# Googong Township water cycle project: Stage A - Network (east)

Traffic Management Protocol January 2013

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# 1 Introduction

# 1.1 Context

This Traffic Management Protocol (TMP or Protocol) forms part of the Construction Environmental Management Plan (CEMP) for the Googong Township water cycle project Stage A – Network (east) (the Project).

Refer to Section 1 and Section 2 of the CEMP for additional detail on the scope of the Project to which this TMP applies.

This TMP has been prepared to address the requirements of the Minister's Conditions of Approval (CoA), the Statement of Commitments (SoC), the safeguards listed in the Googong Township water cycle project Environmental Assessment (EA), submissions report, and all applicable legislation.

# 1.2 Background

The Googong Township water cycle project EA assessed the impacts of construction and operation of the Project on traffic.

As part of EA development, a detailed assessment was prepared to address the Director-General's Requirements issued by the Department of Planning and Infrastructure (DP&I). The traffic assessment was addressed in Section 13.1 and Appendix H of the EA.

The EA concluded that there is unlikely to be significant traffic and access impacts associated with the construction and operation of the Project, following the implementation of the proposed mitigation measures identified in the EA.

# **1.3 Environmental management systems overview**

The overall Environmental Management System for the Project and approach to managing environmental impacts for the Project is described throughout the CEMP.

This TMP forms part of the environmental management framework for the Project, as described in Section 1.5 of the CEMP. In accordance with CoA C20(c), this Plan has been developed in consultation with Queanbeyan City Council (QCC), Palerang Council and the Roads and Maritime Services (RMS).

# 2 Purpose and objectives

# 2.1 Purpose

The purpose of this Plan is to describe how the Principal (ACTEW) and the contractor proposes to manage traffic and access during construction of the Project.

This TMP is an overarching plan that establishes the procedures for work area or task specific traffic control plans (TCPs) to control and maintain safe and effective road traffic.

This Plan also assists in ensuring the Project meets the environmental objectives and targets as defined in Section 3.5 of the CEMP.

# 2.2 Objectives

The key objective of the TMP is to ensure that impacts to traffic and access are minimised. To realise this objectives, the following will be undertaken:

- Ensure appropriate controls and procedures are implemented during construction activities to avoid or minimise potential adverse impacts to traffic and access.
- Ensure appropriate measures are implemented to address the relevant CoA and SoC, and the safeguards detailed in the EA and submissions report.
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements as described in Section 3.1 of this Plan.



# 3 Environmental requirements

# 3.1 Relevant legislation and guidelines

Section 3.1 of the CEMP identifies the legal and other requirements applicable to the Project. This section identifies the key legislation applicable to managing traffic and access.

#### 3.1.1 Legislative requirements

#### Roads Act 1993

Section 138 of the *Roads Act 1993* requires that a person must not carry out work, dig out, pump water into or connect to a classified road without consent from the appropriate roads authority.

A road occupancy licence permits the use a specified road space at approved times, provided certain conditions are met. The licence applies to the occupation of the "road space" only and does not imply permission or approval for the actual (physical) works being undertaken.

The Project will seek a road occupancy licence from local council/RMS where required.

#### 3.1.2 Relevant guidelines

The plan has been prepared in accordance with the following:

- AS1742.3 Traffic Control for Works on Roads (AS1742.3: 2009)
- Development Construction Specification C201 Control of Traffic (QCC, 2011)
- Googong Township water cycle project Stage 1 Community Information Plan (project document).

