ROYAL RANDWICK
Home of The Australian Jockey Club

Prepared by
The Australian Jockey Club Pty Ltd

Environmental Management Plan

Royal Randwick Grandstand and Theatre of the Horse Project

Revision 1
Date:
Commencement Date:

ROYAL RANDWICK
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Contents

1.0 Purpose and Scope

1.1 Purpose

This Construction Environmental Management Plan (CEMP) is an integral component of the Environmental Management System to be prepared by The Contractor to ensure regularity, policy and continual improvement requirements are met for the delivery of the Royal Randwick Grandstand and Theatre of the Horse (the Project).

This plan forms part of The Contractor Management System's which are to be accredited to AS/NZS ISO 9001:2000 – Quality Management, AS/NZS ISO 14001:2004 – Environmental Management System, AS/NZS 4801:2001 – Occupational Health and Safety Management System.

1.2 Scope

This CEMP addresses environmental issues and risks associated with the design and construction of the Project. The primary purpose of this CEMP is to:

- Define the objectives and strategy of the project, reporting, administration arrangements and established management controls and practices to be implemented during construction of the project.
- Ensure all Principal's Minimum Requirements and the relevant regulatory requirements are implemented throughout construction of the project.

This CEMP will be utilised to assist the Project Staff to identify:

- Environmental management issues associated with construction;
- Complying with contractual obligations relating to Environmental Management,
- Management measures required to be implemented.
- Procedures for the planning, documentation and monitoring of environment issues that assist with making sure those subcontractors will adhere to all Environmental requirements listed here within.

1.3 Precedence

Where ambiguity is detected between the procedures and requirements in this plan and The Contractor's Management Systems, then the procedures nominated in this plan will take precedence.

1.4 Interface with other Operational Procedures

This Construction Environmental Management Plan should and should be read in conjunction with The Contractor's Management Standards, Operational Procedures and Management Plans outlined in section 2 and referenced in this plan.

The Operational Procedures may be confidential documents and, as such, are not issued outside of The Contractors Offices. However, they will be made available, on the Project, for the purpose of surveillance and audit of the Environmental Management System.

1.5 Project Description

The Project is the flagship development at the revitalized Royal Randwick and will act as a gateway building to the racecourse.

In keeping with Royal Randwick's ranking as one of Australia's leading racecourses, and its objective to be the leading racecourse within Australia and the Asia-Pacific Region, the Project is designed to increase the capacity, and provide world class spectator, racing and event facilities.

The landmark building is located within the spectator precinct off Alison Road, Randwick.

Aimed to demonstrate the cutting edge design philosophy, the building is:

And will replace the old QEII and paddock stands.

- A 6 storey structure, with a composite façade incorporating glazed components, horizontal and vertical louvers, composite metal cladding and aluminium louvered plant rooms;
- Large expanses of glazing panels form part of the iconic and unique curve shaped structure, with large cantilevered canopies providing cover for spectators;
- Multi-use floor plates will be linked via new vertical transport modes to provide multi-use opportunities on both a race day and non-race day events;
- The Theatre of the Horse complex will provide a new parade ring to the rear of the new precedents. The design has been produced to allow a greater interaction between spectators, the horses and racing personalities: The Theatre also allows the AJC to provide viewing into the theatre from the, currently blank, western grandstand front face;
- Services and plantrooms to be located on a floor by floor basis throughout the new stands in addition to basement and roof plant. Connection to the existing Officials Stand will be required, and all external supply services located within close proximity of the site.

2.0 Definitions

All terminology in this document is taken to mean the generally accepted or dictionary definition with the exception of the following terms which have a specifically defined meaning.

3.0 Responsibility and Accountability

3.1 Accountability

Environment and Approvals Manager is accountable for this document. Accountability includes authorizing the document, monitoring its effectiveness and performing a formal document review.

Direct reports to the Contractors Project Director are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

The direct reports to the Project Director are accountable for specific projects/programs ensuring associated contractors comply with the requirements of this document.

The Contractors team will be formed for the design, construction and commissioning of the project works.

The Project Manager is responsible for the delivery to the AJC of a facility which is accepted as ready to operate. The Project Organisation Chart defines the overall responsibility and accountability for the management of the project within the framework of the agreements which have been established.

3.2 Organisation Structure

The organizational chart outlined in the Project Management Plan, specifies The Contractor personnel assigned to the project.

3.3 Document Development and Control

This Construction Environmental Management Plan for the Project will be a controlled document and will be endorsed by the AJC.

3.4 Roles and Responsibilities

The general responsibilities and accountabilities of key project personnel on the Project in relation to Environmental Management are described below:

Contractor Managing Director

The Contractor's Managing Director shall ensure all appropriate actions are taken and resources are made available to comply with environmental management systems, policies, procedures and legislative requirements.

Project Director

The Project Director is responsible for establishing and resourcing the project team to meet the requirements of The Contractor Environmental Management System and this Plan at the Project. The Construction Director reports directly to the Managing Director on all matters relating to the Project.

The Construction Director is required to:

- Ensure human, technical and financial resources are sufficient and appropriately allocated to the project to meet the requirements of The Contractors Environmental Management System and those objectives outlined in The Contractors Environmental Policy;
- Review performance reporting on the adequacy of implementation of The Contractors Environmental Management System, procedures, work practices and Management Plans and oversee the implementation of corrective action to facilitate continuous improvement;
- Promote a positive project Environmental culture by demonstrated active participation in Environmental initiatives;
- Facilitate the inclusion of Environmental Management as an agenda item in all project and performance review meetings.

Project Manager

The Project Manager is responsible for ensuring that the Construction Environmental Plan is implemented on the project and has line control The Contractors project personnel.

