Checklist – CAC003M
Environmental Management Plan (EMP) Review Checklist (MRTS51 and GCoC, Annexure A to GCoC)

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| --- | --- | --- | --- | --- | --- |
| Contractor |  | Date |  | Review No. |  |
| Contract No. |  | Project No. |  | Project Name |  |

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| --- |
| Review Decision |
|[ ]  The EMP is considered compliant with the requirements of MRTS51 and should be deemed suitable by the Administrator. |
|[ ]  The EMP contains minor non‑compliance with the requirements of MRTS51 that are required to be addressed. However, the submitted EMP(C) is considered suitable as an interim EMP(C) under Clause 33.3 of the General Conditions of Contract for Works other than ground disturbance and vegetative clearing. |
|[ ]  The EMP is not considered compliant with the requirements of MRTS51 and not suitable for the environmental or Cultural Heritage risk associated with the Contract. It is advised that Work under the Contract should not commence until the EMP(C) is revised, resubmitted and accepted by the Administrator. |

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| Reviewed by: |  |  |  |  |
| Name | Position | Signature | Date |

# Definitions

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| --- | --- |
| Conformance (C) | Fulfilment of a requirement, either contractual or legislative. |
| Non-conformance (NC) | A failure to comply with a requirement of contract. |
| Not Fully Verifiable (NFV) | There was insufficient evidence to determine conformance or non-conformance. |
| Observation (O) | A positive or negative comment of the auditor based on evidence and/or an observation made during the audit. Observations may or may not suggest corrective actions. |

| Reference | Requirements | Addressed | Comments / Observations |
| --- | --- | --- | --- |
| General Conditions of Contract (C7830) and Annexure A (C7831) of the Transport Infrastructure Contract – Construct Only |
| Clause 14.3 | The Contractor holds all Approvals required to undertake the Contract.Copies of Approvals have been provided to the Contract Administrator? |  |  |
| Item 24B (Annexure A) Clause 33.3 | No works under the Contract have commenced on Site without the EMP (or interim EMP) deemed suitable by the Contract Administrator. |  |  |
| Item 29A and C (Annexure A) | The Environmental Representative is sufficiently experienced and qualified. |  |  |
| MRTS51 Environmental Management |
| Administrative Requirements |
| Clause 6.4 | Procedure for periodic review of EMP(C) including identification of continual improvement. |  |  |
| Administrative Requirements (MRTS51) |
| Clause 7.1 | Weekly Site InspectionsProcedure for weekly Site inspections include:[ ]  how to identify whether measures are present, functional and adequate[ ]  reporting of inspections, and[ ]  identify corrective actions and management of outcomes. |  |  |
| Clause 7.3 | **Environment‑related Complaint Management**Procedure for notification, investigation, management and reporting of complaints regarding environmental or Cultural Heritage harm from Work under Contract.(Noise and Vibration Complaint Management shall comply with Noise Code of Practice Volume 2). |  |  |
| Clause 7.5 | **Monitoring**Procedures for all monitoring to be undertaken under the Contract. Details of Monitoring include:[ ]  specific location of monitoring (a unique name)[ ]  method[ ]  timing[ ]  frequency[ ]  duration[ ]  parameter to be monitored[ ]  objective / criteria measured against[ ]  management of non‑conformances in accordance with quality plan, and[ ]  reporting requirements. |  |  |
| Clause 7.6 | **Monthly Environmental Reporting**EMP(C) includes Monthly Environmental Reporting template. |  | Either Transport and Main Roads or Contractor’s that complies with the same reporting requirements. |
| Clause 7.7 | **Notification and Management of Environmental Incidents**Contractor’s procedures for notification and management of environmental and Cultural Heritage incidents in accordance with Clause 7.7 of Technical Specification and relevant legislation.Contractor’s procedures to cover:1. Notification - must extend to both:

[ ]  administrating authority for reportable incidents[ ]  Contract Administrator for reportable incidents as well as those listed in Clause 7.7.1 incidents listed under MRTS51 for notifying to Administrator[ ]  actual or potential material or serious Environmental Harm as defined in the *Environmental* Protection Act 1994 (Qld)[ ]  reportable breach of legislation[ ]  breach of an Approval condition(s)[ ]  monitoring non‑conformances against Water Quality Criteria[ ]  injury or death of native fauna other than least concern species, potentially caused by Work under the Contract, including the occurrence of a fish kill on Site or in Waterways receiving Discharge from Site[ ]  tampering with a native animal breeding place(s) other than in accordance with an applicable Species Management Program[ ]  ground disturbance or vegetation clearing beyond the Contractual Limits of Clearing or areas otherwise deemed suitable by the Administrator[ ]  damage to known or potential Cultural Heritage[ ]  ground disturbance or vegetation clearing beyond the boundary of the Contract’s Cultural Heritage Management Agreement or Plan otherwise deemed suitable by the Administrator[ ]  movement or relocation of Cultural Heritage without approval of the Indigenous Party/s[ ]  clearing of a protected plant under State or Commonwealth legislation other than authorised under an Environmental Approval[ ]  unauthorised Deposition of Surplus Material[ ]  identification of a new Biosecurity prohibited matter or restricted matter (Category 1 or 2) on Site or breach of a condition of a biosecurity zone, and[ ]  discovery of a Contaminated Site (including unexploded ordinance) or land contamination occurred on the Site during the Work under the Contract.1. Management of Incidents including:

[ ]  immediate remedial actions to mitigate harm[ ]  investigate[ ]  report – provide Environment and Cultural heritage Incident report to Administrator within 40 Business Days of the incident detailing:1. nature of the incident
2. what management measures in place
3. probable cause, and
4. corrective actions.
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| Clause 7.9 | All environment and Cultural Heritage specific roles and responsibilities of project personnel? |  |  |
| Clause 7.11 | Details of all Approvals relevant to the Contract held by either Principal or Contractor. Including:[ ]  name and type of licence, permit or approval[ ]  administering authority[ ]  reference number[ ]  commencement and expiry date, and[ ]  conditions of the Approval. |  |  |
| Clause 7.12 | Copy of the Environmental Site Induction. Induction includes:[ ]  basic roles and responsibilities for E&CH management[ ]  specific locations within the Site of E&CH significance or high risks[ ]  works managed under an Environmental Approval and its conditions[ ]  the scope and conditions of Approvals[ ]  locations of ancillary activities (including but not limited to stockpile sites turnaround points, construction water, and material sources and Deposition Areas for Surplus Materials if known)[ ]  the Limit of Clearing and boundary of CHMP, CHFA, or CHMA where applicable[ ]  environmental management measures and strategies in EMP(C)[ ]  staff responsibilities and contingencies to be used when operating under an approved departmentally‑held species management program[ ]  procedures for notifying of potential environmental incidents or non‑conformances, and[ ]  contingency plans and management procedures for unplanned events. |  |  |
| EMP(C) Specific Element Requirements |
| General |
| Clause 8.1 | The EMP(C) covers E&CH management of all the Works under the Contract including Temporary Works and ancillary activities including sourcing water, gravel, side tracks, stockpile sites, Contractor’s Site facilities and camps, and turnaround points and Deposition Areas for Surplus Material. |  |  |
| Water Quality |
| Clause 8.2 & Annexure CI 2 | EMP(C) shall include descriptions and diagrams of:[ ]  potentially affected waterbodies and waterways within 200 m of the Site[ ]  concentrated discharge locations from the Site, and[ ]  concentrated flow paths to waterbodies and waterways within and adjacent to Site.[ ]  list works under the Contract (including ancillary activities and temporary works) at risk of impacting water quality, including:1. the potential contaminants
2. locations of Works in relation to waterbodies and waterways, and
3. flow paths to waterbodies and waterways within and adjacent to Site.