## 3.2 Minister's Conditions of Approval

The CoA relevant to this Plan are listed Table 3.1. A cross reference is also included to indicate where the condition is addressed in this Plan or other management documents.

| CoA No. | Condition requirements   | Document<br>reference |
|---------|--|-----------------------|
| 14      | Prior to the commencement of construction of the project, the<br>Proponent shall assess the condition of roads and footpaths which<br>may be potentially impacted by construction of the project, including<br>over-mass of over-dimensional vehicles), in consultation with the<br>relevant road authorities. | Table 5.1 (T2)        |
| 15      | <ul> <li>The Proponent shall:</li> <li>(a) ensure that any measures to restore roads as a result of the construction of the project, are undertaken in a timely manner, to the satisfaction of the relevant road authority and at the full expense of the Proponent;</li> </ul>                                | Table 5.1 (T3, T4)    |

#### Table 3.1 Conditions of approval relevant to traffic and access

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| CoA No. | Condition requirements  | Document<br>reference                             |
|---------|---|---|
|         | (b) ensure that adequate signage is provided to inform road users of any change in traffic conditions resulting from construction work; and   | Table 5.1 (T12, T14)                              |
|         | (c) undertake all road works in consultation with Councils and any relevant road authority.   | Table 5.1 (T5, T6,<br>T10, T12)                   |
| 20(c)   | A Traffic Management Protocol to outline the management of traffic impacts that may occur during construction of the project. The Plan shall be developed in consultation with Councils, the RTA and any other relevant road authority and shall include, but not necessarily be limited to:  | This Plan   |
|         | <ul> <li>details of traffic routes for heavy vehicles, including any<br/>necessary route or timing restriction for oversized loads;</li> </ul>  | Table 5.1 (T8)<br>Section 4.3                     |
|         | (ii) measures to verify the condition of roads used by construction vehicles prior to and following construction;   | Table 5.1 (T2, T3)                                |
|         | <ul> <li>(iii) details of how the construction of project infrastructure will be<br/>managed in proximity to local and regional roads and with<br/>respect to sensitive receivers located in close proximity to these<br/>roads (such as maintaining access to property) and any other<br/>concurrent works occurring in close proximity to the project,<br/>such as the Googong Dam Spillway Remediation Works;</li> </ul> | Section 4.1.4<br>Table 5.1 (T5, T10,<br>T11, T16) |
|         | <ul> <li>(iv) detailed consideration of measures to be employed to ensure<br/>traffic volumes and acoustic and amenity impacts along heavy<br/>vehicle routes are minimised;</li> </ul>   | Table 5.1 (T6, T8,<br>T9)                         |
|         | <ul> <li>(v) details of requirements to restore roads used for the construction<br/>of the project, including Old Cooma Road and Googong Dam<br/>Road; and</li> </ul>   | Table 5.1 (T3, T4)                                |
|         | <ul><li>(vi) demonstration that all statutory responsibilities with regard to<br/>road traffic impacts have been complied with;</li></ul>   | Section 3.1<br>Table 5.1 (T7, T13,<br>T16)        |

# 3.3 Statement of commitments

The SoC relevant to this Plan are listed Table 3.2. A cross reference is also included to indicate where the condition is addressed in this Plan or other management documents.

| Objective  | Ref.<br>No. | Commitment  | Timing                                 | Document<br>reference                     |
|--|-------------|---|--|---|
| Minimise<br>disturbance to local<br>traffic and amenity<br>during construction | T1          | A traffic management plan will be<br>prepared prior to the commencement of<br>construction. It will detail traffic<br>arrangements for the construction phase<br>of the Project. This will include:   | Prior to and<br>during<br>construction | This plan                                 |
|  |             | <ul> <li>The use of standard mitigation and<br/>management controls.</li> </ul>   |  | Table 5.1 (T6, T7,<br>T10, T12, T13, T14) |
|  |             | <ul> <li>Planning of vehicle use to maximise<br/>efficiency and reduce vehicle trips</li> </ul>   |  | Table 5.1 (T17)                           |
|  |             | <ul> <li>An education program for<br/>construction personnel in relation to<br/>local traffic arrangements (as per the<br/>plan) and local conditions (such as<br/>the intersection of Googong Dam<br/>Road and Old Cooma Road)</li> </ul>  |  | Table 5.1 (T1)                            |
|  |             | <ul> <li>Access to properties and provisions<br/>for temporary access</li> </ul>  |  | Table 5.1 (T11, T11)                      |
|  |             | <ul> <li>A traffic control contractor will be<br/>engaged to implement the traffic<br/>management plan (such as partial<br/>road closures), where necessary<br/>specialist advice is required.</li> </ul>   |  | N/A                                       |
| Manage traffic,<br>transportation and<br>access with local<br>authorities      | T2          | Traffic, transportation and access will be<br>managed in consultation with relevant<br>stakeholders, including Queanbeyan<br>City Council and the RTA, including<br>impact mitigation and management<br>measures to address partial road<br>closures, access to properties and<br>provisions for temporary access and re-<br>instatement. | Prior to and<br>during<br>construction | Table 5.1 (T3)                            |
| Minimise the<br>impact of<br>transportation                                    | Т3          | Any oversized or overweight loads will<br>be transported in accordance with RTA<br>guidelines and requirements.   | Construction                           | Table 5.1 (T7, T8)                        |

