

Compliance Monitoring/Tracking and Reporting Program Report



Project:	City & Southwest	Date:	8 July 2019
Group:	City & Southwest Project Delivery	Status:	Final
Author:	Environment Manager	Revision:	2.5
Company:	Sydney Metro	File Number:	SM-18-00140490
File Name:	20190708 CSW CMTRP Report.docx		

Revision	Revision Date	Status	Brief Reason for Version	Author Position	Approver Position
1.0	13 Mar 2017	Final	Compliance with Chatswood to Sydenham planning approval Condition A28	Program Environment Manager	Program Director, Planning, Environment & Sustainability
2.4	8 Jul 2019	Final	Changes to the quarterly compliance review process, auditing, business monitoring requirements, minor formatting changes and compliance with Sydenham to Bankstown planning approval Conditions A29 & A32.	City & Southwest Environment Manager	City & Southwest Director, Planning, Environment & Sustainability

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1. Definitions and Abbreviations

All terminology in this report is taken to mean the generally accepted or dictionary definition, except where defined in any applicable planning approvals. Relevant acronyms, abbreviations and terms used throughout this report are explained in Table 1.

Table 1: Acronym, Abbreviation and Term Explanations

	Definitions
AA	(Independent) Acoustic Advisor
C2S	Chatswood to Sydenham
CCR	Construction Compliance Report
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoA	Condition(s) of Approval
Construction	As per the definition provided in the relevant planning approval
CSSI	Critical State Significant Infrastructure
CMTRP	Compliance Monitoring/Tracking & Reporting Program
CTR	Compliance Tracking Register
EAP	Environmental Audit Program
EIS	Environmental Impact Statement
EM	Environment Manager
EPL	Environment Protection Licence
ER	(Independent) Environmental Representative
IEA	Independent Environmental Auditor
EAS	(Independent) Environmental Audit Schedule
NER	Nominated Environmental Representative (Sydney Metro representative)
PCCR	Pre-Construction Compliance Report
PIRMP	Pollution Incident Response Management Plan
REMM	Revised Environmental Mitigation Measure(s)
S2B	Sydenham to Bankstown
Secretary	The Secretary of the NSW Department of Planning and Environment

2. Introduction

2.1. Purpose of this Report

This document has been prepared and structured to address the compliance monitoring/tracking and reporting requirements, and the Environmental Audit Program (EAP) requirements, of the Sydney Metro City & Southwest project Critical State Significant Infrastructure (CSSI) planning approval conditions. The compliance tracking/monitoring and reporting requirements will be implemented throughout construction on all City & Southwest project stages and for at least one year following the commencement of operations in 2024. The EAP requirements will be implemented until the commencement of operations only. Updates to this document will be made on an as-needs basis.

This Compliance Monitoring/Tracking and Reporting Program (CMTRP) report applies to all works conducted under all stages of the Chatswood to Sydenham and Sydenham to Bankstown Staging Reports. The preparation of these staging reports is required under their respective CSSI planning approvals (refer to Section 2.3 for more information on City & Southwest planning approvals).

Table 2 cross-references sections in this report that address each City & Southwest CSSI planning approval requirement that relates to compliance monitoring/tracking and reporting, and the EAP.

2.1.1. Endorsement and Submission to the Secretary

In accordance with the Chatswood to Sydenham (C2S) Condition of Approval (CoA) A29, this CMTRP report must be endorsed by the Environmental Representative (ER) and then submitted to the Secretary of the NSW Department of Planning and Environment (the Secretary) for information prior to the commencement of works. This requirement was complied with in full as demonstrated in Table 2. The ER's endorsement(s) of this document under the C2S planning approval is provided in Appendix 1.

In accordance with the Sydenham to Bankstown (S2B) CoA A29, this CMTRP report must be endorsed by the Environmental Representative (ER) and then submitted to the Secretary for information prior to the commencement of construction. This requirement has been complied with in full as demonstrated in Table 2. The ER's endorsement(s) of this document under the S2B planning approval is provided in Appendix 1.

Table 2: CMTRP and EAP Planning Approval Condition Cross-References

Planning Approval Condition	Condition Requirement(s)	Report Section
C2S – CoA A28	A Compliance Tracking Program to monitor compliance with the terms of this approval must be prepared, taking into consideration any staging of the CSSI [Critical State Significant Infrastructure] that is proposed in a Staging Report submitted in accordance with Condition A12 and Condition A13 of this approval.	This report.

Planning Approval Condition	Condition Requirement(s)	Report Section
C2S – CoA A29	The Compliance Tracking Program must be endorsed by the ER [Environmental Representative] then submitted to the Secretary [of the NSW Department of Planning and Environment] for information before the commencement of works or within another timeframe agreed with the Secretary.	This table and Appendix 1. The first version of this report was endorsed by the ER on 13 March 2017 and submitted to the Secretary on 28 March 2017. The first stage that commenced construction was the Sydney Yard Access Bridge on 17 June 2017.
C2S – CoA A30	The Compliance Tracking Program in the form required under Condition A28 of this approval must be implemented for the duration of construction and for a minimum of one (1) year following commencement of operation, or for a longer period as determined by the Secretary based on the outcomes of independent environmental audits, Environmental Representative Reports and regular compliance reviews submitted through Compliance Reports. If staged operation is proposed, or operation is commenced of [sic] part of the CSSI, the Compliance Tracking Program must be implemented for the relevant period for each stage or part of the CSSI.	Section 2.1. Staged operation is not proposed and operations are planned to commence in full in 2024.
C2S – CoA A37	An Environmental Audit Program for independent annual environmental auditing against the terms of this approval must be prepared in accordance with <i>AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems</i> and submitted to the Secretary for information no later than one month before the commencement of construction or within another timeframe agreed with the Secretary.	Section 4.4.3. Refer to C2S CoA A29 for information on the first version of this report.
C2S – CoA A38	The Environmental Audit Program, as submitted to the Secretary, must be implemented for the duration of construction.	Section 2.1.
C2S – CoA E64(f)	The Proponent must prepare and implement a Business Management Plan to minimise impact on businesses adjacent to major construction sites during construction of the CSSI. The Plan must be prepared before construction and must include but not necessarily be limited to... provision for reporting of monitoring results to the Secretary, as part of the Compliance Tracking Program required in Condition A28.	Section 4.7.1.
S2B – CoA A29	Before the commencement of Construction, a Compliance Monitoring and Reporting Program must be prepared, endorsed by the ER and submitted to the Planning Secretary for information.	This table and Appendix 1. This document was first endorsed by the ER under the S2B planning approval and submitted to the Secretary in July 2019. The first stage planned to commence construction is the Southwest Metro Early Works Stage in August 2019.

Planning Approval Condition	Condition Requirement(s)	Report Section
S2B – CoA A30	Compliance reports of the CSSI must be carried out for the duration of Construction and for a minimum of one (1) year following commencement of Operation . The Department must be notified of the commencement dates of Construction and Operation of the CSSI in the pre-Construction and pre-Operational compliance reports (respectively).	Construction Compliance Reports covering the C2S and S2B planning approvals are being prepared and submitted to the Secretary on a six-monthly basis. The Department will be notified of construction and operation commencement dates in Pre-Construction and Pre-Operation Compliance Reports to be submitted to the Department prior to the commencement of construction and operation (respectively).
S2B – CoA A31	The Construction Compliance Report must provide details of any review of, and minor amendments made to, the CEMP (which must be approved by the ER), resulting from Construction carried out during the reporting period.	Each and every Construction Compliance Report.
S2B – CoA A32	The Compliance Monitoring and Reporting Program in the form required under Condition A29 of this approval must be implemented for the duration of Construction and for a minimum of one (1) year following commencement of Operation, or for a longer period as determined by the Planning Secretary based on the outcomes of independent audits, Environmental Representative Reports and regular compliance reviews submitted through Compliance Reports . If staged Operation is proposed, or Operation is commenced of [sic] part of the CSSI, the Compliance Monitoring and Reporting Program must be implemented for the relevant period of each stage or part of the CSSI.	Section 2.1. Staged operation is not proposed and operations are planned to commence in full in 2024.
S2B – CoA A33	No later than one (1) month before the commencement of Construction an Independent Audit Program prepared in accordance with AS/NZS ISO 19011:2014 – <i>Guidelines for Auditing Management Systems</i> must be submitted to the Planning Secretary.	Section 4.4.3.2. Refer to S2B CoA A29 for information on when this document was submitted to the Secretary.
S2B – CoA A34	Independent audits of the CSSI must be carried out in accordance with: (a) the Independent Audit Program submitted to the Planning Secretary under Condition A33 of this approval and Independent Audit Reports prepared.	Section 4.4.3.2.
S2B – CoA A35	The Proponent must: (a) review and respond to each Independent Audit Report prepared under Condition A34 of this approval; and (b) submit the response to the Planning Secretary within six (6) weeks of completing the audit.	Section 4.4.3.2.
S2B – CoA E37(f)	The Proponent must prepare and implement a Business Management Plan to minimise impact on businesses around stations during Construction . The Plan must be prepared before Construction and must include but not necessarily be limited to... provision for reporting of monitoring results to the Planning Secretary, in accordance with the Compliance Tracking Program required in Condition A29.	Section 4.7.1.

2.2. Background

The NSW Government is implementing Sydney's Rail Future (Transport for NSW, 2012a) – a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers in the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. This 21st century network will deliver new metro stations and more than 88km of new metro rail for Australia's biggest city – revolutionising the way Sydney travels.

Sydney Metro currently comprises of three projects, all of which have been identified by the NSW Government as priority projects:

- **Northwest** (formerly North West Rail Link) – a 36 kilometre project currently under construction and opening in the first half of 2019 with a metro train every four minutes in the peak. Tunnelling has finished and construction is progressing.
- **City & Southwest** – a new 30 kilometre metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood, under Sydney Harbour, through new Central Business District (CBD) stations and southwest to Bankstown. The project is due to open in 2024 with ultimate capacity to run a metro train every two minutes in the peak.
- **West** – the next significant railway infrastructure investment proposed to be delivered by the second half of the 2020s. This project would link the CBDs of Parramatta and Sydney and communities along the way.

Figure 1 provides a map of the three Sydney Metro project alignments.

