# Chapter 4 Response to government agency submissions



# 4. Response to government agency submissions

Chapter 4 provides a summary of the key issues raised in the submissions from government agencies and local councils including Liverpool City Council (LCC) and Campbelltown City Council (CCC) and Moorebank Intermodal Company's (MIC) response.

# 4.1 NSW Environmental Protection Authority

#### 4.1.1 Noise and vibration

Adequacy of the report – noise levels from the rail link

The NSW Environmental Protection Authority (EPA), were concerned that the noise levels from the rail link may have been under predicted by approximately 11 to 20 dB(A) due to:

- The noise contribution of the rail link potentially being significantly under-estimated (by up to 20 dB(A)) due to the difference between the modelled and design curve radii. The detailed design should maximise the curve radii where practicable.
- The predicted L<sub>Aeq(period)</sub> noise from the rail link at Casula was predicted to be 11dB lower for this
  project than for the SIMTA Project, which will have fewer (one fourth) the rail movements of this
  project. This appears to arise from differences in the predictive noise modelling for each project.
- The Noise and vibration impact assessment (NVIA) relied on predictions for the rail connection from the 2014 NVIA which predicted rail noise levels using the NORDIC Rail Traffic Noise Prediction Method and assumed that curve radii would be close to 500 m and much greater than 300 m however the rail link for the Project includes a curve with radius less than 300 m.
- Predictions in the 2014 NVIA were based on up to 40 rail movements, evenly distributed over a 24 hour period.
- The 2014 NVIA did not apply curve corrections to noise predictions from the rail connection or onsite rail movements and as a result its predictions were significantly different from the SIMTA NVIA (2015).

#### MIC response

MIC has consulted its noise expert from SLR Consulting (SLR) regarding the predicted noise levels from the southern rail access option. In our opinion the rail noise levels have not been under-estimated for the following reasons:

• The 2014 Noise and Vibration Impact Assessment (NVIA) completed for the EIS (Technical Paper 3, Volume 3) cited a study by Transport for NSW (TfNSW) that identified an existing track with a tight curve radius which exhibited maximum rail noise levels up to 20 dB(A) higher than experienced on straight track sections. This information was presented to acknowledge the potential significance of issues such as 'wheel-squeal' where the track design includes curves with a radius <300 m.

- As discussed in the NVIA, the new, modern track systems to be constructed for the rail access at the Moorebank Intermodal Terminal will include measures to mitigate noise events such as wheel squeal and will be designed to maximise the curve radius to, where feasible, be ≥500 m. As such track corrections of 20 dB would not be appropriate for the Terminal.
- The predicted rail noise levels in the 2014 NVIA include track corrections of +3 dB(A) where the
  curve radius is likely to be close to 500m. The predicted noise levels have included the commitment
  of the Moorebank Intermodal Terminal Project to design and construct (as required) rail noise
  mitigation such as track curves designed to have a radius >500 m and the installation of track
  greasing systems.

The Moorebank Intermodal Terminal Project has proposed measures to mitigate rail noise from the southern rail connection including the design of the radius of track curves to be ≥500 m and the installation of track greasing systems. A summary of these mitigation measures are presented in Chapter 7 – Revised environmental management measures of this report.

The predicted rail noise levels account for the implementation of the above mitigation measures and also include +3 dB track corrections for the Interstate track which even with the recommended mitigation may have a curve radius <500 m.

The predicted noise levels have adopted source noise emissions from SLR's extensive database of measured train movements in the NSW. SLR's database forms the basis of the TfNSW rail noise emission inventory referenced by the SIMTA Project for its Stage 1 EIS. The adopted noise emissions for the Moorebank Intermodal Terminal Project are conservative being at the upper extent of measured noise levels for freight trains travelling at up to 80 km/h.

Whilst SLR has not undertaken a detailed review of the SIMTA Stage 1 NVIA, the following factors are likely to account for the difference in predicted noise levels between the Moorebank and SIMTA Stage 1 projects:

- The SIMTA Stage 1 NVIA report acknowledges the predicted noise levels are conservative, with track corrections (up to +8 dB(A)) applied to both the L<sub>Aeq(period)</sub> and L<sub>Amax</sub> noise levels on the assumption the concept design is 'unmitigated' for rail noise.
- In comparison, the noise predictions for the Moorebank Intermodal Terminal Project assumes that the necessary noise mitigation will be included in the design and construction of the southern rail access connection.
- The SIMTA Stage 1 NVIA report does not provide the source noise emissions applied in the noise
  modelling. Notwithstanding, the difference in predicted noise levels suggests the SIMTA
  assessment applied higher train source noise emissions than the conservative noise levels applied
  in the Moorebank Intermodal Terminal Project.
- The noise predictions would be sensitive to the assumed heights of the elevated track across the Georges River. In this regard the rail noise predictions may have been based on track elevations and track gradient specific to the concept designs for the respective MIC and SIMTA projects. In this regard, the SIMTA track elevations should be considered in preference to the adopted elevations applied for the Moorebank Intermodal Terminal Project, as ultimately the SIMTA design will constructed and built (see section 6.1.3 of the Supplementary Response to Submissions report for further discussion regarding the adopted design for the southern rail access).

The NVIA's prepared for both the Moorebank Intermodal Terminal Project and the SIMTA Stage 1 project provide the same conclusion; in order to achieve the Amenity Criteria of the NSW Industrial Noise Policy the design of the southern rail access connection will require appropriate noise mitigation to limit noise from wheel squeal and/or flanging and a design to maximise the radius of track curves.

MIC is committed to managing curve squeal noise by designing the track layouts to minimise small radius curves within the main Moorebank Intermodal Terminal Project site and on the southern rail access. The NVIA assumed mitigation so that the curve radius will be close to or above 500 m which would only incur a minor curve noise correction of +3 dB(A) to both the LAE and LAMAX noise emissions.

As detailed in Section 7.2 of the EIS Technical Paper 2 – Noise and Vibration Impact Assessment, track corrections were included in the prediction of rail noise from the main MIT site and the southern rail access connection.

#### Adequacy of report

In addition to the comments raised above regarding the assessment of the rail link, the EPA raised the following comments on the Appendix F – Noise and Vibration Assessment of the Response to Submissions report:

- noise from the additional traffic generated on the Southern Sydney Freight Line (SSFL) should be quantified. The impacts of the proposal on network rail noise, including the SSFL, should be quantified in accordance with the Rail Infrastructure Noise Guideline;
- sleep disturbances should have been assessed in detail during detailed design of the intermodal and in accordance with the Application Notes NSW Industrial Noise Policy.