Table 3.2 Statement of commitments relevant to traffic and access

| Objective   | Ref.<br>No. | Commitment  | Timing       | Document<br>reference |
|---|-------------|---|--------------|-----------------------|
| Minimise impact of<br>traffic and access<br>on stakeholders<br>and the local<br>community | Τ4          | Councils, property owners and local<br>community members will be informed of<br>any potential loss of or disruption to<br>access to properties, roads and/or<br>pathways. Appropriate temporary<br>measures to either provide alternative<br>access or to reinstate access at the end<br>of each workday will be negotiated with<br>relevant parties. | Construction | Table 5.1 (T10, T11)  |

# 4 Environmental aspects and impacts

The following sections summarise existing traffic environment and local road network. Identified impacts are then reviewed. The key reference documents are Section 13.1 and Appendix H of the EA.

# 4.1 Environmental aspects

#### 4.1.1 Main roads and traffic flow

There are two sealed local council roads within the Project area. The Project lies adjacent to and will connect with Googong Dam Road. Googong Dam Road is a two-lane sealed road that connects Old Cooma Road to Googong Dam. The road provides access to the Googong Foreshores for recreational activities, the ACTEW water treatment plant, and a Ranger's Station and information centre.

Old Cooma Road lies around two kilometres west of the Project, running in a north south direction connecting Googong to Queanbeyan in the north. Old Cooma Road is a two-lane sealed road that predominantly carries rural residential commuter traffic to and from Queanbeyan and provides a connection between Monaro Highway near Royalla and Queanbeyan.

The posted speed limits are 60 kilometres per hour on Googong Dam Road and 100 kilometres per hour on Old Cooma Road.

The only public transport is a weekday school bus service along Old Cooma Road. Table 4.3 outlines existing traffic flows on these two main roads. Old Cooma Road has been divided into two parts (north and south of Googong Dam Road) in relation to traffic flow statistics.

| Road                                      | Date          | Average<br>weekday traffic<br>(total vehicles) | Peak two-way<br>traffic flow<br>(vehicles/hr) | Percentage of<br>heavy vehicles<br>traffic |
|---|---------------|--|---|--|
| Old Cooma Rd (south of<br>Googong Dam Rd) | May 2005      | 2,120  | 244   | 5.7%                                       |
| Old Cooma Rd<br>(north of Googong Dam Rd) | December 2006 | 2,537  | 265   | 5.7%                                       |
| Googong Dam Rd                            | August 2004   | 260  | 29  | 9.5%                                       |

|  | Table 4.3 | Existing traffic flows in the vicinity of the Project |
|--|-----------|---|
|--|-----------|---|

#### 4.1.2 Intersections

The intersection at Old Cooma Road and Googong Dam Road is the main intersection within the Project area. The traffic volumes at this intersection are extremely low in relation to the capacity of the intersection. Both the AM peak hour and PM peak hour flows are classified as level of service (LoS) A and B, respectively.

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#### 4.1.3 Properties

There are two properties that have been considered in relation to access restrictions:

- The 'Talpa' property this is located immediately north of Googong Dam Road.
- The Gorman property this is located immediately west of the water recycling plant (WRP) site.

