



Transport
Roads & Maritime
Services

GUIDANCE NOTE: ENVIRONMENTAL INSPECTION REPORTING

June 2015

About this release

Title	Guidance Note: Environmental Inspection Report
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2	29 Aug 2014	General editorial and formatting corrections Reference to EPS More guidance on issue description Change priority to "recommended timeframes" Revising definitions of traffic light status Web Content Accessibility Guidelines 2.0 (WCAG 2.0)
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I Introduction

Environmental inspections are an important proactive tool for ensuring that Roads and Maritime Services (RMS) construction and maintenance activities comply with contractual and legislative requirements. The inspections provide information on the environmental performance of RMS and its contractors and assist in maintaining the ongoing positive reputation that RMS holds with our public and private sector stakeholders. This guidance note outlines the purpose of the Environmental inspection process and provides guidance on:

- the assessment and communication of any issues observed;
- the determination of the priority risk of individual site issues; and
- the selection of the 'traffic light' overall performance status of the site.

2 Completing the report

Environmental Inspection Reports on the Roads and Maritime Services Environmental Performance System (EPS) are to be completed in accordance with the instructions provided in the EPS Guidance note. The Reports should document the observations noted during environmental inspections and aim to reduce emergent environmental risks during the project lifecycle. The Environmental Inspection Reports should:

- deliver consistent reporting;
- provide comprehensive, measurable and meaningful performance indicators for contractors;
- ensure that RMS environmental performance expectations are being considered during works in progress;
- identify those matters requiring consideration and/or action during daily site activities; and
- provide a means for the RMS to measure environmental performance during the contract review process.

The Environmental Inspection Report is designed to formalise the inspection process between Infrastructure Delivery / Asset Maintenance Delivery / RMS contractors and RMS Environment staff. The report is to be completed in EPS by RMS Environment staff two working days following the inspection process with actions and recommended priorities. It is advisable to leave written notes with the project that summarises the agreed outcomes of the inspection.

A hand written copy from the duplicate inspection form booklet is to be left with the appropriate person on all RMD and RMCC projects immediately following the inspection. The inspection report generated from EPS is also to be emailed to the relevant RMD SEQO/C

The responsibility for addressing the issues and completing the actions lies with the contractor or the relevant delegated Roads and Maritime project manager. In any case, it is important that the relevant Environment Branch officer maintains oversight of the progression of the EPS workflows to ensure that actions are addressed and closed out in a timely manner or elevated to as discussed in this guidance.

3 Describing Issues

If an issue is important enough to raise in an inspection report, it is important enough to clearly describe the issue and to be able to link it to a required outcome

During the site inspection, the environment officer will make observations and review documentation to identify potential environmental and operational risks. It is important that the issue is clearly described. If the issue and risk are not properly clarified, there is a risk that the site staff may not understand the risk or the underlying cause of the issue and that the subsequent action to close out the item will not adequately resolve the issue.

In summary, issues should be described in the following manner and as described in the table below.