#### MIC response

As stated in Section 14 in Technical Paper 2 – Noise and Vibration Assessment of the EIS (EIS Volume 3), the Moorebank Intermodal Terminal Project is intending to operate within the approved capacity of the SSFL and the design of the SSFL includes an allowance for intermodal rail freight at Moorebank.

In the event that the terminal requires a change in the infrastructure or approved capacity of the SSFL this would trigger a new or modified approval process. The Australian Rail Track Corporation would be responsible for any acoustic assessments required as part of future approvals.

As stated in both the Technical Paper 2 – Noise and Vibration Assessment of the EIS and Appendix F – Noise and Vibration Assessment of the Response to Submissions report, sleep disturbance will need to be assessed in accordance with the NSW Industrial Noise Policy at the detailed design stage once the specific operation of the Moorebank Intermodal Terminal Project is known.

#### Adequacy of management and mitigation measures

The EPA provided comments on the management and mitigation measures proposed for the Moorebank Intermodal Terminal including:

- best practice should be used in both the import/export and interstate terminals, including but not limited to electric automated container handling equipment or plant with equivalent sound power;
- a risk assessment should be undertaken to determine if non-tonal reversing alarms can be fitted as
  a condition of site entry. Alternatively site design may include traffic flow that does not require or
  precludes reversing of vehicles;
- supports the installation of a 4.5 m high noise barrier on the western site of the main internal truck access (haul) road;
- over 90% of the mitigation measures identified for noise and vibration impacts were reported as being 'subject to review. More should be committed to by the proponent, or be required by conditions of approval;

- recommendation that for those locations where it is not possible to meet the required noise level criteria, mitigation measures such as noise walls, or architectural treatments should be implemented; and
- the Construction Noise and Vibration Management Plan (CNVMP), alone, is appropriate for managing the predicted construction noise impacts during the day time (standard hours).
   Construction outside these hours would exceed Noise Management Levels and require additional mitigation. The NSW Department of Planning and Environment (DP&E) should consider additional mitigation measures for construction noise outside of standard hours, including respite periods.

MIC is committed to implementing best practice for noise reduction in both the IMEX and Interstate terminals. MIC will undertake a risk assessment during Noise and Vibration assessments during future Stage 2 State significant development (SSD) applications at each development phase including for the IMEX and Interstate terminal developments to determine if non-tonal reversing alarms can be fitted to vehicles to be utilised on site to reduce the noise impact.

MIC is committed to providing appropriate noise mitigation measures. MIC acknowledges that the majority of noise mitigation measures are 'subject to review'. This is because the commitment to noise and vibration mitigation cannot be determined at the concept EIS stage. As the detailed design on the terminal is not known, the management and mitigation measures for noise impacts will be reviewed as part of the Stage 2 SSD applications. The requirement for noise barriers will also be determined at the Stage 2 SSD stage, once the detailed design of the terminal site and the internal truck access road is completed.

The NSW Industrial Noise Policy allows for Proponents to negotiate receptor specific noise limits where the Moorebank Intermodal Terminal Project demonstrates Best Practice for noise control has been implemented. This should be included as a noise management approach prior to the consideration of architectural treatment of dwellings.

MIC are committed to preparing a CNVMP to manage the predicted construction noise impacts during the day and will consult with DP&E for construction outside of standard hours.

Updated management and mitigation measures have been provided in Chapter 7 – *Revised* environmental management measures of this report. The measures have been updated to reflect the information provided by EPA in its submission.

#### Recommended Conditions of Concept Approval

The EPA recommend the following Conditions of Concept Approval:

- 1. Best practise plant for both the import/export terminal and interstate terminal, to minimise noise levels, including electric automated container handling equipment or equipment with equivalent sound power levels.
- 2. A 4.5 m high noise barrier on the western side of the on-site haul road.
- 3. All feasible and reasonable mitigation measures for the rail link, including automatic lubrication and top of rail friction modifiers.
- 4. Only best practise rolling stock to access the import/export terminal, including locomotives with the lowest practicable noise levels, and steering, permanently-coupled 'multipack' wagons.

- 5. A detailed assessment of sleep disturbance impacts, including: how often noise events occur; the time of day when they occur; and whether there are any times of day when there is a clear change in the noise environment.
- A risk assessment be undertaken to determine if non-tonal reversing alarms can be fitted as a condition of site entry. Alternatively site design may include traffic flow that does not require or precludes reversing of vehicles.
- 7. For those locations where it is not possible to meet the required noise level criteria, mitigation measures such as noise walls, or architectural treatments should be implemented.
- 8. A Construction Noise and Vibration Management Plan.
- 9. All additional feasible and reasonable mitigation measures for construction works outside standard hours, including providing respite periods where appropriate.

In regard to recommended condition no. 7, prior to the consideration of architectural treatment of property the Proponent is to discuss receptor specific noise limits where best practice for both the IMEX and interstate terminal to minimise noise levels has been implemented.

MIC is comfortable to receive conditions of approval for all the other recommended noise and vibration conditions.

#### 4.1.2 Contaminated land

#### Audit of Environmental Site Assessment

Concerned about the lack of engagement of an accredited site auditor to issue a Section A Site Audit Statement in relation to the proposal. Recommends that this be a condition of consent.

#### MIC response

As noted in section 15.2.1 of Chapter 15 – Contamination and soils of the EIS and in Appendix B of the Response to Submissions report, the Phase 2 Environmental Site Assessment has been reviewed by an independent site auditor accredited by the NSW EPA under the Contaminated Land Management Act 1997 (NSW) to provide certainty in the non-statutory sign off of the Phase 2 ESA and conclusions relating to the feasibility of the proposed future use of the Moorebank Intermodal Terminal site.

Further contamination land investigations have been undertaken since the exhibition of the Response to Submissions report and a summary of these investigations are provided in Chapter 6 – *Additional clarification and technical investigations* of this report. These additional investigations have also been reviewed by the independent site auditor.

MIC is happy to receive the recommendation of EPA as a condition of its consent.

#### Glenfield waste site

The EPA has concerns about the southern rail access option, as of the three options originally proposed, it will have the most impact on the Glenfield waste site.