#### 4.1.4 Interaction with concurrent projects

#### Stage A – Network (west)

Stage A – Network (west) will be constructed at the same time as the Project, but delivered by a separate contractor. Construction traffic relating to Stage A – Network (west) has been included in the assessment of potential impacts of construction traffic on main roads (refer Section 4.3). Stage A – Network (west) is estimated to generate around 150 truck movements and 60 light vehicle movements per day (refer Table 4.4). Cumulative impacts would be managed as per Table 5.1 (T16).

#### Googong Neighbourhood 1A development and early use

This is the first subdivision of the Googong Township development approved under Part 4 of the EP&A Act, Neighbourhood 1A (NH1A). Construction of NH1A will coincide with construction of the Project.

Construction traffic relating to NH1A works is estimated to be around 80 truck and 120 light vehicle movements per day. This will be a small addition to the construction traffic generated by the Project, and has been included in the assessment of potential impacts of construction traffic on main roads (refer Section 4.3).

#### Stage A – WRP

Stage A – WRP will be under construction from June 2013 and completed around September 2014. There may be a small overlap with construction of the Project.

Construction traffic relating to Stage A – WRP works is estimated to generate around 62 truck movements per day. Cumulative impacts would be managed as per Table 5.1 (T16).

#### Googong Dam spillway remediation works

While the EA noted this project was a potential source of cumulative traffic impacts, remediation works on the Googong Dam spillway were completed in late 2010.

## 4.2 Construction activities

Key aspects of the Project that could result in adverse impacts to traffic and access include:

- Increase in vehicular use of the existing road network.
- Intersection works at Googong Dam Road.
- Access for construction vehicles off Googong Dam Road and/or Old Cooma Road.

## 4.3 Traffic and access impacts

Construction traffic will use Old Cooma Road and Googong Dam Road. This will include personnel vehicles and large vehicles for the delivery and removal of equipment and materials.

The majority of truck movements will be for the delivery of materials with only limited quantities of spoil being removed from the construction site. Heavy vehicles entering the Project from the south would likely arrive via the Monaro Highway, turn right onto Old Cooma Road and right into Googong Dam Road. Trucks originating from the north would arrive via the Kings Highway, turning onto Cooma Street, Old Cooma Road and left into Googong Dam Road. Relevant TCPs will be further developed showing specific truck/haul routes to and from the Project, and a permit will be sought from RMS for any oversized and over mass loads (refer Table 5.1 (T8)).

Consultation will take place with QCC and Palerang Council for use of local council roads during construction (refer to mitigation measures outlined in Table 5.1(T6)).

#### Traffic generation

The Project will generate additional heavy and light vehicle traffic as outlined in Table 4.4. Total truck movements for the construction of each element of the Stage 1 project, and likely daily AM and PM peaks are provided.

| Traffic source                        | RWP                | BWPS | Reservoir<br>works | SPS1 (and<br>SPS2) | Pipe works | Totals |  |  |
|---------------------------------------|--------------------|------|--------------------|--------------------|------------|--------|--|--|
| Trucks (peak daily movements)         | 40                 | 32   | 32                 | 64                 | 54         | 222    |  |  |
| Light vehicles (peak daily movements) | 40                 | 16   | 20                 | 20                 | 20         | 116    |  |  |
| Daily AM peak hour                    | Daily AM peak hour |      |                    |                    |            |        |  |  |
| Trucks in                             | 3                  | 2    | 4                  | 4                  | 4          | 17     |  |  |
| Truck out                             | 3                  | 2    | 4                  | 4                  | 2          | 17     |  |  |
| Light vehicles in                     | 12                 | 5    | 6                  | 6                  | 6          | 35     |  |  |
| Light vehicles out                    | 4                  | 1    | 2                  | 2                  | 2          | 11     |  |  |
| Daily PM peak hour                    |                    |      |                    |                    |            |        |  |  |
| Trucks in                             | 3                  | 2    | 4                  | 4                  | 2          | 14     |  |  |
| Truck out                             | 3                  | 2    | 4                  | 4                  | 4          | 14     |  |  |
| Light vehicles in                     | 4                  | 1    | 2                  | 2                  | 2          | 7      |  |  |
| Light vehicles out                    | 12                 | 5    | 6                  | 6                  | 6          | 23     |  |  |