The Project Manager is required to:

- Assist with the development of the site specific Construction Environmental Plan in accordance with The Contractors Environmental Management System and the objectives of the Environmental Policy;
- Assess tenders submitted by subcontractors and suppliers and the ability of those subcontractors and suppliers to comply with environmental conditions stipulated in the contract;
- Assist the Site Manager in ongoing development of the Project Risk Register including assessment of high risk trade activities to establish the level of environmental management documentation required before work commences;
- Manage compliance with all appropriate Environmental legislation, Australian/New Zealand and national standards and other relevant industry guidelines or information;
- Investigate all significant incidents using The Contractors Incident Investigation Report and ensure that the appropriate and timely action is initiated to prevent recurrence;
- Communicate incident occurrences, in particular those involving emergency services or regulatory authority attendance at the project, to relevant personnel and external parties including the Project Director immediately on becoming aware of the incident.

Environmental and Approvals Manager

The Environmental and Approvals Manager (EAM) shall:

- Establish the environment policy;
- Establish the environment objectives and targets;
- Develop and support strategies to meet these objectives and targets;

- Obtain and comply with all environmental approvals, licenses and permits;

- Liaise with statutory authorities;

- Implement, maintain, monitor, report and advise the Project Manager on all environmental issues;
- Coordinate and manage the preparation and implementation of the EMS in accordance with the requirements of ISO 14001;
- Coordinate and manage the preparation of the CEMP;
- Manage the compliance tracking program;
- Prepare and/or manage all reporting deliverables;
- Maintain necessary environmental management records;
- Ensure all EMS documentation is up-to-date and communicated to the project team;
- Coordinate the specialist sub-consultant activities relating to monitoring and reporting;
- Assist with environmental hazard and risk identification and elimination;
- Coordinate with construction team to identify changes to components of the EMS;
- Encourage environmental innovation and ensure that environmental initiatives are incorporated in the approach to project management and performance;
- Coordinate ongoing training in environmental awareness for all levels of staff;
- Ensure that workplace environmental records are maintained, review and where applicable, corrective action taken;
- Ensure that all relevant employees and contractors receive environmental inductions and ongoing training as appropriate;

Site Manager

The Site Manager is responsible for assisting the Project Manager in the day-to-day implementation of Construction Environmental Management Plan.

The Site Manager reports directly to Project Manager and is required to:

- Undertake duties as directed by the Project Manager;
- Ensure implementation and compliance with the Construction Environmental Management Plan;
- Assist in risk management planning of work activities to establish the level of environmental management planning documentation required before commencement;
- Promote a positive project Environmental culture by demonstrated active participation in Environmental initiatives as defined in the project objectives and targets;
- Assist in compiling the Environmental Monthly Report including information on incidents or other and assist the Project Manager in identifying trends;
- Assist in identifying and need for project specific training and provide training to ensure that employees, subcontractors, their employees and suppliers are appropriately qualified to undertake job tasks.
- Monitor weekly environmental inspections of work areas, to assess compliance with appropriate legislation, regulations, Australia/New Zealand standards and other relevant information.

- Assist the Project Manager to develop an emergency evacuation and response plan and display the plan in prominent locations at the project;
- Implement and monitor compliance with the requirements of the environmental sub-plans;
- Conduct risk workshops for the trades and activities and develop treatment strategies and controls as required.
- Facilitate formal daily inspections by the Site Supervisors and implement corrective action where deficiencies are identified;
- Ensure all plant and equipment is maintained in a safe condition, a regular programme of maintenance occurs to minimize emissions and daily/weekly inspections are carried out as required in accordance with the manufacturer' recommendations and The Contractor Plant and Equipment procedures;
- Review the adequacy of Environmental Plans submitted by subcontractors;
- Conduct audits investigations, and ensure that preventative and corrective action is taken to remedy any deficiencies;
- Complete incident investigation reports as a priority and forward to the Project Manager.

Project Environmental Coordinator

The Project Environmental Coordinator is responsible for assisting the Site Manager in the day-to-day implementation of the Construction Environmental Management Plan with assistance being provided by an External Environmental Consultant where required.

The Project Environmental Coordinator reports directly to the Project Manager and is required to:

- Implement, promote and review the Environmental Management System on the project;
- Report directly to the Project Manager on all environmental issues;
- Conduct periodic audits of Subcontractors' adherence to Environmental Management Plans and legislative compliance and document such audits;
- Review incident investigations, and ensure that preventative and corrective actions is taken to remedy any deficiencies;
- Monitor trends in site Environmental Management, and providing statistical reports to the Site and Project Manager;
- In conjunction with the Site Manager, liaise with statutory authorities on all matters relating to Environmental Management;
- In consultation with managers and employees assist in the development of environmental sub-plans;
- Directly inform personnel & subcontractors of any breach of Environmental Management and ensure corr
- Conduct inspections and docu
- Assist the Site Manager and Pr
- Coordinate and manage all e the project;

Environmental Management Plan

- Prepare and/or manage all environmental management records;
- Ensure all EMS documentation is up-to-date and communicated to the project team;
- Coordinate the specialist sub-consultant activities relating to monitoring and reporting;
- Assist with environmental hazard and risk identification and elimination;
- Ensure that all relevant employees and subcontractors receive environmental inductions and ongoing training as appropriate.

