed around the Boundary of SP1 and at the north east of the Delec Area. ▪ Construct Environmental Controls such as sediment fences, hay bales, diversion drains. ▪ Access to dust and meteorological monitoring station data ▪ Identification of exiting services utilities. ▪ Erection of frog protection fences as required by SPC. SPC's Herpetologist to carry out frog clearance surveys ▪ Protection of Heritage items (pillar water tank, pedestrian footbridge, tarpaulin factory). ▪ Clearing of vegetation (if necessary) 	December 2008
Separable Portion 1		
Demolition	Building 30 - Bulk Oil Storage Crushing of concrete on site (if required) Erect fencing to de-lineate boundary of SP1 Removal and stacking of rail lines	January 2009
Remediation (possible interim activities)	Excavation and stockpiling of Contaminated Soil (TPH, Metals). Reinstatement of excavations after validation works Possible interim remediation activities prior to the completion of the RAP will be undertaken in accordance with procedures endorsed by the Site Auditor.	January 2009
Separable Portion 2		
Demolition – Heritage Buildings	Removal of asbestos from Wagon Repair Shed The Yardmasters Office, the Administration Building and the Wagon Repair Shed will be demolished to ground level and all material taken off site to landfill or recycler. Subsequent to limited testing by SPC's Archaeologists in the area of the Wagon Repair Shed and the Yard Master's Office, the buildings will be demolished	December 2008 – January 2009

Activity	Description	Timing (indicative)
	to 1m below ground level.	
Remediation	After Demolition works have been completed and the RAP approved by SPC and Site Auditor remediation works will be carried out. These will possibly include Excavation of TPH and Metal contaminated soils, stockpiling, landfarming and either reinstatement or off site disposal.	March 2009 – June 2009
Separable Portion 3	Description	Timing
Demolition	Removal and Stacking of rail lines as far as the tarpaulin factory	June 2009
Separable Portion 4	Description	Timing
Demolition	<p>The following buildings will be demolished to 1m below ground level, and all material taken off site to either landfill or recycler -</p> <p>Building 1 - Locomotive Maintenance Shed; Building 3 – Canteen; Building 4 - Amenities Building; Building 5 – Demolition of brick and concrete underneath Rail Turn Table; Building 6 - Distribution Shed; Building 6A - Store shed; Building 7 - Load Box; Building 8 - Effluent Treatment Plant; Building 9 - Training Centre; Building 10 - Fuel Tank and Bund; Building 11 - Fuel Shed 1; Building 11A - Fuel Shed 2; Building 12 - Maintenance Shed; Building 13 - Old Sand Plant including all structures; Building 14 -Refuelling Shed; Building 15 - Fuelers Amenities Shed; Building 15B - Fuelers amenities Shed; Building 16 - Old Load Box; Building 17 - Wash Bays; Building 18A, 18B and 18C - Brick Buildings; Building 20/21 - Workshop and Shed; Building 22 - Crew Shed; Building 23 - Gas Bottle Storage; Building 24 - Amenities Building; Building 25 - Tank Storage Area; Building 26 - Concrete Pad; Building 32 - Bike Sheds</p> <p>Asbestos sheeting will be removed Building 1, 3, 4, 5A, 5B;</p> <p>Crushing of concrete on site will be carried out to the discretion of SPC's Representative.</p>	January – April 2009
Remediation	After Demolition works have been completed and the RAP approved by SPC and the Site	March 2009 –June 2009

Activity	Description	Timing (indicative)
	Auditor, remediation works will be carried out. These will possibly include excavation of TPH and Metals contaminated soils, stockpiling, landfarming and either reinstatement or off site disposal.	
Separable Portion 5	Description	Timing
Remediation Works	Remediation of TPH contaminated hotspot which may involve landfarming or off site disposal, followed by reinstatement	June 2009
Demobilisation	Description	Timing

The location of each of the separable portions are shown below in Figure 2.

CP15	321373.59	6246155.00
CP16	321347.89	6246180.14
CP17	321344.13	6246114.53
CP18	321302.24	6246051.69
CP19	321363.38	6246051.10
CP20	321371.07	6246052.72
CP21	321387.73	6246026.86
CP22	321423.84	6246029.95
CP23	321424.79	6246050.08
CP24	321422.36	6246030.06
CP25	321419.98	6246050.18
CP26	321420.89	6246010.20
CP27	321425.59	6246470.49
CP28	321429.81	6246450.94

CP70	322075.06	6247127.05
CP71	322232.51	6246678.99
CP72	322275.32	6246574.75
CP73	322301.67	6246653.35
CP74	322324.52	6246650.22
CP75	322396.22	6246654.46
CP76	322271.56	6246653.02

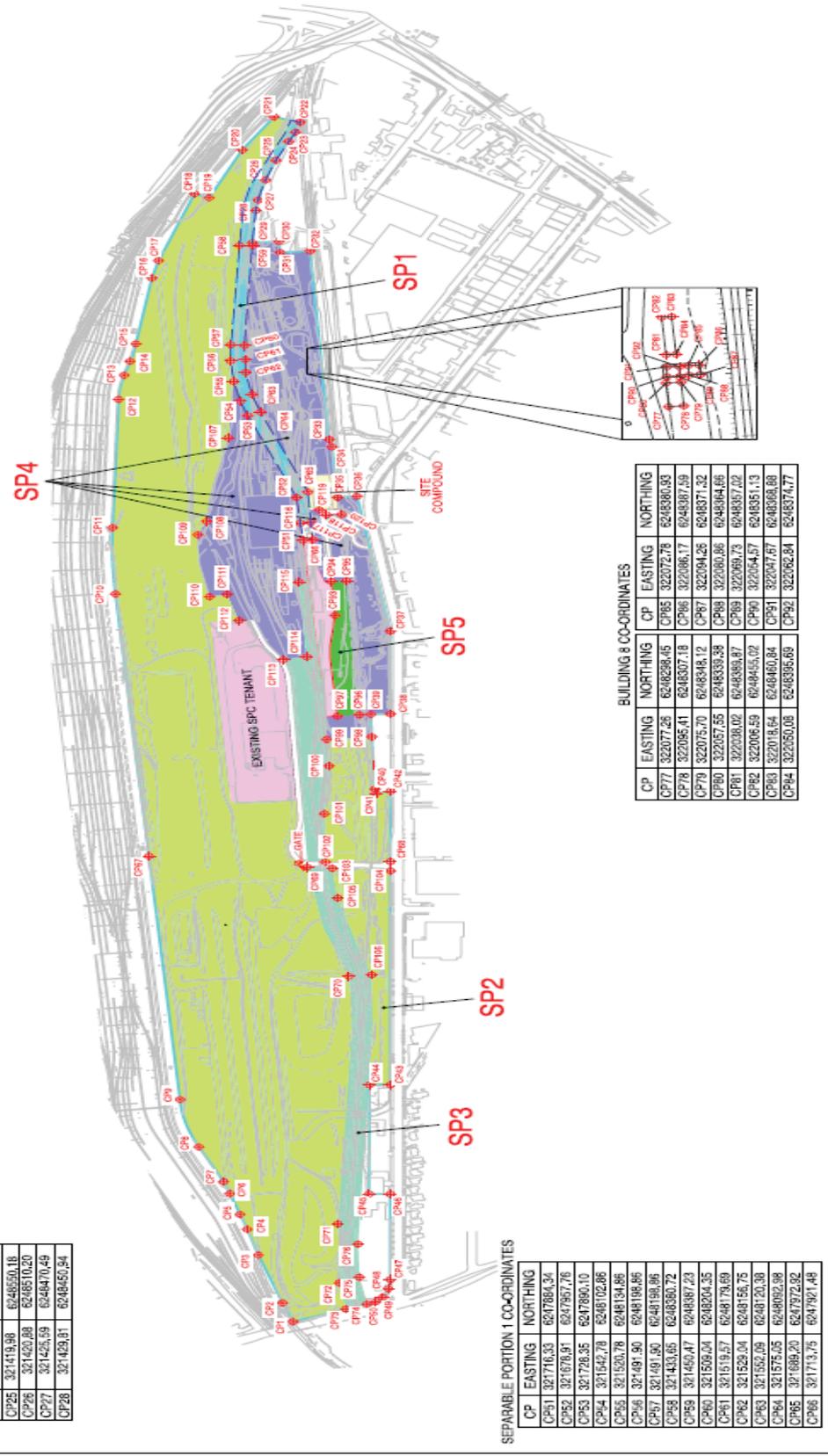


Figure 2 - Location of Separable Portions

ENFIELD
D&R WORKS STAGING PLAN
WITH SITE COORDINATES

SYDNEY PORTS
FIRST PORT, FUTURE PORT

PLAN SCALE: AS PER SCALE DWP

DATE: 24/11/2020
DRAWING NO: SEDP0809

SPC Boundary

SCALE
50m 0 50 100 150 200 250 300 350 400 450 500
Scale in Meters

DISCLAIMER STATEMENT
This plan has been prepared in accordance with accepted practice for the use of Sydney Ports Corporation for the purpose of providing a visual representation of the proposed works. It is not intended to be used for any other purpose and the user should verify the accuracy of the information provided. The user should also verify the accuracy of the information provided for any other purpose. This plan is not intended to be used for any other purpose. The user should also verify the accuracy of the information provided for any other purpose. This plan is not intended to be used for any other purpose. The user should also verify the accuracy of the information provided for any other purpose.

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1.3 CEMP Context

Project Approval was provided by the NSW Minister for Planning on 5th September, 2007 (Major Project Application 05_0147). This CEMP relates specifically to Demolition and Remediation works only, with Remediation to commence only when the RAP has been prepared and endorsed by the site auditor. Other works covered by the Project Approval (bulk earthworks, construction and operation), do not form part of this CEMP and will be covered under a separate CEMP as per SPC's Construction Environment Management Plan framework. Correspondence with the DoP dated 25th July, 2008 raised no objection to the staged delivery of CEMP's under SPC's Framework. This Demolition and Remediation CEMP has been prepared in accordance with SPC's CEMP Framework.

1.4 CEMP Objectives

The main objectives of the CEMP are to:

- Meet the Minister of Planning's conditions of Approval (CoA)
- Meet the obligations and commitments identified in the Environmental Assessment (SKM, 2005) and the Preferred Project Report (SKM, 2006)
- Ensure compliance with relevant environmental legislation
- Ensure environmental risks associated with demolition and remediation activities are properly managed

1.5 CEMP Requirements

Conditions of Approval 6.2 and 6.3 describe the Minister of Planning's requirement for the Project CEMP. The sections where each of these requirements are met in the CEMP are shown in Table 2.

Table 2- CEMP Requirements

Condition Number	Issues to be addressed in the development of the CEMP	Where addressed in this CEMP
6.2	CEMP to be prepared in accordance with Guidelines for the preparation of Environmental Management Plans (DIPNR, 2004). CEMP to be approved by DoP prior to commencement of site preparation and construction works.	Document Structure as a whole Figure 2 (program)
6.2a	Consistency with Chapter 21 of the Environmental Assessment: Intermodal Logistics Centre at Enfield (SKM, 2005), and Preferred Project Report (SKM, 2006)	Section 1.1

Condition Number	Issues to be addressed in the development of the CEMP	Where addressed in this CEMP
6.2b	Description of activities to be undertaken on site;	Section 1.2.2,
6.2c	Statutory and other obligations that the proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies.	Section 2
6.2d	specific consideration of measures to address any requirements of the DECC during site establishment and construction	Section 2.4
6.2e	a description of the roles and responsibilities for all relevant employees involved in the site establishment or construction of the project	Section 3.1
6.2f	details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the plan	Section 4.1, 4.2, 4.3
6.2f(i)	measures to monitor and manage dust emissions;	Section 4.2.5
6.2f(ii)	measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during construction activities;	Section 4.2.6
6.2f(iii)	measures to monitor and control noise emissions during construction works;"	Section 4.3.1
6.2g	a description of the roles and responsibilities for all relevant employees involved in the site establishment or construction of the project and a program for how these employees will be trained in responsibilities identified in the plan	Section 3.1, 3.2
6.2h	complaints handling procedures to be applied during the operation of the project	Section 3.4
6.2i	Issue specific management plans	Section 4.2
6.3a (also refer to in 6.2f, 6.3a, 2.15, 2.16)	Construction noise Management Plan including measures to manage construction noise	Section 4.2.1
6.3b	Construction Traffic Management Protocol to manage construction traffic and heavy vehicle movements	Section 4.2.2
6.3c (also refer to 2.38)	Heritage Protection Plan and of onsite heritage items *	Section 4.2.3
6.3d	Landscape and ecological management *	Section 4.2.4
6.3e (also refer to 2.20, 2.21, 2.22, 2.23 2.24, 2.25, 2.26,2.27,3.1, 3.2)	Construction Dust and Odour Management Protocol including measures to monitor and manage dust emissions and odours	Section 4.2.5

* Agreement by DoP to submit the CEMP for Stage 1B without the Heritage Interpretation Plan and Strategy (HIPS) and the Landscape and Ecological Area Management Plan (LEAMP), but with a Heritage Protection Plan, was obtained from DoP in correspondence dated 25/7/08 and 31/10/08. Green and Golden Bell Frog management documentation, required under condition 6.3d) iv) is provided in the SPC's CEMP Framework (rev 8)*

In addition, the Project Approval also refers to other matters which are suitably covered in this CEMP:

Table 3 - Additional Approval Requirements

Condition Number	Issues to be addressed in the development of the CEMP	Where addressed in this CEMP
1.1, 1.2, 1.3	Terms of Approval	Section 1.5
1.12	Statutory Requirements	Section 2
6.2f, 2.28, 2.29, 2.30, 2.32, 6.3c	Soil and Water Quality Management	Section 4.2.6
2.39, 2.40, 2.41, 2.44	Waste Management	Section 4.2.7
2.50	Dangerous Goods Management	Section 4.2.9
5.2, 5.3, 6.2h,	Complaints handling management	Section 3.4.2
7.1, 7.2,7.3	Incident Reporting	Section 5.6
	Environmental Control Map	Section 4.3

1.6 Enviropacific Environmental Policy

Enviropacific Services conducts business in both Civil and Environmental Engineering sectors throughout Australia. Our objective is to manage our projects with a constant awareness of the impacts on natural, built and human environments.

In our commitment to continually improving environmental management and the prevention of pollution we shall:

- communicate the company's environmental position with regard to the project operations to employees, subcontractors and consultants
- establish measurable objectives and targets to eliminate environment related incidents,
- comply with all relevant legislation and regulations,
- communicate our commitment and make this policy available to interested parties, including the public,

- ensure our employees, subcontractors and consultants use appropriate work practices.

