Checklist – CAC057M
Erosion and Sediment Control Plan (MRTS52)

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

Legend:  C Conformance  NC Non‑conformance  O Observation  N/A Not Applicable  NFV  Not Fully Verifiable

This checklist is designed to assist the Contract Administrator to determine if a submitted Erosion and Sediment Control Plan (ESCP) should be deemed suitable. For high risk projects, the Contractor is required to obtain and submit an independent assessment of their  ESCP by an appropriately qualified person. The independent assessment report would fulfil the requirements of this ESCP checklist.

| Reference | Requirements | Addressed | Comments / Observations |
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| Clause 6.2ESCP requirement a) | 1. Does the plan specify the area and Works that the plan is applicable for?

Is this area appropriate? That is, does the plan cover all proposed exposed areas including full extent of cleared areas, stockpiles, Site compound / storage areas and side tracks? |  | For low risk sites, the ESCP one drawing with associated technical notes on timing of installation of controls and reference to standard drawings may be sufficient. For high risk and large scale projects the ESCP is likely to consist of multiple sets of drawings for various areas and stages of cut / fill for project. |
| Clause 6.2ESCP requirement b) | 1. Major features

Are major features shown on the plan (dispersive soils, waterways)? |  |  |
| Clause 6.2ESCP requirement c) | 1. Flow direction / Contour lines

Does the plan identify the direction of flow of water through contour lines or other? |  |  |
| Clause 6.2ESCP requirement d) | 1. Are the type and location of control measures clearly identified?
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| Clause 6.2ESCP d i) | 1. Erosion Control Measures

Does the plan identify methods to minimise soil exposure? Soil binders, geofabric, hydro mulching and early revegetation.Are these controls suitable?This can also be addressed by methods such as undertaking Works in key risk areas at time of year when rainfall erositivity is the lowest, clearing of vegetation only undertaken immediately prior to Works being actively worked and so on. |  | DEHP states: Clearing large areas of land at one time, may deliver some cost benefits due to economies of scale. However, this benefit needs to be considered in terms of the increased risk of causing water contamination and cost of temporary stabilisation. It is the responsibility of those that create the risk to manage that risk.This requirement may be met by statements or notes such as ‘all areas not worked for 2 weeks to be treated with PAM’. |
| Clause 6.2ESCP d ii) Clause 1.4 | 1. Drainage

Is clean stormwater diverted around or through the Site?Will manner of diversion keep stormwater clean (that is, not cause erosion)? |  | Evidence: Plan may need to show catchments, drainage lines to assist in determining. (Clause 6.2).For high risk sites, calculation for size of drainage lines should be provided. |
| Clause 10.2 | 1. Do all areas of the Site subject to concentrated stormwater flows, have drainage controls which have been designed to meet MRTS52 requirements?
 |  | Calculations required as evidence. Drainage to be designed as per Table 8 in MRTS52. |
| Clause 6.2ESCP d iii) | 1. Sediment Controls

For medium and high risk sites, does the plan show the runoff from all areas which are not effectively stabilised draining to sediment basins?Sediment basins recommended for projects where catchments and exposed soil >10000 m2 and soil loss >150 t/ha/year. |  | If answer is no, are there additional controls for areas that do not drain to sediment basin? |
| Clause 6.2ESCP diii) | 1. For low risk sites, does the plan show the runoff from all areas which are not effectively stabilised draining to suitable Type 2 or Type 3 controls?
 |  | Refer to IECA*‘Sediment Control Classification System’* design guideline for further information. |
| Clause 10.2 | 1. Is each sediment basin sized such that:
2. it has the capacity to contain all the stormwater runoff from at least the 80th percentile 5 day rainfall event; and
3. the capacity to store expected sediment runoff volumes over set maintenance period (not less than 2 months), and
4. sediment basin emergency outlet and embankments sized in accordance with MRTS52 Table 8.
 |  | Evidence: Calculation sheets. |
| Clause 6.2ESCP d iv) | 1. Are sediment basin / stormwater discharge points nominated? Are they suitable?
 |  | The discharge point must be stable so that erosion does not occur.The greatest environmental risk from coagulants / flocculants exists when overdosing has occurred. This risk can be mitigated by discharging water from sediment basin that has been flocced into a drainage channel rather than directly into a waterway. For projects using coagulants other than gypsum, this practice is recommended. |
| Clause 6.2 ESCP d v)Clause 8.1.4 | 1. Site Exit Points

Have Site access points been identified and appropriate controls specified? |  | All exit points to bitumen roadway to have wheel wash. |
| Clause 6.2 ESCP | 1. Timing / staging of controls

Does the plan identify the installation sequence and timing of installation of controls? |  | For low risk projects, detailed timing not required - MRTS52 specification requires that all controls to be installed as soon as possible. |
| Clause 6.2DEHP SWM 2.1c | 1. Are the drainage, velocity, erosion and sediment controls chosen appropriate to the Site characteristics, that is:
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|  | 1. Seasonal conditions
 |  | Works should not occur where monthly R factor> 1500. Where R factor > 285, ensure drainage controls sized for intensive rainfall events and protective material readily available on‑site / on short notice. |
|  | 1. Soil Type – particularly dispersive soils
 |  | Examples of appropriate design for dispersive include:* treat soil particularly if ESP > 6%
* minimise cut into soil, for example, use catch banks or berms, rather than catch drains to divert water, ensure all temporary drains are spoon rather than v‑drains
* disperse water rather than concentrating flows.
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|  | 1. Topography – slope factor, landform
 |  | Where slope factor risks are significant, need to ensure catch drains / check dams to reduce velocity. Energy dissipaters to be specified for end of batter chutes and Type 1 controls to manage sediment load. |
|  | 1. Local hydrology and drainage
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|  | 1. Specific project issues
 |  | If waterway runs through Site / directly adjacent, maintain buffer zones as long as possible. Consider species breeding times in timing of project. |
| Monitoring and Management |
| SWMPClause 6.2g | 1. Is there a contingency plan for severe wet weather event to minimise likelihood of failure of ESC measures?
 |  | These may be included in SWMP (Severe Weather Management Plan) or ESCP. |
| Clause 6.2h | 1. Personnel

Have the ESCP(S) been prepared and signed off by person with required experience? |  | Requirement is:* Low risk – person with training as environmental representative and five years' experience in construction.
* General – Appropriately Qualified Person (AQP).
* High Risk – AQP to develop, plus reviewed by an independent AQP.
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| Recommendation |
|  | The ESCP is suitable as an overarching ESCP. Progressive ESCP sub‑plans detailing specific erosion and sediment controls for particular Work areas, are required to be submitted prior to work in each area. |
|  | The ESCP is considered suitable for <insert area / Works and so on>.It is recommended that it be assessed as suitable by the Administrator. |
|  | The Erosion and Sediment Control Plan (ESCP) is not considered suitable. Works may not commence until the ESCP is revised, resubmitted and assessed as suitable by the Administrator. |

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

This checklist is designed to replace: Preparing an ESCP checklist in Appendix 13A of the Road Drainage Manual and the Erosion and Sediment questions of the CAS Manual. EMPC checklist (CAC003M) is suitable for low risk projects otherwise this checklist should be used. It has been based upon MRTS52, the previously‑mentioned checklist, IECA checklist for ESCP Chapter 5.10 Book 1, and the DEHP Summary Sheet / Checklist ‘Standard Work Method for the assessment of lawfulness of releases to waters from construction sites’