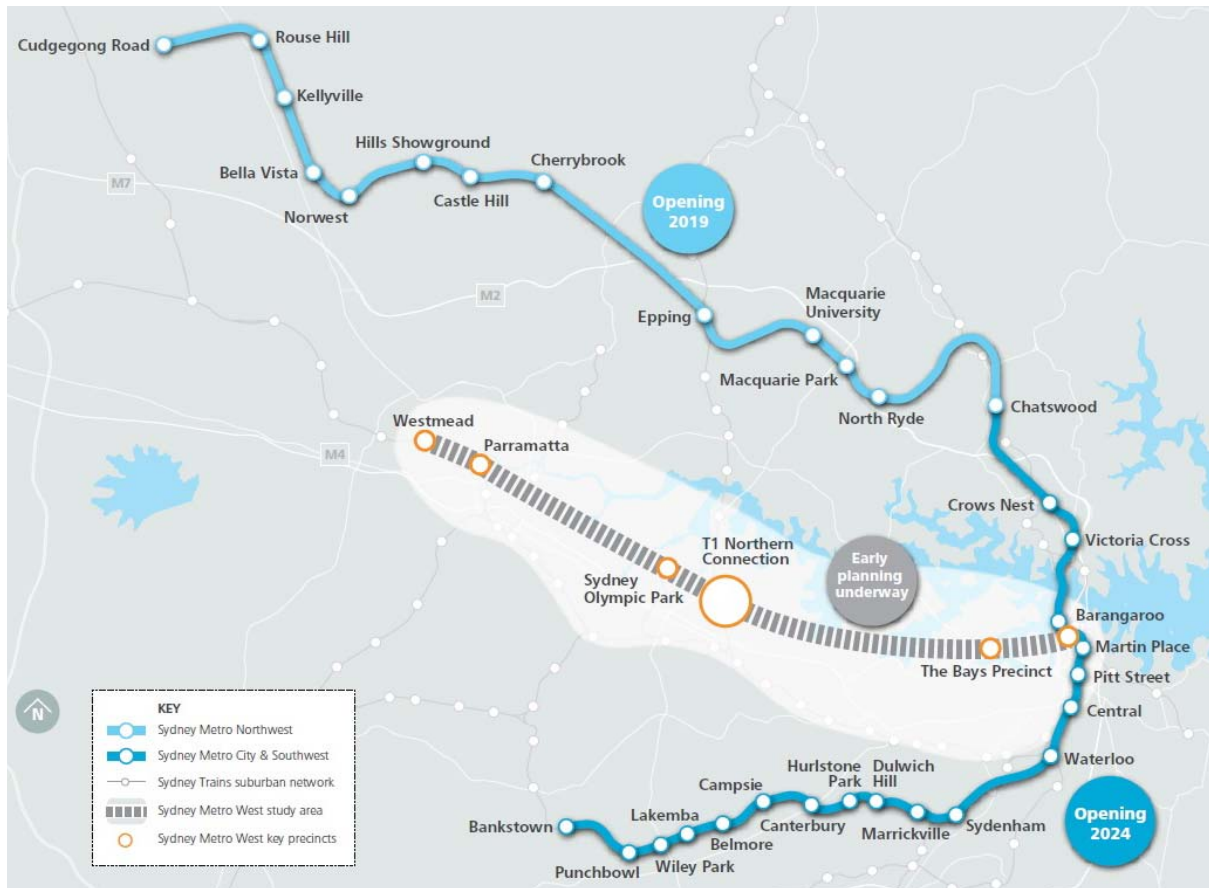


Figure 1: Sydney Metro Project Alignments

2.3. City & Southwest Project and Planning Approvals

The City & Southwest project has generally been declared as a Critical State Significant Infrastructure (CSSI) project by the NSW Minister for Planning. Works within this declaration require planning approval as a CSSI project under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). Works outside the declaration require separate planning approval under the EP&A Act.

2.3.1. CSSI Planning Approvals

The City & Southwest project comprises two core components that are each subject to the CSSI planning approval pathway:

- **Chatswood to Sydenham** – which covers the construction and operation of the Sydney Metro railway between Chatswood and Marrickville. This includes the delivery of 7 new metro stations and 15.5 kilometres of twin railways tunnels from Chatswood, beneath Sydney Harbour and the Sydney CBD, to Marrickville. The Chatswood to Sydenham component was subject to the Chatswood to Sydenham Environmental Impact Statement (EIS) and was granted planning approval on 9 January 2017.
- **Sydenham to Bankstown** – which covers the construction and operation of the Sydney Metro railway between Marrickville and Bankstown Stations. This includes the upgrading of 13.5 kilometres of the Sydney Trains T3 Bankstown Line between the Marrickville and Bankstown Stations. This component is subject to the Sydenham to Bankstown Upgrade EIS and Sydenham to Bankstown Submissions and Preferred Infrastructure Report that were granted planning approval on 12 December 2018.

Over-station developments are subject to separate planning approval processes.

2.4. Project Delivery, Staging and Timing

Refer to the Chatswood to Sydenham and Sydenham to Bankstown Staging Reports for the latest information on project delivery, staging and timings.

2.5. Key Roles & Responsibilities

Each stage of the City & Southwest project will adopt the following key environmental roles:

- **Sydney Metro Nominated Environmental Representatives (NER)** – This role facilitates environmental management processes for Sydney Metro and has assigned responsibilities in various environmental procedures. This person will also participate in environmental surveillance activities on behalf of Sydney Metro. There is at least one NER assigned to each major contract.
- **Contractor's Environment Manager (EM)** – This role represents the contractor for each specific major contract and is responsible for all aspects of environmental management on a contract.
- **Environmental Representative (ER)** – This role acts as an independent point of contact for all environmental and planning approval compliance matters. Both the C2S and S2B planning approval conditions require the appointment of an ER. Refer to C2S CoA A24 and S2B CoA A26 for a comprehensive list of the ER's responsibilities under the respective CSSI planning approvals.
- **Acoustic Advisor (AA)** – This role acts as an independent point of contact for all noise and vibration related matters under the C2S planning approval only. Refer to C2S CoA A25 and A27 for a comprehensive list of the AA's responsibilities under the C2S planning approval. The S2B CoAs do not require the appointment of an AA.

3. Compliance Management

3.1. Construction Environmental Management Framework

The C2S and S2B planning approval documents include the Sydney Metro *Construction Environmental Management Framework* (CEMF). The CEMF represents Sydney Metro's minimum requirements for environmental management and specifies a standard framework that each major contractor must establish and document in their Construction Environmental Management Plan (CEMP). Some of these requirements specifically relate to the CMTRP, including:

- Compliance management and reporting,
- Training, awareness and competence,
- Environmental monitoring, inspections and auditing,
- Emergency and incident response, and
- Environmental non-compliances.

Compliance with the CEMF is a contractual and planning approval (e.g. CoA C1 and C3) requirement for all City & Southwest major contractors.

4. Legislative Compliance

4.1. Statutory

The City & Southwest project is subject to legislative environmental compliance requirements relating to the:

- **Environmental Planning and Assessment Act 1979** (NSW) – where Sydney Metro has identified the need for two separate CSSI planning approvals under the act (refer to Section 2.3), and
- **Protection of the Environment Operations Act 1997** (NSW) – where Sydney Metro has identified the need for several Environment Protection Licences (EPLs) required during the construction and operation phases of the project. These EPLs will be held by the major contractors or by Sydney Trains as relevant and applicable to the scope of works.

While compliance with planning approval requirements is the responsibility of Sydney Metro, these requirements may be wholly or partially allocated by Sydney Metro to one or more major contractors. Compliance with EPLs is the responsibility of the EPL holder.

4.2. Planning Approval Requirements

The City & Southwest CSSI planning approval requirements comprise of:

- Conditions of Approval (CoAs) as issued by the NSW Minister for Planning, and
- Revised Environmental Mitigation Measures (REMMs) as committed to by Sydney Metro in planning approval documentation.

Given the staged delivery of the project, the planning approval requirements will be triggered at different points in time throughout the project's stages. The allocation of planning approval requirements to each stage of the project is fully detailed in the City & Southwest Staging Reports.

4.3. Requirements Lifecycle

Sydney Metro has undertaken an analysis of the CoAs and REMMs and has contractually allocated the responsibility to comply with each of them as relevant to the scope of work being undertaken by the contractor for each stage. The onus to comply with CoAs/REMMs may be held by Sydney Metro, one or more major contractors, or shared between Sydney Metro and one or more major contractors:

- **Sydney Metro-held** – The CoA/REMM is the prime responsibility of Sydney Metro with limited obligations placed on the major contractor. Sydney Metro will maintain oversight of compliance with the CoA/REMM through this CMTRP.
- **Contractor-held** – The CoA/REMM is the prime responsibility of one or more major contractors. Sydney Metro will maintain oversight of compliance with the CoA/REMM through this CMTRP.
- **Shared** – The CoA/REMM is the shared responsibility of both Sydney Metro and one or more major contractors. Sydney Metro and its major contractors will coordinate compliance activities between each other whilst Sydney Metro maintains oversight of total compliance with the CoA/REMM through this CMTRP.

CoAs/REMMs are considered **Active** at the project level upon the granting of a planning approval. A CoA/REMM remains Active until no further evidence or activity is required to be undertaken by any party which has been allocated the CoA/REMM. At this point, the condition becomes **Inactive**.

When a CoA/REMM is allocated to a major contractor through a contract, an environmental requirement is generated. All requirements progress through two phases:

- **Ongoing** – meaning that further action is required to achieve or demonstrate compliance.
- **Complete** – meaning that no further evidence or activity is required to achieve or demonstrate compliance. This is verified in an adequacy review conducted by the ER and Sydney Metro prior to the requirement being approved as completed.

Ongoing requirements are regularly assessed through surveillance activities and determined to be either **Compliant** or **Non-Compliant**:

- **Compliant** – meaning that sufficient evidence is available to demonstrate that the requirement is currently being met.
- **Non-Compliant** – Meaning that sufficient evidence is available to demonstrate that the requirement is not being met.

Figure 2 provides a schematic of the planning approval requirement lifecycle.