To achieve the above, we will provide the necessary resources, skills and training to assist all stakeholders to work in accordance with our management system developed in accordance with ISO 14001.



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2.0 Planning and Legislative Requirements

2.1 Regulatory and Legislative Requirements

Legislation, codes of practice, standards and guidelines of relevance to the project are detailed below in Table 4

Table 4 - Regulatory and Legislative Requirements

Act	Regulatory Authority	Relevance to Project
Occupational Health and Safety Act 2000.	NSW Workcover	Regulates workplace safety
Occupational Health and Safety Regulations 2001.	NSW Workcover	Regulates workplace safety and asbestos handling
Protection of the Environment and Operations (Clean Air) Regulation 2002	NSW DECC	Regulates atmospheric pollutants including dust and odour
Contaminated Land Management Act 1997 and Regulation 1998.	NSW DECC	DECC enforces criteria for contaminated land and remediation goals Regulates the management of contaminated land in NSW
Road and Rail Transport (Dangerous Goods) Act 1997.	NSW DECC	Transport of contaminated materials to landfill
Road and Rail Transport (Dangerous Goods) (Rail) Regulation 1998.	NSW DECC	Transport of contaminated materials
Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998	NSW DECC	Transport of contaminated materials
Environmentally Hazardous Chemicals Act 1985.	NSW DECC	Regulates use of dangerous chemicals used on site (if required)
Waste Avoidance Resource Recovery Act 2000	NSW DECC	Promotes recycling on site of materials
Protection of the Environment and Operations Act 1997	NSW DECC, Local Council	Provides licences and enforces water pollution etc
Threatened Species Conservation Act 1995	NSW DECC	Protection of threatened species on site including the Frog Habitat
Heritage Act 1977	NSW DoP	Management of Heritage listed structures on site

2.2 Codes of Practice, Standards and Guidelines

Relevant codes of practice, standards and guidelines are listed in Table 5

Table 5 - Codes of Practice

Code of Practice	Regulatory Authority	Relevance to Project
Australian Standard AS 2436-1981: Guide to Noise Control on Construction, Maintenance and Demolition Sites.	NSW DECC	Control of Noise during demolition and remediation
Australian Standard AS 2601 – 2001: Demolition of Structures.	NSW Workcover	Specifies demolition guidelines
WorkCover, NSW (1993). Code of Practice: Safe Work on Roofs, Part 1, Commercial and Industrial Buildings.	NSW Workcover	Working at heights during asbestos removal
AS/NZS 3012- 2003: Electrical Installations - Construction and Demolition sites, and Associated Codes of Practice.	NSW Workcover	Isolation/Disconnection of power during demolition
AS2436 – 1981: Guide to Noise Control on Construction, Maintenance and Demolition Sites.	NSW DECC	Control of Noise during demolition and remediation
WorkCover, NSW (1997). Code of Practice: Amenities for Construction Work.	NSW DECC	Site facilities
WorkCover, NSW (1997). Code of Practice: Cutting and Drilling of Concrete and Other masonry Products.	NSW DECC	Demolition works
WorkCover, NSW (1992). Code of Practice: Electrical Practices for Construction Work.	NSW DECC	Site Establishment
BS6472 – 1992: Evaluation and Human Exposure to Vibration in Buildings (1 to 80 Hz).	NSW DECC	Demolition works
BS7385 Part 2 – 1993: Evaluation and measurement of Vibration in Buildings Part 2.	NSW DECC	Demolition works

Code of Practice	Regulatory Authority	Relevance to Project
Department of Conservation and Land Management, CALM (1992): Urban Erosion Control and Sediment Control.	NSW DECC, Local Council	Remediation and Demolition
NSW DEC (2007): Noise Guide for Local Government.	Local Council	Remediation and Demolition
National Environment Protection Council (1998): National Environment Protection Measure (NEPM) on Ambient Air Quality.	NSW DECC	Remediation and Demolition
NSW Department of Housing (1998): Managing Urban Stormwater – Soils and Construction	NSW DECC, Local Council	Control of on site stormwater
Landcom (2004) Managing Urban Water	NSW, DECC	Control of on site stormwater
NSW DEC (2004): Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes	NSW DECC	Disposal of wastes
National Occupational Health and Safety Commission, 2nd Edition [NOHSC: 2002 (2005)]: Code of Practice for the Safe Removal of Asbestos.	NSW Workcover	Demolition works
Workcover NSW (2008): Working with Asbestos Guide	NSW Workcover	Demolition works
WorkCover NSW (2000): Code of Practice: Excavation Work	NSW Workcover	Remediation and Demolition

2.3 Project Specific Approvals and Permits

All demolition and remediation site work shall be undertaken with the appropriate regulatory approvals, or permits in place and shall comply with applicable environmental regulatory and legislative requirements.

The approvals which will be required prior to initiating works are listed in Table 6 below

Table 6 - Project Specific Approvals

Regulatory Authority	Licence/Permit/Approval	Purpose	Approval Holder
NSW Government	Approval 05_0147 under Part 3A of the Environmental Planning and Assessment Act (1979)	To comply with conditions provided to ensure a high standard of development having regard to the effect upon the environment	Sydney Ports Corporation
NSW Workcover	Demolition Permit	Demolition to be undertaken by WorkCover licensed sub-Contractor.	Demolition Sub Contractor
NSW Workcover	AS1 Permit	Removal of Asbestos	Enviropacific and Demolition Sub Contractor

Consultations and agreements required from authorities and other stakeholders are detailed in SPC's CEMP Framework (rev 8).

2.4 NSW DECC Requirements

The NSW DECC has provided a response to section 6.2d in the CoA which is contained in SPC's CEMP Framework.

In brief, this CEMP reflects the advice proposed by the DECC below:

- The CEMP has been completed and will be approved by the DoP before construction works commence
- The CEMP has been prepared in accordance with ISO14001
- A Frog Management Plan, Frog Protection Plan and a concept design for the frog habitat area have been prepared and are provided in SPC's CEMP Framework (rev 8)

3.0 Environmental Management

3.1 On Site Structure and Responsibility

Figure 3 outlines the structure of responsibility of key positions in relation to environmental management.

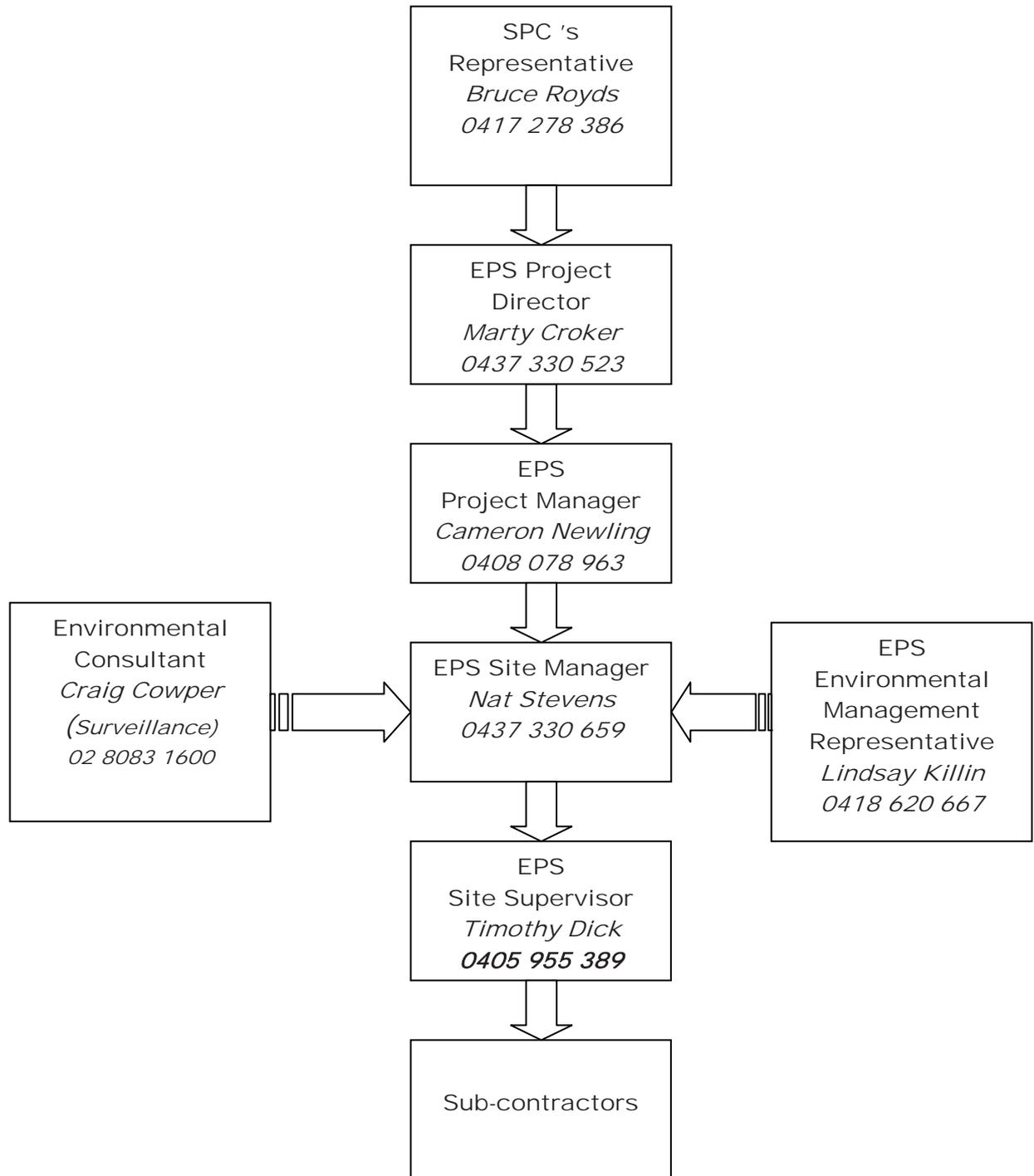


Figure 3 - Reporting Lines

3.1.1 EPS Project Director

The Enviropacific Projector Director is head of the line management structure for the Project, and has overall responsibility and accountability for environmental performance on the Project. The Projector Director is responsible for ensuring consistency with the relevant legislative standards of Australia, EPS Corporate Standards and contractual obligations, and the provision of appropriate resources to ensure the effective implementation of this CEMP. The EPS Project Director will demonstrate commitment to the Project CEMP by Participating in compliance audits and reviewing overall environmental performance against stated objectives.

3.1.2 EPS Project Manager

Reporting to the EPS Project Director, the EPS Project Manager is accountable for the EPS Project team and sub-contractors in respect to environmental performance on site through:

- Monitoring compliance with applicable environmental aspects of: Federal, State, and Local Government regulations and, project specific development and approval guidelines including those of the Client;
- Ensuring the implementation, monitoring, review, and where required – updating, of the relevant environmental actions and controls detailed in this CEMP;
- Ensuring all EPS and sub-contractors receive site specific induction training that incorporates environmental concerns raised in this CEMP and - as far as is reasonably practical, ongoing environmental awareness training;
- Ensure EPS Managers and sub-contractors manage their work scope with full compliance to this CEMP and that each sub-contractor effectively manages specific environmental risks or exposures in areas under their control;
- Ensuring the effective investigation, reporting and communication of environmental issues, incidents, complaints, and compliance status to all appropriate parties as defined in this CEMP and contract documents;
- Relating closely with the various EPS managers and the Env/QA Manager ensuring appropriate resources are allocated to effectively discharge their allocated responsibilities under this CEMP;
- Ensuring any complaints received are managed in accordance with this CEMP; and
- Active participation in auditing of site sub-contractors in relation to environmental performance and adherence to this CEMP.

3.1.3 EPS Site Manager

The EPS Site Manager reporting to the EPS Project Manager have direct day to day responsibility for managing the activities of sub-contractors under their control and for monitoring and ensuring compliance by sub-contractors with the relevant environmental guidelines established for the Project. These responsibilities include:

- Ensuring sub-contractors submit appropriate documentation complying with relevant Federal, State and Local Government regulations covering the environmental aspects, impacts and control strategies associated with their particular scope of work;
- Ensuring sub-contractors develop and effectively implement an environmental surveillance and auditing program including monitoring schedules and associated documentation to record overall environmental performance, identify areas of under performance or where corrective actions are required, and to monitor compliance with this CEMP and relevant legislation;
- Ensuring that all sub-contractor personnel under their control are aware of their environmental responsibilities and that all new employees are provided with initial induction and ongoing awareness training which details their environmental responsibilities and environmental concerns associated with their particular scope of work and the necessary control measures to be implemented;
- Conducting routine daily monitoring of sub-contractors environmental performance and compliance with the CEMP and, conduct scheduled environmental audits ensuring any corrective or preventative actions from Action Item Requests or Non-Compliance Reports (NCRs) are implemented and closed out within the stipulated time frame Ensure that checklists are completed correctly and on time reviewing same for accuracy prior to signing off and forwarding to the EPS Project Manager;
- Ensure that all environmental incidents, issues, or concerns are reported immediately to the EPS Project Manager and that the appropriate action is taken in a timely manner to eliminate, control, or remediate any spills, accidents, or potential exposures.
- Ensuring also that the appropriate documentary records are maintained and /or submitted in accordance with this CEMP;
- Ensure that all environmental complaints are handled in a prompt and courteous manner and in compliance with the guidelines contained in this CEMP.

3.1.4 EPS Environmental Management Representative

The EPS Environmental Management Representative (EMR) provides advice to the Project Manager to ensure environmental compliance of the Project with legislative requirements and the Project Approval.

The EMR will have responsibility for:

- Considering and advising on matters specified within the Project Approval, Statement of Commitments and compliance with these matters;
- Periodically monitoring EPS's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with the CEMP and associated plans and procedures, including carrying out site inspections.

3.1.5 EPS Site Supervisor

The EPS Site Supervisor reports directly to the EPS Site Manager, is responsible for direct on site supervision of labour operatives and sub-contractors. The EPS Site Supervisor is responsible ensure that appropriate Work Procedures and emergency response procedures are implemented and, where appropriate, Inspection and Test Plans, Inspection Checklist Reports and/or Inspection Test Reports are completed by the appropriate operational

Personnel. The EPS Site Supervisor shall identify safety, environmental and quality issues, and have the authority to recommend and initiate solutions.

The EPS Site Supervisor has the authority to stop the work if by continuance of the work activity the safety of persons, the quality of work / service or the environment may be impacted upon and adversely affected. The EPS site supervisor is directly accountable for the health and Safety of those persons under their control. Their responsibilities are to:

- Ensure that work procedures are implemented and adhered to by all persons.
- Identify and take corrective action to eliminate or control hazardous work conditions, equipment and/or practices

3.1.6 Environmental Consultant

Coffey Environments are responsible for preparation of the RAP, waste classification of stockpiles and validation of all remediation works

3.1.7 External Consultants

External consultants will be engaged to carry out additional monitoring where required by the Conditions and/or the EA and PPR Statement of Commitments.