 Table 4.4
 Predicted traffic volumes during construction of the Project

#### Potential impacts on main roads

The assessment of construction traffic impacts in the EA took a conservative approach and included likely traffic generated by all activities for Stage 1 (Stage A – Network (west), Stage A – Network (east) and Stage A – WRP, Stage B – Network and WRP), Googong NH1A early works and the Googong Dam Spillway rehabilitation project. As outlined in Section 4.1.4 the Googong Dam Spillway rehabilitation project is complete. Given the conservative approach taken, the estimated traffic impacts are likely to be slightly overestimated.

The impact of the Project (and concurrent developments as outlined above) on the LoS of the Old Cooma Road and Googong Dam Road intersection is negligible. The AM peak hour LoS ranges from LoS A – C, and PM peak hour LoS ranges from A – B. The Project will not result in a significant change to the LoS, which are considered acceptable.

At Old Cooma Road, north of Googong Dam Road, the daily traffic along this road is likely to increase by up to 698 vehicles, including 294 heavy vehicles. These conditions would equate to a LoS - C, which is considered acceptable.

At Old Cooma Road, south of Googong Dam Road, and at Googong Dam Road, the Project would have no significant impact on the LoS, LoS – A, which is considered acceptable.

The additional traffic generated during construction of the Project will retain acceptable LoS on Old Cooma Road, Googong Dam Road and the intersection of these roads. Given the low volumes of construction traffic, major damage to these roads are not anticipated. Should any unforeseen damage occur the road surface would need to be repaired to its former condition. Refer to mitigation measures outlined in Table 5.1 (T3, T4).

#### Potential impacts on access to properties

Access to properties would generally be maintained during construction of the Project. If temporary alterations to access are required, arrangements will be negotiated with relevant landowners (refer Table 5.1 (T10, T11)). The community will be notified of any traffic alterations as outlined in the Community Information Plan.

#### Construction traffic noise

Construction traffic noise impacts from vehicle movements to and from the construction site are covered in the Noise and Vibration Management Plan (CEMP Appendix D).

# 5 Environmental control measures

## 5.1 Traffic and access mitigation and management measures

A range of environmental requirements and control measures are identified in the various environmental documents, including the CoA, SoC and the EA. Specific measures and requirements to address impacts on traffic and access are outlined in Table 5.1.

Table 5.1Mitigation measures

| ID | Measure  | When to<br>implement  | Reference                            | Responsibility                              |
|----|--|-----------------------|--------------------------------------|---|
| T1 | All personnel will be required to attend the project induction and will receive ongoing training via toolbox talks regarding their responsibilities related to traffic management and access.  | Construction          | SoC T1                               | Environment<br>Manager                      |
| T2 | A road dilapidation survey will be carried out prior to the commencement of construction. The survey will include Googong Dam Road within the Googong Foreshore boundary. Dilapidation surveys will be carried out in consultation with QCC, Palerang Council and RMS (if relevant).   | Prior to construction | CoA 14<br>CoA 20(c)(ii)<br>SoC T2    | Construction<br>Manager                     |
|    | Dilapidation surveys will document the current condition of roads through photographic and written reports, or similar.  |                       |                                      |   |
| Т3 | At the completion of construction of Stage A – Network (east), the condition of roads (including Googong Dam Road and Old Cooma Road) utilised by the Project will be reviewed in consultation with QCC, Palerang Council and RMS (if relevant).   | Construction          | CoA 15(a)<br>CoA 20(c)(ii)<br>SoC T2 | GTPL Assistant<br>Project Director          |
|    | Road restoration measures and nominated timeframes to repair roads will be developed in consultation with the relevant road authority. The timeframe for repair work will be developed with consideration of potential future impacts, for example from future Integrated Water Cycle stages (eg Stage A – Network (west), Stage A – WRP) and the Googong Township works (subdivision and building works). |                       | 300 12                               |   |
| Т4 | Any damage to local roads attributable to the Project will be repaired without delay to ensure<br>the road surface is kept safe for traffic.   | Construction          | CoA 15(a)<br>CoA 20(c)(v)            | Construction<br>Manager<br>Project Engineer |