The EPA will not be in a position to assess the impacts of the rail link on the Glenfield waste site until such a time as a detailed impact assessment including mitigation strategies has been undertaken and the results of such presented in various sub-plans. The EPA will not support approval of the southern rail access option until such time as the proponent is clearly able to demonstrate that the construction and operation of the rail link will not compromise the effectiveness of the landfill pollution and control and monitoring systems at the Glenfield Landfill licensed premises.

Impacts on leachate and the leachate management and barrier system other than the leachate pond should be considered in the EIS in the event that landfilled waste is excavated during earthworks. The EPA cannot support any works that have the potential to disturb the landfill cap or barrier system such as excavation or piling because the proponent has not detailed mitigation strategies. The EPA is concerned that there is no commitment to monitor leachate and groundwater into the future.

A methodology to ensure the landfill containment system retains its integrity during and after construction has not been provided.

Landfill gas management has not been adequately addressed in the EIS and the EPA cannot support any works which have the potential to increase, facilitate movement, accumulate or release landfill gas because the proponent has not adequately detailed impacts or mitigation strategies to avoid occupational or environmental impacts.

The Secretary for DP&E's Environmental Assessment Requirements (SEARs) required consultation with the EPA on the impacts of the rail link on the Glenfield waste site, yet formal consultation has not yet successfully taken place.

Environmental Protection (EP) Licence 4614 required regular monitoring of environmental pollutants at specific locations. If these points are required to be moved it should be identified in the EIS. The EPA cannot support the relocation or removal of any monitoring points with the operation of the landfill within the Glenfield Waste Services premises because the proponent has not provided specific detail on points to be relocated or removed

The EPA cannot support the construction of a 20 m wide rail corridor within the Glenfield Waste Services because not enough detail has been provided on the licensee's access to monitoring points, leachate and stormwater controls.

#### MIC response

MIC acknowledges EPA's concerns regarding the selection of the southern rail access option as having the most impact on the Glenfield Waste Site. The selection of the southern rail access option also presents a number of benefits (over the central and northern access options), including the lower noise impacts and reduced visual impacts in surrounding residential areas and to the Casula Powerhouse facility.

As presented in Chapter 2 – Assessment of the issues raised by the NSW Planning Commission of the Response to Submissions report, only one rail connection into the Moorebank precinct will be constructed, either by SIMTA under the terms of its consent, or, if that lapses under the terms of the Moorebank Intermodal Terminal Project approval. If it's the later, then the assessment and approval of the rail connection will be subject to a Stage 2 SSD application. If it's the former the conditions of consent will be adopted following the approval of the SIMTA Stage 1 SSD application.

MIC is comfortable to receive a condition of approval to monitor leachate and groundwater into the future.

Construction of the rail bridge will not impact any landfill cells on the Glenfield waste site and will not penetrate any engineered capping layers or leachate treatment systems. MIC considers that a detailed methodology to retain the integrity of the landfill containment system detail is not required for a Stage 1 SSD concept EIS approval and should be the requirement of a Stage 2 SSD application during detailed design of the rail connection. Similarly, the requirements for landfill gas management would be addressed during the Stage 2 SSD application.

The SEARs for the Moorebank Intermodal Terminal site do not contain a requirement to consult with EPA on the impact of the rail link on the Glenfield Waste site. The SEARs for the Moorebank Intermodal Terminal Project EIS are presented in Table 15.1 of Chapter 15 – *Contamination and soil* of the EIS.

The EPA maybe confusing the Moorebank IMT SEARs with the SIMTA EIS SEARs – which do have a requirement for consultation with EPA regarding the Glenfield waste site.

MIC notes their requirements of EP Licence 4616.

#### Disturbance of contaminated material

The EPA cannot support any proposal that:

- has the potential to disturb landfilled waste because the proponent has not detailed specific mitigation strategies to prevent the release of asbestos fibres within previously landfilled waste;
- may have any activities that involve the disturbance of exhumation of landfill waste because it is
  prohibited by Environment Protection Licence 4614 and because the proponent has not provided
  enough information to make an assessment of the impacts; and
- includes the stockpiling of contaminated materials as part of the proposed Rail Link as the
  proponent has not addressed all potential impacts to the environment from the excavation of
  potentially contaminated soils in this area.

#### MIC response

EPA's comment is noted, however as noted above, the alignment of the rail connection does not impact on any live cells or breach any engineered capping layer or leachate treatment facility. Landfill waste will not be exposed during construction of the rail connection. Further MIC considers this level of detail is not required for a Stage 1 SSD concept EIS approval. Mitigation strategies associated with the disturbance of landfilled waste would be addressed during the Stage 2 SSD application.

#### Recommended Conditions of Concept Approval

- 1. The proponent must prepare a detailed assessment of the impacts on the Glenfield Waste site licensed premises. The assessment must include, but not be limited to:
  - > Targeted intrusive investigations to determine contamination pathways and to develop mitigation, management and/or remediation options based on those investigations.
  - Details of the quantity of landfilled waste to be removed, the location from where it will be removed, the methodology to be utilised and the estimated timeframe for the removal and reburial.

- > Proposed measures to mitigate odour impacts on sensitive receivers, including application of daily cover to any exposed waste in accordance with benchmark technique 33 of the EPA's Environmental Guidelines: Solid Waste Landfills, 1996.
- > Details of impacts on pollution control and monitoring systems including existing groundwater and landfill gas bores and their subsequent repair or replacement.
- > The methodology proposed to ensure that where the landfill barrier system disturbed, it is replaced or repaired to ensure its ongoing performance. The proponent should detail matters such as sub grade preparation and specifications, liner installation/reinstallation procedures and construction quality assurance (CQA) procedures.
- > An overview of any access and materials or equipment storage arrangements with the Glenfield Landfill in relation to the construction of the project, and operation and maintenance of the rail link.
- Details of any other expected or potential impacts to the licensed area and options for management and mitigation of those impacts (i.e. leachate management and surface water runoff, potential impacts on the Georges River during works, dust etc.).
- > Details of and proposed mitigation measures for the long term management of the rail link. A permanent rail link across the landfill is likely to have long term impacts that needs to be considered and mitigated (e.g. subsidence or gas issues).
- 2. The proponent must provide the assessment report to the EPA for review and approval at least three months prior to commencement of construction (including early works). No works are permitted to commence within the Glenfield Waste site licensed premises without the EPA's written approval.
- 3. The proponent must provide the EPA with any construction design plans for review and approval prior to commencement of the Rail Link construction (including early works).
- 4. The proponent must prepare a construction and operational management plan specific to the management of activities to be undertaken to the Glenfield Waste licensed premises. The plan must include, but not be limited to:
  - Details of the exact location of the rail link in relation to landfill cells and activities.
  - > Details of land tenure and licence management. Where land is to be excised from the landfill licenced premises the proponent must include a surveyors plan.
  - > Details of how access during construction and operation will be maintained including access to landfill monitoring and environmental controls.
  - > Details of material requirements and how landfill levy issues will be managed when bringing construction material through the landfill.
  - > Details how community interactions will be managed such as notification or operations and a community complaints line including a direct link to an onsite manager.
  - > Details of the management of environmental issues from construction/haulage/operation, including but not limited to:
    - a) soil and water (including runoff from stockpiles)
    - b) air