3.1.8 Sub-Contractors

All subcontractors have environmental responsibilities during the performance of their various activities on the Project in particular:

- The submission to EPS's Site Manager of their own documentation which complies with Federal, State, and Local Authority regulations, the contents of this CEMP,
- The preparing and implementing of and specific environmental control plans deemed necessary by the Site Manager or his nominee to correct identified deficiencies or to enhance overall environmental performance and compliance on the Project;
- Taking all necessary precautions or actions in relation to any activity conducted on the Project that may potentially cause environmental harm and ensuring compliance with this Project CEMP and relevant regulations including the development and implementation of an environmental monitoring program;
- Providing initial and ongoing environmental awareness training including induction training for all new employees detailing each persons individual environmental responsibilities and key aspects of the Project CEMP and their own environmental objectives and compliance plans, and any other details specific to their individual work scope on the Project;
- The immediate verbal reporting to the site manager of all environmental incidents, non-conformances, or concerns and the timely implementation of corrective actions or remediation strategies to control or ameliorate the extent of environmental harm;
- Ensure that all environmental complaints are handled in a prompt and courteous manner and in compliance with the guidelines contained in this CEMP.

3.2 Environmental Awareness Training

The Site Manager and Project Manager will be responsible for ensuring that all Project personnel under their control receive both initial and ongoing environmental awareness training sufficient to ensure they are familiar with their environmental responsibilities under the Demolition and Remediation CEMP.

Enviropacific's Project induction will provide all site employees with an overview of the demolition and remediation environmental management system and key aspects of the Demolition and Remediation CEMP prior to allowing access to the worksite. Induction records will be maintained in a register on site.

The Project Manager or nominee shall assess the requirements of the subcontract package. Subcontractors shall attend environmental inductions.

The environmental induction training will, as a minimum cover:

- Individual responsibilities under the CEMP;
- Risk management strategies for addressing potential environmental impacts and for developing appropriate control strategies for any activity perceived to pose an environmental risk;
- Key environmental concerns and associated control strategies
- How hazardous or dangerous goods will be handled;
- Waste minimisation, recycling, and disposal guidelines;
- Incident and emergency response actions including reporting and recording guidelines
- Complaint handling procedures

3.3 Emergency Contacts and Response

Table 7 lists the contact personnel and their details for emergency responses in relation to environmental management on the ILC Site during demolition and remediation works. EPS's Emergency Response Procedure is contained in Table 8.

Table 7- Environmental Responsibility Contacts

Position	Contact	Business Address	Phone Number
EPS Project Director	Marty Croker	1/28 Barcoo St, Chatswood NSW	0437 330 523 9882 4200
EPS Project Manager	Cameron Newling	1/28 Barcoo St, Chatswood NSW	0408 078 963
EPS Site Manager	Nat Stevens	1/28 Barcoo St, Chatswood NSW	0437 330 659
EPS Environmental Representative	Lindsay Killin	1/28 Barcoo St, Chatswood NSW	0418 620 667

Position	Contact	Business Address	Phone Number
Environmental Consultant	Coffey Environments Craig Cowper	Level 1, 3 Rider Boulevard Rhodes NSW 2138	02 8083 1600
Site Supervisor	Tim Dick	1/28 Barcoo St, Chatswood NSW	0405 955 389

3.3.1 Emergency Response

Table 8 below details the procedure for handling environmental emergencies on site.

Table 8 - Emergency Response Procedure

Emergency Response Procedure	
Objective	The overall objective is to minimise the potential for incidents to occur and - should an incident occur, to provide for an effective rapid response to control the incident and minimise its impact and the potential for any long term negative outcomes.
Statutory Requirements	<ul style="list-style-type: none"> ▪ Protection of the Environment Operations Act 1997 ▪ Occupational health and Safety Act 2000
Performance Criteria	<ul style="list-style-type: none"> ▪ No incidents (no injuries, property damage, environmental, incidents) ▪ All personnel trained in emergency response procedures
Mitigation Measures	<ol style="list-style-type: none"> 1. Implementation of the Project Emergency Response procedures detailed in the OHS Plan 2. All employees to receive induction training which includes training in the Project emergency response and hazardous substances procedures. 3. Maintenance of hazardous substance registers and Material Safety Data Sheets accessible at the site office for all chemicals bought onto the Project site. 4. Adequate supply of spill containment materials such as booms and absorbent materials to be available in proximity to relevant storage areas with routine checks of inventory conducted to ensure they are properly located and maintained. 5. Appropriately banded and sealed storage and equipment maintenance areas to contain spills. 6. Emergency phone/radio contacts to be prominently displayed on site. 7. Appropriate runoff controls at all creek crossings and minor waterways and drainage paths. 8. A central control point for emergency situations will be established. 9. Emergency contact phone numbers for statutory services and key Site personnel shall be displayed in all office areas. 10. Report spills immediately using the emergency procedure. 11. Limit or contain spill using sand bags to construct bund walls, use absorbent material, temporary sealing of cracks or leaks in containers, use of geotextile or silt fencing to contain the spill. 12. Coordinate response, clean up and disposal of material to approved site in accordance with environmental regulations and manufacturers suppliers recommendations contained on the MSDS

Emergency Response Procedure	
	13. Utilise heavy earthmoving equipment if required for bund construction.
Monitoring	Monitoring of environmental compliance performance shall be undertaken daily by the Site Manager as per the Site Environmental Checklist (Appendix A)
Responsibility	<p>The EPS Site Manager/Project Manager is responsible for ensuring personnel are trained and aware of all environmental health and safety requirements, maintaining the hazardous materials register, and ensuring all emergency preparation measures are implemented at commencement of work.</p> <p>The EPS Project Manager shall be responsible for the allocation of appropriate resources and for reporting any incident which causes or threatens to cause material environmental harm to the DECC or local Council.</p>
Reporting	Project incident reporting and investigation procedures detailed in each management plan shall be used for all environmental incidents. Under these procedures all parties are required to immediately notify SPC's representative of any environmental incident that may occur in order to ensure the incident is dealt with effectively and limit the potential for significant environmental harm.
Corrective Actions	<p>In the event of a failure to comply with the CEMP guidelines, or a permit or condition, the relevant party shall:</p> <ul style="list-style-type: none"> ▪ Report to SPC ▪ Undertake an investigation in conjunction with the EPS Project Manager and Environmental Representative to determine the cause of the problem; ▪ Modify any work practices or procedures as necessary to improve emergency response and management; and ▪ Formally report the outcomes of the investigation to SPC's Representative

3.4 Community Consultation and Notification Strategy

3.4.1 Community Consultation

SPC has prepared a Community Consultation Plan (CCP) for site preparation and pre-construction works which is attached to SPC's CEMP Framework (rev 8). All communication with the local community will be undertaken by SPC with assistance from EPS on specific activities related to demolition and remediation works. Information distributed to the community may address progress, traffic disruptions and controls, temporary detours, work outside normal hours and may be provided in the form of, or as other otherwise required by SPC's Representative:

- on the ILC website;
- advertisements (eg progress updates, road closures, disruption to traffic); and
- e-newsletters.

EPS will be proactive in keeping SPC informed of the status of demolition and remediation works, including progress, milestones and other matters which are of interest or concern to SPC, stakeholders and/or the community. This would include notification to SPC of any proposed noise works, out of hours works and other works that may require early notification to residents and adjacent properties.

EPS will provide all information requested by SPC's Representative for inclusion in advertisements, e-newsletters and on the ILC website. EPS will support SPC's overall management and coordination of stakeholder and community involvement and consultation in relation to the development of the ILC at Enfield.

EPS will respond to all community inquiries and contacts in a polite and professional manner. All community inquiries will be referred to SPC's Project Administrator.

EPS will refer media inquiries in relation to its work on the project to SPC's Project Administrator. EPS will refer all enquiries from Federal, State and /or Local Government political representatives (including Ministerial representations), to SPC's Project Administrator

3.4.2 Complaints Management

In accordance with CoA's 5.2 and 5.3, and 6.3h, SPC has prepared a Complaints & Inquiries Procedure(CIP) (included in SPC's CEMP Framework (rev 8)) to ensure complaints during site preparation and pre-construction works are dealt with adequately. As part of the Procedure, SPC has established a Complaints Register to receive, log, track and monitor response to complaints within specified timeframes. EPS will maintain an on site register for complaints made directly to the EPS site manager, which must also be referred to SPC's Project Administrator for inclusion in SPC's Complaints Register. The site complaints register will be made available for inspection by the Director-General upon request. Refer to EPS Environmental Complaint Form, contained in Appendix D.

SPC's 24 hour complaints contact number (1800 059 233) has been established, publicised, displayed on site. This will enable any member of the general public to reach a person who can arrange appropriate response action to a complaint.

SPC contact details for the public to make enquiries or lodge complaints about the project are:

- Telephone: 02 9296 4999 (SPC switchboard) or 1800 059 233
- Fax: 02 9296 4742
- Postal: PO Box 25, Millers Point, NSW 2000
- Email: ilcenfield.project@sydneyports.com.au.

The procedure for handling complaints is detailed below in table 9.

Table 9 - Complaints Handling Procedure

Complaints Handling Procedure	
Objective	<ul style="list-style-type: none"> ▪ Support the delivery of the demolition and remediation works with minimum disruption and impacts to local communities and the environment; ▪ improving community understanding of the need and benefits of the project; ▪ being proactive and minimising risk to Sydney Port's reputation; ▪ being timely and delivering the demolition and remediation works within budget ▪ compliance with the relevant conditions of the Planning Approval
Statutory Requirements	<ul style="list-style-type: none"> ▪ Protection of the Environment Operations Act 1997 ▪ Part 3A Project Approval ▪ Australian Standard 4269 – Australian Standard for Complaints Handling
Performance Criteria	<ul style="list-style-type: none"> ▪ All complaints formally registered. ▪ During standard working hours or non-construction times <ul style="list-style-type: none"> ○ After initial contact, respond verbally within 24 hours or earlier as possible. ▪ During the night: verbal response before 9am the next morning or within 2 hours for emergencies.
Responsible Person	The EPS Project Manager – or in his absence the EPS Site Manager - is responsible for notifying all complaints to SPC, documenting them and responding to and acting on the complaint to the satisfaction of SPC.
Mitigation Measures	<ol style="list-style-type: none"> 1. All community complaints and enquiries must be directed to the Sydney Port's ILC Project Administrator (PA), Virginia Mullins, who will register them on an electronic web-based community management database setup specifically for the ILC at Enfield Project. The database will capture the community interactions through the life of the Project. SPC's PA will nominate the relevant project personnel to address the complaint. 2. A Complaints Register will be set up with complaints handled according to the procedure below: <ul style="list-style-type: none"> ▪ the date and time, where relevant, of the complaint; ▪ the means by which the complaint was made (telephone, mail or email); ▪ any personal details of the complainant that were provided, or if no details were provided, a note to that effect; ▪ the nature of the complaint; ▪ record of operational and meteorological condition contributing to the complaint; ▪ any actions taken in relation to the complaint, including any follow-up contact with the complainant; and ▪ if no action was taken in relation to the complaint, the reasons why no action was taken. 3. Complaints Escalation

Complaints Handling Procedure	
	<ul style="list-style-type: none"> ▪ Wherever possible, disputes will be negotiated directly between Sydney Ports ILC Project Manager, the community representative and the EPS Project Manager. ▪ Failing resolution under the above a meeting will be convened between the Sydney Ports ILC Project Manager, Sydney Ports ILC Project Director, the EPS Project Manager and the community representative. ▪ Failing resolution under the above a meeting will be convened between the Sydney Ports ILC Project Manager, Sydney Ports ILC Project Director, EPS Project Manager and the community representative, mediated by an independent facilitator. The independent facilitator would be determined at the time and agreed upon by Sydney Ports. The facilitator will be engaged to assist in a mutually agreeable solution.
Monitoring	<ul style="list-style-type: none"> ▪ Targeted monitoring dependant on the nature of the complaint.
Reporting	<p>SPC will be notified of any complaint as soon as possible after the complaint has been lodged. An incident report will be sent to SPC regarding complaints about any environmental issue, including pollution, arising from the works as well an Environmental Complaints form (Appendix D) The Report will provide details of the complaint and the action taken to alleviate the problem. A final report with proposed measures to prevent the occurrence of a similar incident will be submitted to the SPC. The actions will be included in the Complaints Procedure and will be entered in the Consultation Manager database.</p>
Corrective Actions	<p>Corrective actions will be taken as soon possible depending on the nature of the complaint and followed up on the incident report.</p> <p>Should an incident of failure to comply occur in relation to the management of environmental complaints one or more of the following corrective actions will be undertaken as appropriate:</p> <ul style="list-style-type: none"> • Conduct additional training of staff regarding complaint management; • Review procedure in light of shortfall

4.0 Implementation

4.1 Environmental Risk Assessment

Environmental planning requirements of the NSW Environmental Regulations and ISO14001 Environmental Management Systems address the need to identify and assess environmental risks and potential impacts of activities associated with demolition and remediation works.

Potential environmental risks associated with the Project were identified during preparation of the Environmental Assessment prepared by SKM (2005). These risks have been reviewed as part of the risk assessment carried out for the demolition and remediation activities in this current CEMP.

The objectives of the risk assessment carried out for the demolition and remediation works are as follows:

- Identify the activities, aspects and possible environmental impacts associated with the demolition and remediation works;
- Consider these activities in isolation of any controls and determine a raw risk rating;
- Identify any controls required to minimise the potential for environmental impacts to reduce the risk to the lowest possible level for inclusion in the Environmental Management Plans provided in section 4.3.

The Environmental Risk Rating for the demolition and remediation works is contained in Table 9 below. The Environmental Risk Rating is measured in terms of consequence (severity) and likelihood (probability) of the event happening.

The consequences of an event are categorised as follows:

1	Catastrophic	A major event which could cause severe or irreversible damage to the natural and or human environment. Involves death, toxic release off-site with detrimental effect, huge financial loss.
2	Major	An event which could have a substantial and permanent consequence to the natural and / or human environment. Involves extensive injuries, loss of production capability, off-site release contained with outside assistance and little detrimental impact, major financial loss.
3	Moderate	An event which could create substantial temporary or minor permanent damage to the natural and / or human environment. Medical treatment required, on-site release contained with outside assistance, high financial loss.
4	Minor	An event which could have temporary and minor effects to the natural and / or human environment. First Aid treatment required, on-site release immediately contained medium financial loss.
5	Insignificant	No detrimental impact on the natural and / or human

		environment is measured or envisaged. No injuries, low financial loss, negligible environmental impact.
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The likelihood (or probability) of each impact occurring is rated according to the following qualitative measures:

Level	Descriptor	Description
A	Almost certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Could occur
D	Unlikely	Could occur but not expected
E	Rare	Occurs only in exceptional circumstances

A risk matrix based on these qualitative measures of consequence and likelihood was then used to measure risk and enable risk prioritisation.