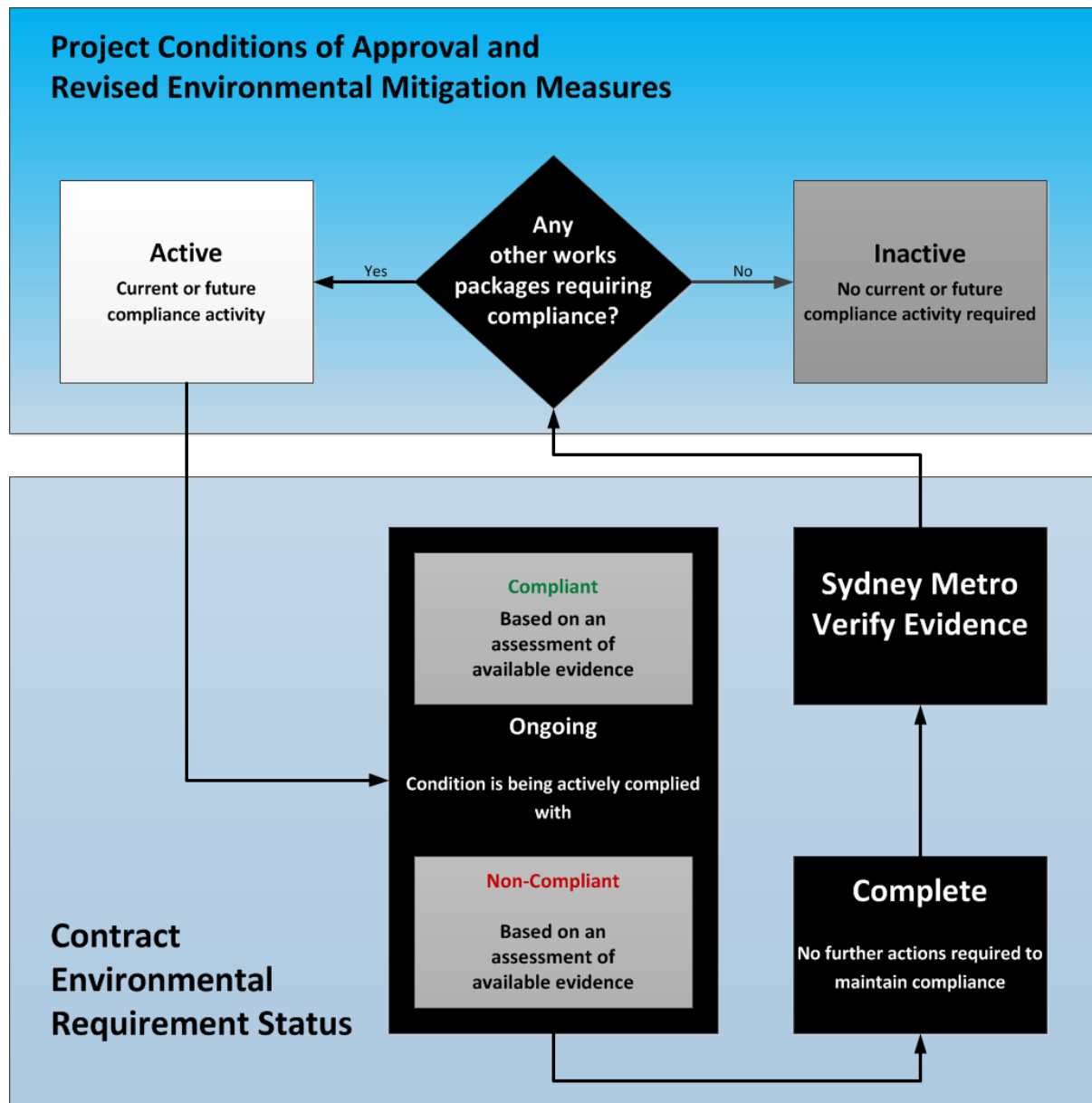


Figure 2: Planning Approval Requirement Lifecycle

4.4. Environmental Surveillance

A variety of monitoring and review activities will be undertaken to ensure compliance with planning approval requirements. Table 3 provides a summary of these activities and Sections 4.4.1 to 4.4.3 provide further information. The Environmental Audit Program is outlined in Section 4.4.3.

Table 3: Compliance Monitoring and Review Activities

Activity	Responsibility	General Frequency per Project Stage
Environmental Site Surveillance	Major contractors	Every work day onsite
ER Inspections	The ER in conjunction with Sydney Metro and major contractors	Between weekly and an as-needs basis dependent on level of onsite work activity and environmental risk profile.
Review of Environmental Actions and Controls	Major contractors and Sydney Metro	Between weekly and an as-needs basis dependent on level of onsite work activity and environmental risk profile.
Environmental Performance and Compliance Reporting	Major contractors and Sydney Metro	Monthly
Formal Compliance Review of Requirements	Major contractors and Sydney Metro, in conjunction with the ER	Quarterly
Independent Environmental Auditing	Major contractors, Sydney Metro, the ER and Independent Environmental Auditors. Refer to Section 4.4.3.	In accordance with the EAP.
CEMP and sub-plan reviews	Major contractors	Six-monthly
Environmental Risk Assessment Review	Major contractors	Six-monthly
Environmental Management Reviews	Major contractors	Annually

4.4.1. Environmental Inspections

Major contractors are expected to undertake daily site surveillance at all sites under their control. This includes walk-overs, maintenance of environmental controls and identification and rectification of emergent environmental risks.

Formal environmental inspections are also required to be organised and undertaken on a regular basis. These inspections will be undertaken jointly by the ER, the major contractor's EM, the Sydney Metro NER, the AA (on an as-needs basis where applicable) and the Independent Certifier (where applicable). The Independent Certifier is responsible for independent certification of the project's designs, including review and determination of whether designs comply with contract requirements. The collaborative approach to conducting environmental inspections reduces duplication and ensures consistency in discussing and resolving any issues arising from inspections.

Following each environmental inspection, the ER is required to prepare an ER Inspection Report detailing any issues, incidents and non-compliances identified during the inspection in its opinion. This report is intended to be issued to all attendees and any other relevant parties within 24 hours. The major contractor is required to address any items identified and

consider the risk ratings and recommendations provided in the report with respect to implementing corrective and preventative actions.

An example of an ER Inspection Report Template is provided as Appendix 2.

4.4.2. Quarterly Compliance Reviews

Sydney Metro and its major contractors are required to undertake reviews of the compliance requirements contractually allocated to each party by Sydney Metro. These reviews are a collaborative exercise undertaken between Sydney Metro, the major contractor and the ER. The review process for the contractor of each City & Southwest stage is as follows:

- Upon the award of each major contract, Sydney Metro will issue a Compliance Tracking Register (CTR) template to the major contractor for completion. This template is a spreadsheet containing a list of all the compliance requirements that have been allocated to the major contractor in accordance with the contract. The major contractor is required to complete the template and return to Sydney Metro no later than two weeks prior to the anticipated commencement of construction activities. The major contractor is to complete the template by demonstrating how compliance against each requirement has been addressed from the date of contract award to the date the CTR is due to be returned to Sydney Metro (including references to evidential documentation). This completed CTR will be used by Sydney Metro to prepare any documentation required to prepare/update the applicable Pre-Construction Compliance Report.
- Following the commencement of construction, Sydney Metro will issue a new CTR (containing the evidence from the previous version) to the major contractor to update for the existing (and potentially subsequent) calendar quarter. Depending on the date of construction commencement, Sydney Metro will determine whether the new CTR is due for completion following the current calendar quarter or the subsequent calendar quarter. Regardless, the major contractor is to complete the new CTR to cover all activities from the commencement of construction until the end of the existing or subsequent calendar quarter (as determined by Sydney Metro). The major contractor must issue the completed CTR to the Environmental Representative (ER) within five working days following the end of the reporting period.
- Within five working days of receiving the final completed CTR from the major contractor, the ER is to issue a draft Compliance Report (with the associated completed CTR) to Sydney Metro for comment. After reviewing any comments, the ER is to issue a final Compliance Summary Report to Sydney Metro.
- Following receipt of the final Compliance Summary Report from the ER, Sydney Metro will issue the next quarterly period CTR template to the major contractor for completion. This process repeats every quarter until all compliance requirements have been 'completed' (refer to Section 4.3).

This quarterly review process will also be implemented for compliance requirements that are wholly or partially retained by Sydney Metro. These compliance reviews will be undertaken by Sydney Metro and reviewed by the ER for endorsement.

In the event of a non-compliance against a requirement at any time during this process, a summary of the non-compliance needs to be entered into the relevant CTR template. This is in addition to the requirements of the *Sydney Metro Environmental Incident and Non-Compliance Reporting Procedure* (refer to Appendix 3).

4.4.3. Audits and the Environmental Audit Program

Two levels of environmental auditing will be undertaken on the City & Southwest project:

- Internal auditing coordinated by the contractor for each project stage, and
- The independent Environmental Audit Program (EAP).

In addition to these, the project may be audited by the Secretary upon the Secretary's request. In this event, the ER will facilitate the audit on behalf of the Secretary in accordance with C2S CoA A24(g) and S2B CoA A26(f).

4.4.3.1. Internal Audits

Internal environmental auditing will be coordinated by the major contractors in accordance with the requirements of the CEMF (and the contractors' CEMPs if relevant). These audits may cover:

- Compliance against planning approval requirements (as allocated to each major contractor by Sydney Metro), any applicable EPLs and other permits,
- Compliance against the major contractor's CEMP, sub-plans and procedures,
- Community consultation and complaint management,
- Environmental training records, and
- Environmental monitoring and inspection results.

4.4.3.2. Independent Environmental Audit Program

Independent environmental auditing and reporting will be undertaken by an Independent Environmental Auditor (IEA) engaged by Sydney Metro. The IEA is responsible for developing, coordinating, implementing, reviewing and updating an Environmental Audit Schedule (EAS) in consultation with Sydney Metro and its major contractors.

The IEA has a responsibility to maintain awareness of program activities and any associated environmental risks. This is primarily undertaken through continual analysis of project-based documentation, attendance at specific forums and consultation with key stakeholders. These activities are further detailed in Figure 3.