Site Supervisors

Site Supervisors report directly to Site Manager and are required to:

- Undertake duties as directed by the Project Manager and Site Manager;
- Ensure implementation and compliance with the Environmental Management Plan;
- Assist in Environmental Management planning of work activities to establish the level of environmental management planning documentation required before commencement;
- Assist in review of environmental plans or equivalent provided by subcontractors prior to commencement of work;
- Promote a positive project Environmental culture by demonstrated active participation in Environmental initiatives;
- Ensure the implementation of The Contractors Environmental Procedures;
- Ensure that The Contractors employees or subcontractors, their employees and suppliers have received appropriate work activity training or equivalent procedure relating to their work tasks;
- Monitor subcontractor work activities, report hazards and ensure appropriate and timely remedial action;
- Ensure workers are inducted and that the information is recorded in The Contractors Project Induction and Declaration Form;
- Undertake formal daily Environmental inspections of work areas, work methods, materials, plant and equipment.

All Employees

All Construction workers, whether employees The Contractor or of Subcontractors are required to:

- Comply with duties as prescribed by legislation and regulatory requirements;
- Attend and satisfactorily complete the site induction prior to commencing work on the site;
- Consult and cooperate with the site management representatives and their employers environmental issues;
- Attend other training or information sessions as required;
- Follow their supervisor' instructions with respect to environmental management on the project;
- Report all actual and potential hazards and incidents to their supervisor;
- Implement practical ways to control environmental risks.

Subcontractors

Subcontractors have a responsibility to undertake specific works for the project and are also responsible for ensuring their work is undertaken in accordance with the Construction Environmental Management Plan.

Supervisory personnel for subcontractors, their employees and suppliers will adopt the same responsibilities as noted previously for the Site Supervisor and will report to The Contractors Site Manager on any matters relevant to workplace Environmental Management which may arise.

All subcontractors that perform construction work at the project will be required to participate in induction including any sections of the Environment relevant to work routines or areas of work and will be required to provide, participate and consult in the development of detailed project specific Environmental Management Plan/Environmental Work Method Statements or equivalent.

4.0 Management System Framework

The Contractors management system is hierarchical, where documents and systems meet and support the requirements of those at higher levels. The outline below details the structure of the management system applicable to the project.

Level 1 – Strategic Objectives/Policies

The strategic objectives are aligned with the Groups Strategy reflect and support a commitment to sustainable growth to ensure its business remains viable and continues to create value for its employees, suppliers, subcontractors and partners. Its bottom line performance is dependent on identifying opportunities and managing its resources to operate efficiently and grow.

The policy statements have been developed by Management and are statement of the company's objectives and commitment to quality, health and safety, environment and risk management. The policies are communicated to all employees during induction, implemented and maintained at all levels of the organisation and continually review for their ongoing suitability.

Level 2 – Management Standards

Management Standards have been developed to define the company's expectations and minimum performance requirements for managing projects. The framework for the standards is based on the continuous improvement model of plan, implement, monitor and review and covers all operational aspects and activities that have the potential to affect its performance either positively or negatively. They include:

1. Commitment and Accountability
2. Objectives and Targets
3. Risk Management
4. Documentation and Legal Requirements
5. Awareness, Competence and Behaviour
6. Health and Safety
7. Communication and Consultation
8. Financial and Commercial
9. Design, Construction, Commissioning
10. Consultants, Subcontractors, Suppliers
11. Environmental Management
12. Incidents, Investigation and Reporting
13. Emergency Management
14. Monitoring, Audit and Review

Level 3 – Operational Procedures

Operational Procedures have been developed to provide detailed instructions on disciplines. They include;

- Integrated Management
- Risk Management
- Design Management
- Planning and Programming
- Financial and Commercial
- Site Management
- Health and Safety Management
- Environmental Management
- Quality Management

Level 4 – Project Management Plans

Management Plans have been developed to satisfy specific contract requirements. The management system will be implemented within the framework of the Project Management Plan, which overlays the suite of management plans.

Level 5 – Management and Trade Action Plans/Risk Workshops

Management and Trade Action Plans are implemented throughout the construction phase and are used as the primary tool in considering what has to be done, when it is done and what document is required to verify compliance to the projects specifications.

The Action Plans are used in conjunction with the Risk Management Process, whereby risk treatments and/or controls, identified during risk workshops are transferred to the relevant action plans for implementation by nominated site personnel.

Level 6 – Forms and Supporting Documents

Forms and supporting documents are provided as tools to ensure conformance with procedures.

5.0 Environmental Targets

The key project environmental targets of The Contractor on the project are to include:

- No instances of non-compliance with the environmental statutory requirements;
- To recycle 80% of waste produced on site
- No complaints relating to excessive noise and vibration during construction;
- No sustained visual dust observes beyond the immediate boundaries of construction during construction;
- Conduct internal 3 monthly audits of the Construction Environmental Management Plan;
- 100% of all site personnel inducted prior to commencement of work onsite;

Organisational responsibility for achieving the project Environmental targets ultimately rest with senior management.

6.0 Planning Legislative Requirements

The key project environmental targets of The Contractor on the project are to include:

6.1 Legal Requirements

Legislation Title	Application	Administering Authority
Environmental Planning and Assessment Act 1979	Environmental Planning	Department of Planning
Environmentally Hazardous Chemicals Act 1985	Hazardous Chemicals	Department of Environment and Climate Change and Water
Protection of the Environment Operations Act and Regulations 1997 (POEO)	Environment Protection	Department of Environment and Climate Change and Water
POEO (Noise Control) Regulation 2008	Noise	Department of Environment and Climate Change and Water
POEO (Penalty notices) Regulation 2004	Penalty Notices	Department of Environment and Climate Change and Water
POEO (Waste) Regulation 2005 and amendment 2008	Waste Management	Department of Environment and Climate Change and Water
Fisheries Management Act 1994	Fisheries Management	Office of Water
Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment	Catchment Management	Department of Planning
Waste Avoidance and Resource and Recovery Act 2001	Waste Management	Department of Environment and Climate Change
Protection of the Environment Administration Act of 1991 and Regulation 2007	Environment Protection	Department of Environment and Climate Change
Catchment Management Authorities Act 2003	Catchment Management	Various Catchment Management Authorities
Heritage Act 1977	Cultural Heritage	Planning Authority
Local Government Act 1938	Planning Assessment	Planning Authority
Occupational Health and Safety Act 1983	Safety	Work cover
Soil Conservation Act 1938	Erosion	Rural Assistance Authority
NSW Guidelines for Construction Sites 1998	Erosion and Sediment Control	N/A
NSW Contaminated Land Management Act 1997	Land Contamination	Department of Environment and Climate Change
Contaminated Land Management Regulation 1998	Land Contamination	Department of Environment and Climate Change