Likelihood		Consequence				
		Catastrophic	Major	Moderate	Minor	Insignificant
		1	2	3	4	5
Almost Certain	A	E	E	E	H	H
Likely	B	E	E	H	H	M
Possible	C	E	E	H	M	L
Unlikely	D	E	H	M	L	L
Rare	E	H	H	M	L	L

These risks are prioritised such that:

Risk Ranking	Symbol	Description
Extreme Risk	E	Immediate action required
High Risk	H	Senior management attention needed
Moderate risk	M	Management responsibility must be specified
Low risk	L	Manage by routine procedures

The main areas of environmental concern associated with the Project have been summarised in Table 10 below.

Table 10 - Environmental Risk Assessment

Activity	Specific Process	Aspect	Impact	Consequence	Likelihood	Potential Risk	Control	Residual Risk
Set up	Site Establishment	Construction of Wheel Wash	Sedimentation of stormwater from stockpiles and excavations	Minor	Unlikely	Low	Silt Fencing, Protection of Drains	Low
		Establish Environmental Controls	Sedimentation of stormwater from stockpiles and excavations	Minor	Unlikely	Low	Silt Fencing, Protection of Drains	Low
		Erection of Frog Fence	Disturbance of frog habitat	Minor	Unlikely	Low	Frog clearance survey, visual monitoring for frogs	Low
		Protection of Heritage Listed Items	Physical damage to heritage listed items	Major	Possible	High	Temporary fencing and signage to create exclusion zone; induction training	Low
		Clearing of vegetation	Weeds, Sedimentation of stormwater from stockpiles and excavations	Minor	Unlikely	Low	Disposal of all weeds and foreign vegetated regrowth	Low
Removal of structures and services	Demolition	Surface water discharge	Contamination of on and off site waters	Moderate	Possible	High	Silt Fencing, Protection of Drains, Hay bails if necessary; diversion drains	Low
		Dust/Gas emission	Deposition on neighbouring properties; health impacts	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site. When vehicles are transporting on site, they must only travel designated haul routes; dust suppression to be used and PM10 monitor to regularly monitored	Low
		Noise emission	Noise pollution at on/off site locations	Minor	Possible	Medium	All machinery is to be appropriately silenced with mufflers. Regular maintenance of transport vehicles. Respite periods for noise activities. Operating hours between 07:00am and 6pm	Low
		Vibration	Vibration generation at off site locations	Moderate	Unlikely	Medium	Minimise hammering and vibration compaction when in close proximity to structures, buildings or property boundary	Low
		Transport/Haulage	Dust and mud generation on local roads	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
			Air pollution at off site locations	Moderate	Unlikely	Medium	Regular maintenance of transport vehicles	Low
Remediation	Excavation	Spillage of material	Contamination of off site waters or roadways	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
			Contamination of clean soils	Moderate	Possible	High	When vehicles are transporting on site, they must only travel designated haul routes	Low
		Decontamination of plant	Contamination of clean soils	Moderate	Possible	High	Excavation Plant will be decontaminated at completion of excavation in the designated decon area (wheel wash area)	Low
	Stockpiling & Landfarming	Dust/Gas emission	Air pollution at off site locations; health effects	Moderate	Possible	High	Regular maintenance of transport vehicles; use of dust suppression when required	Low
		Surface water discharge	Contamination of on and off site waters	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
		Noise emission	Noise pollution at off site locations	Minor	Possible	Medium	All machinery is to be appropriately silenced with mufflers. Regular maintenance of transport vehicles. Respite periods for noise activities. Operating hours between 07:00am and 18:00pm	Low
	Transportation	Spillage of material	Contamination of off site waters or roadways	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
	Reinstatement or Disposal	Spillage of material	Contamination of off site waters	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
			Contamination of off site areas and roadways	Moderate	Possible	High	All vehicles must travel through wheel wash prior to leaving site	Low
	Material Compaction	Spillage/leaking from fuel/oil stores	Contamination of off site waters	Moderate	Unlikely	Medium	Maintain environmental controls around fuel stores	Low
			Contamination of clean soils	Moderate	Unlikely	Medium	Maintain environmental controls around fuel stores	Low
		Dust/Gas emission	Air pollution at off site locations	Moderate	Possible	High	Regular maintenance must be carried out on all machinery and transport vehicles	Low
Internal Road Maintenance		Dust and mud generation	Moderate	Possible	High	All machinery is to stop movements on site during heavy rainfall. During dry conditions, a watercart will be used to control dust	Low	

4.2 Environmental Management Plans

The environmental management sub-plans provided in Sections 4.2.1 to 4.2.10 specify the environmental requirements and safeguards for demolition and remediation activities.

An ECM summarising these plans is contained in Section 4.3

4.2.1 Construction Noise Management

Potential noise impacts associated with the project are to be managed during demolition and subsequent remediation works. The potential impacts include noise emissions due to on site activities such as:

- Demolition (concrete crushing, hammering, removing rail lines, off site transport of material)
- Remediation Earthworks (front-end loader, dozer, excavator, grader, articulated dump trucks, concrete vibrator, mobile crane, hand tools and air compressor)

The most intensive noise activities are expected to occur during demolition, particularly during hammering, crushing and cutting of rail lines. These activities are not expected to occur simultaneously.

Table 11 below displays typical noise level for machinery expected to be used on site. The levels are based on published data from Table 11-15 of the EA, and Table B-1 of the DECC Draft Construction Noise Guidelines (2008)

Table 11 - Typical Noise Levels for Construction Equipment

Plant Description	Range of Indicative sound power levels (dB(A))	Range of Indicative sound power levels at 10m (dB(A))
Compressor	93-110	65-82
Diesel Generator	84-113	56-85
Dozer	102-114	74-86
Dump Truck	117	89
Excavator	97-117	69-89
Jackhammer	121	93
Rockbreaker/Crusher	118	90
Concrete/Rail Saw	112-122	84-94
Truck	107	79
Vibratory Roller	103-112	75-84
Watercart	106-118	79
Wheel Loader	103-111	75-83

The noise assessment for site preparation works from the EA predicted possible exceedances of the noise criteria (see Table below) at the nearest affected residences. The EA predictions were however worst case scenarios, with cumulative sound power levels calculated from plant operating concurrently on the site and no mitigation measures in place.

Noise criteria is not expected to be exceeded during demolition and remediation activities. Most of the demolition and remediation works will occur in the DELEC area. To the east of the DELEC area is Cosgrove Rd and an industrial estate, and to its west is vacant land and Railcorp Yards, with no sensitive receivers located nearby. Minimal demolition (removal of a rail line down to the northern end of the Tarpaulin Shed) and remediation works are anticipated at the southern part of the site. Works in this area will be separated from the residential areas by the existing (and under construction) industrial buildings fronting Cosgrove Rd and a soil mound located along the south-east site boundary. The buildings outside the DELEC area to be demolished (the Administration Building, the Yard Masters office and the Wagon Repair Shed) are located at the western part of the site, near the Railcorp Marshalling Yards, with the nearest residential areas located about 500m away. In addition to the separation between demolition and remediation activities and residential areas, noise mitigation measures will be undertaken as detailed below and compliance noise monitoring will be carry out throughout the works. Consequently, noise is not expected to be an issue during demolition and remediation.

To manage noise emissions at the site, a Construction Noise Management Plan (below) has been developed.

Construction Noise Management Plan								
Objective	To meet appropriate noise standards so as to minimise any impacts of the Demolition and Remediation works on noise sensitive land uses.							
Statutory Requirements	<ul style="list-style-type: none"> ▪ Condition of Approval 6.2f, 6.3a, 2.13, 2.15, 2.16 ▪ Australian Standard AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition on Sites. ▪ NSW DECC Draft Construction Noise Guidelines (2008) ▪ Protection of the Environment Operations Act 1997 ▪ Statement of Commitments (SKM 2005, 2006) ▪ Environmental Assessment, (SKM 2005) 							
Performance Criteria	<ul style="list-style-type: none"> ▪ Undertake works in accordance with Australian Standard AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition on Sites; and DECC Noise Management Guideline – Construction Noise ▪ Construction Noise Criteria developed in Table 11.14, Environmental Assessment (SKM, 2005) for Construction periods over 26 weeks (ie. the L10 level measured over a period of not less than 15 minutes when the construction site is in operation must not exceed the background level by more than 5 dB(A) <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Sensitive receptor</th> <th>dB(A)</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>Eastern end of Jean Street, Strathfield South</td> <td>54</td> </tr> </tbody> </table>			Sensitive receptor	dB(A)	A1	Eastern end of Jean Street, Strathfield South	54
	Sensitive receptor	dB(A)						
A1	Eastern end of Jean Street, Strathfield South	54						

Construction Noise Management Plan			
	A2	Eastern end of Ivy Street, Strathfield South	53
	A3	2 Wentworth St (south), Greenacre	49
	A4	Eastern end of Gregory Street, Strathfield South	49
	A5	Western end of Blanche Street, Strathfield South	46
	A6	40 Bazentin Street, Belfield	46
	For location of potential sensitive receptors A1-A6 refer to the ECM (Section 4.3)		
Mitigation Measures	<p>An awareness program for construction personnel on noise minimisation will be incorporated into site induction training. The awareness program will include discussion of mitigation measures as outlined in this Construction Noise Management Plan.</p> <ol style="list-style-type: none"> 1. Information will be provided to the local community by SPC prior to the commencement of works as per the Community Consultation Plan. The 1800 contact number is available to the public (on sign on ILC Site entrance and on ILC website) so that information can be received or complaints made in relation to noise. A log of complaints will be maintained by SPC and action will be taken by the Contactor as required." 2. Significant noisy activities will be largely undertaken in the DELEC area which is located at least 250-300m from the nearest residential areas and separated from potential sensitive receivers by vacant land, busy road and RailCorp Marshalling Yards to west, and by Cosgrove Rd and industrial area to the east. 3. Where applicable, residential class mufflers and engine shrouds (acoustic lining) will be used on all construction equipment. 4. All equipment will be maintained in good order including mufflers, enclosures and bearings to ensure unnecessary noise emissions are eliminated. 5. Plant and equipment will be used appropriately. This includes reasonable work practices with no extended periods of 'revving', idling or 'warming up' within the proximity of existing residential receivers. Plant will be turned off when not being used. Any excessively loud activities will be scheduled during periods of the day when higher ambient noise levels are apparent. Where possible, noisy plant will be located away from potentially noise-affected neighbours or behind barriers, such as sheds or walls. Where reasonable, respite periods will be utilised for very noisy activities. 6. Workers must avoid dropping materials from height. 		

Construction Noise Management Plan	
	<p>7. Reprogram works during windy conditions where possible</p> <p>8. Noisy activities will be planned, where possible, for parts of the day when they would have the least impact</p> <p>9. Vibration will be minimised by restricting hammering where possible and around existing buildings. Ripping of concrete will be favoured over hammering where feasible.</p> <p>10. As per section 11.7 of the EA, vibration is not considered to be an issue due to sensitive receptors being greater than 25m away.</p> <p>11. Only undertake construction activities associated with the Demolition and Remediation works that will generate an audible noise at any residential premises during the following hours:</p> <p>a) 7.00 am to 6.00 pm, Mondays to Fridays, inclusive; b) 8.00 am to 1.00 pm on Saturdays; and c) At no time on Sundays or public holidays</p> <p><i>Note: This does not apply in the event of a direction from police or other relevant authority for safety reasons. (As per Condition 2.15 of the Project Approval). The hours of construction specified may be varied with the prior written approval of the Director-General. (As per Condition 2.16 of the Project Approval)</i></p>
Monitoring	<p>Ambient background noise levels have been assessed as part of the EA prior to demolition and remediation works commencing at the boundary and in proximity to the closest residence.</p> <p>Noise compliance monitoring will be conducted by SPC's noise consultant at affected sensitive receptors (A1-A6) on a monthly basis during noisy activities. Results will be recorded as L10 and Leq (as relevant) and compared against the adopted criteria. The nearest sensitive receivers are some distance away and it is expected that the mitigation measures described should be sufficient for the works.</p> <p>Point source noise monitoring will be undertaken by the EPS's Site Manager on a weekly basis or as required depending on the activity.</p> <p>If complaints are received, monitoring shall be undertaken by external environmental consultants according to NSW EPA guidelines and Australian Standard 1055.1:1997 Acoustics – Description and Measurement of Environmental Noise.</p>
Responsible Person	<ul style="list-style-type: none"> ▪ EPS Project Manager is responsible for activities and areas under their control and will identify and manage any activity that has the potential for noise emissions that exceed the performance noise criteria.

Construction Noise Management Plan	
	<ul style="list-style-type: none"> ▪ Individual sub-contractor Project Managers shall implement all reasonable and feasible noise mitigation and management measures with the aim of achieving the construction noise criteria. ▪ The EPS Site Manager is responsible for compliance to the relevant regulations and the provisions of the Project Approval. ▪ Compliance noise monitoring at sensitive receivers will be conducted by SPC's noise consultant. ▪ SPC's representative is responsible for obtaining any authorisation to conduct construction work out of approved hours should the need arise.
Reporting	<ul style="list-style-type: none"> ▪ EPS is responsible for managing compliance noise monitoring results provided by SPC ▪ The EPS Site Manager is responsible for daily inspections and non-conformance reporting to the Project Manager ▪ The EPS Site Manager shall be responsible for reporting any incident which causes or threatens to cause material environmental harm or breaches requirements to SPC as soon as possible. ▪ Noise monitoring results will be reported on the relevant Inspection and Test Plan (Form ITR05 in Appendix F of this CEMP)
Corrective Actions	<p>In the event of a complaint or failure to comply with the relevant guidelines of the Project Approval, the following corrective / preventative actions shall be taken by EPS's PM:</p> <ul style="list-style-type: none"> ▪ Report to SPC's Representative ▪ An investigation shall be undertaken to determine the cause of the problem or non conformance; ▪ Measure sound power and pressure levels emitted from equipment identified as the likely source of the problem and review possible mitigation techniques; ▪ Modify work practices as necessary to reduce the duration or level of noise. ▪ Report corrective actions to SPC's Representative

4.2.2 Construction Traffic Management

This section outlines management of construction traffic within the Project site, and nearby local roads. It only considers traffic movement during demolition and remediation..