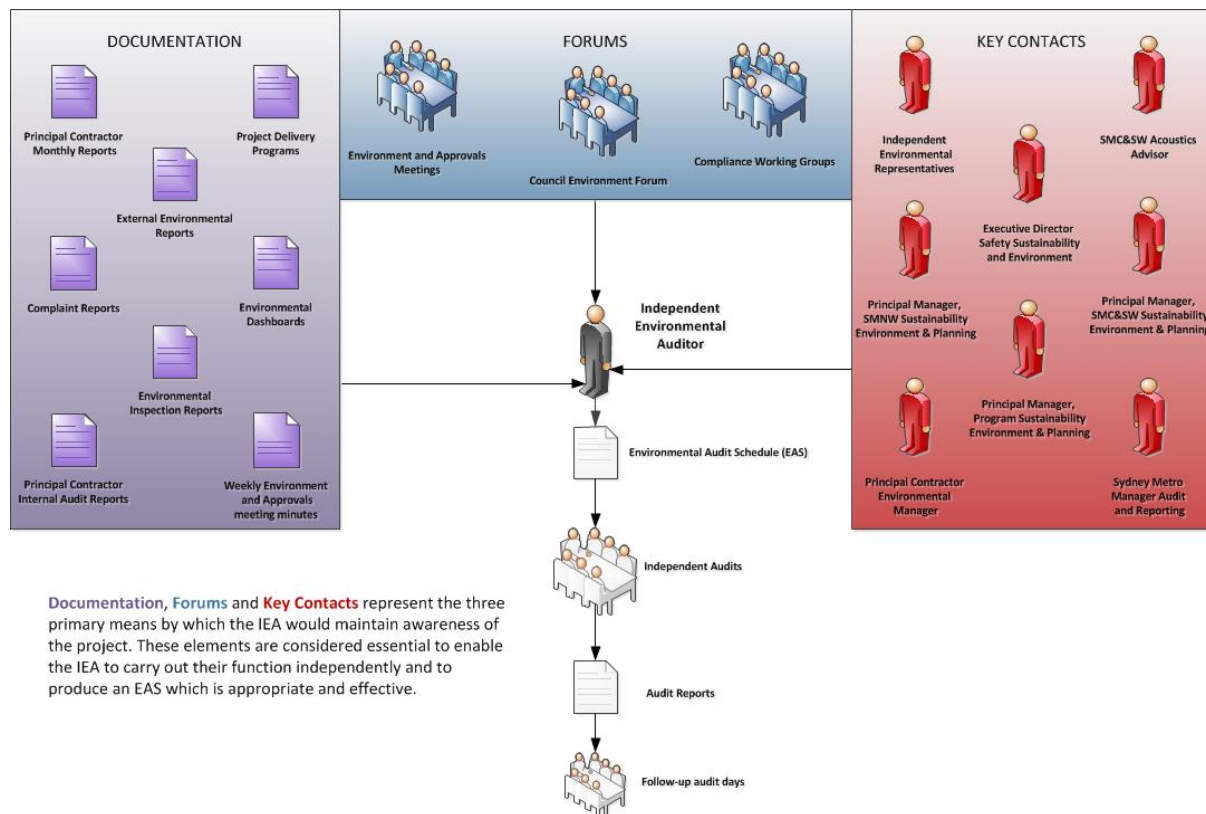


Figure 3: Independent Environmental Audit Program Inputs and Outputs

Maintenance of the EAS by the IEA includes determination/identification of:

- Version control,
- Lead auditor and auditee,
- Auditing timeframes and tracking/monitoring of timeframe execution,
- Audit scope summaries (including aspects to be audited),
- Audit findings and tracking/monitoring of audit finding close-outs, and
- Generally at least four audits to be undertaken on the City & Southwest project each calendar year (total number may increase/decrease dependent on the changing risk profile of the project over time).

The EAS will be endorsed by Sydney Metro at the beginning of each calendar year. This endorsement will acknowledge Sydney Metro's concurrence that an appropriate risk-based approach has been adopted in the development of the EAS. In the event that Sydney Metro comments on the program, the IEA must address these comments in a revised EAS and submit to Sydney Metro for endorsement. The IEA is permitted to make minor changes to the EAS following endorsement by Sydney Metro without the need to resubmit to Sydney Metro for endorsement. The IEA is to notify Sydney Metro and the ER following any updates to the EAS.

Audits will be undertaken in accordance with the endorsed EAS and in consultation with key stakeholders. This consultation will include involvement in the Sydney Metro Compliance Working Group to ensure that the EAS is incorporated into the overall audit program for each Sydney Metro major contractor. The IEA will also use this forum to request any relevant documentation from the major contractor that is required as part of undertaking an audit.

In planning each audit, the IEA should consult key stakeholders to make more informed decisions with respect to audit scoping. This consultation should particularly seek input from the ER, Sydney Metro and an appropriate representative from the auditee.

Audits should generally be undertaken within one full work day, inclusive of opening and closing meetings at which the auditee's senior management team will be invited to attend. During each closing meeting, the IEA must itemise each and every finding that is proposed to be raised in order for the auditee to provide a response and/or additional information to demonstrate compliance or close-out a finding.

The IEA must produce a draft audit report within one calendar week of the closing meeting of the audit. Any comments that the IEA receives on the draft audit report must be addressed in the final audit report. Within one calendar month of the day of the audit, the IEA must organise a follow-up audit in order to confirm that appropriate progress has been made on any audit findings. The results of this follow-up audit must be included in a final audit report, which must be issued to Sydney Metro and the auditee within one calendar month of the day of the audit. Final audit reports must include as a minimum:

- Details of the relevant audit,
- Any findings and their status,
- Actions taken, or planned to be taken, to resolve audit findings, and
- Any relevant performance related commentary.

Sydney Metro is responsible for submitting the final audit report to the Secretary within six weeks of the day of the audit.

4.5. Incident Reporting

Emergency and incident response procedures will be developed by each major contractor. These procedures will incorporate:

- The incident reporting requirements of the applicable planning approval(s),
- Categories for environmental emergencies and incidents,
- Forms for detailed recording, reporting and responding to environmental incidents,
- Notification protocols for each category of environmental emergency or incident that include, as a minimum:
 - Consideration of the applicable planning approval, Environment Protection Licence, Pollution Incident Response Management Plan and/or Crisis Management Plan requirements.
 - Notifying Sydney Metro, the ER and relevant stakeholders and/or affected receivers.
 - Notifying the relevant regulatory authority if/when the incident results in material harm to the environment.
- Process for notifying the Secretary within 48 hours of becoming aware of an off-site incident that significantly affects the people or the biophysical environment (followed by a full written report within seven days of the date on which the incident occurred),
- Identification of personnel who have the authority to take immediate action to shut down any activity or affect any environmental control measure (including from the Environment Protection Authority),

- Onsite rectification actions.

Major contractors' incident response procedures must be consistent with the Sydney Metro *Environmental Incident and Non-Compliance Reporting Procedure* (refer to Appendix 3).

Major contractors working under an EPL are required to develop and implement a *Pollution Incident Response Management Plan* (PIRMP) in accordance with the requirements of the *Protection of the Environment Operations Act 1997* (NSW). The PIRMP may substitute for the normal incident management documentation requirements but must maintain consistency with Sydney Metro requirements in addition to those of the act.

4.6. Non-Compliances

Non-compliances against CoAs/REMMs will be documented in a Non-Compliance Report prepared by the identifying party. Non-compliances should be raised immediately following the identification of a non-compliance, which may sometimes occur following the compliance monitoring and review activities listed in Table 3. Refer to Appendix 4 for the Sydney Metro *Environmental Incident and Non-Compliance Report Template*.

Major contractors are required to develop and implement corrective actions to rectify any non-compliances and preventative actions to prevent the reoccurrence of the non-compliance. Actions that are raised must be assigned to individuals and due dates must be established in consultation with the responsible individual with the objective of closing out the non-compliance without delay. Where non-compliances become repetitive or systemic (as determined by Sydney Metro in consultation with the ER), the suitability of actions in relation to the repeated issue will be examined by Sydney Metro and the ER in consultation with the major contractor's Environment Manager to determine more appropriate actions in response to the documented non-compliance.

Sydney Metro will maintain a register of all non-compliances raised against the City & Southwest project.

4.7. Compliance Reporting

Project compliance reporting to the Secretary will be undertaken in several forms in accordance with the CSSI planning approval conditions. These include submission of:

- The Sydney Metro Pre-Construction Compliance Reports (PCCR) for the C2S and S2B planning approvals (both of which will be continually updated immediately following the Secretary's approval of each stage's CEMP and prior to each stage's construction commencement date). These reports will include the commencement of construction dates for each stage outlined in the applicable Staging Report,
- *Construction Compliance Reports* (CCR) every six months for the duration of construction in accordance with C2S CoA A34 and S2B CoA A30. These CCRs will cover all works undertaken during each consecutive six (6) month period from April to September, October to March, etc. The reports will include details, analyses and/or summaries of:
 - Environmental monitoring programs (including business monitoring programs – refer to Section 4.7.1),
 - Complaint management,
 - CEMP review and amendments,
 - Consistency assessments,

- Environmental audit outcomes,
 - Environmental incidents,
 - Non-compliances, and
 - Any other compliance matters as requested by the Secretary.
- A *Pre-Operation Compliance Report* for information at least one month prior to the commencement of project operations in accordance with C2S CoAs A35 & A36 and S2B CoA A30. This report will include the commencement date for operations and details on how the planning approval conditions that require action prior to the commencement of operation have been complied with,
- ER and AA Reports each month for information in accordance with C2S CoAs A24 & A27 and S2B CoA A26, and
- Environmental Audit Reports within six weeks of the completion of each independent environmental audit in accordance with C2S CoAs A39 & A40 and S2B CoA A35 (refer to Section 4.4.3.2 for further information).

4.7.1. Business Monitoring Program Reporting

A summary of business monitoring program results will be included as part of each six-monthly CCR submitted to the Secretary for information in accordance with C2S CoA E64(f) and S2B CoA E37(f).

The contractor for each stage, in accordance with the applicable Staging Report, is required to provide a summary of the business monitoring program results to Sydney Metro for all construction activities undertaken during the applicable CCR's reporting period. This summary is to address, as a minimum, each of the following business management key performance areas for the reporting period:

- Awareness of construction activity and likely impacts,
- Implementation of measures to maintain business vehicle and pedestrian access, parking, visibility and amenity during construction activity, and
- Implementation of measures to minimise noise and vibration impacts on noise and vibration sensitive businesses.

These summaries are required to be submitted by each major contractor to Sydney Metro within one month following the end of the applicable CCR's reporting period.

Refer to the *Sydney Metro Overarching Community Communication Strategy* for further information on business monitoring programs and reporting (including performance criteria).

Appendix 1 – Environmental Representative Endorsement(s)

Mr Stuart Hodgson
Principal Manager,
Program Sustainability Environment & Planning
Safety, Environment & Business Systems | Sydney Metro
Transport for NSW
PO Box 588
NORTH RYDE BC NSW 1670

13 March 2017

Our Ref: 170108_CTP
Rev 1.0 Final

Dear Stuart

RE: Endorsement of Sydney Metro Compliance Tracking Program

Thank you for providing the Sydney Metro City & Southwest Compliance Tracking Program (Rev 1.0 Final, March 2017) for Environmental Representative (ER) review and endorsement as required by the Condition of Approval A29 for the approved Sydney Metro City & Southwest project (SSI – 15_7400 January 9 2017).