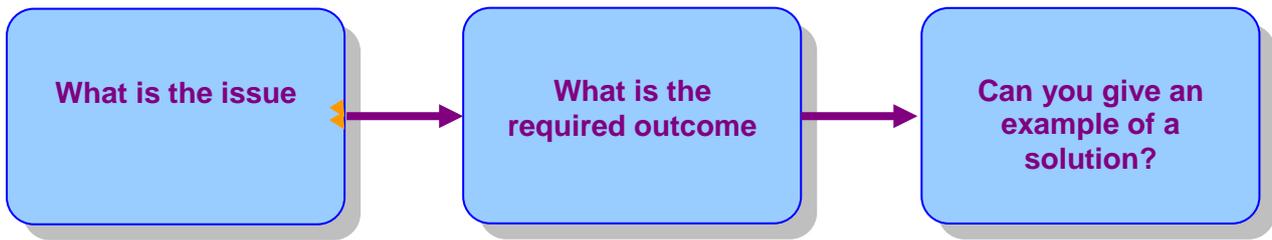


Table 1: Describing¹ the Issue

Point	Example
What is the issue	<ul style="list-style-type: none"> • Sediment fence not installed in accordance with G38. • Perimeter exclusion damaged. • The concrete wash out pit requires repair. • Sediment basin is at storage capacity. • Sediment basin inlet is not adequately stabilised as per Erosion and Sediment Control Plan. • Check dams are full of sediment.
What is the required outcome	<ul style="list-style-type: none"> • To ensure compliance with the EPL condition O1.2. • As described in the project CEMP. • In accordance with the ERSED plan. • To prevent pollution of waters. • Sediment basin needs cleaning to ensure design capacity is restored. • Sediment basin inlet requires stabilisation to avoid erosion. • Check dams require cleaning to ensure effective operation.
(if appropriate) Can you give an example of a solution?	<ul style="list-style-type: none"> • As discussed on siteAs employed elsewhere on site • As discussed on site, sand bag check dams should be removed, sediment cleaned and then check dams re-instated. • Sediment basin inlet stabilisation could include lining the inlet with plastic and geotextile fabric and / or course rock.

¹ wherever possible the description should use commonly accepted terminology and refer back to specification clauses/ CEMP requirements, licence conditions or applicable legislation in describing the issues observed.

It can also be advantageous to give an example on how to address the issue based on discussions on sites (eg. as discussed on site, additional controls are required to separate clean and dirty water). In any case, it is important not to be too prescriptive in the description of a solution in order not to be an instruction to a contractor or to inhibit innovation or alternative solutions. Where a project has been identified as having high erosion and sediment control risk though, the appointed soil conservationist may provide specific recommendations (which the contractor can choose whether or not to adopt).

For Asset Maintenance projects however, the environment officer undertaking the inspection forms a critical part of the RMS project team and it is recommended to provide detail in the options available to address the issues raised. For example, words in the following manner could be used *'recommend the use of a mulch bund at chainage 1500 and 1625 to create temporary check dams with a spill way along the drainage line.'*

The inspection report is also an opportunity to acknowledge positive environmental performance on the site. This may include a demonstration of innovation or proactive actions taken to avoid environmental risk (i.e. Demonstrating good practice - Vehicles working adjacent to the school have been fitted with broad spectrum reversing alarms) or where it is evident that the contractor is performing well environmentally.

3.1 Grouping or Splitting Issues

As described above, the inspection process should provide measurable and meaningful environmental performance measures for contractors by identifying matters requiring action during daily site activities.

If you find that the inspection is identifying a large number of issues (for example more than 10 or so), it is recommended to consider **grouping** issues rather than providing construction and maintenance project managers with an exhaustive list of potentially repetitive location specific issues or where a variety of issues are evident in one area. This will also assist in managing the time required to fully process the complete inspection work flow in EPS, from the environment officer through to final approval.

There are a number of successful methods currently employed by environment officers. Examples of grouping strategies are outlined in the table below:

Table 2: Describing the Issue – grouping

Group	Example
Issue type	<ul style="list-style-type: none"> • Concrete washout bays throughout the site are not constructed in accordance the project CEMP. • Sand bag and mulch check dams are not installed in a consistent manner in accordance with RMS standard drawings. • Batters require smoothing prior to ASS emulsion sealing (for example at chainages 1234, 2323,3333 etc)
Location (NOTE: ask the project representative for the appropriate location terminology)	<ul style="list-style-type: none"> • The ERSED plan for Cut 2A requires updating and implementation of revised management measures. • Culverts 23, 24 and 25A require enhanced batter protection above headwalls. • Velocity controls need to be installed in the sediment basin 6 catchment to prevent scouring of the basin inlet. • Drainage lines in the compound are eroding and require stabilisation.

If however the number of issues are independent and not similar, this might lead to increasing the frequency of the inspections until the number of issues is manageable on the project and its performance is more acceptable or recommending a follow up inspection.

3.2 Noting other Issues

Environmental inspections provide an opportunity to note actions or issues for future reference. They can act as a proactive tool for notice activities or actions that have or will lead to positive environmental outcomes.

The inspection reports can also highlight works in progress or proposed program of works that can be reviewed at the next inspection. Often, these notes will not require due date or close out comments and can be included for information only.

Example descriptions of a noteworthy issue include:

- (i) Note – the contractor has indicated that the flocc tank on site will be relocated if rainfall is predicted and would be used to dewater the footings of the retaining wall.
- (ii) The construction of the eastbound carriageway is scheduled to commence next month. It is noted that CEMP clause X requires the progressive ESCP to be submitted for review and approval 14 days prior to the commencement of this work.

3.3 Assigning Inspection Codes

As far as possible, ensure that the most relevant Environmental Inspection Codes (Appendix 1) are used when categorising an issue.

