



ENVIRONMENTAL PLANNING

PURPOSE AND SCOPE

This System Requirement explains the planning activities necessary to deliver the environmental performance outcomes outlined in the Laing O'Rourke Environmental and Energy Policy and other compliance obligations.

1.0 BID HANDOVER AND PROJECT START UP AND MOBILISATION

The Bid Leader is responsible for ensuring the environmental requirements of the tender are addressed during the bid phase and following award, responsibility is handed over to the Project Leader for the planning, design and delivery phases. Following the bid phase, and into the project's planning phase, the Project Start Up and Mobilisation (PSUM) process and associated PSUM Toolbox is to be implemented until all actions are closed out. This includes planning activities for environmental management.

2.0 ENVIRONMENTAL RISK ASSESSMENT WORKSHOP

An environmental risk assessment works is to be completed to facilitate the development of the project's environmental risk and opportunity register and aspects and impacts register. Environmental risks and opportunities are to be identified and documented in accordance with **System Requirement Environmental Risk and Opportunity**.

The environmental risk assessment workshop is to be undertaken prior to project commencement to identify all the environmental constraints, risks and activities associated with the project. This may be combined with a cross-functional project wide risk workshop if relevant environmental risks and opportunities are included.

The environmental risk assessment workshop is to be used to develop risk mitigation and management strategies to eliminate or reduce the risk exposure. The risk mitigation strategies are to be incorporated into the site-specific Environmental Management Plan (EMP) and into the associated construction methodologies or work packs. Project-wide or significant environmental risks or opportunities will also be incorporated into the project or site Risk and Opportunity Register.

The environmental risk assessment workshop may be undertaken during the tender phase and updated on project award. The workshop is to be attended by the project leadership team, relevant functional team members and bid team (if handover is considered necessary).

The Laing O'Rourke Environmental Aspects and Impacts Register will be used to guide the content of the workshop. In addition, the site- or project-specific environmental assessment and compliance obligations will be used to inform the environmental risk assessment workshop.

Specific mitigation measures identified to manage environmental risks must be incorporated into operational activities through the following working documents:

- EMP
- Safe Work Method Statement (SWMS), Job Safety Environmental Analysis (JSEA), HAZID, CRAW, Inspection and Test Plans (ITP)/check sheets (ITC)(as appropriate)
- Construction and manufacturing methodologies
- Work packs
- Work instructions (e.g. refuelling and servicing).



3.0 PLANNING FOR HIGH-RISK ACTIVITIES

Each project or workplace EMP must outline the proposed approach for planning for high environmental risk activities. An activity specific method statement is to be developed and implemented for all activities with the potential to cause high-risk environmental impacts or are considered environmentally high-risk activities as determined from the project environmental risk assessment. Activity-specific work method statements may include but are not limited to:

- Work packs
- Environmental Work Method Statements (EWMS)
- SWMS
- Construction work methodologies.

The activity-specific work method statements relevant to high environmental risk impacts are to include the following:

- Description of the work activity including any plant and equipment to be used
- Outline of the sequence of tasks for the activity including interfaces with other construction activities
- Identification of potential environmental risks/impacts due to the work activity
- Mitigation measures to reduce the identified environmental risk, including assigned responsibilities to site management personnel and requirements from environmental conditions of approval, contract and legal obligations
- Identification of any environmental and/or socially sensitive areas, sites or places.

The performance of the implemented mitigation measures must be monitored and assessed in accordance with the project's assurance programme and health safety and environmental (HSE) activity schedule.

The Severe Environmental Risks (SERs) and Critical Controls as relevant to high-risk activities are to be used during the planning phase of site activities. Critical controls identified in the SERs must be incorporated into the activity-specific work method statements.

The SER process is to be applied to environmental high-risk activities. Where necessary, additional SERs may be developed to address high-risk activities.

The activity-specific work method statement to address environmental high-risk activities may be combined with existing construction planning documentation as outlined above. This is to be developed in consultation with the environmental team, engineering team, relevant workplace supervisors and supply chain partners.

Prior to the start of the activity, the site team will be trained on the key environmental risks and controls provided in the activity-specific construction work method statement to address high-risk activities.

Supply chain partners involved in these activities or who have been identified as high risk through the health safety environment and quality (HSEQ) package grading system during the procurement phase are to complete an environmental risk assessment workshop before the start of the activity. The identified risks and controls are to be contained in their activity-specific construction work method statements

High-risk activities include the following:

- Activities that impact on environmentally sensitive areas and on Aboriginal heritage sites
- Activities that involve work in waterways and that pose a risk to receiving water quality
- Construction and operation of sediment basins or water retaining structures
- Construction of bridges or culverts and flow diversions
- Piling



- Abrasive blasting
- Vegetation clearing and grubbing
- Concrete washout, painting or plaster washout
- Sewage construction or diversion works involving existing sewage systems
- Commissioning of systems with environmental impacts
- Management of contaminated materials and spoil
- Installation, use and decommissioning of any temporary working platforms in a waterway
- Activities that generate high levels of noise and vibration near sensitive receptors
- Activities with the potential to encounter acid sulfate soils (ASS).