*The **Compliance Tracking Program** must be endorsed by the ER [Environmental Representative] then submitted to the Secretary [of the NSW Department of Planning and Environment] for information before the commencement of works or within another timeframe agreed with the Secretary.*

As an approved Environmental Representative for the Sydney Metro City & Southwest project, I have reviewed and provided comment on the Sydney Metro City & Southwest Compliance Tracking Program, and consider it appropriate for implementation as a program for the tracking of compliance across the Sydney Metro City & Southwest project.

I consider this suitable for submission to the Secretary of the NSW Department of Planning and Environment (DPE) and this should be provided to the Department for information before the commencement of works (or within another timeframe agreed with the Secretary).

Yours sincerely



Jo Robertson
Environmental Representative – Sydney Metro – City and South West

Mr Stuart Hodgson
Director, Environment Planning & Sustainability
Sydney Metro
Transport for NSW
PO Box K659
HAYMARKET NSW 1240

8 July 2019

REF: 170108_CMTRP_Rev2.5

Dear Stuart

RE: Endorsement of Sydney Metro Compliance Monitoring/Tracking and Reporting Program Report

Thank you for providing the Sydney Metro Compliance Monitoring/Tracking and Reporting Program Report (Rev 2.5 Final, July 2019) (CMTRP) for Environmental Representative (ER) review and endorsement as required by:

- Condition of Approval A29 for the approved Sydney Metro City and Southwest Chatswood to Sydenham project (SSI –15_7400 January 9 2017); and
- Condition of Approval A29 for the approved Sydney Metro City and Southwest Sydenham to Bankstown project (SSI – 8256 December 12 2018).

This CMTRP updates the previously endorsed Sydney Metro City and Southwest Chatswood to Sydenham Compliance Tracking Program Report endorsed in 2017.

The update provides for changes required to address Conditions A29 and A32 of the now included Sydenham to Bankstown planning approval, updates to the quarterly compliance review process, updates to the Independent Audit Program (as per A33), and clarification of business monitoring requirements.

As an approved Environmental Representative for the Sydney Metro City and Southwest project, I have reviewed and provided comment on the CMTRP and consider it appropriate for implementation as a program for the tracking of compliance across the Sydney Metro City and Southwest project.

I consider this suitable for submission to the Planning Secretary for information before the commencement of works in accordance with A29 and A33.

Yours sincerely



Jo Robertson
Environmental Representative – Sydney Metro – City and South West

Appendix 2 – Environmental Representative Inspection Report Template

ER Inspection Report

Contract:

Contractor:		Site Name Inspected:		Inspection Number:	
Date:	Time:	Weather conditions:			
Inspection attended by:					
Name	Position	Company	Name	Position	Company
Report Prepared by:			Report Reviewed by:		
Name	Position	Company	Name	Position	Company
Site Location and Activities:					
Locations Inspected			Key Activities		

Summary of Issues Observed

New Issues

Sydney Metro City & South West – Chatswood to Sydenham

Contract:

ER Inspection Report

Inspection Issues

[illegible]



Sydney Metro City & South West – Chatswood to Sydenham

Contract:

ER Inspection Report

Ratings and Definitions

Risk Rating	C6	C5	C4	C3	C2	C1
Environment	Insignificant No appreciable changes to environment and/or highly localised event.	Minor Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries.	Moderate Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Major Impacts external ecosystem and considerable remediation is required.	Severe Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.	Catastrophic Irreversible large-scale environmental impact with loss of valued ecosystems.
Incident DPE Notifiable (<24 hours) Condition A41	No	No	No	Yes	Yes	Yes

Non-compliance and Incidents

N: Non-compliance - non-compliance against requirement of Conditions of Approval CSSI 15_7400 (i.e. CEMP not implemented, no records, material harm, breach of condition/legislations/regulations/licences).

I: Incidents - An occurrence or set of circumstances that causes, or threatens to cause, material harm to the environment, community or any member of the community, being actual or potential harm to the health or safety of human beings or to threatened species, endangered ecological communities or ecosystems that is not trivial.

Aspect	# times raised this inspection	# times raised prior inspection	Trending
<input type="checkbox"/> Soil and Water			
<input type="checkbox"/> Flora and Fauna			
<input type="checkbox"/> Waste and Spoil			
<input type="checkbox"/> Heritage			
<input type="checkbox"/> Air Quality			
<input type="checkbox"/> Noise and Vibration			
<input type="checkbox"/> Community Stakeholder and Business			
<input type="checkbox"/> Design			
<input type="checkbox"/> Traffic Transport and Access			
<input type="checkbox"/> Management Systems			

Appendix 3 – Sydney Metro Environmental Incident and Non-Compliance Reporting Procedure



Environmental Incident and Non-compliance Reporting Procedure

SM-17-00000096

Sydney Metro Integrated Management System (IMS)

Applicable to:	Sydney Metro
Document Owner:	Manager, Environment
System Owner:	Executive Director, Safety, Sustainability & Environment
Status:	FINAL
Version:	5.1
Date of issue:	18 February 2019
Review date:	11 February 2020
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1. Purpose and scope

This procedure documents the process to be used when classifying and reporting Environmental Events.

This procedure applies to Sydney Metro and any contractor Sydney Metro engages to carry out works. Principal Contractors must ensure their processes for managing Environmental Events is consistent with this document. The requirement for consistency is documented in the Construction Environmental Management Framework (Section 3.3(f)) and shall be allocated as a contractual requirement to each delivery partner.

2. Introduction

Sydney Metro is committed to minimising risks to the environment, the rapid identification and rectification of breaches to Environmental Requirements and efficient and effective responses to Environmental Incidents that grows our ability to minimise harm and prevent future re-occurrences.

This procedure defines an approach to classifying Environmental Issues, Incidents and Non-compliances and establishes the immediate, interim and long term actions that are taken in response to Environmental Events.

3. Definitions

All terminology in this Procedure is taken to mean the generally accepted or dictionary definition with the following exceptions:

Term	Definition
Environment	means components of the earth, including: a) land, air and water, and b) any layer of the atmosphere, and c) any organic or inorganic matter and any living organism, and d) human-made or modified structures and areas, and includes interacting natural ecosystems that include components referred to in (a)-(c).
Environmental Event	An occurrence that identifies actual or potential environmental impacts or non-compliances. Events can include conversations, inspections, incidents, or failures of process.
Environmental Harm	Includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution.
Environmental Incident	An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.
Environmental Issue	An occurrence or set of circumstances where Environmental Harm or Non-compliance could occur if not rectified.
Environmental Non-compliance	A breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans.

Term	Definition
Material Harm to the Environment	<p>harm to the environment is material if:</p> <ul style="list-style-type: none"> a) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or b) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and c) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment. <p>It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.</p>

Terms and jargon specific to this procedure are defined within the [Sydney Metro Glossary](#).

4. Accountabilities

The Executive Director, Safety, Sustainability & Environment is accountable for this Procedure. Accountability includes authorising the document, monitoring its effectiveness and performing a formal document review.

Direct Reports to the Chief Executive are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

The Direct Reports to the Chief Executive who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document if specified in the relevant contracts.

5. Environmental Events

Environmental surveillance data is relied upon to inform Sydney Metro of performance trends, to provide assurance that legislative requirements are being met and indicate where surveillance activities should be directed. In order to rely upon environmental data for this purpose there needs to be a high degree of consistency in the manner by which it is collected and interpreted. Due to the need for consistency, any incident/Non-compliance procedure produced by a delivery partner to Sydney Metro is required to be consistent with the requirements of this document.

The concept of Environmental Events forms a common starting point for understanding what types of occurrences should be managed and reported as Incidents and what should be reported as Non-compliances or Issues. When an Environmental Event occurs a series of questions can be asked to consistently determine what type of event it is. Commonly, Environmental Events lead to three different processes:

1. Reporting of an Environmental Incident;
2. Reporting of an Environmental Non-compliance; or
3. Reporting of an Environmental Issue.

Incidents and Non-compliances are recorded using the Environmental Incident and Non-compliance Report Form (SM ES-FT-403) and Environmental Issues are recorded through environmental inspection reports using the Environmental Inspection Information & Summary Form (SM ES-FT-406). These paper based records are subsequently entered into the Sydney Metro Compliance Register (Section 6.7) which is used to disseminate the data and facilities reporting internally and externally. Note where a Principal Contractor has submitted alternative processes and these have been approved by Sydney Metro they may also be used.

The figure below shows the process by which Environmental Events are classified (Figure 1).

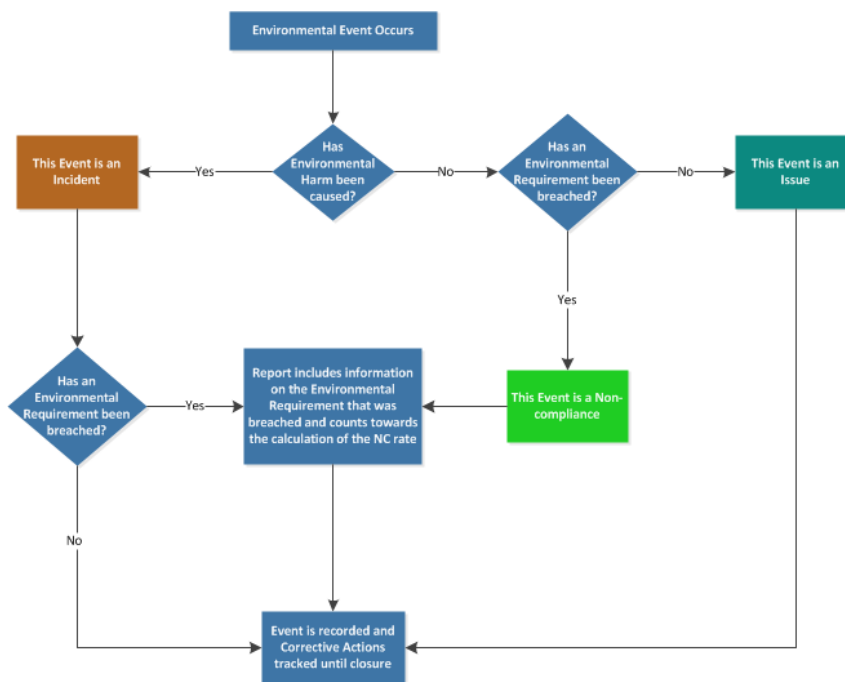


Figure 1: Environmental Event Classification Process

Where Environmental Harm has been caused the event will always be classified as an Environmental Incident regardless of whether one or more Environmental Requirements have been breached. Only when an event occurs without harm being caused to the environment will it be classified as a Non-compliance or Issue. It should be noted that the Incident management process still captures any breaches of Environmental Requirements and these incidents contribute towards the calculation of the NC Rate (Section 7.1).