- c) odour
- d) noise
- e) waste
- f) contamination/remediation.
- 5. The proponent must provide all management plans to the EPA for review and approval at least two months prior to commencement of construction (including early works). No works are permitted to commence within the Glenfield Landfill licensed premises without the EPA's written approval.
- 6. The proponent must provide the EPA with CQA report within 60 days of the completion of the Rail Link project.

MIC is comfortable to receive these conditions of approval for contaminated land, provided these conditions (in relation to the Glenfield Waste site) are consistent with the conditions of approval given to SIMTA for their Stage 1 SSD application.

#### 4.1.3 Air quality

#### Adequacy of Local Air Quality Assessment

The EPA raised concerns that there were some Inconsistencies in the emissions estimates between the regional and local air quality assessments. The additional information provided did not explain the omissions of emissions sources from one assessment and not the other.

The EPA recommended that the discrepancy in source allocation be rectified in any subsequent assessment for project approval.

The change in VOC emissions (an ozone precursor) warrants additional consideration in the context of ground level ozone at the project approval stage.

#### MIC response

Any discrepancies in source allocation will be rectified in subsequent Stage 2 SSD applications for the Moorebank Intermodal Terminal Project.

The potential ground level ozone concentrations associated with the Moorebank Intermodal Terminal Project have been investigated using peak calculated annual emissions (coincident with Full Build operations) and the NSW EPA Level 1 Screening procedure tool (hereafter the 'EPA Screening Tool', sourced from <a href="http://www.epa.nsw.gov.au/air/appmethods.htm">http://www.epa.nsw.gov.au/air/appmethods.htm</a>).

The EPA Screening Tool was configured as follows:

- 'Sydney Central' source region selected;
- default VOC concentrations applied; and
- daily CO, NO<sub>x</sub> and VOC emission rates of 0.72 t/day, 0.70 t/day and 0.34 t/day respectively.

The maximum 1-hour and 4-hour incremental ozone concentrations calculated by the EPA Screening Tool were 0.27 ppb and 0.17 ppb respectively. Both of these concentrations are below the screening impact level criterion of 0.5 ppb.

On the basis of the screening assessment procedure, no further ozone impact assessment is required for the Moorebank Intermodal Terminal Project.

As the screening tool requires emissions of  $NO_x$ , CO and VOCs, and the cumulative SIMTA scenarios only calculated emissions of particulate matter and  $NO_x$ , the ozone screening assessment cannot be conducted for the cumulative SIMTA scenarios. Nevertheless, the magnitude of  $NO_x$  emissions from the cumulative SIMTA scenarios is comparable to the Full Build scenario, therefore it is considered that these scenarios would also satisfy the screening level criteria.

#### Air quality management and mitigation measures

EPA recommends that additional investigation and assessment of remediation options, potential for air emission controls should be undertaken prior to the commencement of earth moving activities on the site.

#### MIC response

EPA's comment is acknowledged. MIC has recently conducted soil, groundwater and soil vapour sampling to investigate the potential for site contamination which could impact sensitive receptors during earth moving activities (Refer to Chapter 6 – *Additional investigations* of this report). The results of these investigations indicated that no soil vapour concentrations at elevated levels which could harm site workers or surrounding sensitive receptors exist at the site. The results of these investigations will be incorporated into future assessment phases prior to the commencement of bulk earth moving activities.

#### Recommended Conditions of Concept Approval

Prior to each stage of Project Approval, the proponent must:

- Review and commit to best practice process design and emission control.
- Update the air quality impact assessment based on the final project design, operating regime and include best practice emission controls.

Project Application Requirements

The following requirements apply with respect to each stage of project application:

- Best practice process design and emission control.
- Air quality impact assessment.

Best Practice Process Design and Emission Control

A report that reviews and details best practice process design and emission control applicable to the proposal must be prepared and submitted to DP&E for each stage of the proposal. The report must:

- 1. Demonstrate that the project has incorporated best practice facility and process design to minimise idling emissions at the terminal.
- 2. Demonstrate that the project has incorporated best practice emission control to effectively minimise all air emissions. Consideration must be given, but not limited to:
  - a) best practice non-road emission standards, including locomotives;
  - b) minimise idling;

- c) fuel switching; and
- d) electrification of terminal plant.

#### Air Quality Impact Assessment

An updated air quality impact assessment must be prepared and submitted to DP&E for each stage of the proposal.

- 1. The assessment must be undertaken in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2005) (or its later version).
- Air emissions must be based on final project design with consideration to worst-case meteorological and operating conditions and cumulative impacts from contemporaneous operations of nearby emissions sources.
- 3. The assessment must identify measures to manage and monitor the efficiency and performance of air pollution control techniques; and
- 4. Particular consideration shall be given to:
  - a) Cumulative air impacts to a local and regional level;
  - b) Assessment of both construction and operation emission scenarios from the proposal.
  - c) Potential for ground level ozone impacts.
  - d) Mitigation and management measures that will be implemented to reduce the emission of all air pollutants including (as applicable):
    - i) Solid particles;
    - ii) Sulphur oxides;
    - iii) Nitrogen oxides;
    - iv) Hydrocarbons; and
    - v) Other toxic air pollutants.

#### MIC response

MIC acknowledges EPA's recommendations to make the above items conditions of Project Consent and MIC is comfortable to receive these conditions for the project.

# 4.2 NSW Department of Primary Industries – Fisheries NSW

#### Fish passage and mitigation measures

The NSW Department of Primary Industries (DPI) requires that the maintenance of fish passage at all times in the Georges River will be required.

Supports the mitigation measures listed in Table 9.1 of the Response to Submissions report and all water stormwater quality related mitigation measures.