3.4 Identifying Repeat Issues

Review previous inspection reports for the project to identify repeat issues. Repeat issues should be identified by identical (or very similar) environmental inspection codes/categories and contain similar issues or comments for a similar element of works and/or work practice. The repeat issues need to be identified by referencing the previous report date that the issue was identified in, and the item number of the issue.

4 Determining the Issue Risk

Determination of the environmental risk of an issue can be based on the likelihood of actual or potential harm to the environment and whether the consequences of that impact are off-site or on-site. This may also include consideration of the potential likelihood of a rainfall event. Risk can also be assessed by whether an incident or a breach of legislation has occurred based on the RMS Environmental Incident and Classification Procedure.

The risk is determined by the environment officer whereas the accompanying timeframe to close out the issue can be negotiated with the relevant site manager (see section 4.2, however based on each risk, there are recommended timeframes that should be considered).

It is also noted that a decision on the risk of an issue should not be influenced by the number of issues requiring action on site. For example – If there are three basins on site which require urgent action to dewater and rainfall is predicted however there are multiple other issues on site including damaged exclusion fencing around a heritage item, the heritage item issue should remain a high risk and should not be reduced to a medium in light of the action also required at the sediment basins. **In other words, the risk for a particular action should be considered independent of other actions on site.**

Where the recommended risk is disputed, it should be noted on the report and the matter escalated to the RMS Project Manager and the RMS Regional Environmental Manager if appropriate. Guidance on the determination of the issue risk is provided below in Table 3.

Table 3: Issue risk assessment and response.

Issue Risk	Definition	Recommended Timeframe	Comment
Urgent	Actual or imminent off-site environmental harm due to a failure or absence of controls. Actual or potential breach of legislation or contractual requirements	To be addressed straight away and closed out on the day of inspection	Urgent issues require a swift, reactive approach and include situations where: <ul style="list-style-type: none"> • a real impact on the environment has occurred and something is wrong with the method by which the environment is being protected and harm could continue to occur if something is not done to prevent it. • there is imminent legislative and contractual non compliance (including Environment Protection Licence or Conditions of Approval) that may result in environmental harm.
High	Potential off-site environmental harm due to a failure or absence of controls.	within 24hrs	High issues require a swift proactive approach. These issues may include instances where controls have not been installed in accordance with the CEMP or best practice guidelines that may have the potential to lead to direct environmental harm. These situations can be viewed as opportunities to plug system gaps and should be actively sought out by encouraging their identification and prevention.
Medium	Actual or potential on-site environmental impacts due to a failure or absence of controls	within 3 working days	On-site actual and potential impacts are usually within the footprint of the site and should be managed by limiting environmental harm to a level that is as low as reasonably practicable. Priority should still be given to the prevention of off-site impacts and therefore a medium level of risk is appropriate
Low	Non-conformity with CEMP or any other requirements and standards which are applicable to the project, but will not result in direct environmental harm.	within 5 working days	These issues may include instances where controls have not been installed in accordance with the CEMP or best practice guidelines that may not result in direct environmental harm, or new potential risks that have not been previously identified or covered by the CEMP. Low risk issues could also include the need to start planning environmental controls for future stages of work. Examples could include a lack of identification signage on a sediment basin, or the need to prepare an environmental work method statement for upcoming utility works.

Note: The recommended risk does not remove the responsibility of the contractor to ensure that the site is complying with legislative and contractual requirements at all times.

4.1 Agreeing on Timeframes

It is critical that timeframes to address and close out issues raised during the inspection are discussed (and hopefully agreed) with the relevant responsible site personnel to ensure that the timeframes are achievable.

The timeframes agreed for each issue should reflect the level of risk, but also consider the construction process and other relevant factors where possible. For example, for an issue rated as medium priority that only has the potential to cause on-site environmental harm, if no rainfall is predicted it may be appropriate to agree on a four day timeframe that would ensure the issue is completed prior to the weekend shutdown. This flexible approach is in the spirit of co-operative contracting, and will often assist in creating a good working relationship with the construction team that could result in improved environmental outcomes.

Agreed timeframes also allow the environmental performance of the site to be objectively measured and appropriate action taken where necessary. It is appropriate to change the traffic light status of a site if issues are repeatedly not closed out on time, and this can only be objectively done if timeframes are assigned.