This flowchart above is intended to be a guide and there may be situations where it is unclear exactly how an Environmental Event should be classified. In these situations a judgement call should be made in consultation with your Manager.

5.1. Worked Example – Classifying Environmental Events

This Section provides a fictitious example of Environmental Events which fall into each of the three different categories. The situations outlined below are provided to explain how event classifications are made. The background for these worked examples is as follows:

Sydney Metro is carrying out works in a newly established site and substantial earthworks are occurring to construct piers for an elevated viaduct. A nearby creek contains a variety of important fish species and the local community are known to use this creek for recreational fishing. The Environmental Impact Statement identified the creek as being at risk of increased sedimentation from dirty water run-off and the Conditions of Approval include a requirement to have a Progressive Erosion and Sediment Control Plan in place. This plan has been produced and indicates that sediment fences must be in place at specific locations to capture dirty water run-off. Regular daily inspections of the sediment controls are carried out by the contractor's Environment Manager and an Independent Environmental Representative has commenced a monthly inspection on this site at 7 am on Thursday morning.

5.1.1. Soil and Water Issue

The Environmental Representative notices a sediment fence has been knocked over in one of the areas indicated as requiring fencing on the ERSED plan. It appears to have occurred recently and there is no record of rainfall in the last few days. During the course of the inspection all other ERSED controls appeared to be in good condition and erected in accordance with the requirements of the Blue Book. In this example no harm has yet been caused and no environmental requirement has been breached so the event is classified as an Environmental Issue which is raised on the inspection report with an action to reinstall the fence.

5.1.2. Soil and Water Non-compliance

Alternatively, the Environmental Representative might have noticed many sediment fences had been knocked down and in some areas an absence of sediment fences where the plan indicates they are required. Despite there being no rain in recent days the Environmental Representative concludes that the requirements of the plan are not being followed and have been breached. The event is raised as non-compliance and actions are set in place to re-enforce the requirements of the ERSED plan for that sites workforce as well as the immediate reinstatement of controls.

5.1.3. Soil and Water Incident

Finally, in a third scenario the Environmental Representative notices many sediment fences are down and some are absent where required by the plan. However, significant rainfall has occurred in recent days and the Environmental Representative determines that it is likely dirty water has escaped through the area into the nearby creek potentially causing harm to the fish population. This event is classified as an Incident by the inspector and immediate notification is undertaken. Similar controls are implemented as described above.

5.2. Notifiable Events

There are a number of Acts and regulations that include a specific requirement to notify a Regulatory Authority. When an Environmental Event triggers one of these notification requirements we then also refer to that event as a Notifiable Event (Table 1).

The Principal Contractor's Environment Manager must determine whether an event is notifiable, and may rely upon advice from Sydney Metro if it is provided.

Table 1: Examples of Notifiable Events

Event type	Legislation		Trigger for Notification
Pollution Incident ¹	POEO Act 1997	Part 5.7	Where Material Harm has occurred contact the EPA Pollution Line as soon as practicable
	POEO (General) Regulation 2009	Section 101	
Land contamination	Contaminated Land Management Act 1997	Section 60(1)	As soon as practicable, after becoming aware of contamination that exceeds the relevant investigation levels in the National Environment Protection Measure, where a person has or will be exposed to the contamination
Discovery of an Aboriginal relic	National Parks & Wildlife Act 1974	Section 89A	Director General of EPA in writing within a reasonable time after becoming aware. Note this is not required for Projects approved under Part 5.2 of the Environmental Planning and Assessment Act (see section 115ZG). Notification and reporting is addressed in the relevant Infrastructure Approval
Discover Aboriginal Remains	Commonwealth Aboriginal & Torres Strait Islanders Heritage Protection Act 1984	Section 20	Commonwealth Minister of the Environment in writing as soon as practicable after becoming aware
Discovery of a relic	Heritage Act 1977	Section 146	Heritage Council in writing within a reasonable time after becoming aware Note -this is not required for Projects approved under Part 5.2 of the Environmental Planning and Assessment Act (see section 115ZG). Notification and reporting is addressed in Infrastructure Approvals

5.3. Event Types

Each Environmental Event is assigned a secondary classification of an Event Type for the purpose of data analysis and general environmental management. They are grouped by areas of environmental management so that targeted auditing, training or awareness initiatives can be initiated in response to emergent trends. Each Event Type is explained in Table 2.

¹ Further information on reporting pollution incidents to EPA is provided in Section 6.6 Environmental Incident/Non-compliance Report

Table 2: Environmental Event Types and their descriptions

Event Type	Applies To:			Description
	Issue	Incident	Non-compliance	
Soil and Water	●	●	●	Covers the physical location, chemical composition and ecology of soils and waterways. Any event which changes these compositions is a Soil and Water event. Within this event type all instances of contamination, erosion and sedimentation of waterways is covered.
Flora and Fauna	●	●	●	Covers vegetation and vegetation communities as well as animals and animal habitat. Any event where vegetation is felled or damaged, animals are killed or injured, or habitat is harmed or destroyed is covered.
Waste and Spoil	●	●	●	Covers the management of Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM) including on-site management, and disposal and also the classification and management of Waste materials. Note: that the transportation of spoil is covered under Traffic, Transport and Access.
Heritage	●	●	●	Covers the management of known heritage artefacts or sites, and the treatment of unexpected finds, archaeological investigations and other impacts.
Air Quality	●	●	●	Covers the management of emissions of particulate matter, odours, and gasses used as air quality parameters from worksites.
Noise and Vibration	●	●	●	Covers the management of airborne and ground borne noise and vibration and includes hold points on the commencement of any work where Out of Hours Works permits or Construction Noise Impact Statements are required.
Community Stakeholder and Business	●	●	●	Covers the management of Community and Stakeholder requirements and includes complaint response procedure, community management protocols, and the maintenance of information on websites.
Traffic Transport and Access	●	●	●	Covers the management of traffic inside and outside of sites including access points and parking requirements. This event type also covers any requirements in relation to vehicles and vehicle maintenance or the transportation of waste and spoil.
Spills and Leaks	●	●	●	Covers all instances where environmentally sensitive substances are held within a container which has the potential to leak or spill and covers pipes, hoses, fuel tanks, storage tanks and plastic containers. Note: Spills and Leaks specifically exclude anything in relation to the transport and deposition of sedimentation.
Management Systems	●	●	●	Covers procedural or administrative processes that are common across all areas. It specifically does not cover procedural or administrative processes which are unique to any of the other event types. For example, not completing a vegetation removal form prior to vegetation clearing is still a Flora and Fauna event. Note: A good example of a Management Systems NC would be not reporting an Environmental Incident within required timeframes.

6. Environmental Incident Classification and Management

Sydney Metro has defined an Environmental Incident as:

An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.

Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items, or adverse community impacts.

Planning Approvals and Environment Protection Licences permit some environmental impacts and these are not intended to be captured as Environmental Incidents.

Table 3: Examples of Environmental Incidents

Type	Example Incident
Air Quality	Odour that travels beyond the site boundary
Air Quality	Dust exceeding reasonable levels without active management measures in place
Air Quality	Operation or maintenance of plant in a manner that causes or has likely caused excessive air pollution
Soil and Water	Discharge of water on or off site in a manner that causes or has likely caused water pollution without required approvals.
Noise and Vibration	Noise that travels beyond the site boundary as a result of poorly maintained plant or operation of plant in an inefficient manner
Noise and Vibration	Failure to comply with the approved hours of work
Soil and Water	Where the chemical composition of soil or water has been detrimentally modified by a contaminant leading to potential or actual environmental harm. For example, rainfall causes a flow of water across a site that erodes soil and enters a waterway increasing the total suspended solids of that water body.
Spills and Leaks	Where a substance has leaked from, or spilt from a container that is designed to prevent that substance from escaping into the environment (including bunds, fuels tanks, chemical bottles and other containers). Spills and Leaks specifically exclude anything in relation to the transport and deposition of sedimentation.
Soil and Water	Dispose of waste in a manner that harms or is likely to harm the environment
Flora and Fauna	Harm or “pick” a threatened species, endangered population or endangered ecological community without required approvals
Flora and Fauna	Damage to vegetation, fauna or habitat including watercourses without required approvals
Heritage	Damage, disturbance, destruction or works to heritage items/relics without required approvals
Heritage	Damage, disturbance, or destruction of Aboriginal objects or places without required approvals

6.1. Incident Classification

Environmental Incidents are classified into one of three Classes that are based upon the consequence descriptors for environmental risks in the Sydney Metro Risk Matrix (refer to [Sydney Metro Risk Management Standard](#)). Each of these classifications trigger a variety of management actions and/or legislative requirements depending on the severity of the consequence described where Class 3 represents minor consequences and Class 1 represents major consequences.

This matrix is further sub-divided into consequence ratings ranging from C6 (low impact) to C1 (high impact). An incident transitions between a Class 3 to a Class 2 incident once material harm has been caused, and transitions into a Class 1 incident once it is determined that the Environmental Harm caused is large-scale and cannot be remediated (Table 4).

Table 4: Classification System for Environmental Incidents

Class 3			Class 2		Class 1
C6	C5	C4	C3	C2	C1
No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well-contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems

6.1.1. Class 3 Incidents

These Incidents are events which cause Environmental Harm, but do not cause Material Harm to the environment. Normally Class 3 Incidents are not Notifiable Events and therefore a simple notification protocol is adopted whereby Sydney Metro must be notified within 48 hours verbally, and in writing.

In some cases it will be unclear whether Material Harm has been caused in the early stages of Incident Management. If this is the case then the process for Class 2 Incidents is followed (see Section [Class 2 Incidents](#)) until it is clear that Material Harm has not been caused.

A formal Incident Investigation report is not required for Class 3 Incidents, however, it is expected that the person responsible for completing the Incident Notification Report makes appropriate enquiries to determine the likely causal factors involved and assigns effective corrective actions.