4.0 ENVIRONMENTAL CONTROL PLANS

For each site, Environmental Control Plans (ECPs) (may include Environmental Control Maps (ECMs) or Worksite Environmental Management Plans (WEMPs)) are to be developed to outline the location of protection measures, monitoring requirements, sensitive receivers, and environmentally sensitive areas.

The ECP should be included as information in tender documents to subcontractors where applicable and in support of ancillary environmental approvals. ECPs are to be used in project inductions and during work site set-up, reviewing ongoing environmental performance. ECPs should include/reference the control measures and mitigation strategies outlined in the operational control documentation such as Environmental Risk Action Plans (ERAP) or EMP sub-plans.

ECPs will include the following relevant project/workplace specific details:

- The worksite layout and boundary, including entry/exit points and internal roads and clearing limits
- Location of adjoining land use and nearest sensitive receivers
- Location and type of erosion and sediment control (ESC) measures including size/capacity of detention basins and wheel wash facilities
- Location of site offices
- Location of spill containment and clean-up equipment
- Location of worksite waste management facilities
- Hours of work applicable to the worksite (including deliveries and any restrictions on high noise generating activities)
- Location of environmentally sensitive areas (e.g. threatened species, critical habitat, contaminated areas, heritage zones)
- Vegetation and trees to be protected
- Location of known heritage (Indigenous and non-Indigenous) items
- Location of stormwater drainage and watercourses leading to and from the worksite
- Specific environmental management requirements from licences, approvals or permit conditions
- Key environmental risk issues and the specific mitigation measures
- Document control and approval details.



5.0 PROJECT BOUNDARIES

The project boundary, contractor's activity boundary and worksite boundary document the areas in which project activities are approved to be undertaken. Approval of project activities and scope of work is in accordance with the relevant local environmental planning legislation and associated planning instruments. It is also the area that has undergone environmental assessment and defines the area that may be impacted by the project. During the project mobilisation phase, the project boundary will be reviewed to confirm that sufficiently detailed information has been provided to accurately identify and document it. Where there is insufficient detail, the client or regulatory authority is to be consulted to determine the approach for determining and documenting the project boundary. Accurate documentation of the project boundary means there is sufficient geospatial information available so the survey team can establish the boundary in the field.

Boundaries are to be clearly delineated and relevant signage including but not limited to "No-go" or "Environmentally Sensitive Area" is to be installed and maintained.

Project boundaries are to be documented in ECMs/ECPs and the project's GIS.

Project boundary changes may arise from design change requests, changes to methodology, altered access requirements, or the inclusion of additional work scope.

Each client and jurisdiction in which we work has a different process or approval pathway for changing or modifying the approved project boundary.

Work outside the project boundaries generally has not been assessed for environmental impacts and any associated impacts and is therefore not approved. For utilities and early works where there is limited boundary information available, the boundaries will be documented in consultation with the client and regulatory stakeholders.

Each project must have a process for the documentation of the approved project boundary and a process for modification or change to the approved project boundary. This process is to be documented in the Construction Environmental Management Plan (CEMP). The approved project boundary is to be documented on the ECPs/ECMs and within the project GIS.

The ground disturbance permit or excavation permit process is to include a review of the environmental requirements necessary to confirm works are within the project boundary and outside environmentally sensitive areas.

A change to the approved project boundary is a hold point and must be formally released through the agreed project-specific processes before use of the additional area. A permit system or alternative process must be in place to manage the handover or hand back of areas associated with a project boundary change.

The boundary change process must include and document the following:

- Likely timeframes for the assessment, review and approval of the approved project boundary
- The approval pathway, stakeholders and approval authorities for boundary changes
- The process for updating ECMs or ECPs should there be a change to the project boundary
- The process for communicating the change to the relevant delivery personnel
- The process for communicating the change to relevant personnel and the supply chain, including the re-issue of ECMs/ECPs to all of the supply chain
- The process to ensure the new boundary is again delineated in the field.



6.0 SUPPLY CHAIN ENVIRONMENTAL PLANNING

Supply chain partners are required to nominate relevant environmental risks and proposed mitigation measures associated with their scope of work within their project specific documentation. This can include the following:

- EWMS or methods statements that specifically include environmental mitigation measures for high-risk activities
- SWMS for all other activities undertaken on the site
- Site-specific management system documentation
- Site induction and project onboarding training.

7.0 SITE SHUTDOWN PLANNING

Shutdown periods are any period over the active site lifecycle in which construction activities are not planned to be undertaken for more than three consecutive days. This includes designated holiday periods such as Christmas and Easter and rostered weekends in which activities are not undertaken on-site for more than three consecutive days.