The Moorebank Intermodal Terminal Project will be subject to stringent mitigation measures at all stages of development that will include riparian vegetation management and revegetation, bridge design based on NSW Fisheries fish passage requirements for waterway crossings, and appropriately designed stormwater management measures based on further ongoing water quality monitoring.

These mitigation measures will address the concerns raised by DPI in relation to the passage of fish in Georges River. Updated management and mitigation measures have been provided in Chapter 7 – *Revised Environmental management measures* of this report.

# 4.3 NSW Department of Primary Industries - Water

#### 4.3.1 Adequacy of assessment

Inconsistencies between the Moorebank Intermodal Terminal EIS and the SIMTA Stage 1 EIS

The NSW Department of Primary Industries (DPI) has highlighted some inconsistencies between the Response to Submissions report (SSD-5066) for the Project and the SIMTA Stage 1 EIS (SSD-6766) which need to be resolved, particularly as the Planning Assessment Commission (PAC) has advised that MIC must assess the SIMTA proposal. These include:

- The SIMTA Project refers to a minimum 50 m wide riparian corridor along either side of the
  Georges River however the Response to Submissions report notes MIC would be prepared to
  receive conditions for a minimum 20 m corridor, this reduction of width will impact on riparian
  connectivity function. Figure 7.2 in the Response to Submissions report may need to be amended
  depending on the minimum width required.
- The Response to Submissions report states that bridge piers are proposed to be outside the Georges River channel bed however SIMTA EIS indicated bridge piers are to be located in the river.
- Appendix C of the Response to Submissions report refers to a revised southern access rail corridor being realigned to coincide with existing disturbed rail corridor (section 2.1) but Section 7.4.2 of the Response to Submissions report states that the southern rail access location and configuration has not changed since the EIS (page 174).
- Appendix C of the Response to Submissions report notes the revised southern access rail corridor
  will result in a reduction in the impact to the Riparian and Alluvial vegetation by approximately 5 ha
  (Section 2.1) whereas the Response to Submissions report states the reduction in the impact to be
  4 ha (pages 133, 216 & 217).
- Inconsistencies of the southern rail corridor near the Georges River. Recommends the following Conditions of Consent:
  - > The rail link corridor will be no greater than 20 m wide in all ecologically sensitive areas including the Georges River riparian corridor.
  - > The bridge design will facilitate fauna movement. Adequate light and moisture are required to penetrate under the bridge structure to enable native riparian vegetation to grow to facility connectivity.

• The EIS and Response to Submission report shows the proposed rail crossing over existing riparian forest location however the SIMTA EIS (SSD-6766) states that the edge of the corridor on the eastern side of the rail link be established at the edge of the embankment so not to disturb the existing riparian corridor. If not possible to relocate to the west it is recommended that the area currently cleared of vegetation on the west bank be revegetated as an offset.

#### MIC response

MIC will ensure that riparian corridor widths associated with the southern rail option are consistent with riparian corridor widths for the SIMTA project. In respect to the overall project site, MIC is committed to achieving compliance with DPI – Office of Water Guidelines for riparian corridors on waterfront land (July 2012).

The detailed design for the rail bridge over Georges River is further advanced for the SIMTA project compared to the Moorebank Intermodal Terminal Project which is currently at concept approval stage. As discussed in section 1.3 of this report, only one rail access will be constructed, and SIMTA will be responsible for this. The environmental impacts assessed by SIMTA as part of its Stage 1 SSD application will also be applicable to the Moorebank Intermodal Terminal Project.

The discrepancy between Appendix C and Section 7.4.2 in the Response to Submission report is noted. The southern rail corridor will align to the detailed design conducted by SIMTA.

There was a typographic error in Appendix C of the Response to Submissions report. The reduction to the impact of Riparian and Alluvial vegetation communities is 4 ha. Table 3.1 in Appendix C of the Response to Submissions report has the correct data.

MIC is comfortable to receive these conditions of approval for in relation to the southern rail corridor, provided these conditions of approval are consistent with the conditions of approval given to SIMTA for their Stage 1 SSD application.

The Biodiversity Offset Strategy is an ongoing evolving document that will ensure opportunities, such as potential for areas of additional revegetation, will continue to be explored.

#### Rail options

DPI believes that the northern rail option would cause the least disturbance to existing remnant riparian however the Response to Submissions report does not provide any additional details to compare the northern option and the revised southern option.

#### MIC response

Since the exhibition of the EIS and the appointment of SIMTA as the future developer and operator of the Moorebank Intermodal Terminal, the southern rail access option has been chosen as the preferred rail access option.

Therefore the northern rail access option is no longer considered as a viable alternative and the Response to Submissions report has removed this option from further consideration. Hence the biodiversity offset strategy only assessed the impact of the southern rail access option. It was not the intent of the EIS to compare and contrast the three presented rail access options. The intent was to present the impacts of the three options, and once the preferred option was selected, only the impacts associated with this option were taken forward for consideration and approval.

#### 4.3.2 Riparian corridor

#### Width of riparian corridor

DPI notes that the minimum width of the riparian corridor needs to be resolved as part of this project and a Condition of Approval be included to clarify the minimum width which should be consistent with either the Final Statement of Commitments for MP10-0193 (min 50 m) or DPI Water guidelines for controlled activities (min. 40 m).

#### MIC response

In accordance with DPI guidelines for controlled activities for a 4<sup>th</sup> order stream, MIC will establish a 40 m wide riparian corridor (measured from top of bank). Where this cannot be practically achieved throughout the length of the Moorebank Intermodal Terminal Project, the 'averaging rule' will be applied to achieve an average width of the vegetated riparian zone of at least 40 m with a minimum corridor width of 20 m at the narrowest point.

As previously stated, the proposed conservation area will improve on the current minimum width (by a further 10 metres) and will increase the existing vegetated riparian zone, in some areas by >200 m.

The minimum width of the riparian corridor where the southern rail access link crosses the Georges River will be consistent with the SIMTA's Final Statement of Commitments for MP10-0193 of their concept plan approval.

#### Management of riparian corridor

The DPI seeks clarification as to why the western side of the River is not included in the Casula offset. It is recommended that the SDD-5066 (Moorebank Intermodal Terminal) and SSD-6766 (SIMTA) projects rehabilitate this section of the riparian corridor.

Rehabilitation of cleared areas within the corridor is strongly supported however it would be preferable for the project to retain and protect existing remnant riparian vegetation in the first instance.