6.1.2. Class 2 Incidents

These Incidents are events which cause Material Harm to the environment and they always trigger notification of Regulatory Authorities. These Incidents represent events that are far more serious than Class 3 Incidents and therefore strict communication protocols are required to ensure that effective and informed decisions are made (Figure 2).

The Environmental Lead, contract Environment Manager and the Independent Environmental Representative must be notified verbally as soon as possible after the observer becomes aware of a Class 2 Incident.

Class 2 Incidents must be investigated and the investigation must produce an investigation report containing corrective or preventative actions. This investigation report must be provided to Sydney Metro within 7 days of the event unless another timeframe is agreed with the EL.

Despite any arrangements for the submission of investigation reports, an Incident Notification Report must be provided with all available information and submitted to Sydney Metro within 48 hours. It is not expected that initial Incident Notification Reports for Incidents under investigation initially include actions as these will be informed by the findings of the investigation. The report should be updated with actions resulting from the investigation when available.

6.1.3. Class 1 Incidents

Class 1 Environmental Incidents are managed in the same manner as Class 2 Incidents except where a determination is made by the Chief Executive (or delegate) that a Crisis Management Team should be activated. In this situation the [Sydney Metro Crisis Management Implementation Plan](#) is followed.

6.2. Incident Notification

When an Environmental Event occurs which causes Environmental Harm in all cases both verbal and written communication of the incident must be carried out immediately and within 48 hours respectively. For Class 1 and 2 Incidents the notification process shown in Figure 2 must be followed. Written communication of Environmental Incidents is via an Incident Notification Report (Section 6.3).

This process includes specific roles and responsibilities within Sydney Metro and our delivery Partners who are required to take notification actions in response to Incidents.

This notification process has been developed to ensure that crucial information about Incidents is captured early and communicated to specific individuals who can ensure the Environmental Impacts are minimised and efficient and effective responses to the event are implemented.

In particular the Principals Representative and the Environmental Lead for Sydney Metro play a crucial role in the communication of Incidents within Sydney Metro and these roles are explained in more detail below.

6.2.1. Principal's Representative (PR)

Each works package establishes a contractual interface for communication between the contracted party and Sydney Metro. Generally this interface is between the Principal Contractors Project Director and an appointed representative of Sydney Metro called the Principals Representative.

All formal written communications must pass between these two individuals electronically using TeamBinder. The Principals Representative holds certain responsibilities in the Incident management Process outlined in Figure 2.

6.2.2. Environmental Lead (EL)

Where this procedure is applied to a works package an Environmental Lead (EL) will be selected for the relevant works package. The Environmental Lead must possess environmental experience and competency in managing Incidents and be a representative of Sydney Metro for those works. This representative holds specific responsibilities outlined in Figure 2.

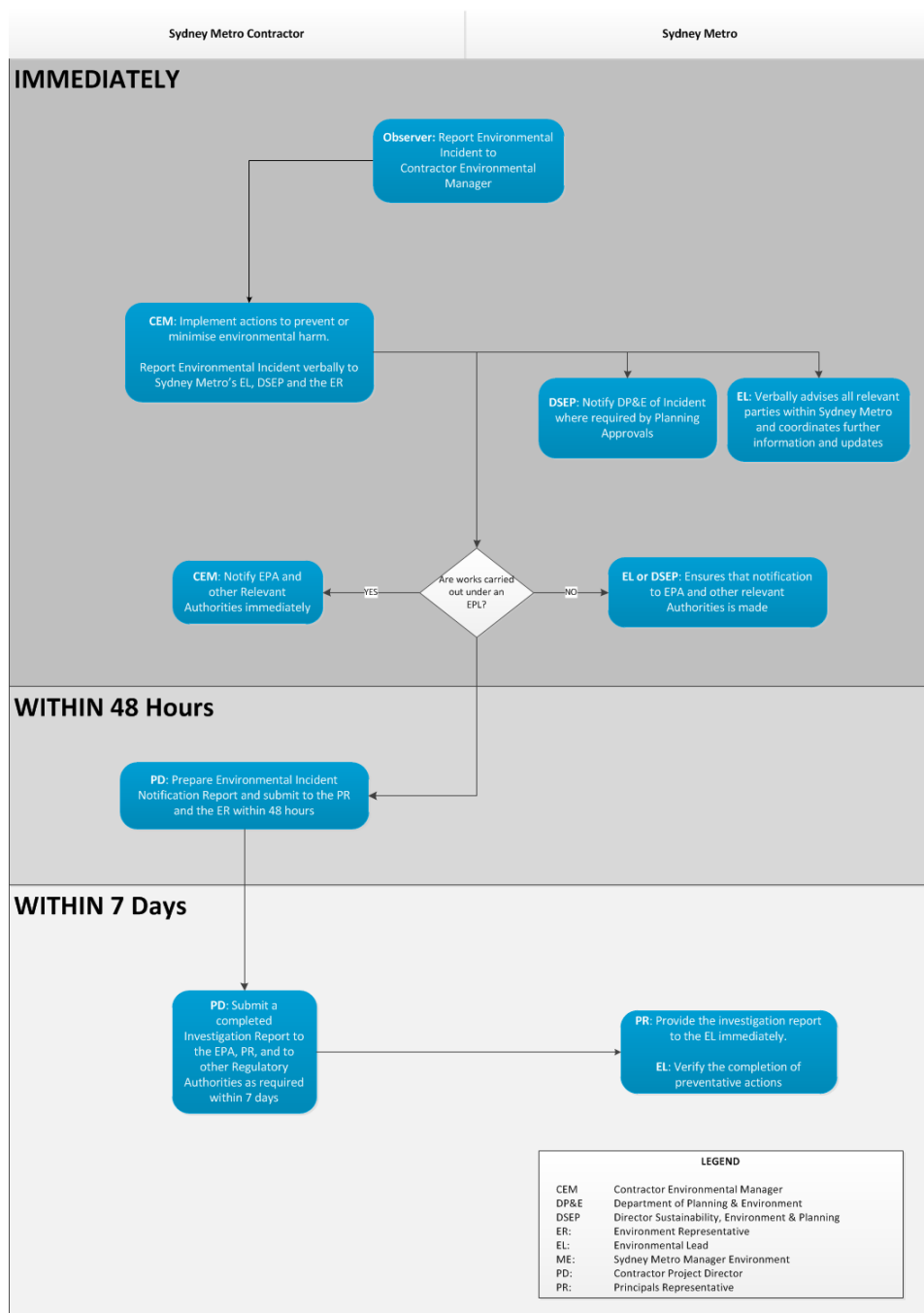


Figure 2: Environment Incident notification process for Class 1 and 2 Incidents

6.3. Incident Notification Reports

For all Incidents an Incident Notification Report must be completed and submitted to Sydney Metro within 48 hours. These reports satisfy the requirement for written communication to Sydney Metro and are completed using the Environmental Incident and Non-compliance Notification Report (SM ES-FT-403) or a similar and consistent form approved by Sydney Metro.

6.4. Incident Investigations

Environmental Incident Investigations must be carried out for all Class 1 and Class 2 Incidents. Investigations may also be requested for any other Environmental Event at the discretion of Sydney Metro. This discretion is likely to be exercised where incidents of a similar nature are occurring repetitively.

When conducting an Environmental Incident investigation, they must:

- Be led by a lead investigator who is suitably independent investigator capable of arriving at objective findings and is experienced in conducting environmental incident investigations;
- Consider the need for legal privilege during the investigation process in consultation with legal counsel;
- Be informed by all available information that is relevant to the investigation;
- Analyse the timeline of events which led up to and followed the occurrence of Environmental Harm including the immediate incident response;
- Be conducted in a manner that is consistent with recognised investigation techniques such as ICAMS;
- Gather and record evidence;
- Seek the input of key stakeholders; and
- Identify Preventative and Corrective actions and document these in the Incident Notification Report.

6.5. Environmental Incidents with Health and Safety Impacts

It is possible that where an Event occurs that causes Environmental Harm, harm is also caused to the health, safety or wellbeing of people. In these situations there will also be a Health and Safety Incident process undertaken which is separate to the process outlined in this document.

While the definition of the Environment covers people under the POEO Act, the management of impacts upon them are carried out using the Health and Safety Incident Management protocols. This is because Health, Safety and Wellbeing requirements are governed by a range of legislation other than the POEO Act and this procedure is not comprehensive in that regard. Sydney Metro has well established processes to manage impacts on people without the need for the Environmental Incident Process to intervene.

Furthermore, where Environmental Events cause harm to both the 'environment' and people it is possible that the root causes for the respective impacts are different. It is also possible that differences in the severity of the impacts trigger inconsistent notification requirements and investigation levels. It is prudent to identify appropriate and effective corrective actions that reduce the risk of impacts to both people and the environment, therefore separate Incident Management Processes are undertaken in these situations.

For more detail on the management of Health and Safety Incidents please refer to the [Health & Safety Incident Reporting & Investigation Standard \(SM-17-00000040\)](#).

6.6. Reporting Pollution Incidents to Relevant Authorities

If an Incident or Non-compliance is a Notifiable Event, then a report must be provided to the relevant Regulatory Authority within the timeframe(s) specified by the relevant legislation. Pollution Incidents which are causing or threatening Material Harm to the environment must be reported to each of the following authorities immediately after project personnel become aware of the Incident, as required by Section 148 of the POEO Act 1997. The contact numbers for these authorities are listed in Table 5.

Table 5: Contact details for Relevant Authorities

Type	Example incident
EPA Environment Line	131 555
Local Authority	Local Council (specific to area)
Ministry of Health	Public Health Unit (refer to http://www.health.nsw.gov.au/Pages/default.aspx to confirm local area contact details)
SafeWork NSW	131 050 or contact@safework.nsw.gov.au
Fire and Rescue NSW	000

Relevant information required to be given to EPA when making a notification is specified in Section 150 of the POEO Act 1997 as follows:

- Time, date, nature, duration and location of the incident;
- Location of the place where pollution is occurring or is likely to occur;
- Nature, the estimated quantity or volume and the concentration of any pollutants involved;
- Circumstances in which the Incident occurred (including the cause of the Incident, if known);
- Action taken or proposed to be taken to deal with the Incident and any resulting pollution or threatened pollution; and
- Other information prescribed by the regulations.