[ ]  water quality management strategies and measures that are reasonable and practical and brief risk-based justification has been provided (Clause 8.1)[ ]  water quality monitoring plan (commensurate with risk ‑ see notes), and[ ]  contingency plans or procedures for events causing adverse water quality impacts or complaints received from the public. |  | Low water quality risk* monitoring = visual
* monitoring plan – locations, frequency and methodology

Medium and high water quality risk* monitoring = field and laboratory testing
* Monitoring plan – meets DEHP Sampling Manual (sampling scope, design, spreadsheet template)
 |
| Cultural Heritage (MRTS51) |
| Clause 8.4 & Annexure CI 3.1 – 8 | EMP(C) shall include descriptions and diagrams of:[ ]  the Principal’s Cultural Heritage Officer contact details[ ]  location of known sites / places of cultural heritage significance within and adjacent to the work Site[ ]  how each Cultural Heritage site has been flagged or fenced off to prevent harm[ ]  work under the Contract likely to occur in proximity to sites / places of cultural heritage significant[ ]  Cultural Heritage management measures that are reasonable and practical and brief risk‑based justification has been provided (Clause 8.1)[ ]  a monitoring plan for Cultural Heritage (Aboriginal, Torres Strait Islander and historical / European), and[ ]  assessment, consultation and approval outcomes for any proposed Deposition Areas for Surplus Material, if applicable. |  |  |
| Noise (MRTS51) |
| Clause 8.5 & Annexure 4.1 - 3 | For projects with Low Noise RiskEMP(C) shall include descriptions and diagrams of:[ ]  location of any sensitive receptors and critical facilities, infrastructure and utilities in proximity to the project[ ]  noise (including air blasting overpressure) generating activities, their locations, work periods[ ]  applicable construction noise criteria for assessment (including Monitoring)[ ]  evaluation outcome of whether Sensitive Receptors will likely be impacted by construction noise[ ]  noise management measures and strategies that are reasonable and practical and brief risk‑based justification has been provided (Clause 8.1), and[ ]  contingency plan for adverse noise impacts. |  |  |
| Clause 8.5 Annexure 4.1 - 4.3 | **Medium and High Noise Risk**A stand‑alone Noise Management Plan has been prepared in accordance with the Noise Code of Practice: Volume 2.Refer to CAS form CAC\_\_\_\_ Noise and Vibration Management (NVMP) Plan to assess the Contractor’s NVMP against the Code of Practice Vol 2. |  |  |
| Vibration |
| Clause 8.6 Annexure 5.1 - 5.6 | **For projects with Low Vibration Risk**EMP(C) shall include descriptions and diagrams of:[ ]  type of vibration sensitive receptors and critical facilities, infrastructure and utilities potentially impacted by Site and their location in relation to Site[ ]  location of significant vibration and air blasting overpressure generating works, within the Site[ ]  applicable construction vibration criteria[ ]  list which sensitive receptors, structures and/or buildings will likely be impacted by construction vibration and air blast overpressure and from what works[ ]  vibration management measures and strategies that are reasonable and practicable to avoid or minimise vibration (human comfort) and vibration (structural / building) impacts and brief risk‑based justification has been provided (Clause 8.1), and[ ]  contingency plan for observed damage to structures (private, public or departmentally‑owned). |  |  |
| Clause 8.6 Annexure 5.1 - 5.6 | **Medium and High Vibration risk**A stand‑alone Noise Management Plan has been prepared in accordance with the Noise Code of Practice: Vol 2Refer to CAS form CAC\_\_\_\_ Noise and Vibration Management Plan to assess the Contractor’s NVMP against the Code of Practice Vol 2. |  |  |
| Air Quality |
| Clause 8.7 Annexure 6.1 - 6.4 | EMP(C) shall include descriptions and diagrams of:[ ]  location of Air Quality Sensitive Receivers to the Site[ ]  Works likely to cause environmental harm from air quality and location of the Works[ ]  prevailing wind direction and speeds (wind rose) generally expected for the Site[ ]  evaluation outcome of which air quality sensitive receivers will likely be adversely impacted[ ]  management measures and strategies that are reasonable and practicable for minimising adverse air quality impacts and brief risk‑based justification has been provided (Clause 8.1)[ ]  where required, air quality monitoring methodology, equipment used, frequency, duration, location of equipment and details of the person undertaking the monitoring assessment[ ]  where required, air quality Compliance Testing methodology, equipment used, frequency, duration, location and details of the person undertaking the Compliance Testing assessment, and[ ]  contingency plan for observations of emissions exceeding criteria. |  |  |
| Acid Sulphate Soils |
| Clause 8.8 MRTS04 Clause 10(Clause 10.2 - 10.7) | Requirements as listed in Clause 5.5 of Annexure MRTS04.1:[ ]  compilation of an Acid Sulphate Soil Management Plan where potentially acid sulfate soils are discovered, and[ ]  testing and reporting of test results for all excavated material that could reasonably be expected to have acid sulfate potential.The testing frequency and reporting shall be as detailed below:* visual testing undertaken by trained personnel shall be continuous throughout the earthwork phase
* field pH testing for both actual and potential acid sulfate soils on all borrow material to be imported to the Works and all material excavated or exposed in the Works in areas specified as having acid sulfate potential. A minimum of one test per soil type shall be carried out, and
* where materials test positive to actual or potential acid sulfate contamination in the field, the Administrator shall be notified immediately. Such soils shall not be used on the Site until the results of subsequent quantitative laboratory testing negates the results of the field testing.