Where timeframes cannot be agreed upon, the reasons and the disagreement should be noted in the inspection report. In any case, as environmental professionals, Roads and Maritime officers have the responsibility to objectively determine and record the priority of an action based on the environmental and legislative risk and should be able to support this position in the inspection report. Where disagreements regarding urgent or high priority issues exist, staff should escalate the issue immediately to their Manager to discuss the management options.

5 Assigning Environmental Status – traffic light system.

The “traffic light” status (red, amber, green) of the site is to be determined by Roads and Maritime Environment staff at the end of the inspection and is an indicator of the overall environmental performance of the site on the day of the inspection and is non-negotiable. The status is derived from the issues raised during an inspection and their recommended risk. The traffic light status indicates the effectiveness of environmental management measures and practices evident across the site during the inspection.

A simple relationship is drawn between the issue risk (table 3, above) and inspection status (table 4, below) where the highest risk identified during the inspection determines what status the site will be. The reasoning behind this simplification is that an inspection is a snapshot of the entire site and if just one high risk issue is raised then it can be inferred that there may be more. It should also be noted that an ‘amber’ status is not a bad outcome and simply an indication of a site with room for improvement in environmental management.

An explanation is provided below in Table 4 on how each traffic light should be interpreted.

Table 4: Traffic Light Status

Status	Definition
RED	<ul style="list-style-type: none">• actions required to address urgent risk issues.• satisfactory actions not taken for high risk issues identified on the previous inspection.• a Category 1 incident has been identified during the inspection.
AMBER	<ul style="list-style-type: none">• actions required to address high and/or medium risk issues.• satisfactory actions not taken for previous medium or low risk issues on the previous inspection.
GREEN	<ul style="list-style-type: none">• actions required to address low risk issues that will not directly cause environmental harm.• site demonstrates good environmental management with no action required to avoid environmental harm.

Appendix I Environmental Inspection Codes

Category	Sub category
EROSION AND SEDIMENT CONTROLS - ESC	
ESC – CII	ESC Controls incorrectly installed – refer standard drawings
ESC - CIS	Controls not sufficient
ESC - MDT	Mudtracking
ESC _ ESNM	ESC not maintained (on EPS use EPS ESNM 'Other E\$SC')
ESC - DAU	Disturbed Area not stabilised
SEDIMENT BASINS - BAS	
BAS - SBNI	Sediment Basin not installed and/or incorrectly installed
BAS - BNM	Sediment Basin not maintained
BAS - DW	Dewatering issues
STOCKPILES – SP (NOTE WASTE CATEGORY ALSO)	
SP - SPU	Stockpiles not managed / stabilised (incl TANNIN production)
CONTAMINATION – SPL	
SPL - SNC	Spill not cleaned up
SPL- NSK	Spill kit not on site or maintained
BUNDED STORAGE - BS	
BS - IAS	Inappropriate storage
BS - CWO	Concrete wash out
ABORIGINAL HERITAGE - AH	
AH –HIU	Aboriginal heritage unprotected
AH - HII	Aboriginal heritage impacted
NON ABORIGINAL HERITAGE - AH	
NAH – HIU	Heritage items unprotected
NAH - HII	Heritage items impacted
FLORA AND FAUNA - FF	
FF – CNA	Unapproved clearing or trimming of vegetation
FF - LCND	Limits of clearing not delineated
FF – VDV	Vehicle damage to vegetation (incl access tracks)
FF - WNM	Weeds not maintained
REVEGETATION _ RV	
RV - FRV	Failed revegetation
RV - PSP	Poor surface preparation
RV - RVNM	Revegetation not maintained
COMMUNITY ISSUES - COMM	
COM - NSH	Non standard hours not communicated
COM - CUI	Community uninformed
AIR QUALITY- AIR	
AIR - UCL	Uncovered loads
AIR - EXE	Lengthy exhaust emissions
AIR - USD	Uncontrolled dust from site dust
WASTE MANAGEMENT - WAS	
WAS - IWS	Inappropriate waste storage / s143
WAS - IWD	Inappropriate waste disposal / s143
NOISE AND VIBRATION - NV	
NV - NIPR	Noise impacts on adjacent properties
NV - VIPR	Vibration impacts on neighbouring properties
DOCUMENTATION - DOC	
DOC - WWA	Works without approval
DOC - ESCP	Progressive ESCPs not up to date.
GENERAL - GEN	
GEN - CGO	Other
POSITIVE COMMENTS – NOTE ALL CATEGORIES HAVE CODES FOR POSITIVE COMMENTS for example ESC – POS	