6.2 Policies, Standards, Guidelines

Policy/Guidelines	Application
AS 2436 – 1981 'Guide to Noise Control on Construction, Maintenance and Demolition Sites'	Noise/Vibration
EPA Guidance Statement #8 'Environmental Noise' (Draft)	Noise/Vibration
EPA Guidance Statement #18 'Prevention of Air Quality Impacts from Development Sites'	Dust, Odour and Fumes
National Environmental Protection Measure – Ambient Air Quality	Dust, Odour and Fumes
EPA Guidance Statement #14 'Road and Rail Transportation Noise'	Noise/Vibration and Traffic Management
Storing and Handling Liquids: Environmental Protection – Participants Manual	Chemical Storage
Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management – Part B Review of Best Practice and Regulation	Chemical Storage
AS 1940 – 2004 'The Storage and Handling of Flammable and Combustible Liquids'	Dangerous Goods and Hazardous Materials
Managing Urban Storm water: Soils and Construction, Landcom (4th Edition), March 2004	Erosion and Sediment Control
Department of Land and Water Conservation Urban Erosion and Sediment Control Field Guide	Erosion and Sediment Control
Department of Environment, Climate Change and Water – Bunding and Spill Management, November 1997	Erosion and Sediment Control
Department of Housing Manual Managing Urban Storm water – Soils and Construction (August 1998)	Storm water Management
ANZECC Water Quality Guidelines, 2000	Water Quality
NSW Guidelines for Construction Sites, 1998	Erosion and Sediment Control
NSW Industrial Noise Policy 1999	Noise Management
Planning Guidelines SEPP 55 – Remediation of Land	Land Contamination
NSW Government Waste Reduction and Purchasing Policy	Waste Management

6.3 Approvals, Licenses and Permits

The relevant approvals, permits and licenses for the project will include:

Approval/License/Permit	Relevant Authority	Details
Part 3a Development Consent	NSW Department of Planning	Submission currently lodged by client, awaiting approval
Various authority approvals	Sydney Water, Randwick City Council, Roads and Traffic Authority, etc	

6.4 Development Conditions

Following Part 3a approval, all relevant development conditions relating to environmental management for the project will be identified and addressed.

7.0 Environmental Management Strategies

The Environmental Strategies have been prepared and form the key controls within the Construction Management Plan to provide operational controls to minimise the potential impact to the environment from construction activities.

The Environmental Strategies are designed to protect environmental values, identify controls for construction activities and provide monitoring and reporting requirements for the project works.

7.1 Project Risk Management

The Project will incorporate a process of environmental risk identification, assessment and monitoring into all activities. Typically this shall be implemented through one or more of the following as appropriate:

1. Completion of Project Risk Workshops at different stages during the project to ensure that environmental risks are identified; assessed; and controls implemented and reviewed to ensure ongoing effectiveness. The outcomes of this process will be reflected in and managed via the relevant Management Plans, Action Plans and Risk Register;
2. Implementation of our management practices and procedures;
3. Development of Environmental Management Plans and sub-plans by THE CONTRACTOR and subcontractors for work activities to ensure effective controls is developed to minimise the environmental risk during construction activities;
4. Various daily, weekly and monthly site inspections;

All risk management will be undertaken in accordance with The Contractors Risk Management Plan.

7.2 Environmental Controls Map

The Environment Sub-Plans are specific operating procedures for all project participants to adhere to minimise the risk environmental nuisance or incidents. The Sub-Plans identify the following:

- Objectives
- Responsibilities
- Management Strategy
- Performance Indicators
- Reporting
- References

Where any further information or specific Management Plans have been prepared for activities or aspects that pose a significant risk, the Sub-Plan will make a reference to the specific document and will be included as an attachment to the CEMP.

7.3 Environmental Controls Map

Environmental Controls Map has been prepared for the project to include key information from the sub-plans and other sources where relevant and will include the following:

a) The worksite layout and boundary
b) Location of the nearest noise sensitive receivers
c) Sediment and erosion control measures
d) Stockpiles
e) Noise barriers
f) Site Offices
g) Car parking
h) Construction traffic routes within and adjacent to the worksite
i) Dust control measures
j) Monitoring equipment (eg. Dust monitors)
k) Location of environmentally sensitive area (eg. Threatened species, critical habitat)
l) Vegetation and trees to be protected
m) Location of heritage (indigenous and non-indigenous) items
n) Location of spill containment and clean-up equipment
o) Storm water drainage and watercourses
p) Location of worksite waste management facilities

The Environmental Controls Map will also include in table format the following information:

a) Key construction stages and timeframes for the works
b) Hours of work applicable to the worksite (including deliveries)
c) Restrictions on certain activities (eg. Rock breaking and driven piling)
d) Contact details (including hours) for key staff (including environment manager and EMR)
e) EPA's Pollution Line number
f) Key Control and mitigation measures and responsibilities for managing issues identified in sub-plans
g) Reference to and location of operating procedures for pollution control equipment and other environmental control measures (eg. Water treatment, plants, wheel wash facilities)
h) Monitoring and inspection requirements
i) Document control and approval details
j) Approvals, licenses, permits etc. applicable to the works
k) Appearance of threatened species (eg. Photograph, sketch)

7.4 Subcontractor Management

All subcontractors are required to operate with the requirements of the Construction Environmental Management Plan and associated documents.