The southern portion of the developed project site drains to Anzac Creek, adequate mitigation measures need to be in place to ensure the creek downstream of the site in not degraded. Any relocation of Moorebank Avenue to the eastern boundary of the SIMTA sites needs to assess the potential impacts on Anzac Creek and the riparian corridor.

#### MIC response

Areas on the western side of Georges River, within the Glenfield Waste Facility (i.e. outside of the Casula offset lands), are not under the ownership or management of MIC and as such are not currently available for offsetting purposes.

The Moorebank Intermodal Terminal Project has considered avoiding or minimising direct impacts to biodiversity (including riparian vegetation) throughout the Moorebank Intermodal Terminal Project lifecycle in accordance with Section 8.3.2 of the Framework for Biodiversity Assessment (FBA) methodology. Further avoidance of vegetation will be investigated during detailed design and as part of the Stage 2 SSD application.

Protection of Anzac Creek from degradation will be achieved through controlling surface water runoff from the site in accordance with a Stormwater Management Plan and the Construction Environmental Management Plan. Protection of water quality and reduction in the rate of stormwater inflow to the creek would also be achieved through post-construction revegetation at the boundaries between operation areas and riparian habitats.

It is reiterated that any relocation of Moorebank Avenue is outside the scope of this Moorebank Intermodal Terminal Project and would be subject to a separate planning approval process.

#### 4.3.3 Aquatic habitat

#### Amiens wetland

The EIS states that Amiens wetland is retained and rehabilitated as it is a natural lake basin however the Response to Submissions report (Appendix B – Volume 2) notes that it is an artificial structure. Prior to approval advice should be sought from a qualified independent wetland expert to determine the significance of this wetland.

#### MIC response

Technical Paper 10 – Aboriginal Heritage Impact Assessment (Volume 7, page 153 of the EIS) provides commentary in respect to the potential for archaeological deposits in Amiens Wetland and does not provide technical overview of water body functionality.

In contrast, Chapter 16 – *Hydrology, groundwater and water quality*, section 16.2.2, page 16.9 of the EIS provides a technical overview of the local surface water environment. This section of the EIS clearly states that the Amiens Wetland is a modified water body that acts as an outlet controlled detention basin for the M5 Motorway and adjacent catchment. The Amiens wetland has been modified such that if water levels in the Georges River are elevated, the basin will not release water until the levels are below the outlet pipe levels. Waters are discharged from the Amiens wetland via a piped connection to the Georges River.

The Amiens Wetland is an artificially controlled water body. The Moorebank Intermodal Terminal Project intends to provide stormwater detention/biofiltration pond within this area as part of overall water management within the site. Weed control and planting of native wetland vegetation will ensure aquatic habitat within this area is maintained and enhanced.

#### Aquatic habitat assessment

DPI recommends that an aquatic habitat assessment is undertaken to determine if the Moorebank Intermodal Terminal is likely to have an adverse impact on the Georges River and Anzac Creek downstream of the site. Monitoring of macroinvertebrate communities should be undertaken prior to, during, and following construction upstream and downstream of the proposed impact and reference locations.

#### MIC response

As previously stated aquatic habitat assessments have been undertaken for both the Georges River and Anzac Creek as part of the SIMTA Stage 1 SSD application and considered under the Moorebank Intermodal Terminal Project Stage 1 SSD concept approval application.

A detailed survey of aquatic habitat would be undertaken in preparation for the Stage 2 SSD application and includes baseline aquatic monitoring, monitoring during and following construction to identify any changes in aquatic communities.

Prior to construction, detailed flora and fauna impact mitigation measures will be developed and presented in a Construction Environmental Management plan (CEMP). As part of the CEMP, detailed monitoring of aquatic habitats and aquatic fauna will be addressed to ensure the Moorebank Intermodal Terminal Project will have minimal impact on the Georges River and Anzac Creek downstream of site.

#### 4.3.4 Riparian management and mitigation measures

#### Revision of mitigation measures

DPI recommends that the following management measures should be revised to include:

- 6E:
  - > topsoil (and seedbank) is to be collected from native vegetation that are to be permanently cleared and used in the revegetation of riparian areas; and
  - > native plants in areas that are to be permanently cleared are to be relocated and transplanted in riparian areas identified for rehabilitation.
- 6N should also include light and moisture penetration under the bridge to encourage the growth
  of native riparian vegetation.
- 6S the long term program of weed removal and riparian restoration in the Georges River corridor should be undertaken for the operational life of the project.
- 6Z needs to identify and clarify if the riparian corridor equates to the Conservation Area which is shown in Figure 7.1 in the Response to Submissions report.

Management measures should be revised to ensure only one bridge is referred to and the following new management measure should be included:

 Ongoing monitoring of macroinvertebrate communities will be undertaken prior to, during and following construction upstream and downstream of the proposed impact and reference locations to assist identify any changes in aquatic communities.

#### MIC response

These proposed revisions under item 6E can only occur within high quality intact native vegetation. If undertaken across large areas, there is a high likelihood of increasing the spread of weed species.

Where possible, recommendations regarding 6N will be incorporated into the detailed design of the bridge.

The Riparian restoration plan (referenced in 6Z) includes areas outside of the Conservation Area identified in Figure 7.2 of the Response to Submissions report, including areas along the western bank of the Georges River.

The management measures have been revised to ensure only one bridge is referred to and the recommended additional management action has been included. The updated management and mitigation measures are presented in Chapter 7 – *Revised environmental management measures* of this Report.

#### Recommended Conditions of Concept Approval

DPI recommends the following Conditions of Approval:

1. Only one bridge crossing over the Georges River is to be constructed for the SSD – 5066 and SSD – 6766 projects at a location that causes least impact to the river and the riparian corridor.

