

These tables set out the operational controls required to achieve the objectives and targets set out in Environmental Program 15 Light Escape Control. BBA will, as a minimum, implement the control activities and performance measures set out below.

Table OCO 15.1 Light Escape Control

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Ref	Subject	Reference	Control Activity	Responsibility	Timing	Performance Measure	Audit Check
<b>INDUCTION AND TRAINING</b>							
1.	Design Consultant briefing	CEMP 10	The Design Consultants will be briefed on the design aspects of this Control Document	Design Director	Prior to start of design	Briefing record	
2.	Project and site induction	CEMP 13	All employees, consultants and subcontractors involved will be inducted into the environmental aspects and controls related to this Control Document.	Construction Director or Project Manager, as applicable Start up Manager for Early Works	Prior to personnel commencing work on site	Induction records	
3.	Staff Construction Environmental Management Plan induction	CEMP 13	All relevant staff will be inducted into the requirements of the Construction Environmental Management Plan and all associated documents.	Construction Director or Project Manager, as applicable	Prior to staff commencing work on site	Induction records	
4.	Briefings	CEMP 13 CEMP 14	Environmental briefings shall emphasize site-specific Light Escape Control requirements.	General Superintendent	Prior to working in a specific area	Record of Briefing (eg SEP Briefing)	

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<b>DESIGN</b>							
5.	Design to avoid light disturbance	LU1, Part 2, 2.44, pg 25, (Seq pg 38) LU1, Part 2, 2.57, pg 30, (Seq pg 43) LU1, Part 3, Section 2, 2FN3.1, pg 71, (Seq pg 84) LU2, Part 2, 2.11, pg 6, (Seq pg 220) LU3, Part 3, FN4.1, pg 31, (Seq pg 270) LU4, Part 3, FN4.1, pg 32, (Seq pg 321)	Design permanent project lighting so that it does not cause unacceptable disturbance to the community or to listed migratory species, or other significant migratory or nocturnal species.	Design Director	Design of Permanent Works	Impact on community and significant species avoided	
<b>PRE-CONSTRUCTION</b>							
6.	Consultation in areas of light sensitivity	Project Requirement	Consult with relevant parties in the development of SEPs for areas with significant light sensitivity	Environmental Manager	SEP Development	Consultation records	
7.	Light sensitive areas detailed in SEPs	Project Requirement	Identify any light-sensitive areas or migratory pathways on the Site Environmental Plan.	Environmental Manager	SEP Development	Light-sensitive areas and pathways identified	
<b>CONSTRUCTION</b>							
8.	Restrict working hours where listed migratory species route identified	Project Requirement	Where a listed migratory species route is identified, working hours will be restricted to daylight hours, as far as practicable. This will be identified on the SEP.	General Superintendent	During construction	Working hours	

**OPERATIONAL CONTROLS 15 LIGHT ESCAPE CONTROL**

Ref	Subject	Reference	Control Activity	Responsibility	Timing	Performance Measure	Audit Check
9.	Direct temporary lighting away from sensitive areas	LU1, Part 3, Section 2, 2FN3.1, pg 71, (Seq pg 84) LU3, Part 3, FN4.1, pg 31, (Seq pg 270) LU4, Part 3, FN4.1, pg 32, (Seq pg 321)	Direct temporary lighting away from light-sensitive areas, as identified on the SEP. Light shades and low lighting must be applied to construction and operational areas located adjacent to remnant native vegetation.	General Superintendent	During construction	Inspection records	
10.	No night construction at wharf or outfall	EPBC 30(d)	No night construction will occur at the wharf or outfall	General Superintendent	During construction	Working hours	

**INCIDENTS**

Ref	Subject	Reference	Control Activity	Responsibility	Timing	Performance Measure	Audit Check
11.	Potential environmental harm	CEMP incident response procedures	<p>Class 1: <i>An actual adverse effect on the health or safety of human beings that is of a high impact or on a wide scale; an actual adverse effect on the environment that is of a high impact or on a wide scale; an actual loss or property damage of an amount, or amounts in aggregate, exceeding ten times the threshold amount (\$5,000); an environmental nuisance of a high impact or on a wide scale; an actual adverse effect on the health or safety of human beings that is not negligible; an actual adverse effect on the environment that is not negligible</i> - cease relevant activities across all sites until the problem is fully understood and rectified; follow incident response procedures</p> <p>Class 2: <i>The emission of a pollutant that unreasonably interferes with, or is likely to unreasonably interfere with, a person's enjoyment of the environment; any emission specified in an environment protection policy to be an environmental nuisance; an actual loss or property damage of an amount, or amounts in aggregate, exceeding the threshold amount (\$5,000)</i> - cease relevant activities at the site of occurrence until the problem is rectified; follow incident response procedures</p>	Environmental Manager	Ongoing	Incident response records	

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12.	Potential permit breach	CEMP incident response procedures	<p>Class A: <i>A permit condition has been breached and either the environmental consequences are significant or the breach is due to a wilful or negligent failure to attempt to satisfy the condition – cease relevant activities across all sites until the problem is fully understood and rectified; follow incident response procedures</i></p> <p>Class B: <i>A permit condition has been technically breached but the intent of the condition has been or will be achieved and environmental consequences of the breach are not significant – cease relevant activities at the site of occurrence until the problem rectified; follow incident response procedures</i></p> <p>Class C: <i>Compliance with the permit has been raised as an issue but the intent and requirements established by the permit condition have been met – examine the significance and potential for corrective action; follow incident response procedures</i></p>	Environmental Manager	Ongoing	Incident response records	
<b>EVALUATING PERFORMANCE</b>							
13.	Inspection	CEMP 16	Inspect the installation of lighting and arrange modifications, as required.	Site Environmental Officer	Daily	Weekly checklist	
14.	Reporting	CEMP 17	Report on the implementation of this EP in the environmental section of the monthly Project Report.	Environmental Manager	Ongoing	Monthly Report	
15.	Assess monitoring results	CEMP 19	Evaluate and assess monitoring results against specified targets	Environmental Manager	Ongoing	Reports	
16.	Corrective action	CEMP 19	Take corrective action, where required	Project Manager	As required	Action taken	

**Revision Status**

Revision	Date	Revision Description	Prepared	Reviewed	Approved
A0	27 April 2007	Draft for BBA review	IW		
A1	9 May 2007	Draft for DTAE review	IW		
B0	22 October 2007	Revised for submission to DTAE following auditor's comments	IW	JD	JC
B3	30 January 2008	Revised to include inspection frequency	JRD	JD	CF