Based on a risk assessment, The Contractor shall establish whether a subcontractor is required to develop a project specific Environmental Management Plan or Environmental Work Method Statement to confirm that their process and procedures conform to The Contractors CEMP, Sub-Plans of internal procedures. The risk assessment shall consider:

- The potential environmental impacts of the subcontractors activities;
- The environmental sensitivity of the area(s) in which the subcontractors will be working;

- The nature and scope of the subcontractors activities; The scale of the subcontractors activities;
- The subcontractors capacity to manage its own environmental performance effectively;
- The subcontractor's previous environmental performance

Where an Environmental Management Plan is required from subcontractors, this plan shall address the specific work packages(s) awarded and be submitted for approval to the AJC and The Contractor prior to commencement of work on site. The plan must assess the level of environment risk and implement appropriate management controls for the subcontractor's full scope of work.

Monitoring of work activities will be undertaken by The Contractor to establish that subcontractors are carrying out work in accordance with the environmental documentation provided to The Contractor. Monitoring may be achieved by one or more of the following:

- Ongoing visual inspections by supervisors,
- Inspections,
- Subcontractor audits,

7.5 Purchasing

The Contractor personnel responsible for letting contracts or supply agreements shall ensure that subcontractors and suppliers are evaluated to meet The Contractors environmental requirements prior to being placed on a final tender list and contractual arrangements being established.

Where goods are procured such as materials, plant and equipment, procedures for compiling environmental specifications shall be implemented and shall include any compliance requirements such as those required by standard, legislation or organisational environmental requirements.

7.6 Consultation and Communication

The Contractor shall ensure meaningful and effective consultation and communication processes are established and maintained throughout the life of the project.

The Contractor aims to ensure that the environmental management processes effectively use available methods of communications, both internally and externally, that allows all individuals to be aware of environmental issues, participate in environmental management activities, identifying risks and assist in developing corrective and preventative action.

Consultation and communication on environmental matters will occur through the following mechanisms:

- Management meetings/coordination meetings;
- Site inductions;
- Training, informational and promotional sessions;
- Distribution/circulation/display of environmental information and other relevant documents;
- Informal workplace interface meetings;

- Reporting systems;
- Electronic media (eg. Aconex);
- Environmental meetings – held as needed to discuss specific environmental issues and implications;
- Site inspection;
- Site Rules contained in the 'Induction Training Handout';
- Stakeholder interface meetings.

Any enquiries or complaints received from regulatory authorities, interest groups or the general public will be managed in accordance with the Community Liaison Plan (CLP).

7.7 Induction and Training

7.7.1 Induction

The Contractor will develop an induction program on the project that includes the following;

- Project Specific Induction – All personnel who are current holders of a Construction Industry OHS General Induction shall attend the project specific induction. As part of the project specific induction, The Contractor will communicate relevant site-specific environmental requirements so that all personnel are aware of and understand the rules that they are required to conform with;
- Environmental Induction training – All subcontractor personnel shall attend an Environment Induction training based on their own Environmental Management Plan.

7.7.2 Training

A Contractor Training Plan has been developed that identifies a number of areas where training is provided to employees, including in the area of environmental training.

The training plan includes the following steps:

- Indentifying training needs;
- Develop a training program;
- Train personnel;
- Assess and accredit personnel performance;
- Evaluate the training process

7.8 Incidents and Investigations

Environmental incidents on the project shall be communicated to the appropriate internal personnel, formal recorded and where appropriate reported to regulatory authorities. Where required incidents are investigated and any lesson learned for future prevention are made available and distributed.

At any time where an environmental issue needs to be communicated to the senior staff or authorities, the following contact numbers are to be used:

7.9 Emergency Management

Emergency incidents and emergency situations will be managed in accordance with the Emergency Management Plan which has been developed for the Project. The plan provides guidance in the event of any environmental or safety related emergency affecting the project.

Relevant details of the Emergency Management Plan shall be provided to all personnel during the site induction and information posted on notice boards.

7.10 Environmental Monitoring and Inspections

Monitoring to ensure environmental management/compliance shall be undertaken by The Contractor in accordance with the monitoring requirements outlined in the environmental management sub-plans. Where required, specialist consultants will be engaged to help establish monitoring systems and to train relevant personnel in the collection of samples, use of scientific instrumentation and recording and analysis of data.

In addition to formal environmental monitoring, the Project shall ensure that regular environmental inspections are undertaken of all work activities being carried out at the project. Inspection shall be carried out in conjunction with personnel responsible for a particular work area and shall include the following:

- Daily Inspections – site supervisory staff as part of their daily duties will conduction daily inspections of the site (incl. all subcontractor activities), and issues noted in daily diaries if applicable;
- Weekly Site Inspections – formal weekly inspections recorded on the Environmental Site Inspection Checklists which will be developed to cover activities as presenting significant environmental risk.

Site supervisory staff will manage corrective actions arising from inspection.

7.11 Non-Conformances

Deficiencies identified during audits and site inspection will be generally recorded on the audit report or inspection report/checklist and auctioned. In the event of a non-conformance being raised, The Contractor shall be documented on the Non-Conformance Report.

When non-compliance is identified, the recipient and/or The Contractor shall identify strategies in order to rectify the non-conformance. Where appropriate, the recipient and/or The Contractor shall also develop measures to prevent recurrence of the non-conformance. The measure to rectify and to prevent recurrence of the non-conformance shall be documented on the Non-Conformance Report and a time frame established. The instigator shall carry out a follow up review and closeout of the Non-Conformance Report to verify completion of measures taken to rectify and to prevent recurrence of the Non-Conformance within the specified time frame.