During the demolition and remediation phases, several activities will generate traffic within the site, including:

- Equipment delivery
- Floats of Earthmoving Equipment

- Staff transport
- Articulated truck movements to and from landfill (Truck and Dogs or Semi - trailers)

Oversize truck movements (predominantly floats) will only occur during RTA approved hours 10am to 3pm, and 7pm to 7am) and will not operate during peak traffic curfews.

Traffic peaks will occur in the early morning, and late afternoon, coinciding with travel times for site workers. The demolition phase, predominantly SP2, is expected to generate the largest volume of traffic due to the volume of material to go off site for disposal and recycling. These truck movements are not expected to impact current traffic flows on Cosgrove Road as per section 7.3.2 of the EA, which states that an estimated construction traffic peak of 240 vehicles in the peak hour would represent less than an additional 1% of total traffic, and would have a negligible impact on road network and intersection performance. The estimated maximum volume of truck movements in an hour is expected to be less than 30 for demolition and remediation works, and is expected to be much less.

A breakdown of vehicle movements is shown in Table 12 below.

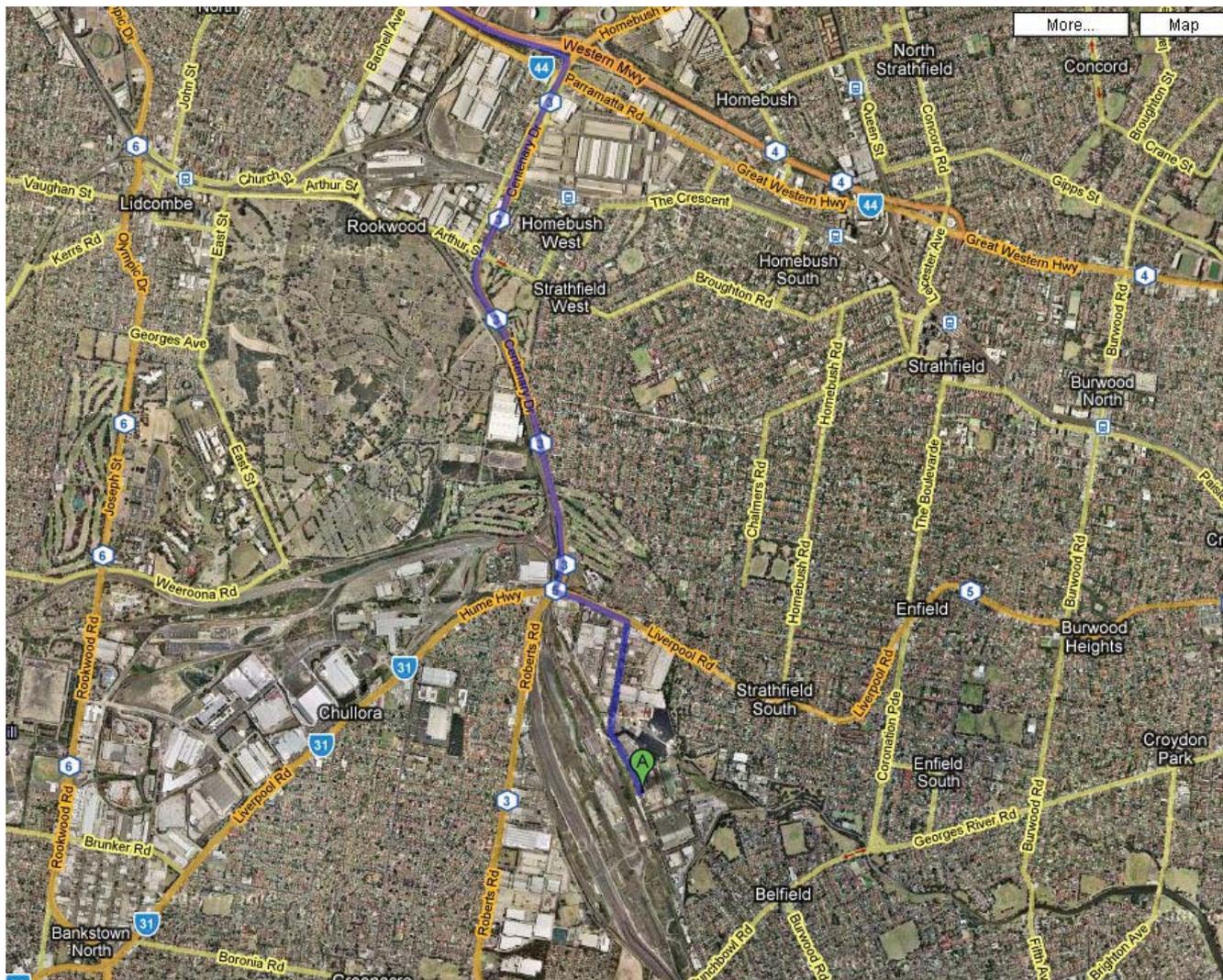
Table 12 - Vehicle Movements

Works	Estimated Vehicle Movements
Site Establishment	
Employee Vehicles	10 per day
Demolition	
Employee Vehicles	10-20 per day
Float of Equipment	5-10 in first week, then 1-2 per week thereafter
Haulage of Steel	5-10 per day when steel is ready to be removed
Haulage of Concrete	5-10 per day when concrete is ready to be removed
Haulage of Asbestos Bins	1-5 per day when required
Haulage of General Waste	1-5 per day when general waste is ready for removal
Remediation	
Employee Vehicles	5-10 per day
Float of Equipment	1-2 per week
Haulage of Soil	If soil is required for removal, 40-50 truck movements per day

The majority of construction traffic will access the site via an existing entrance opposite Hope St, off Cosgrove Road. A temporary wheel wash will be constructed at the north entrance off this road (DELEC entrance), and a permanent wheel wash will be constructed at the main site entrance off Hope Street West (as shown on the ECM). Most heavy vehicles will exit Cosgrove Rd to the Hume Highway and on to Centenary Drive, and then exit to the M4 to western landfills and recycling facilities. In accordance with the statement of commitments, heavy construction traffic will be restricted to these designated arterial routes.

A map of the routes is shown in Figure 4 below.

Figure 4 - Heavy Vehicle Route



To reduce potential impacts of construction traffic at the site, a Traffic Management Plan has been prepared below. Sub-contractors employing traffic management measures at the site in accordance with the Traffic Management Plan must ensure that the measures improve and not detract from safety at the Project site

Construction Traffic Management Plan	
Objective	<ul style="list-style-type: none"> ▪ To ensure maximum safety of on-site personnel and pedestrians and drivers. ▪ To ensure that construction activities do not adversely impact or compromise safe traffic flow within the site. ▪ To minimise environmental nuisance and impact as a result of construction traffic. ▪ To ensure construction traffic does not interrupt existing traffic flows on local road network.
Statutory Requirements	Condition of Approval 6.3.b Road Transport (Safety and Traffic Management) Act 1999. Statement of Commitments (SKM 2005, 2006) Environmental Assessment (SKM, 2005)
Performance Criteria	No safety incidents. Adherence to any relevant permits and/or license conditions. No noise, dust complaints or complaints in relation to construction traffic from neighbouring property owners or residents in the local area.
Mitigation Measures	<ol style="list-style-type: none"> 1. All transport vehicles to have proper noise attenuation and to be maintained in good order. 2. Construction traffic would comply with construction noise limits and construction times to minimise noise impact on residents. 3. Queuing will be forbidden in local streets. Truck movements will be staggered to prevent queuing occurring. 4. Vehicle and machinery movements during works will be restricted to designated areas within the site; these areas will change during demolition and remediation works as required by work progress. 5. Heavy and light vehicles will be separated by designated onsite parking for light vehicles, and restricting the use of unnecessary light vehicles around heavy vehicle movements. 6. Oversize truck movements (predominantly floats) will only occur during RTA approved hours 10am to 3pm, and 7pm to 7am) and will not operate during peak traffic curfews 7. Traffic will be confined to maintained site tracks and roads. 8. Internal construction road network would be designed to incorporate one way traffic flow. 9. All vehicles will be restricted to the on site speed limit of 25 km/hr. 10. Adequate off-road parking will be provided for construction vehicles and construction workforce vehicles. 11. Adequate room will be provided for vehicles to manoeuvre on the site. 12. All trucks on site will have fitted, and will maintain, reversing lights and reversing alarms for on site safety. 13. In accordance with the Dust Management Plan, vehicles transporting material to and from the construction site will be

Construction Traffic Management Plan

	<p>covered immediately after loading (prior to traversing public roads) to prevent wind blown dust emissions and spillages.</p> <p>14. In the event of a spillage of materials from construction vehicles, spilled material will be removed as soon as practicable within the working day of the spillage</p> <p>15. Trucks will only be allowed to use designated arterial roads as discussed above. Trucks will not be allowed to use local roads in residential areas.</p> <p>16. A Road Transport Coordination Group (RTCG) has been established by SPC to oversee and coordinate the management of traffic and road issues associated with and affected by the project. The RTCG includes representatives of SPC, DoP, RTA, Strathfield Council and Bankstown Council. Details of the RTCG are provided in SPC's CEMP Framework (rev 8)</p>
Monitoring	<ul style="list-style-type: none"> ▪ Visual monitoring of all traffic movements on site will be carried out by the Site Manager or Site Supervisor to ensure the safe movement of traffic and the protection of persons and property through and around the site. ▪ Construction roads will be inspected to ensure road conditions support safe working and driving. ▪ Following periods of heavy rain or adverse conditions, construction roads will be inspected prior to heavy vehicle traffic use to ensure driver and vehicle safety. ▪ The site will be inspected to ensure signage and traffic barriers are in place, clearly visible, and performing their function in directing traffic and alerting drivers of safety issues.
Responsible Person	<ul style="list-style-type: none"> ▪ Each individual sub-contractor is responsible for compliance with this plan, for vehicle and transport safety of personnel and vehicles under their control, and for ensuring the road safety of other on-site road users is not affected by the way in which the sub-contractor conducts its business. ▪ Drivers of all vehicles on site are responsible for driving safely and exercising care. ▪ The EPS Site Manager is responsible for compliance to the relevant regulations and the provisions of the Project Approval
Reporting	<ul style="list-style-type: none"> ▪ Any complaints from the general public will be investigated and reported as per the guidelines of this CEMP. ▪ All off site truck movements will be logged on ITR06 (Appendix G) displaying time, date, registration and destination.
Corrective Actions	<p>In the event of a site safety incident, the relevant sub-contractor or EPS shall:</p> <ul style="list-style-type: none"> ▪ Stop the vehicle/personnel involved in the incident immediately (or as appropriate), operate warning lights and warn other drivers to slow down. ▪ Clear the spill in the event of a spillage – engaging appropriate safety standards as relevant to the event.

Construction Traffic Management Plan	
	<ul style="list-style-type: none"> ▪ In the event of a complaint or failure to comply with the CEMP, the relevant Guidelines, the Project Approval or the Statement of Commitments, the EPS Site Manager will investigate the complaint promptly and initiate appropriate action to reduce impact as per guidelines in this CEMP: ▪ Undertake an investigation to determine the cause of the problem; ▪ Undertake monitoring if required; ▪ Modify transportation practices as necessary to reduce the duration or level of impact; and ▪ Report the results of the investigation to SPC's Representative

4.2.3 Heritage Protection Plan

SPC's Heritage Advisor has identified three structures requiring protection during works:

- Tarpaulin Factory
- Pillar Water Tank
- Pedestrian Footbridge

The pillar water tank and pedestrian footbridge will be relocated by others, and in the mean time will be protected accordingly as detailed in the management plan below.

The Heritage Protection Plan prepared by SPC's Heritage Advisor is included in SPC's CEMP Framework (rev 8).

Archival records of the Yard Master's Office, the Administration Building and the Wagon Repair Shed (and associated Gantry Crane) have been carried out by SPC's heritage advisor. NSW Heritage Office indicated in correspondence dated 30 October 2008 that it is satisfied with the records and that they satisfy the requirements of condition of approval 2.38. SPC has lodged the archival records with Strathfield Council public library.

Heritage Protection Plan	
Objective	To prevent disturbance or damage to heritage listed structures during demolition and remediation works
Statutory Requirements	<ul style="list-style-type: none"> ▪ Condition of Approval 6.3c and 2.34, 2.38 ▪ Cultural Heritage Act 1977
Performance Criteria	<ul style="list-style-type: none"> ▪ No unauthorised disturbance to cultural heritage material. ▪ No breach of protocols set out in relation to Cultural Heritage. ▪ No breach of Cultural Heritage Act 1977 or other relevant State or Federal Legislation.
Mitigation Measures	Tarpaulin Factory <ul style="list-style-type: none"> ▪ Fencing will be installed by EPS (as shown on the ECM) to isolate the area whilst remediation earthworks are occurring in the vicinity.

Heritage Protection Plan

	<p>Pillar Water Tank</p> <ul style="list-style-type: none"> ▪ Fencing will be installed by EPS (as shown on the ECM) around the base of the tank and appropriate signage indicating that the structure is not to be impacted in anyway <p>Pedestrian Footbridge</p> <ul style="list-style-type: none"> ▪ Access to the Administration Building and Yard Master's Office (located to the north of the pedestrian footbridge) by demolition machinery will generally be via the access road to the north of the Administration Building. It is intended that demolition machinery will not need to pass by the pedestrian footbridge during demolition works. All works required for the demolition of the Administration Building and Yard Master's Office will be undertaken within the existing wire mesh fence surrounding the two buildings if feasible, or separated by a demarcation fence between the Yard Master's Office and the Pedestrian Bridge ▪ 1.8m high fence panels will be installed by EPS (as shown on the ECM) at the base of the steps to prevent entry to the bridge, and associated signage will be displayed by EPS <ol style="list-style-type: none"> 1. All demolition personnel will attend a site induction that includes identification of heritage issues and requirements prior to the commencement of demolition works (and/or the commencement of individual contracts). 2. In accordance with CoA 2.38, archival recording of the wagon repair shed, Yard Masters Office and Administration Building has been carried out by SPC to the satisfaction of the Heritage Office and lodged with Strathfield Council. Demolition can therefore proceed once approval of this CEMP has been obtained from DoP. 3. If suspected indigenous or non-indigenous culturally significant material is found during demolition, excavation or remediation works, work within 50 m must stop immediately, steps taken to prevent further disturbance, and SPC's Representative notified, who will obtain expert advise from an appropriate qualified professional. 4. Where culturally significant items are found on Site, exclusion zones are to be established and clearly marked with tape, fencing or pegs. 5. Only after written confirmation is given by SPC, in consultation with the NSW Heritage Office (non-indigenous heritage), or NPWS (indigenous heritage) shall work recommence in the area." 6. General cultural awareness information shall be presented at the Project induction.
Monitoring	<ul style="list-style-type: none"> ▪ Individual sub-contractors – in consultation with the EPS Site Manager, are required to monitor areas and activities under their control; ▪ Daily inspections of heritage protection items and protection fencing shall be conducted by the EPS Site Manager when works are being carried out adjacent.
Responsible Person	<ul style="list-style-type: none"> ▪ Individual sub-contractor Project Managers are responsible for activities and areas under their control. ▪ EPS Site Managers are responsible for ensuring Contractors comply

Heritage Protection Plan	
	<p>with these provisions and the guidelines contained in this CEMP.</p> <ul style="list-style-type: none"> ▪ The EPS Project Manager / Site Manager is responsible for compliance to the relevant regulations and the provisions of the planning approval
Reporting	The discovery of possible archaeological or heritage material will be reported to SPC's representative who will conduct the initial investigation and where appropriate, notify the relevant authority, NPWS or Heritage Office.
Corrective Actions	<p>In the event of non-compliance with this sub-plan the following corrective actions shall be taken:</p> <ul style="list-style-type: none"> ▪ An investigation shall be undertaken to determine the cause of the problem; and ▪ Work processes and practices shall be modified as necessary; ▪ Affected personnel shall undergo additional cultural heritage awareness training

4.2.4 Ecological Management

The Environmental Assessment proposed a frog habitat be constructed in the southern section of the site. In accordance with CoA 6.3d)iv), a frog habitat area will be constructed by others and does not form part of this CEMP. A Frog conservation area concept design and a Frog Management Plan have been prepared by SPC's Herpetologist (contained in SPC's CEMP Framework (rev 8)).