[ ]  soil collection, handling and transport (as per MRTS04, Clause 10.4.5)[ ]  method for treatment of all acid sulfate soils encountered, and[ ]  method for treatment of all runoff from stockpiles of acid sulfate soils, and exposed groundwater potentially contaminated by acid sulfate soils. |  |  |
| Contaminated Sites (MRTS51) |
| Clause 8.9.5 & AnnexureClause 7.1 - 7.3 | EMP(C) shall include descriptions and diagrams of:[ ]  location of known contaminated sites and type of insitu contaminants[ ]  reasonable and practicable management measures and monitoring requirements applicable to each contaminated Site and brief risk-based justification[ ]  where required, a Contaminated Site Management Plan including methods of assessment, remediation and Compliance Testing, and[ ]  contingency plan for the event of contaminants leaving Site or being discovered on Site. |  |  |
| Native Fauna |
| Clause 8.10 & Annexure 8.1 - 4 | EMP(C) shall include descriptions and diagrams of:[ ]  location of known native fauna habitat and breeding places in relation to Site and Limits of Clearing[ ]  identification of activities that are likely to impact fauna, habitat or animal breeding places and the nature of impacts[ ]  identification of mapped Fish Passage Waterways impacted by the Work under the Contract and location of any temporary Waterway Barrier Works[ ]  reasonable and practicable management measures and strategies for native fauna, breeding places, habitat and fish passage and brief risk‑based justification (Clause 8.1)[ ]  details of any Suitably Qualified and Experienced Person to be utilised for fauna management[ ]  contingency plan including procedures for fauna rescue and release including treatment of fauna injured by Work under the Contract, and[ ]  contact details for emergency wildlife care shall be included on the Site’s emergency contact list and within the Fauna Management Plan. |  |  |
| Vegetation (MRTS51) |
| Clause 8.11.4 & AnnexureClause 9 | EMP(C) shall include descriptions and diagrams of:[ ]  a drawing depicted:1. location and dimensions of Contractual Limits of Clearing (as specified in Clause 8.11.1 of this Technical Specification)
2. limits of Contractor’s intended vegetation clearing (demonstrating minimised clearing area)
3. restrictions to clearing in waterways (as specified in Clause 7.2.2 of MRTS04)
4. any areas required for clearing additional to the Contractual Limit of Clearing
5. locations of Significant Vegetation and any specific trees identified in Clause 9 of Annexure MRTS51.1 or Annexure MRTS04.1 to be retained on Site
6. a program of clearing operations demonstrating progressive clearing stages where practicable

[ ]  identification method for the Limit of Clearing and method of identifying Significant Vegetation[ ]  reasonable and practical management measures and strategies to minimise the area of vegetation clearing and brief risk-based justification including where reasonable and practicable:* progressive vegetative clearing
* progressive rehabilitation, and
* protection of individual trees or vegetation to be retained.