7.12 Environmental Audits

An environmental auditing programme shall be established and consist of:

- Internal systems audits which will focus on those sections of the Environmental Management Plan that are relevant to current operations;
- Subcontractor compliance audits for major subcontractor packaged;
- Audits by external organistations

Results of the audits shall be documented and brought to the attention of personnel having responsibility for the area audited and reported to the Project Manager. For any deficiencies or non-compliances found, correction action shall be initiated using the 'Non-Conformance Report' or detailed as 'Observations' in the audit report.

7.13 Document and Records Management

The Contractor shall establish a uniform system of document management and record keeping that maintains currency of information is able to demonstrate compliance to the Environmental Management Plan and regulatory requirements and retains all required documents for commercial protection.

7.14 Reporting

The project management team shall establish and maintain a uniform system of record keeping enabling accurate reporting of environmental matters. Reporting on the environmental matters on the project will occur through the monthly client Project Control Group report and the monthly internal report to The Contractors senior management.

The project will also ensure reporting required by law is provided to all regulatory authorities.

A Preconstruction Compliance Report (PCCR) for the Project will be prepared detailing compliance with all relevant conditions of approval that apply prior to commencement of construction. The PCCR will also include trailed of approvals and licenses required to be obtained under any other Act. Every six months until the completion of the project, a Construction Compliance Report (CCR) must be provided to the Director Planning. The CCR will include information on:

- Compliance with the Construction Environmental Management Plan and the Conditions of Approval within the Designation Report;
- Compliance with any approvals or licenses issued by relevant authorities;
- The implementation and effectiveness of environmental controls;
- Environmental monitoring results, presented as a results summary and analysis;
- The number and details of any complaints;

- Details of any review and amendments to the Construction Environmental Management Plan;
- Any other matter as requested by the Director of Planning.

8.0 Environmental Sub-Plans

8.1 Construction Water and Soil Management Sub-Plan

Objectives
To minimise land degradation and erosion so as to protect air quality, water quality, drainage infrastructure and the visual amenity of the area.

Responsibilities
Subcontractor/Site Team

Management Strategy
The following sub management plans are to be developed:

- Soil and water quality management plan
- Storm and water quality management plan
- Storm water quality management plan
- Erosion and sediment control plan

Performance Indicators
No transport of sediment off site.

Reporting
Site Environmental Inspection Checklist.

8.2 Dust and Air Quality Management Sub-Plan

Objectives
To implement all reasonable and practicable measures to ensure the prevention or minimisation of dust and odour from all project construction related activities. To ensure that dust and odour emissions do not adversely affect environment values or the health, welfare and amenity of people and adjacent land uses.

Responsibilities
Subcontractor/Site Team.

Management Strategy

- All construction staff shall be inducted on dust control measures and instructed on management actions required under the CEMP (eg. Speed limits, access tracks);

- Minimise the total area of exposed surfaces (such as stockpiles and cleared areas) required for construction activities;
- Conduct earthworks immediately following the clearing of vegetation;
- The speed of all vehicles on-site shall be restricted to 20km/hr. This speed will be further reduced if large amounts of dust are still being generated;
- Dust generating activities will be assessed during periods of excessively windy conditions (40-50km/hr) and ceased and rescheduled where adequate control of dust generation cannot be achieved;
- Where a complaint is received regarding dust, dust monitoring will be undertaken. Where monitoring reveals dust emissions are above 5mg/m3 or daily (24 hours average) PM10 50ug/m3, work will be stopped and procedures reviewed;
- All construction plant and equipment with access to the site will be properly maintained;
- Emission controls fitted to plant and equipment will be regularly inspected and monitored to ensure that they are operating efficiently and not creating excessive exhaust fumes in accordance with DECC requirements;
- Mufflers, plant and machinery will be in good working order;
- Equipment emitting visible smoke for longer than 10 seconds while operational on site will be taken out of service and corrected to ensure smoke is no longer visible;
- Trucks transporting materials on behalf of the Australian Jockey Club Pty Ltd, such as sand, soil, landscape materials and gravel will have covered loads and tailgates secured;
- Ensure paint-spraying activities are not undertaken in adverse weather conditions;
- There will be no incineration or open burning on site of waste materials;
- Prompt action will be taken to extinguish fires;
- A water cart will be used to dampen exposed area and access tracks to reduce dust generation. Where spatial constraints inhibit the use of a water tanker, hand-held water prays will be used;
- Any temporary or permanent stockpiles will be dampened regularly , covered or treated with a polymer soil binder (or equivalent) to minimise nuisance dust emissions;
- Disturbed areas will be sealed or re-vegetated as soon as practical after completion of construction works;
- Water spray/dust retardant or seeding will be used on exposed areas to prevent dust lift off;
- The Contractors will endevours to use materials of non-toxic nature.

Performance Indicators

No sustained visual dust observed beyond the immediate boundaries of construction sites during construction.

No deposition of dust or other contaminant particulate, resulting from construction activities.

Reporting
Site Environmental Inspection Checklist.

8.3 Construction Noise and Vibration Management Sub-Plan

Objectives
Ground vibrations and nuisance noise as a result of construction activities will not exceed the objectives of development approval and relevant legislations; and construction activities will not cause nuisance due to 'unreasonable' levels of noise.

Responsibilities
Subcontractor/Site Team.