At least two weeks prior to any shutdown period, the project or facility leadership team is to commence shutdown planning activities. The Project/Workplace Leader is responsible for ensuring site shutdown planning is completed and documented. Shutdown planning activities will include the following:

- Confirmation of the plant and equipment required on-site to address potential environmental maintenance or emergency situations
- A plan for environmental site inspections leading up to the shutdown period to progressively confirm that site environmental controls have been established and are maintained to manage environmental risks
- A nomination of the team members who are available during the shutdown period to address environmental issues
- Completion of the specific Shutdown Go Pack including:
 - Site map showing all key site features including high-risk areas for managing ESC, dust and traffic
 - Approved ESC Plans for the shutdown period
 - Site emergency contact list (including internal and external resources available)
 - Incident response and notification requirements
 - Trigger descriptions and corresponding actions including ESC matters, dust mitigation measures, bushfire response, flood preparation (i.e. inspection, mobilisation of equipment and additional resources)
 - Routine inspection frequency (if required)
 - Weather monitoring (i.e. SES, BOM, otherwise)
 - Materials available on-site to address environmental management during the shutdown period
 - Process for testing sediment basin water for discharge during the shutdown period
 - Details of site personnel and plant resources available for mobilisation during the shutdown period including proposed measures to minimise dust generation during the shutdown period.



8.0 ENVIRONMENTAL RESOURCES

Projects and facilities have different levels of environmental risk, opportunities and environmental obligations depending on the statutory requirements, sensitivity of the receiving environment and client-imposed obligation. As a result, requirements for environmental resources vary from project to project.

As a minimum requirement, each project requires an allocated environmental representative. The Laing O'Rourke leadership team is responsible for ensuring environmental resources are assigned to meet the businesses operational risks and to realise opportunities. Each environmental representative must have demonstrated experience or training in environmental management.

The following sections provide guidance on the resourcing requirements for projects based on a qualitative risk assessment.

9.0 SIGNIFICANT-RISK PROJECTS

Significant-risk projects typically require an environmental team with a Senior Environmental Manager to meet contractual obligations and address project risk (commercial, procurement, legal, programme).

Examples include projects:

- Involving petroleum activities
- Including sensitive marine works
- Including controlled actions under the *Environmental Protection and Biodiversity Conservation Act*
- Requiring an Environmental Impact Statement (EIS) that has been completed and approved by the relevant State environmental planning regulator
- Involving complex statutory approvals conditions, either State or Commonwealth
- Including sensitive receiving environments.

10.0 MEDIUM-RISK PROJECT

Medium-risk projects typically require a dedicated Environmental Advisor with a functional reporting line to the HSE Leader. Examples may include projects:

- Involving a receiving environment that is not significantly sensitive, and where we have existing positive relationship with the client and local regulator
- Requiring additional approvals to be procured by Laing O'Rourke
- Requiring additional environmental licences or approvals to be secured or managed by Laing O'Rourke.

11.0 LOW-RISK PROJECT

Low-risk projects require an allocated Environmental Representative (potentially functioning with a dual/shared role) to ensure the EMS is implemented, maintain statutory compliance and address operational risks and opportunities.

The Project/Workplace Leader is responsible for allocating the environmental function to an existing project team member. The Project/Workplace Leader is also responsible for ensuring that the allocated resource is sufficiently competent in environmental management and has the required experience and training.

Where the environmental management role is being undertaken by the allocated resource in the absence of previous experience, a training and development plan is to be developed by the Project/Workplace Leader in conjunction with the Environmental Leader. This is to ensure the minimum competency requirements are addressed within the first three months of starting in the role.



12.0 COMPETENCE

People performing tasks with the potential to impact Laing O'Rourke's environmental performance will be competent on the basis of appropriate education, training and experience. The Environmental Representative must have demonstrated experience or training in environmental management. Minimum training requirements include ISO 14001 Awareness and Introduction to Environmental Compliance and Obligations.

Laing O'Rourke senior managers will complete the internal Laing O'Rourke environmental obligations training. Laing O'Rourke leadership personnel are also required to attend and complete the Frontline Leadership Programme that includes Laing O'Rourke's environmental management requirements.

All staff will be required to attend environmental awareness training relative to their impact on the business's environmental performance. Details of the training and awareness programme are provided in the EMP. Environmental awareness training will address the following as it is relevant to each location:

- Environmental and Energy Policy and objectives
- Legal requirements and due diligence
- Environmental aspects and impacts relevant to the site location
- Environmental governance
- CEMPs.

Throughout a project, Laing O'Rourke team members may identify HSE skill development needs related to specific site risks for the project team. Additional requirements will be addressed through the project-based EMP. Appropriate training and awareness programmes are to be implemented for site-specific skill gaps. Records are to be maintained together with a register of the HSE training that must be regularly forwarded to a People representative or their nominee for inclusion on the EIFY or Success Factors systems.

13.0 PLANS, FORMS AND TEMPLATES

For relevant plans, forms and templates see the Laing O'Rourke HSEMS at www.lorhsems.com.