There is potential for Green and Golden Bell Frogs (GGBF) to venture into other parts of the site under suitable weather conditions. A frog protection plan has also been prepared by SPC's Herpetologist and is also contained in SPC's CEMP Framework (rev 8) and discussed below.

Site landscaping is not required for this stage of the project and therefore the Landscape and Ecological Area Management Plan (LEAMP) will be submitted by SPC at a later stage. As discussed above, the Green and Golden Bell Frog management documentation, required under condition 6.3d)iv) is provided in the SPC's CEMP Framework (rev 8) The EA concluded that no threatened plants or endangered ecological communities were found on site.

It is not envisaged that works will require significant clearing of vegetation, however any weeds that are encountered during works will be removed and disposed of as per the management plan below.

Ecological Management Plan	
Objective	<ul style="list-style-type: none"> ▪ To prevent disturbance or damage to the frog habitat area and other fauna on site ▪ To prevent the dispersion of noxious weeds
Statutory Requirements	<ul style="list-style-type: none"> ▪ Condition of Approval 6.3d ▪ Environmental Planning & Assessment Act 1979 and Regulations. ▪ Threatened Species Conservation Act 1995 and Threatened Species amendment Bill 2004 ▪ Native Vegetation Conservation Act 1997, Native Vegetation Act 2003 and Statement of Commitments (SKM 2005, 2006)

Ecological Management Plan	
Performance Criteria	Compliance with relevant requirements of applicable legislation and the Project Approval.
Mitigation Measures	<ol style="list-style-type: none"> 1. Frog exclusion fences will be erected in areas identified as potential GGBF habitat by the SPC's Herpetologist. Frog exclusion fences will be erected prior to any works in these areas. 2. Frog surveys and frog clearances will be carried out by the SPC's Herpetologist within the fenced areas where work is proposed after the frog-exclusion fences have been erected and in other proposed work areas with no frog habitat prior to the commencement of any works. 3. Should dead GGBF be found, the sub-contractor or EPS should retain the carcass and immediately advise SPC on 9296 4752 and Dr Arthur White on 9599 1161 or 0427 021 059. 4. Should any live frogs be discovered while construction works are being undertaken, the sub-contractor or EPS should place the frogs into a holding container with some water and immediately advise SPC on 9296 4752 and Dr Arthur White on 9599 1161 or 0427 021 059 5. Apply measures outlined in the Soil Erosion and Sediment Control plan and this CEMP to minimise any impacts on water courses in the vicinity of the site. 6. As outlined in the Soil Erosion and Sediment Control plan, topsoil will be re-used on site wherever possible, maintaining local seed stock on site. 7. Any fauna species encountered on site would be relocated by a qualified wildlife carer from an organisation such as WIRES 8. All personnel will take care not to cause injury to any wildlife. 9. Any weeds found on the site, will not be mulched, but bagged and removed from the site.
Monitoring	All frog fences will be inspected daily to make sure that they are functional and not torn or holed. The identification of the presence of weeds form part of daily site inspections.
Responsible Person	Individual sub-contractor Project Managers are responsible for activities and areas under their control. EPS Site Managers are responsible for ensuring sub-contractors comply with these provisions and the guidelines contained in this CEMP. The EPS Project Manager / Site Manager is responsible for compliance to the relevant regulations and the provisions of the planning approval
Reporting	Monitoring will be recorded on the site environmental checklist (Appendix A)
Corrective Actions	Management methods will be reviewed where found to be ineffective

4.2.5 Construction Dust Management

Activities that may generate dust include:

- Demolition of brick and concrete buildings
- Demolition and crushing of concrete slabs and footings

- Internal vehicle movements
- Stockpiled material
- Unsealed Areas

Remediation works have the potential to generate dust from

- Excavation
- Internal transport
- Landfarming activities

Dust generating activities that have the potential to impact the sensitive receivers will be during exceptionally dry and windy conditions. However given that the majority of works will be conducted in the DELEC Area, and that the receivers are to the far north west and south east of the site, it is considered that there will be minimal impact once the mitigation measures in the management plan below are implemented.

Air quality will be continuously monitored from the commencement of soil disturbing works associated with demolition and remediation activities. In addition air quality monitoring for asbestos fibres will be undertaken during asbestos removal works.

A Dust Management plan has been included below.

Construction Dust Management Plan	
Objective	<ul style="list-style-type: none"> ▪ To conduct works in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. ▪ To undertake all construction activities with the objective of preventing visible emissions of dust from the site. ▪ To identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease should visible dust emissions occur at any time. ▪ To meet the relevant air quality standards for preventing degradation of ambient air quality and nuisance to adjoining properties during construction and transport activities. ▪ To conduct asbestos removal works in accordance with NSW Workcover and ASCC Guidelines ▪ Achieve compliance with PM₁₀ (24h) concentration criteria during soil disturbance works
Statutory Requirements	<ul style="list-style-type: none"> ▪ CoA 6.3e. 2.20, 2.21, 2.22, 2.23 2.24, 2.25, 2.26, 2.27, 3.1 and, 3.2. ▪ Environment Operation Act 1997 (POEO Act) and Regulations. ▪ Protection of the Environment Operations (Clean Air) Regulation 2002. ▪ Environmental Planning & Assessment Act 1979 and Regulations ▪ Workcover Asbestos Removal Permits ▪ Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)] ▪ NSW Workcover Working with Asbestos Guide (2008)
Performance Criteria	<ul style="list-style-type: none"> ▪ Ambient PM₁₀ concentration (24 hour rolling average) <50 µgm-3, at the two PM₁₀ continuous dust monitoring stations ▪ Compliance with the relevant requirements of the Project Approval. ▪ No significant quantities of visible dust blowing onto adjoining sites

Construction Dust Management Plan

	<ul style="list-style-type: none"> ▪ No complaints from nearby residents
Mitigation Measures	<ol style="list-style-type: none"> 1. Dust emissions will be controlled by the use of water spraying when required. 2. Dust screens will be used at the perimeter of the site where applicable 3. Heavy vehicles entering and leaving the site will be covered at all times; 4. Works involving potential dust generating activities will be scheduled to avoid gale wind forces (above 63km/hr) when possible 5. Vehicle and machinery movements during the construction works will be restricted to designated areas. 6. Wheel wash facilities will be used at each construction site exit to remove mud and dust from vehicles and minimise material being transferred onto a public road or footpath. 7. Vehicle speed limits of 25km/hr will be imposed on all vehicles on site. 8. Equipment will be operated in a proper, efficient and correct manner which includes proper maintenance in order to minimise exhaust emissions. 9. Should visible dust emissions occur at any time, works generating the dust emissions will cease, so that emissions of visible dust cease. 10. Asphalt and concrete paved areas will be maintained during the demolition and recycling works to minimise the extent of exposed soil generation of dust both on and off site. Unsealed haul roads will be appropriately sealed to prevent dust generation. 11. Stockpiles will be located as far away from public & residential areas as possible 12. During the removal of asbestos containing materials at the site strict adherence with regulatory guidelines will be required to ensure that no asbestos fibres are released into the atmosphere; 13. Air quality monitoring for asbestos fibres will be undertaken at the boundaries of works being conducted (or as determined by the Occupational Hygienist engaged by EPS to conduct the monitoring) during the asbestos removal works. Monitoring locations will be dependant on the site activities and environmental conditions. 14. Odour emissions from the site which could adversely affect air quality or the amenity of the local area are to be monitored. The following techniques will be used to minimise potential odours associated with demolition and/or remediation works. <ul style="list-style-type: none"> ▪ spraying of odour suppressants over the affected material as required; ▪ the areas exposed during demolition (dust or odour

Construction Dust Management Plan

	<p>generating) at any one time will be minimised wherever possible by undertakings works in a localised progressive manner over the site; and</p> <ul style="list-style-type: none"> ▪ Appropriate covering techniques, such as use of plastic sheeting, PVA sprays or non odorous soil to cover excavation faces and unsealed surfaces. <p>15. Where visible dust is coming from stockpiles, the use of water suppression or tarps will be utilised.</p> <p>16. Weather forecasts will be checked daily to program works for the following day. Data will also be collected and continually monitored from the on site weather station.</p> <p>17. Results from dust monitoring will be used to assess the performance of dust control measures and their effectiveness</p> <p>18. If ambient PM₁₀ concentration (24 hour rolling average) at the PM₁₀ continuous monitoring station exceeds 50 µgm-3, (with consideration of wind data) works will be temporarily halted to identify the cause and appropriate mitigation actions taken.</p>
Monitoring	<ul style="list-style-type: none"> ▪ EPS will have access to continuous meteorological information and PM10 dust monitoring data from a website linked to the met station and two PM10 monitoring stations located on site. ▪ Hourly, Daily and weekly visual surveillance of dust emissions, dust controls, plant emissions ▪ Weather and physical parameters such as wind speed, rain, temperature, humidity will be utilized to assist in programming works (impact of rain and wind conditions on site) and recorded or attached to ITR01 – Daily Environmental Checklist. Works will not be conducted during periods of rainfall where there is the potential to generate runoff, or where heavy rain is forecast. Weather data (such as wind direction) will also be used where complaints are received in relation to dust or noise. ▪ Weekly and monthly monitoring is to be reported as per the “Reporting” section below.
Responsible Person	<ul style="list-style-type: none"> ▪ Individual sub-contractor Project Managers are responsible for activities and areas under their control. ▪ EPS Site Managers are responsible for ensuring sub-contractors comply with these provisions and the guidelines contained in this CEMP. ▪ The EPS Project Manager / Site Manager is responsible for compliance to the relevant regulations and the provisions of the planning approval
Reporting	<ul style="list-style-type: none"> ▪ Monitoring data will be downloaded and recorded on the ITR04 in Appendix E.
Corrective Actions	<ul style="list-style-type: none"> ▪ Should an incident or failure to comply with relevant statutes or Project Approval and standards occur in relation to fugitive dust emissions from Project activities, one or more of the following corrective actions will be

Construction Dust Management Plan	
	<p>implemented by EPS as appropriate:</p> <ul style="list-style-type: none"> • undertake an investigation to determine the cause of the problem and assess processes to identify any significant sources of emissions and if required, modify activities/processes. • Increase the use of dust control measures such as water spraying. • Undertake additional monitoring if required.

4.2.6 Soil and Water Quality Management Plan

Soil and water quality impacts associated with the project are to be managed accordingly during demolition and remediation works. The potential impacts include:

- Excavation during earthworks may expose erosive soils which may lead to sediment runoff and siltation of nearby water bodies.
- Stockpiled soils may produce runoff during rain events.
- Dirt from vehicle tyres may lead to sedimentation of street stormwater systems.

Water management during demolition and remediation is discussed below.

4.2.6.1 Wastewater

A wastewater treatment plant (WTP) currently exists on the site which collects water from the former operational areas in the DELEC Area (as shown on ECM). The WTP consists of an oil separator, solids removal system and finally pH correction before being discharged to sewer under a trade waste agreement with Sydney Water (to be maintained by SPC) The wastewater treatment plan will remain operational during demolition and remediation works for as long possible, or until remediation works require it to be decommissioned. If the wastewater treatment plant is decommissioned, water draining to it will be managed as per stormwater runoff in section 4.2.6.3 below.

4.2.6.2 Stormwater Runoff – Buildings and Sealed Areas

Existing stormwater infrastructure (downpiping, shallow drains) will be maintained until removed as part of demolition works. The existing underground trunk drain running through the Delec Area will be maintained for the duration of all works. Where there are former services linking to this service that cannot be removed, they will either be capped off, or allowed to drain will appropriate sediment controls such as geofabric, silt fences, sandbags, hay bales and silt traps (whatever is appropriate). All stormwater draining through the main trunk system currently exists through a triple interceptor system at the east of the site (as shown on ECM). In the north of the DELEC Area, water will be diverted to the wastewater treatment area where possible.

4.2.6.3 Stormwater Runoff – Unsealed Areas

Stormwater from unsealed areas will be diverted where possible to prevent water coming into contact and accelerating the potential for erosion. This will be achieved by creating diversion banks to channel water through existing infrastructure and minimising contact with bare areas. Where significant areas of bare surfaces are created, the former train turntable dish (building 5) is proposed to be utilised as a temporary sediment basin (as shown on ECM). Water will be diverted or pumped to this area where possible.

4.2.6.4 Excavation Water

Diversion drains will be constructed upstream of excavations to prevent ingress. Any water that is collected will be tested according to ANZECC Guidelines by the Environmental Consultant and the following will occur:

- If contaminated and unsuitable for discharge as trade waste, water will be pumped out by a vacuum truck and disposed off site at a licensed facility upon approval by SPC's representative
- If meets trade waste criteria, will be pumped to wastewater treatment plant
- If free of contaminants, will be reused on site for dust suppression
- If free of contaminants and sediment, will be discharged to stormwater where possible

4.2.6.5 Contaminated Stockpiles

Contaminated stockpiles will be situated on hardstand areas (currently proposed in SP2 as shown on ECM). Stockpiles will be appropriately bunded with sediment controls to minimise sediment transport and runoff from occurring. Any collected runoff will be assessed as per section 4.2.6.4.