Management Strategy

- All activities are to be undertaken in accordance with the Construction Noise and Vibration Management Plan;
- All construction work to take place between:
  - 7:00am to 6.00pm Monday to Friday
  - 7:00am to 5:00pm Saturday
  - At no time on Sundays or public holidays
- Rock breaking, rock hammering and any other activities which result in Impulsive or Tonal Noise generation must only be scheduled between the following hours unless otherwise agreed by the Director of Planning or DECC:
  - 8:00am to 12:00pm (noon) Monday to Saturday
  - 2:00pm to 5:00pm Monday to Friday

Performance Indicators
No complaints regarding noise.

Reporting
Site Environmental Inspection Checklist.

References

- AS2436 – 1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites;
- Chapter 171 of DECC's 'Environmental Noise Control Manual';
- Occupational Health and Safety Regulation 2001

8.4 Land Contamination

Objectives
The site has a Hazardous Materials Register, controlled by the AJC.

Responsibilities
Subcontractor/Site Team.

Management Strategy
In the event that hazardous materials are uncovered once site works have commenced, the following procedures and principles will be followed; this would be consistent for expected and unexpected hazardous materials;

- Notification to client and project stakeholders;
- The AJC to develop a remediation management plan;
- Advise the client of the most cost and time efficient solutions whilst adhering to industry best practice standards;
- Agree strategy and commence implementation/

Performance Indicators
No incidents involving treatment, removal, transport or disposal.

Reporting
Site Environmental Inspection Checklist.

References

- NSW Contaminated Land Management Act 1997;
- Contaminated Land Management Regulation 1998.

8.5 Chemicals Management Sub-Plan

Objectives
Avoid or minimise contamination of land caused by use of imported materials, or by spillage of fuels, plant, form oil, chemicals, hazardous and dangerous goods. Hazardous Chemicals and Dangerous Goods have been identified as a significant aspect and will require specific management FOR ANY Hazardous or Dangerous Goods.

Responsibilities

Subcontractor/Site Team.

Management Strategy

- Develop a Register for Material Safety Data Sheets that will include information on cleaning up spills;
- All chemicals and dangerous goods used on site will require a material safety data sheet;
- Bunds capable of storing 110% of the container volume will be installed around areas where chemicals are stored;
- Bund walls and floors will be constructed with impervious materials and in accordance with product compatibility;
- The site will have spill kits established and readily available;
- Any chemical or fuel spills will be cleaned as quickly as possible and placed in a suitable receptacles for reclamation or disposal and in a manner that does not cause pollution;
- Fuelling of vehicles or construction plant will be carried out in areas from which fuel or oil does not have the potential to be discharged to waters/street gutters or storm water drainage systems;
- Under no circumstances shall trucks that leak any sort of mechanical fluid be permitted on or adjacent to the site;
- Oil contaminated storm water will be disposed of to a licensed disposal site;
- Enamel paints and paintbrushes are to be washed into purpose built tanks that will be disposed of by painting contractor and disposed of through licenses transfer station;
- Any construction personnel storing or using hazardous chemicals or dangerous goods must provide a Construction Environmental Management Plan specifically addressing handling and storage of the product.

Performance Indicators

No incidents or spillages.

Reporting

Site Environmental Inspection Checklist.

References

- AS1940 – Storage and Handling of Flammable and Combustible Liquids;
- Storage and Handling Liquids:
- Environmental Compliance Management – Part B Review

Environmental Management Plan

8.6 Waste Minimisation and Management Sub-Plan

Objectives

To reduce waste sent to landfill by reduction, redirection and management of waste materials. Waste can be avoided through design, reducing waste at the source, reusing waste both on and off site to recycle waste on-site through separation.

Responsibilities

Subcontractor/Site Team.

Management Strategy

- Waste Management hierarchy of 'Avoid, Reuse, Recycle and Dispose' will be sued to determine appropriate materials for construction of the project;
- Designing in waste minimisation in the design phase by using standard sizing in materials, the use of modular and prefabricated construction techniques and the purchase of recycled and reprocessed materials;
- Key subcontractors to develop a waste minimisation plan for their scope of work detailing the type of waste they will generate and the way they will avoid, reduce, reuse and recycle materials;
- Subcontractors will undertake as part of their contract to minimise the packaging they bring onto the site and to reuse off-cuts where possible;
- Pallets and reels will be returned with reusable packaging to the suppliers;
- Regular auditing and reporting of the waste programme will be conducted by Site Management and a data base maintained monitoring recycling, reuse and reduction data over the life of the project;
- Supplies and deliveries will be monitored to reduce overestimating;
- The target set for demolition and construction waste reduction on the project is at least 80% of material generated on the site will be recycled. The allocation of a storage area used for the separation, collection and recycling of wastes will be undertaken where possible;
- Complete a Waste Minimisation Plan;
- Ensure that evacuation contractors have disposal dockets available for all excavated material generated and taken off site. When excavation is complete they contractor will need to provide a report verifying the quantities of both recycled material and material sent to landfill;
- Implement that management of office resources including: organise recycling paper bins in the office for waste p
reduce use of paper, purchase

Environmental Management Plan

Performance Indicators

Meeting waste minimisation objectives.

Monitoring and Reporting

- Regular reporting of the waste management will be conducted by Site Management;
- Site Environmental Inspection Checklist;
- Subcontractors to provide quarterly waste reports providing all receipts, dockets and any other evidence displaying recycling quantities and evidence of re-use to comply with the min 80% required.

Waste Management Plan

Please find outlined below the proposed Waste Minimisation Plan to be submitted to local authority. To be updated upon contract award.

Site Address

Royal Randwick Racecourse, Alison Road, Randwick, NSW 2031.

Applicant's Name and Address

The Australian Jockey Club Pty Ltd.

Buildings and other structures currently on site

Refer to Environmental Assessment Application for details.