| ID  | Measure   | When to<br>implement                      | Reference                               | Responsibility                              |
|-----|---|---|---|---|
| Τ5  | Prior to construction, individual TCPs will be developed for each specific section of works.<br>These plans will show the specifics of the proposed works and individual traffic controls for<br>the site. TCPs will further describe the implementation of the measures prescribed by this<br>TMP on a site and activity specific basis.   | Prior to<br>construction,<br>construction | CoA 15(c)                               | Project Engineer                            |
| Τ6  | <ul> <li>TCPs will be developed in consultation with QCC and/or Palerang Council/RMS for any work that would involve any obstruction to traffic on council/classified roads. TCPs will include the following information:</li> <li>Design drawings for any temporary roadways and detours.</li> <li>Details of arrangements for construction under traffic.</li> <li>A signpost layout.</li> <li>Working hours when traffic control measures will be in place.</li> </ul> | Prior to<br>construction,<br>construction | CoA 15(c)<br>CoA 20(c)(iv)<br>SoC T2    | Project Engineer                            |
| Τ7  | The Project will seek a road occupancy licence from the relevant road authority (local council/ RMS) as required by Section 138 of the <i>Roads Act 1993</i> .  | Construction                              | CoA 20(c)(vi)<br>SoC T3                 | Project Engineer                            |
| Т8  | Construction haul routes and heavy vehicle routes will be developed by the contractor and identified in relevant TCPs. Where possible, routes will be developed to minimise impacts on noise and amenity of nearby residents.<br>Any oversized and over mass loads will be transported in accordance with RMS guidelines.<br>A permit will be sought from RMS' Special Permits Unit in Glen Innes (phone 1300 656 371).   | Construction                              | CoA 20(c)(i)<br>CoA 20(c)(iv)<br>SoC T3 | Project Engineer                            |
| Т9  | Deliveries will be scheduled to occur within approved work hours (7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on Saturday) to minimise impact on amenity.  | Construction                              | CoA 20(c)(iv)                           | Construction<br>Manager<br>Project Engineer |
| T10 | The Project will notify councils, property owners and the local community (including the Googong Foreshore Committee) of any potential loss of or disruption to access to properties, roads and/or pathways. Notification protocols and communication tools are outlined in the Googong Township water cycle project Stage 1 Community Information Plan.  | Construction                              | CoA 20(c)(iii)<br>SoC T4                | Environment<br>Manager<br>Project Engineer  |
| T11 | Safe and convenient passage for vehicles, pedestrians and stock to and from side roads and property accesses to the roadway will be maintained or alternative arrangements made following consultation with the affected community. If required, appropriate temporary measures – to either provide alternative access or to reinstate access at the end of each workday – will be negotiated with relevant parties.  | Construction                              | CoA 20(c)(iii)<br>SoC T4                | Project Engineer<br>Foreman                 |
|     | The details for maintaining access will be provided on individual TCPs.   |   |   |   |