4.2.6.6 Wheel Wash

As per the traffic management plan, all vehicles leaving the works area will be required to exit via the wheel washes (as shown on the ECM).

4.2.6.7 Cox's Creek

The Cox's Creek drain exists in the southern portion of the site. No demolition or remediation works are planned in this section of the site, and thus it is envisaged that there will be no impact on this watercourse. Additionally, the terrain is predominantly flat in this area and there is sufficient grass cover over the entire area to prevent any sediment laden runoff from occurring.

To manage erosion and sediment at the site, a Soil and Water Quality Management Plan has been developed below.

Soil and Water Quality Management Plan	
Objective	<ul style="list-style-type: none"> ▪ To comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters, except as may be expressly provided by an Environment Protection Licence for the project. ▪ To minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with Landcom's Managing Urban Stormwater: Soils and Construction.
Statutory Requirements	<ul style="list-style-type: none"> ▪ CoA 6.2fii, 2.28, 2.29, 2.30, ▪ Environmental Planning & Assessment Act 1979 and Regulations. ▪ Protection of the Environment and Operations Act, 1997 ▪ Water Management Act 2000 ▪ Guidelines contained in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 published by ANZECC
Performance Criteria	<ul style="list-style-type: none"> ▪ No turbid waters entering stormwater systems ▪ Adherence to relevant legislation
Mitigation Measures	<ol style="list-style-type: none"> 1. Implementation of mitigation measures described in Sections 4.2.6.1-4.2.6.7 2. Identification of all stormwater drains and pits on site and installation of required water management controls. 3. Sediment control devices will be installed before works commence, to prevent impacts on surrounding vegetation and creeks. Sediment controls to be maintained and regularly inspected as part of the environmental checklist (Appendix A) and after rain events. 4. Stormwater runoff will be controlled by diverting stormwater from bare areas to existing infrastructure, and minimising slope gradients, lengths and runoff velocities 5. Areas of bare surfaces will be minimised during construction and stabilised as soon as practicable. 6. Wastewater treatment plant to be maintained for as long as possible, and water diverted to it wherever possible. 7. Rainfall or groundwater that has collected in low lying areas or excavations will be tested according to ANZECC (2000) Guidelines Water that is suitable for reuse will be used for dust suppression where needed. Contaminated water will be disposed of off site at an appropriately licensed treatment facility or treated on site wherever feasible. 8. Stripped topsoil will be stockpiled for reuse on site in revegetation areas where possible, and protected from erosion by using suitable erosion control measures. Excess soil or unsuitable spoil material will be taken off site and disposed at an approved disposal facility. 9. Construction vehicles will use sealed roads wherever possible to prevent any loss of load, whether dust, liquid or soils. 10. Rumble grids and wheel wash facilities will be used at each construction site exit (as shown on the ECM) to remove mud and dust from vehicles and minimise material being transferred

Soil and Water Quality Management Plan

	<p>onto a public road or footpath.</p> <p>11. In the event of a spillage, spilled material will be removed as soon as practicable within the working day of the spillage.</p> <p>12. Stockpiles for landfarming will be located on hardstand where possible to minimise the possibility of leaching and runoff. Where possible the landfarm stockpile will be located as far away from sensitive receptors as possible. Stockpiles will be appropriately bunded to minimise runoff occurring.</p> <p>13. Appropriate drainage lines feeding it will either be removed or capped off.</p>
Monitoring	<ul style="list-style-type: none"> ▪ The effectiveness of the sediment and erosion control system will be monitored by daily inspections (ITR01 in Appendix A) ▪ The quality of surface water discharges from site will be monitored visually and during and after rainfall events by the EPS Site Manager and Environmental Consultant to establish if further controls are necessary. Parameters to be monitored shall include, but are not limited to, pH, Total Dissolved Solids, Suspended Solids, Dissolved Oxygen, Heavy Metals, Trace Ions and Total Oil and Grease. The monitoring frequency shall be determined on a case by case basis the Environmental Consultant.
Responsible Person	<ul style="list-style-type: none"> ▪ Individual sub-contractor Project Managers are responsible for activities and areas under their control. ▪ EPS Site Managers are responsible for ensuring sub-contractors comply with these provisions and the guidelines contained in this CEMP and for daily monitoring of sediment controls (ITR01 in Appendix A) ▪ The EPS Project Manager / Site Manager is responsible for compliance to the relevant regulations and the provisions of the planning approval
Reporting	<ul style="list-style-type: none"> ▪ The EPS Site Manager shall be responsible for reporting any incident which causes or threatens to cause material environmental harm or breaches approval requirements to SPC as soon as possible.
Corrective Actions	<p>Should an incident in relation to discharge water quality occur, one or more of the following corrective actions shall be implemented by EPS considered appropriate:</p> <ul style="list-style-type: none"> ▪ An investigation will be undertaken by the relevant sub-contractor assisted ▪ by the Project Manager to determine the cause of the problem; ▪ The Erosion and Sediment Management Plan or work practices for the activity shall be modified as necessary to reduce erosion /pollution, sedimentation or turbidity; ▪ If water containment structures or sediment control devices are not operating effectively, they will be repaired or replaced. Sediment will be removed immediately following rainfall events when the operating capacity of the devices is impaired. ▪ Undertake water quality monitoring if required to establish efficacy of corrective action. ▪ The EPS Site Manager will notify SPC's Representative or DECC as appropriate

4.2.7 Waste Generation Management Plan

To manage waste at the site during demolition and remediation works, a Waste Management and Re-use Plan has been developed below. The plan will identify requirements for:

- The application of the waste minimisation hierarchy principles of avoid/reduce/re-use/recycle/dispose;
- Waste handling and storage;
- Disposal of wastes. Specific details for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; an
- Any waste material that is unable to be re-used, re-processed or recycled will be disposed at a facility approved to receive that type of waste via licensed transporter.

Waste Generation and Management Plan	
Objective	To prevent or minimise any adverse environmental impacts from wastes during the demolition and remediation phases and to minimise their generation, to maximise their reuse and recycling, and to ensure safe and lawful disposal of all waste.
Statutory Requirements	Protection of the Environment Operations Act 1997 Protection of the Environment Operations (Waste) Regulations 2005. Waste Avoidance and Resource Recovery Act 2001 & associated Regulations. Waste Classification Guidelines (Department of Environment and Conservation, 2008) Working with Asbestos Guide (Workcover 2008)
Performance Criteria	All waste material to be appropriately classified for reuse, recycling or offsite disposal Waste to be disposed of lawfully No complaints received in relation to waste management practices
Mitigation Measures	<ol style="list-style-type: none"> 1. All contaminated waste (as defined by Environmental Waste Guidelines) that may be encountered on site will be stored and managed in a manner that minimises the impacts of the waste on the environment, including appropriate segregation for storage and separate disposal by a waste transporter licensed by the DECC. 2. Asbestos waste will be removed according to Workcover Guidelines, and placed in double lined bins before being disposed of at a licensed landfill by licensed transporter. 3. Concrete and Brick from demoltion activities will be crushed and stockpiled on site for future use. 4. Contaminated concrete or brick will disposed of as per item 1 above. 5. Recyclable wastes from the demolition (scrap metal) will be transferred by a licensed waste carrier to an appropriate recycling facility where possible; 6. Waste will be stored neatly in appropriate bins or stockpiles, in such a manner that stormwater run-off does not come into contact with the waste 7. Contaminated soil will be managed as per the RAP prepared by the Environmental Consultant. It is envisaged that site criteria will be developed permitting some material to be capped or reused on site.

Waste Generation and Management Plan	
	<p>Material that does not meet this criteria will be disposed of as per item 1.</p> <ol style="list-style-type: none"> 8. Management of sewage is via the existing system controlled by a Trade Waste Agreement with Sydney Water; 9. EPS and sub-contractors working on the site would be informed of their responsibility to reduce waste where possible. 10. All personnel would receive instruction on what waste materials can be recycled and where the appropriate bins are located during the site induction. 11. Secure lids would be fitted to bins that store food waste to prevent scavenging by birds and animals;
Monitoring	<ul style="list-style-type: none"> ▪ Soil sampling and waste classifications will be carried out by the Environmental Consultant. ▪ All waste disposed off will be recorded on ITR06 (In Appendix G) and will be document over landfill/recycler weighbridge.
Responsible Person	<ul style="list-style-type: none"> ▪ EPS Site Managers are responsible for ensuring sub-contractors comply with these provisions and the guidelines contained in this CEMP. ▪ The EPS Project Manager / Site Manager is responsible for compliance to the relevant regulations and the provisions of the planning approval
Reporting	<ul style="list-style-type: none"> ▪ The EPS Site Manager shall be responsible for reporting any incident which causes or threatens to cause material environmental harm or breaches approval requirements to SPC as soon as possible. ▪ All waste and stockpiles both on and off site will be tracked on the t tracking form (ITR06) (in Appendix G) ▪ Landfill disposal dockets will be used for confirmation of tonnages and proof of lawful disposal.
Corrective Actions	<p>In the event of a failure to comply with the CEMP the Project Manager will:</p> <ul style="list-style-type: none"> • Undertake an investigation to determine the cause of the problem; • Modify any work practices or waste management procedures as necessary to improve non-hazardous waste management; and, • Report the results of the investigation to SPC's Representative

4.2.8 Energy and Water Management Strategies

Energy and Water Management Plan	
Objective	<ul style="list-style-type: none"> ▪ To minimise the amount of potable water being used and encourage recycling of water where feasible ▪ To encourage energy efficient practices on site
Statutory Requirements	Statement of Commitments (SKM 2005, 2006) Sydney Water Usage Restrictions
Performance Criteria	Water and Energy use has been minimised where practical

Energy and Water Management Plan	
Mitigation Measures	<p>Energy Usage</p> <ul style="list-style-type: none"> ▪ Ensure equipment is serviced and maintained regularly ▪ Ensure works are programmed to maximise machine utilisation time ▪ Turn machines/equipment off whilst they aren't being used <p>Water Usage</p> <ul style="list-style-type: none"> ▪ Use water from ponds or excavations for dust suppression where appropriate ▪ Minimise the use of water for equipment cleaning or cleaning of roadways ▪ Use of fine mist sprays where possible for dust suppression ▪ Turn off watercart pumps as soon as practically possible
Monitoring	Observation based monitoring will be carried out to identify potential energy savings and water minimisation strategies.
Responsible Person	EPS Site Managers are responsible for ensuring sub-contractors comply with these provisions and the guidelines contained in this CEMP.

4.2.9 Dangerous Goods Management

It is not envisaged that any dangerous goods will be required as part of the demolition and remediation works. If the need arises, then the following points below will be adhered to

- Sub-contractors to provide list of hazardous chemicals and MSDS to EPS prior to bringing chemicals on site.
- No chemicals to come onto site unaccompanied by a suitable MSDS.
- MSDS, chemical inventory and copy of Emergency Response Plan be held at each storage facility.
- Designated hazardous substances or dangerous goods require SPC approval prior to bringing on Site.
- Corrosive materials to be stored and handled in accordance with AS3780.8 (Class 8 substances – Corrosives).
- All fuel, oils and chemicals must be clearly labelled.
- Transfer of bulk fuel and handling of hazardous chemicals to be conducted only by appropriately trained personnel.
- Spill clean-up kits including absorbent materials will be kept at each storage facility.
- All permanent bulk oil storage areas would be provided with bunds, permanent fire control equipment, and lockable valved outlets for the controlled release of stormwater to meet the statutory requirements.
- All temporary fuel, oil, or chemical storage areas shall be bunded, have suitable fire protection, appropriate procedures for monitoring and clearing accumulated

stormwater, and appropriate procedures for spill containment and clean up with equipment stored in close proximity ready for immediate use.

- Operational procedures for bulk oil or chemical handling, delivery, and disposal shall be documented and shall be in accordance with the relevant regulations and Australian Standards.
- Only personnel trained in the relevant procedures and in contingency action and spill clean up procedures shall supervise the loading and unloading of bulk oil and chemicals.
- Appropriate quantities of spill containment material shall be available for immediate use (see Emergency Response Plan).

4.2.10 Soil and Contamination

Coffey Environments are responsible for preparation of the RAP which is a separate document to this CEMP. The RAP addresses contamination issues and strategies on the site in further detail.

4.3 Environmental Control Maps

The attached ECM graphically displays key environmental controls and monitoring locations at the site. The ECM will be displayed on the walls in the employee lunch room and site office. EPS Site supervisors will hold copies of the ECM. The ECM may be modified during the works if necessary to reflect any required changes in environmental controls. Any changes made will be consistent with the project approval and the PPR's commitments, and will be sent to SPC prior to implementation for SPC's Endorsement.

5.0 Auditing, Monitoring and Review

5.1 Environmental Monitoring Program

Scheduled monitoring of environmental performance and formal compliance auditing of environmental management systems will be conducted throughout demolition and remediation works. This will enable the overall effectiveness of established environmental controls and compliance procedures to be assessed, and allow areas of underperformance to be identified so corrective actions can be taken to strengthen environmental safeguards or improve outcomes.

The environmental monitoring and audit program proposed under this CEMP, incorporates daily, weekly and event based inspections and associated reports.

External consultants (TBA) will conduct monitoring when required to further strengthen the monitoring program.

5.2 Environmental Monitoring and Inspection (Internally)

The following sections detail the minimum environmental monitoring and inspections to be conducted on the Project. Specific monitoring information is provided at each sub-plan (Section 4.3 of this CEMP).

5.2.1 Daily Inspections

Routine daily visual inspections will be carried on all demolition and remediation activities and work areas in order to check compliance with this CEMP and regulatory conditions. The results of these inspections shall be recorded on a Daily Site Environmental Form. An example of such a form is provided at Appendix A. All non-conformances shall be actioned as outlined in each Management Plan referred to in Section 4.3 of this CEMP.

5.2.2 Weekly Inspections

Weekly Workplace Inspections (refer Appendix B) shall be conducted and submitted as part of the monthly reporting procedure to SPC.