- The bridge over the Georges River will be design to facilitate riparian connectivity and fauna movement. The bridge design will:
  - > Minimise the number of piers located within the bed and banks of the river.
  - > Be elevated and spans the full width of the riparian corridor to improve connectivity, protection existing remnant vegetation and facilitate vegetation regrowth.
  - > Incorporate provision for light and moisture penetration under the bridge structure to enable plant growth.
- 3. The minimum width of the riparian corridor to be protected and rehabilitated along either side of the Georges River within the project site and adjacent to the southern rail crossing will be consistent with the Final Statement of Commitments for MP10-0193.
- 4. The riparian corridor is to be fully vegetated with native plant species from the relevant local vegetation community along either side of the Georges River within the project site and adjacent to the southern rail crossing.
- 5. The riparian corridor/conservation area is to be zoned E2.
- 6. The design and location of the rail link corridor should minimise encroachment into the riparian corridor and the removal of existing remnant vegetation. The rail link corridor must be no greater than 20 m wide in all ecologically sensitive areas including the Georges River riparian corridor.
- 7. A long term program of weed removal and riparian vegetation restoration will be undertaken for the operational life of the project.
- 8. A detailed survey of aquatic habitat must be undertaken in preparation of the Stage 2 SSD application and includes baseline aquatic monitoring, monitoring during and following construction to identify any changes in aquatic communities.
- A groundwater assessment report is to be prepared during detailed design to assess impacts of the project on groundwater and groundwater dependent ecosystems.

MIC acknowledges DPI's recommendations to make the above items conditions of Project Consent and MIC is comfortable to receive these conditions of approval for biodiversity, with the following exceptions, as noted below:

Condition 3 – The minimum within adjacent to the southern rail crossing will be in accordance with the SIMITA Final Statement of Commitments for MP10-0193 of their concept plan approval however, in accordance with DPI guidelines for controlled activities for a 4<sup>th</sup> order stream, MIC will establish a 40 m wide riparian corridor (measured from top of bank). Where this cannot be practically achieved throughout the length of the Moorebank Intermodal Terminal Project, the 'averaging rule' will be applied to seek to achieve an average width of the vegetated riparian zone of at least 40 m with a minimum corridor width of 20 m at the narrowest point. Compliance with DPI – Office of Water Guidelines for riparian corridors on waterfront land (July 2012) could be applied as part of any Conditions of Approval.

Condition 4 – Restoration and revegetation of the riparian zone of the site will be consistent with, and complementary to, areas of remnant indigenous vegetation within the Georges River Corridor. All works will be undertaken in accordance with the approved Biodiversity Offset Strategy for the Moorebank Intermodal Terminal Project.

Condition 5 – Taking into consideration additional objectives of the conservation area including provision of some development such as drainage channels and possible walking rails, an E3 zone was selected to best address the balance of biodiversity conservation and active social and environmental management outcomes sought by the Moorebank Intermodal Terminal Project.

The BioBanking agreement for the Conservation area will ensure the conservation values of the area are protected in perpetuity.

# 4.4 NSW Health – South West Sydney Local Health

#### 4.4.1 Management and mitigation measures

#### Air quality

NSW Health (South West Sydney Local Health) note that in relation to the assessment of cumulative impacts of air quality, they are generally considered to be low however there is the potential for risks in adjacent commercial/industrial areas at a level considered unacceptable. EnRisks suggests further mitigation measures need to be implemented to minimise exposure to particulates in the adjacent workplaces. This should be detailed further.

#### MIC response

Where appropriate, additional mitigation measures will be described within the Stage 2 SSD applications for the Moorebank Intermodal Terminal Project when further project details are known. It should be noted that the unacceptable cumulative health risk related to a receptor that has been removed. The receptor was described as a commercial/industrial receptor due to the nature of site activities at the time of assessment. The site is the proposed SIMTA site and the location of the receptor is the same location as the proposed IMEX terminal.

#### Noise and vibration

Appropriate mitigation measures should be considered for sleep disturbance for industrial premises at Casula and Glenfield. Advice should be sought from the EPA about appropriate mitigation. Consideration should also be given to requiring noise monitoring and a Noise Management Plan as a condition of consent.

#### MIC response

A more detailed assessment of sleep disturbance would be undertaken during the detailed design phase and outlined in future Stage 2 SSD applications.

A draft Noise Management Plan has already been prepared for the Moorebank Intermodal Terminal Project (Appendix H of the EIS) and will be updated during future Stage 2 SSD applications.

#### General human health comments

NSW Health supports mitigation measure 17A and the Revised Environmental Management measures in Chapter 9 of the Response to Submissions report.

If the use of grey water and black water recycling is considered, it will need to comply with the relevant guidelines and agency approval.

The predicted health outcomes relating to traffic congestion should be positive as long as all the proposed mitigation measures are implemented.

MIC notes these comments by NSW Health.

# 4.5 NSW Office of Environment and Heritage

#### Aboriginal cultural heritage

The NSW Office of Environment and Heritage (OEH) is concerned how the Moorebank Intermodal Terminal will ensure perpetual and ongoing conservation of lands assessed as retaining local, state and National significant Aboriginal cultural heritage values remains unsubstantiated.

It is recommended that the preparation of an Aboriginal Cultural Heritage Management Plan. It should identify any areas of Aboriginal Cultural Heritage significance within the conservation area an appropriate management of sites and values including vegetation management, infrastructure, future uses and site interpretation.

#### MIC response

An Aboriginal Cultural Heritage Management Plan (ACHMP) will be submitted for approval as part of future Stage 2 SSD applications for the Moorebank Intermodal Terminal Project.

#### The ACHMP will provide:

- A consultation framework which identifies how Aboriginal community stakeholders will be consulted and involved in the management of Aboriginal cultural heritage values within the conservation area.
- Strategies for the in situ conservation and management of sites MA1, MA3, MA8, MA11, MA12, MA13 and MAPAD2, including vegetation management, infrastructure, future uses and site interpretation.
- Strategies for the in situ conservation and management of any further sites that can be avoided as a result of detailed design.
- Mapping of archaeological sensitivity (predicted or known archaeological subsurface archaeological deposits) across the conservation area.
- Strategies to predict, identify and manage currently unidentified subsurface deposits elsewhere in the conservation area.
- Protocols to be followed in the event of unanticipated discoveries of Aboriginal objects and deposits.

#### 4.5.1 Biodiversity

#### **Biodiversity Offset Strategy**

The NSW OEH are concerned that the Biodiversity Offset Strategy (BOS) does not commit to providing offsets via a BioBanking agreement for the Moorebank and Casula offsets. OEH believes that the applicant needs to make a stronger commitment to BioBanking as the conservation mechanism protecting the offset.

The proposed rail crossing will directly impact on the riparian vegetation which requires further consideration by the consent authority under the Framework for Biodiversity Assessment 2014 (FBA 2014). The latest version of the BOS still does not provide any additional offsets, supplementary measures or other action to address this impact.