| ID  | Measure   | When to<br>implement | Reference                                 | Responsibility   |
|-----|---|----------------------|---|--|
| T12 | If required, posted speed limits will be reduced on the road network to comply with work safety requirements and enhance road safety through temporary construction zones that impact on traffic flows.   | Construction         | CoA 15(b)<br>SoC T1                       | Project Engineer<br>Foreman                                  |
|     | QCC and/or Palerang Council will be consulted prior to installation of any speed limit changes on local roads. Consultation with NSW Police Service will be undertaken where required to determine the strategies to enforce these speed restrictions through work sites.   |                      |   |  |
| T13 | Traffic control will be in accordance with AS1742.3 and the <i>Specification 201: Control of Traffic Design</i> (QCC, 2011).  | Construction         | CoA 20(c)(vi)<br>SoC T1                   | Project Engineer<br>Foreman                                  |
| T14 | Directional signposting, driver information signposting and variable message signs to provide advance warning of changes to traffic conditions will be erected to minimise disruption to traffic.   | Construction         | CoA 15(b)<br>SoC T1                       | Project Engineer<br>Foreman                                  |
| T15 | Pedestrian and cyclist access will be maintained on sealed roads. The Project site will be fenced as necessary to prevent unauthorised pedestrian access and to enhance pedestrian safety.  | Construction         | SoC T1                                    | Project Engineer<br>Foreman                                  |
| T16 | GTPL will ensure effective communications between the GTPL projects (Stage A – Network (west), Stage A – Network (east), Stage A – WRP, NH1A works) and other relevant authorities to allow the identification of potential cumulative impacts from other developments.   | Construction         | CoA 20(c)(iii)<br>CoA 20(c)(vi)<br>SoC T2 | GTPL Assistant<br>Project Director<br>Environment<br>Manager |
|     | In the event of cumulative impacts from construction traffic generated by other developments, GTPL will communicate with the relevant developers or authority to identify any possible ways of minimising impacts. This may include coordination of high traffic events, or scheduling to minimise overall impacts. |                      |   | Project Engineer   |
| T17 | The Project team will be encouraged to maximise vehicle use efficiency to reduce the number of vehicle trips, eg through car pooling. Fuel efficient and low emission vehicles will   | Construction         | SoC T1                                    | Construction<br>Manager                                      |
|     | be utilised where practicable.  |                      |   | Environment<br>Manager                                       |

# 6 Compliance management

## 6.1 Roles and responsibilities

The Project team's roles and responsibilities are outlined in Section 4.1 of the CEMP. Specific responsibilities for the implementation of environmental controls are detailed in Section 5 of this Protocol.

## 6.2 Training

All personnel working on site will undergo site induction training relating to traffic and access issues. The induction training will address elements related to traffic and access management including:

- Construction haul routes.
- Approved work hours.
- Maintenance of property access.
- Appropriate driver behaviour.

Further details regarding induction and training are outlined in Section 5 of the CEMP.

## 6.3 Inspections

Inspections of sensitive areas and activities with the potential to impact traffic and/or access will occur for the duration of the Project. Daily visual inspections of the construction site will be undertaken by the Environment Manager and construction personnel to identify traffic and access issues.

Weekly environmental inspections including of traffic and access management and mitigation measures will be undertaken by the Superintendent/Foreman/Environment Manager. This will include auditing of construction activities to ensure property access and pedestrian/cyclist access is maintained. These inspections will be documented on the weekly checklist.

The Environmental Representative will inspect the site regularly.

Requirements and responsibilities in relation to inspections are documented in Section 8.1 of the CEMP.

## 6.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this Protocol, CoA and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 8.4 of the CEMP.

# 6.5 Reporting

Results and outcomes of inspections, monitoring and auditing will be reported internally on a monthly basis. Six-monthly construction compliance reports will be prepared to report on compliance with the Project Approval. Reporting requirements and responsibilities are documented in Section 8.5 of the CEMP.

# 7 Review and improvement

# 7.1 Non-conformity, corrective and preventative actions

A non-conformance is an action or omission that does not conform with the requirements of this TMP or any legal and other requirements. Any member of the Project team or the Environmental Representative can identify a non-conformance or opportunity for improvement. Section 8.3 of the CEMP identifies the process for identifying, reporting, recoding and reviewing non-conformances. This will ensure continual improvement.

# 7.2 Management plan update and amendment

The processes described in Section 7 and Section 8 of the CEMP (relating to incidents, inspections, monitoring and auditing) may result in the need to update this TMP. This will occur as needed.

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