[ ]  where required, Environmental Approval for additional clearing. |  |  |
| Biosecurity Management |
| Clause 8.12.4 & Annexure 10.1 - 2 | EMP(C) shall include descriptions and diagrams of:[ ]  details of the Biosecurity Matter including photo, location, the Biosecurity Matter category and respective management measures[ ]  location of applicable biosecurity management zone boundaries in relation to Site (including ancillary activities such as water source, stockpile sites, gravel sources, Deposition Areas)[ ]  identify movement of Biosecurity Matter carriers across biosecurity zone boundaries and Biosecurity Instrument Permit details pertaining to these movements[ ]  reasonable and practicable management measures for preventing the spread of Biosecurity Matters within Site and out of the Site[ ]  reasonable and practicable management measures to exclude access to known areas of Biosecurity Matter infestation such as flagging[ ]  location of clean‑down facility. If temporary clean‑down bay is to be constructed on Site, specify:* design and maintenance requirements and procedures
* method of contain wastewater and restrict movement of biosecurity matters particularly to Waterways and drainage lines
* management measures to contain biosecurity matter, sediments, oils and greases, and
* prevention of vehicle recontamination.

[ ]  specific monitoring procedures for biosecurity matters (method, timing, frequency, duration, parameter to be monitored, criteria / outcome measured against)[ ]  pesticide treatment schedule addressing method of control, chemicals, locations, timing of works, and[ ]  details of biosecurity Matter control operator licence. |  |  |
| Waste 2 Resource (MRTS51) |
| Clause 8.13 & Annexure 11.1 | EMP(C) shall include descriptions and diagrams of:[ ]  estimates of type and quantity of Waste expected to be generated and their source[ ]  waste management strategies (avoidance, reuse, recycling, energy, recovery, disposal)[ ]  waste containment locations[ ]  Deposition Areas for Surplus Material, if applicable, and associated mitigation or management measures[ ]  all mulch stockpiles identified on plans with maximum dimensions specified, and[ ]  the procedure for measuring and recording waste generated, reused, recycled and disposed of under the Contract.  |  |  |
| Chemicals and Fuels (MRTS51) |
| Clause 8.14.3 | EMP(C) shall include descriptions and diagrams of:[ ]  list chemical and fuels stored on Site in volumes greater than 250 L, the maximum quantity to be stored at any one time, storage location, management and containment practices for storage[ ]  type, location, size of spill response equipment stored on Site[ ]  reasonable and practicable management measures for avoiding contamination or Discharge to land or water from fuels and chemicals and brief risk‑based justification[ ]  details of any approvals held in relation to fuel and chemical storage or use, and[ ]  contingency plan in the event of a contamination or discharge. |  |  |
| Material Sourcing (MRTS51) |
| Clause 8.15.4 & Annexure 12.1 | EMP(C) shall include descriptions and diagrams of:Water Sourcing[ ]  key water consumption activities under the Contract[ ]  the estimated volumes of water[ ]  the identified construction water source(s) and proposed volume of take[ ]  legislative requirements and applicable conditions for take of water and whether notification to other users has been undertaken[ ]  water efficiency strategies to be utilised under the Contract, and[ ]  procedures for monitoring against requirements of any applicable Environmental Approval (exemption) (that is, capacity level of non‑flowing source).Construction Material[ ]  identified gravel, fill or sand sources[ ]  distance to Site[ ]  access track and stockpile area requirements[ ]  associated approvals and conditions[ ]  proposed volume of take[ ]  progressive rehabilitation processes, and[ ]  activity based management plan for extraction sites.Other[ ]   Other construction material requirements identified sources and management measures. |  |  |
| Supplementary Conditions |
| Annexure Clause 14 | *[enter where applicable]* |  |  |