Brief description of proposal

Stage: Demolition and Excavation Phase

Materials on Site			**Destination**		
			Reuse and Recycling		**Disposal**
Type of Materials	**EST Vol (m3)**	**EST Wt. (tone) -**	**ON-SITE Specify proposed reuse or on-site recycling methods**	**OFF-SITE Specify contractor and recycling outlet**	**Specify contractor and landfill Site**
A) Demolition					
Masonry, Brick and Tile					
Timer					
Metal					
Mixed Waste					
Bitumen					
The demolition contractor prior to commencement will develop a waste minimisation plan for the project. Material will be separated on site and removed in separate trucks for recycling, re-use and landfill.					
B) Excavation					
Clean Fill					
The excavation phase is to be conducted by a licenses contractor and the site's soil will be tested prior to excavation to determine the presence of any hazardous material. All environmental precautions were taken during the process as specified by BMNMJV EMP including full environmental management of the site for the DA requirements including dust, erosion and sediment control with monitoring and reporting initiatives in place. Any hazardous waste will be isolated and managed as per the NSW legislation for hazardous waste. In all, 100% of the material will be diverted from landfill.					

Environmental Management Plan

Stage: Construction Phase

Materials on Site			Destination		
			Reuse and Recycling		Disposal
Type of Materials	**EST Vol (m3)**	**EST Wt. (tone) -**	**ON-SITE Specify proposed reuse or on-site recycling methods**	**OFF-SITE Specify contractor and recycling outlet**	**Specify contractor and landfill Site**
Construction:					
Concrete					
Masonry, Brick and Tile					
Timber					
Metal					
Plasterboard					
Cardboard					
Pallets					
Reels					
Mixed waste					
During the construction phase, the project will be operated according to the site-specific waste management plan. Waste will be minimised by the design choice of modular components and pre-cast. The waste stream will be separated into four parts: metal, plasterboard, cardboard and mixed waste. There is also a reuse area on site for the return of pallets and reels. Subcontractors are required to return packaging to the suppliers and suppliers are encouraged to reuse, returnable stackable packaging. All subcontractors' that are awarded will be required to provide a site specific environmental management plan that will be reviewed in coordination with our waste minimisation plan.					

Environmental Management Plan

Stage: Ongoing Waste Management Plan

Type of waste to be generated	Expected vol. Per week	Proposed on-site storage and treatment facilities	Destination
Paper	Per Week	Separate and recycle	Recycle
Packaging	Per Week	Separate and recycle	Recycle
Containers	Per Week	Separate and recycle	Recycle
Bottles	Per Week	Separate and recycle	Recycle

Environmental Management Plan

8.7 Spoil Management Sub-Plan

Objectives
To ensure that appropriate environmental systems and controls are implemented during material management activities to minimise the impacts of spoil handling and disposal

Responsibilities
Subcontractor/Site Team.

Management Strategy

- Wherever practicable spoil would be reused as part of the Project;
- Top Soil will be retained and reused in the project landscaping;
- Sites for the disposal of surplus soil would be selected according to the rate of development activity and the volume of material generated elsewhere;
- Spoil that is not VENM would be transported to approved landfill sites and/or off-site recycling depots;
- Spoil haulage routes will be identified to be used;
- Testing of the fill material would have to be undertaken prior to it being acceptable for waste disposal purposes.

Performance Indicators
To correctly implement all measure to ensure environmental impacts are minimised during spoil activities.

Monitoring and Reporting

- Daily visual inspections by construction and other personnel of stockpile management measures;
- Volumes and classification of spoil removed or reused will be recorded as required.

8.8 Flora and Fauna Management Sub-Plan

Objectives
To minimise disturbance to existing native fauna and flora during the works.

Responsibilities
Subcontractor/Site Team.

Management Strategy

- A detailed survey will be undertaken prior to any works in the areas in close proximity (within 50m) to sensitive vegetation to identify the potential risk of impact to the sensitive vegetation. Refer Attachment 10.9 for sensitive vegetation;
- Site environmental induction to highlight the significance of the protected trees and their maintenance;
- Vegetation removal will be minimised wherever possible by clearing defining work areas and creating exclusion zones with secure fencing around areas of significant vegetation to be retained.;
- No materials or machinery will be stockpiled near retained vegetation;
- If any previously undiscovered threatened species or endangered ecological communities listed under the TSC Act or the EPBC Act are discovered during the works, all activities with the potential to impact on the species has been assessed and appropriate permits obtained and/or appropriate mitigation measure provided.
- Disturbed areas are to be progressively rehabilitated, where appropriate, following the completion of construction;
- Topsoil containing seed from invasive weed species may be re-used as engineering fill, or otherwise will be removed from the worksite;
- Construction personnel are not to handle fauna;
- All rubbish and food scraps are too placed in the appropriate lidded waste bin which will be serviced regularly,
- If any flora or fauna is discovered, personnel are to notify THE CONTRACTOR Site Manager;
- The erosion and Sediment Control Plan will be implemented prior to construction and maintained throughout the duration of works to protect the habitat provided by the Georges River;
- If threatened species under the TSC Act or the EPBC Act are discovered during the works, all activities with the potential to impact of the species will stop immediately. Work will only recommence once the impact on the species has been assessed and appropriate permits obtained and/or appropriate mitigation measure provided;

- Any trees to be removed or shrubs to be removed from the site will be checked for the presence of active nests of native birds (eg. Those containing fertile eggs or nestlings) and arboreal mammals (eg. Possums) prior to removal. These plants will not be removed until completion of the breeding cycle. Injured animals will be taken to a local veterinarian, or the local wildlife rescue service notified.

Performance Indicators

No incidences regarding mismanagement of flora and fauna.

Monitoring and Reporting

Site Environmental Inspection Checklist.