All relevant information known at the time of making the notification must be reported. If the information required by (c), (d) or (e) above is not known at the time of initial notification but becomes known afterwards, it must be reported to each authority immediately after it

becomes known. Verbal notification must be followed by notification in writing within seven days of the date on which the Incident occurred.

Pollution Incidents are not required to be reported if the Incident has already come to the attention of the EPA or the Incident involves only the emission of an odour.

Failure to report a pollution Incident as required by the POEO Act 1997 is an offence.

Where any work or activity is regulated by an Environment Protection License (EPL), notification of a pollution Incident to the EPA should be made by the licensee. Thus, where the contractor holds the EPL for the project, notification to EPA shall be made by the contractor.

For any work or activity that is not regulated by an EPL, notification of pollution Incidents to EPA shall be made by Sydney Metro, unless the contractor is instructed otherwise by Sydney Metro. This includes pollution Incidents that occur as a result of pre-construction activities which may be undertaken prior to an EPL being required for a project. Pre-construction activities are determined by the Planning Approval and may include, for example, geotechnical investigations or surveys.

Where the Environmental Representative determines there to have been a significant off-site impact on people or the biophysical environment, the program Director Sustainability Environment and Planning will notify the Secretary of the Department of Environment and Planning within 48 hours in accordance with Project Infrastructure Approval Conditions. This notification will be followed by a full written report within seven days of the date on which the incident occurred.

6.6.1. Maritime Related Incident Notification and Reporting

Marine Incidents involving vessels and personnel on board vessels must be reported to the Australian Maritime Safety Authority in accordance with the guidance published on their website at:

- [Australian Maritime Safety Authority Incident Reporting](#); and
- [Reporting obligations of owners and masters of domestic commercial vessels](#).

6.7. Environmental Compliance Register

The Environmental Compliance Register is used to manage the information associated with reporting of Environmental Events. This register is maintained by the Manager Environment and may be used by a variety of individuals to input data. For access to the register or information on its use contact the Manager Environment.

This register analyses the data it contains and produces environmental compliance statistics that are used to meet a range of reporting and environmental management requirements.

7. Environmental Non-compliance

An Environmental Non-compliance is a breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans. It is important to note that regardless of whether an event is classified as a Non-compliance or an Incident the process behind managing the event remains the same, with the following exceptions:

- Non-compliances are not notifiable to Regulatory Authorities under the POEO Act;
- Non-compliances are reported to have occurred on the day the breach was raised as opposed to the date when the requirement was breached (this is to preserve historical reporting and analysis – see Section 7.1);
- Non-compliances are not divided into severity classes (Section 5.2);
- Non-compliances do not have the potential to trigger crisis or emergency management processes; and
- There is an informal notification process in the immediate timeframe following a Non-compliance being raised.

When an Environmental Event occurs that causes Environmental Harm and also breaches one or more Environmental Requirements, then an Incident Notification Report will be created which records what requirements were breached.

If a Non-compliance is identified then it must be raised using the Environmental Incident and Non-compliance Report Form within 48 hours by the party responsible for the breach.

7.1. Non-compliance Rate

A key environmental performance statistic used by Sydney Metro is the Non-compliance Rate. This statistic provides a standardised way of comparing the performance of different projects or contractors. The NC Rate is calculated using the following formula:

$$= \left(\frac{NCs + Incidents\ with\ breaches\ raised\ in\ month + (Open\ NCs + Open\ Incidents\ with\ breaches\ from\ previous\ months)}{Total\ Number\ of\ Ongoing\ Requirements} \right) \times 100$$

Each month a count of the number of NCs raised, and Incident raised where Environmental Requirements have also been breached is counted. Added to this number is the number of these events which were raised in previous months that still held an Open status in the current reporting period. Non-compliance and incident Events are considered Open if any of the associated Actions are Open. The total is divided by the number of Environmental Requirements which are actively being complied with (Ongoing Requirements) and a multiplying factor of 100 is applied.

8. Corrective and Preventative Actions

Whenever an Environmental Event is raised actions will be assigned to the event irrespective of whether it is an Issue, Incident or Non-compliance. These actions will generally be Corrective Actions which are implemented to eliminate the cause of the Incident, Non-compliance or Issue and can be thought of as reactive measures in response to the Environmental Event.

Preventative Actions may also be assigned to prevent the occurrence of an Incident, Non-compliance or Issue and can be considered pro-active measures which may be recommended following a detailed investigation of the event.

Actions must:

- Limit impacts as far as is reasonably practicable;
- eliminate risk where practicable;
- where it is not practicable to eliminate the risk, follow the hierarchy of controls;
- address root causes and contributing factors; and
- be prioritised based on risk.

The Executive Director, Safety Sustainability & Environment must ensure there are systems in place to:

- monitor corrective action status;
- escalate issues to the executive where progress on a corrective action is inadequate; and
- retain all corrective action responses for recording purposes.

8.1. Action Status

Actions are allocated to a person who will take accountability for ensuring it is carried out within a timely manner and completed by the due date.

Actions are either closed immediately if the Action has already been carried out and verified by Sydney Metro, or are created with an open status. The Action will remain in an open state until such a time as Sydney Metro verifies that the responsible person has completed the Action in a satisfactory manner. Until all actions associated with an Incident, Non-compliance or Issue are closed the original Environmental Event is considered to be open as well. This is relevant when calculating the NC Rate as open Non-compliances and Incidents contribute toward the calculation of this statistic.

Verification is determined by the Environmental Lead by sighting evidence of the Actions implementation.

9. Related Documents and References

Related Documents and References

- [Environmental & Sustainability Management Manual](#)
- [Risk Management Standard](#)
- [Health & Safety Incident Reporting & Investigation Standard \(SM-17-00000040\)](#)
- [Crisis Management Implementation Plan](#)
- [Environmental Incident and Non-compliance Notification Report](#)
- [Environmental Inspection Information & Summary](#)
- [Sydney Metro Glossary](#)

10. Superseded Documents

Superseded Documents

There are no documents superseded as a result of this document.

11. Document History

Version	Date of approval	Notes
1.0	31 March 2015	New document
2.0	7 July 2016	IMS Review
3.0	7 April 2017	IMS Review
4.0	23 November 2018	IMS Review
5.0	11 February 2019	IMS Review
5.1	18 February 2019	Minor correction to formula

Appendix 4 – Sydney Metro Environmental Incident and Non-Compliance Report Template

Environmental Incident and Noncompliance Notification Report

Record only factual information that you know to be correct. Do not make assumptions, be succinct and avoid speculation.

Section 1: General Details			
Contractor:			
Site:			
Sydney Metro ID Code: (If known)		Contractor Reference ID: (If known)	
Date of Incident or Non-compliance:		Time of Incident/ Non-compliance:	
Date of notification:		Time of notification:	
Method of notification:			
Notification received by – Name:			
Notification received by – Position:			
Event Classification:		Probable Impact Duration	
<input type="checkbox"/> Non-compliance (complete Section 6 & 7 only)	<input type="checkbox"/> Class 3 Incident	<input type="checkbox"/> Short term (less than 1 week)	<input type="checkbox"/> Medium term (less than 3 months)
<input type="checkbox"/> Class 2 Incident	<input type="checkbox"/> Class 1 Incident	<input type="checkbox"/> Long term (greater than 3 months)	<input type="checkbox"/> Permanent
Incident Properties: (Tick as many as appropriate, where significant off-site impacts on people or the biophysical environment occurs this incident is also notifiable to DP&E)		<input type="checkbox"/> Notifiable event (also complete Section 4) <input type="checkbox"/> Environmental Requirements Breached (also complete Section 6)	
Incident type (choose one):			
<input type="checkbox"/> Air Quality (e.g. dust or odour emission, excessive exhaust from plant or equipment)	<input type="checkbox"/> Heritage (e.g. damage/disturbance to heritage item/object/place)	<input type="checkbox"/> Noise & Vibration (e.g. exceedances of noise and vibration limits)	
<input type="checkbox"/> Flora and Fauna (damage/harm to species /habitat/ecological community)	<input type="checkbox"/> Spills and Leaks (e.g. escape of fluids from containers)	<input type="checkbox"/> Traffic, Transport & Access (e.g. Issues regarding the management of traffic flow)	
<input type="checkbox"/> Soil and Water (events where harmful materials escape into soil or discharge to any onsite or offsite waterway)	<input type="checkbox"/> Community, Stakeholder and Business (e.g. events causing impacts on community amenity/property)	<input type="checkbox"/> Waste & Spoil (e.g. disposal causing environmental harm or improper stockpile management)	
<input type="checkbox"/> Management Systems (e.g. Non-Compliance with project approval, or a CEMP requirement)			

Section 2: Circumstances and Corrective Actions

Exact location:
(address, chainage, nearest cross street, landmarks etc., attach sketch if appropriate.)

Circumstances:
(Outline the circumstances of the Incident leading up to the event and detail the activity being conducted)

Corrective Actions:
(Actions taken immediately to address the cause of environmental harm)

Section 3: Other Relevant Information (pollution events only)

Pollutant:			
Quantity or volume:		Concentration:	
Location of Pollution: (If different from the exact location of the event, also describing the extent of the pollution)			

Section 4: Notification to Relevant Authorities (notifiable events only)

Relevant Authorities to be notified: (relevant information to be given in this notification is contained within this form)	Incident Observer immediate verbal notification made to: <input type="checkbox"/> Sydney Metro Nominated Environmental Representative <input type="checkbox"/> Principal Contractors Environment Manager		
	Sydney Metro Nominated Environmental Representative Immediately notified: <input type="checkbox"/> Local Authority (Council) <input type="checkbox"/> EPA (through the Pollution Hotline on 131 555) <input type="checkbox"/> Ministry of Health <input type="checkbox"/> WorkCover Authority		
	As soon as possible following immediate notification requirements: <input type="checkbox"/> Department of Planning and Environment <input type="checkbox"/> Independent Environmental Representative		
Relevant Authority Notification made by – Name:			
Relevant Authority Notification made by – Position:			
Date of notification:		Time of notification:	

Section 5: Incident Investigation Details

Investigation Details: (Actions taken immediately to prevent or minimise environmental harm)			
Report Due Date	Allocated to	Comments	
Relevant approval(s):		Relevant condition(s):	
Action(s) required for closure: (Where an individual is assigned an action to close a Non-compliance they must notify the Nominated Environmental Representative once this is achieved)			
Assigned to:		Status:	<input type="checkbox"/> Open <input type="checkbox"/> Close immediately

Section 6: Signoff

Signature:	
Name:	
Position:	