5.2.3 Event Based Inspections

CONSTRUCTION PROGRAM	
Site Establishment	December 2008
Separable Portion 1	January 2009
Separable Portion 2	Dec 08-Jan 09
- Demolition	March 09
- Remediation	June 2009
Separable Portion 3	Jan 09-Apr 09
Separable Portion 4	Mar 09-Jun 09
- Demolition	June 2009
Separable Portion 5	July 2009
Demobilisation	

KEY CONTACTS		
Project Manager	Cameron Newling	0408 078 963
Site Manager	Nat Stevens	0437 330 659
Site Supervisor	Timothy Dick	0405 955 389
Project Director	Marty Croker	0437 330 523
SPC Representative	Bruce Royds	0417 278 386
SPC's Hepatologist	Dr Arthur White	0427 021 059
Environmental Cnslt	Coffey	8083 1600
DECC Pollution Line		131 555
Community hotline		1800 059 233



SEPARABLE PORTIONS

- 1
- 2
- 3
- 4
- 5

STRUCTURES TO BE DEMOLISHED

STRUCTURES TO BE RETAINED

RAIL LINES TO BE DEMOLISHED

HERITAGE PROTECTION

SPC Boundary

Noise Assessment Locations

Contamination Spots

PLAN LIMITATION STATEMENT
 This plan has been prepared in accordance with accepted practice for the use only of Sydney Ports Corporation for a specific purpose and is not to be used for any other purpose or in any other jurisdiction. Sydney Ports Corporation is not responsible for any errors or omissions or for any consequences arising from the use of this plan for any purpose other than that for which it was prepared.
THIS NOTE IS AN INTEGRAL PART OF THE PLAN
NOTE: SCALED AND SUBJECT TO SURVEY
 Copyright © Sydney Ports Corporation

Scale in Metres

0 50 100 150 200 250 300 350 400 450 500m

ENFIELD INTERMODAL LOGISTICS CENTRE ENVIRONMENTAL CONTROL MAP STAGE 1B - DEMOLITION & REMEDIATION

DRAFTED BY: J.T. (for mmp)

DATE: 08/12/2008

PLAN SCALE: AS PER SCALE BAR

PLN PRODUCED ON MGA GRID

PLAN NO: SEDP108A

SYDNEY PORTS
 FIRST PORT, FUTURE PORT

PLAN PRODUCED ON MGA GRID

ENFIELD INTERMODAL LOGISTICS CENTRE ENVIRONMENTAL CONTROL MAP STAGE 1B - DEMOLITION & REMEDIATION

DRAFTED BY: J.T. (for mmp)

DATE: 08/12/2008

PLAN SCALE: AS PER SCALE BAR

PLN PRODUCED ON MGA GRID

PLAN NO: SEDP108A

Event based checks shall be conducted by the Site Manager or Project Manager following any significant event such as rainfall of sufficient quantity to generate run off, high winds, the receipt of an environmental complaint, issue of a non conformance report or any exceedances in monitoring results. Event based checks will be recorded on the weekly inspection checklist.

5.2.4 Monthly Reporting

A monthly report shall be sent to SPC's Representative for review. The report shall include (in addition to the OH&S component), a summary of environmental issues and actions during the period to ensure compliance with the Project CEMP including details of any action item requests, complaints received, incidents and associated investigations and corrective actions, and environmental inductions and awareness training provided during the period. A copy of the form is provided in Appendix C.

5.2.5 Compliance Reporting

The Environmental Consultant will report to SPC on compliance with the Conditions of the Project Approval on a 3 monthly basis, to enable SPC to prepare the compliance documentation for issue to DoP, as required under CoA 4.1.

5.3 Environmental Monitoring and Recording (external consultants)

Specific environmental monitoring requirements and instructions are located in the management procedures of the relevant sub plans incorporated in this CEMP.

Monitoring, including sampling with field instruments and the establishment of quality control and chain of custody protocols for laboratory testing will be the responsibility of the Environmental Consultant. The taking and laboratory analysis of all samples or raw monitoring data shall only be conducted by quality endorsed (ISO9001) consultants using NATA approved laboratories.

5.4 Formal Audit Schedule

Enviropacific Services is third party certified to ISO9001, ISO4001 and AS4801. Formal recertification audits are conducted on a yearly basis. Internal management system audits are conducted monthly.

5.5 External Audits

In accordance with CoA 4.1, SPC will commission an independent environmental auditor to audit the project annually in accordance with ISO 19011:2002 - Guidelines for Quality and or Environmental Management Systems Auditing. The first audit will be carried out in the third

quarter of 2009. EPS will comply with the external auditor. EPS will comply with the requirements of the external auditor, should EPS still be working on the site at this time

5.6 Incident Reporting and Corrective Actions

All Incidents including actual or potential (Near Miss) for injury, or damage to equipment, property or the environment will be reported to the Project Manager or immediate supervisor as soon as practicable after the occurrence. Regardless of how minor the incident appears, it will be reported. An "Incident Investigation Report" will be completed within 12 hours of the incident. Prompt reporting will allow an immediate investigation to take place and prevent similar situations occurring.

The reporting of hazards is the responsibility of all staff and if a hazard or a safety problem is identified, it will be brought to the attention of the Project Manager immediately who will investigate and rectify the situation as soon as practicable. An employee can report a hazard by completing a "Hazard Report" form.

Enviropacific will notify SPC of any incidents, with actual or potential significant off-site impacts on people or the biophysical environment, to as soon as possible after the occurrence of the incident. Both SPC and EPS will maintain a Project Incident Register. The Register will include details of accidents, incidents and potential incidents with actual or potential significant off-site impacts on people or the biophysical environment. The Register will be made available for inspection at any time by the independent qualified person or team conducting the Environmental Audit and/or the Director-General.

Incidents will be reported and managed in accordance with conditions 7.1, 7.2 and 7.3. of the Project Approval.

SPC will notify the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. SPC will provide written details of the incident to the Director-General within seven days of the date on which the incident occurred.

SPC, EPS and EPS's Sub-Contractors will meet the requirements of the Director- General to address the cause or impact of any incident within the period agreed by the Director-General."

Corrective actions will be addressed as per the Environmental Management Plans contained in Section 4.3.

5.7 CEMP Review

Enviropacific will ensure that controls outlined in this CEMP are properly implemented and regularly monitored to ensure their effectiveness. Changes to the controls will be instigated if they are not achieving their objectives. The CEMP shall be revised and refined as required to ensure it remains relevant to the Project and consistent with environmental regulatory requirements and conditions of approval

This CEMP will be reviewed as required to ensure the system is conforming to the environmental objectives and legal requirements. Reviews will be undertaken as necessary as a result of any of the following:

- When there is a change in the scope of the project that requires a change in environmental controls;
- When there is a need to improve performance in an area of environmental impact;
- At the completion of environmental audits as required;
- As a result of changes in environmental legislation applicable and relevant to the project;
- As required by SPC or DoP

APPENDIX A – SITE ENVIRONMENTAL CHECKLIST

Enviropacific Services Pty Ltd

PROJECT TITLE: ILC ENFIELD
JOB NO: E0896

ITR01 - SITE ENVIRONMENTAL INSPECTION

To be completed **daily** by Site Manager then retain on file for submission with Monthly Report.

Tick (✓) completed actions & give details where necessary.

Date Action	Mon	Tue	Wed	Thu	Fri	Sat	Week Ending / /
	Comments						
Noise and Vibration							Olfactory, Point Source, Ext Consultant (details on ITR05 if required)
Traffic Management							Parking Areas, Trucks leaving with waste recorded on ITR06, vehicles exiting via wheel wash, using approved routes
Heritage Protection							Protection fences maintained and signage displayed
Ecological Area							Frog protection fences maintained, no GGBL observed
Construction Dust							Monitoring from PM10 monitor (download and attach to ITR04), sources of visual dust (note on ITR04)
Soil and Water Management							
Sediment Controls							Effective
Sediment basins							Require pump out/sampling
Off site disposal							Record on ITR06
Roads clean of dirt/mud							Visual check
Stockpiles							compacted, banded, sediment controls effective
Waste Management							
Soil							Truck movements recorded on ITR06
Steel							Truck movements recorded on ITR06
Demo Waste							Truck movements recorded on ITR06
Other							Truck movements recorded on ITR06
Weather							
Rain (mm)							Monitor weather station/record on ITR04 where appropriate
Maximum Temp							Monitor weather station/record on ITR04 where appropriate
Wind max (km/hr)							Monitor weather station/ record on ITR04 where appropriate
Complaints Received							Record on Complaints form and register
Chemical Storage							In appropriate areas
Refueling							In appropriate areas
Other (ad as required)							
Additional Comments							
Supervisor/Site Manager - action complete						Project Manager - noted & placed on job file	
Name						Name	
Sign						Sign	
Date						Date	

**APPENDIX B – WEEKLY WORKPLACE INSPECTION
CHECKLIST**

WORKPLACE INSPECTION CHECKLIST

ITEM 1	Criteria	
Yard Control	Speed limits, directional signage	
	Doorways, clearways clear	
	Pedestrian access ways marked	
	Parking areas identified	
	Security fencing maintained	
	Storage areas identified	
	Orderly storage of Plant & Equipment	
ITEM 2	Criteria	
Stormwater/ Litter Control	Drains/ponds clean & clear of debris	
	Water irrigation system operational	
	Wash bay water contained	
	Wash bay water disposed of correctly	
	Site free of litter	
	Litter control measures appropriate	
ITEM 3	Criteria	
Solid/Liquid Waste disposal	Waste bins available & utilised	
	Solid wastes disposed correctly	
	Liquid wastes contained	
	Liquid wastes disposed correctly	
	Bulk storage areas bunded & dry	
	Used chemicals disposed correctly	
	Tyres, batteries etc disposed correctly	
ITEM 4	Criteria	
Dust/Noise Odour Control	All areas sweep and dust free	
	No sources of visible dust	
	Noise levels of equipment, acceptable	
	Noise levels monitored as per ITR01	
	No sources of noticeable odours	
	Odour suppression available	
ITEM 5	Criteria	
Office Area	Doorways clear/unobstructed	
	Floors clean/tidy	
	Walls and windows	

ITEM 9	Criteria	
Workshop Area	Doorways clear/unobstructed	
	Floors clean/tidy	
	Walls and windows clean/maintained	
	Lighting cleaned/maintained	
	Work areas clean and tidy	
	Storage areas marked, orderly/secure	
ITEM 10	Criteria	
Electrical Equip	Distribution boards identified	
	Switch boards/boxes closed/locked	
	Earth leakage protection in use	
	Equipment inspected, tagged/current	
	Correct plugs/sockets used	
	Equipment stored correctly	
ITEM 11	Criteria	
Fire Protection	Extinguishers/hoses unobstructed	
	Correctly mounted and clearly marked	
	Extinguishers fully charged	
	Equip inspections current/tagged	
	Flammable materials stored correctly	
	Fire Warning/No Smoking Signs	
ITEM 12	Criteria	
Hazardous Substances Storage	MSDS available	
	Chemicals clearly labelled	
	Chemicals stored correctly	
	Storage, access clear & identified	
	PPE available and used	
ITEM 13	Criteria	
Compressed Gas storage	Bottles stored/chained securely	
	Acetylene and oxygen separated	
	Flash back arresters fitted	
	Trolleys maintained & used correctly	

APPENDIX C – MONTHLY REPORT FORM



Demolition and Remediation (Enviropacific – Works Provider)

Report No. ILC – D&R – 001 (To be updated by author)

Monthly Report for January 2009

Author _____

Date _____ (to be submitted on the last business day of the month)

Revision 1



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2 PROGRESS

2.1 PROGRESS THIS MONTH

2.2 PLANNED ACTIVITIES

2.3 DELAYS (POTENTIAL AND INCURRED)

2.4 APPROVAL/INFORMATION REQUIRED FROM SPC

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3 ADMINISTRATION AND COMMERCIAL

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4 ISSUES AND OPPORTUNITIES

4.1 ISSUES

4.2 OPPORTUNITIES

5 PROJECT RISKS

6 SAFETY

Project E0896	ILC at Enfield	
Reporting period		
SHE Performance		
No. of First Aid Cases for the period		
No. of First Aid Cases to the previous period		
Total First Aid Cases to date		
No. of Medical Treatment Injuries for the period		
No. of Medical Treatment Injuries to the previous period		
Total no. of Medical Treatment Injuries to date		
No. of Lost Time Injuries for the period		
No. of Lost Time injuries to the previous period		
Total no. of Lost Time Injuries to date		

7 ENVIRONMENTAL

Project E0896	ILC at Enfield	
Reporting period		
Environmental Performance		
Compliance with CoP		
Environmental Inductions/awareness carried out		
No. of environmental incidents for the period		
No. of environmental incidents to the previous period		

Project E0896	ILC at Enfield	
Total no. of environmental incidents to date		
No. of complaints received for the period		
No. of complaints received to the previous period		
Total no. of complaints received to date		
Environmental Controls monitoring results (attach as required)		

8 QUALITY ASSURANCE AND REPORTING

9 RESOURCES

10 PROJECT PLANS

11 ATTACHMENTS

APPENDIX D – ENVIRONMENTAL COMPLAINTS FORM

ITR03 - ENVIRONMENTAL COMPLAINT FORM

INCIDENT REF NO.			
Type of Incident			
<input type="checkbox"/> Pollution Event	<input type="checkbox"/> Potential Pollution Event	<input type="checkbox"/> Other	
Location of Incident		Date: _____	Time: _____
Incident Notification			
By whom :			
<input type="checkbox"/> Internal	<input type="checkbox"/> Public	<input type="checkbox"/> Regulator	<input type="checkbox"/> Other
Details of Informant		Name: _____	
Means of Complaint		Address: _____	
Phone/Email/In Person		Contact No.: _____	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nature of Incident			
Dust	<input type="checkbox"/>	Flora/Fauna	<input type="checkbox"/>
Noise	<input type="checkbox"/>	Heritage (indigenous)	<input type="checkbox"/>
Water (Ground)	<input type="checkbox"/>	Heritage (non-indigenous)	<input type="checkbox"/>
Water (Surface)	<input type="checkbox"/>	Vibration	<input type="checkbox"/>
		Soil Contamination	<input type="checkbox"/>
		Archaeology	<input type="checkbox"/>
		Plant	<input type="checkbox"/>
		Waste	<input type="checkbox"/>
		Erosion/Sed. controls	<input type="checkbox"/>
		Sed. Basin	<input type="checkbox"/>
		Chemical Store, ADG	<input type="checkbox"/>
		Other	<input type="checkbox"/>
Details		Site Conditions at Time of Complaint (Operational and Meteorological)	
Corrective action/actions taken to complaint			
Personnel Advised			
<input type="checkbox"/> Project Manager	<input type="checkbox"/> SPC	<input type="checkbox"/> DECC	<input type="checkbox"/>
Comments			
Project Manager		Signed:	Date:
Review Actions (fill out incident report) <input type="checkbox"/> Yes <input type="checkbox"/> No			
Corrective actions effective <input type="checkbox"/> Yes <input type="checkbox"/> No			
Any changes made?			
Preventive action taken/or reasons if no action taken			
Follow up with Informant			
Project Manager		Signed	Date:

APPENDIX E – AIR QUALITY REPORT

APPENDIX F – NOISE MONITORING REPORT

APPENDIX G – OFF SITE SHIPPING FORM