MIC is committed to providing appropriate biodiversity offsets in accordance with requirements set out under the FBA 2014. Achieving compliance with this framework is continuing to be explored through the establishment of a BioBanking agreement.

The Biodiversity Offset Strategy is an ongoing evolving document that will continue to be developed in conjunction with OEH to ensure all impacts are proportionally offset in accordance with FBA 2014. An update of the current BOS is provided in Chapter 6 – *Additional Investigations* of this report.

#### Leacock Regional Park

The Project needs to consider impacts of the development on Leacock Regional Park using the Guidelines for developments adjoining land and water managed by Department of Environment Climate Change and Water (DECCW 2010).

#### MIC response

Leacock Regional Park (LRP) is under the control and management of OEH and occurs west of the Cumberland and South suburban rail lines to the west of the Moorebank Intermodal Terminal Project site.

In accordance with Section 2 of the *Guidelines for developments adjoining land and water managed by Department of Environment Climate Change and Water* (DECCW 2010) the following issues have been considered in respect to LRP:

- <u>Erosion and sediment control:</u> All rail tie in works will be undertaken in accordance with a specific erosion and sedimentation control plan. Post construction no erosion or sedimentation control issues will impact on LRP.
- <u>Stormwater runoff:</u> All stormwater will be managed and treated within the Moorebank Intermodal Terminal Project site prior to discharge to the Georges River. No stormwater will issues will impact on LRP.
- <u>Wastewater:</u> No wastewater will directly or indirectly impact on LRP.
- <u>Pests, weeds and edge effects:</u> The Moorebank Intermodal Terminal Project will result in the management of the Casula Offset lands and riparian vegetation along the eastern bank of the Georges River that will reduce areas of weed and pest source to LRP.
- <u>Fire:</u> No asset protection zones will need be established adjacent or within LRP.
- <u>Boundary encroachments:</u> The Moorebank Intermodal Terminal Project will not encroach or require access through LRP.
- <u>Visual, odour, noise, vibration, air quality and amenity impacts</u>: have all been adequately addressed
  in the EIS and Response to Submission report. Issues relation to such potential impacts will be
  further assessed and managed as part of the detailed design phase.

Threats to ecological connectivity and groundwater-dependent ecosystems: have been addressed within the EIS and Response to Submission report. The Moorebank Intermodal Terminal Project will not adversely impact directly or indirectly on ecological connectivity or groundwater-dependent ecosystems within LRP.

Cultural Heritage: The Moorebank Intermodal Terminal Project will not result in direct or indirect impacts on the cultural heritage values of LRP.

Through the implementation of stringent mitigation measures the Moorebank Intermodal Terminal Project will not impact on the values of LRP.

#### 4.5.2 Planning considerations

#### Future zoning

OEH recommends the use of E2 Environmental Conservation for the Moorebank and Casula conservation areas.

#### MIC response

The proposed conservation area is intended primarily to achieve conservation outcomes. However it is also recognised that some development will be required in the conservation area, being as a minimum the installation of drainage channels from the main Moorebank Intermodal Terminal portion of the site to the Georges River. This has been taken into consideration in the assessment of the value of the conservation area as an offset site. Furthermore, depending on the outcomes of the community consultation process, consideration would be given to the development of a walking trail and associated facilities in the conservation area. It is recognised that this would reduce the value of the conservation area, and that any reduction in value would need to be offset elsewhere. This matter would be considered further during the Stage 2 SSD application process.

Taking into consideration these additional objectives of the conservation area, an E3 zone was selected to best address the balance of biodiversity conservation and active social and environmental management outcomes sought by the Moorebank Intermodal Terminal Project. This decision has been discussed and agreed with NSW Department of Planning and Environment.

# 4.6 Campbelltown City Council

#### 4.6.1 Planning considerations

#### Master planning

Campbelltown City Council (CCC) believes that a joint development and operation arrangement between MIC and SIMTA should be put in place as a condition of any approval to ensure appropriate and co-ordinated construction and operation can occur.

Any approval for either MIC or SIMTA should be subject to a condition to the effect that the total operational capacity of the terminals, when combined, does not exceed the maximum capacity constraint as identified and assessed in the EIS for each facility.

CCC welcomes the commitment to the selected southern rail access route.

CCC recommends that any approval be subject to conditions preventing commencement of Terminal operations unless and until appropriate rail access has been constructed and is operational.

#### MIC response

MIC acknowledges the comment made by CCC and agrees that the selection of the Southern Rail Access Route is the optimal solution to the Moorebank precinct development.

As noted in section 2.2 of Chapter 2 - Assessment of the issues raised by the NSW Planning Assessment Commission of the Response to Submissions report, an agreement has been reached for a precinct-wide IMT facility to be developed by SIMTA on the Moorebank and SIMTA sites. In recognition of freight catchment demands, and capacity constraints of the Southern Sydney Freight Line (SSFL), the

precinct-wide development proposes an IMEX terminal with a maximum capacity of 1.05 million TEU per year and an interstate terminal with a maximum capacity of 500,000 TEU per year.

MIC is therefore happy to receive a condition of approval that states that that the precinct will be developed to proceed with:

- 1.05 million TEU p.a. IMEX capacity on either the Moorebank site or the SIMTA site (but not both);
- 300,000 sq. m. of warehousing on the SMITA site;
- 500,000 TEU p.a. interstate facility on the Moorebank site;
- 300,000 sq. m. of warehousing on the Moorebank site; and
- rail access to the precinct via a connection to the SSFL near the south of the Moorebank site.

It is anticipated that a condition of consent will be placed on the Concept Approval which restricts development greater than this.

#### 4.6.2 Traffic, transport and access

#### Heavy vehicle movements

Any approval should be conditional upon prevention of heavy vehicle access to and from Cambridge Avenue, should this not be imposed alternative conditions requiring the proponent to ensure that appropriate upgrade and maintenance works would be carried out on Cambridge Avenue and related road routes to accommodate potential heavy vehicles associated with the Terminal.

#### MIC response

The design of the Moorebank Intermodal Terminal Project is such that the intersection at Moorebank Avenue and Anzac Road is the primary entry and exit point for the terminal. All heavy vehicle traffic will be forced to turn left onto Moorebank Avenue when exiting the site, and hence no south bound heavy traffic will occur as a result of the terminal. Therefore there is no requirement to upgrade the southern section of Moorebank Avenue or Cambridge Avenue as a result of the Moorebank Intermodal Terminal Project.

#### Planning agreement

Any approval condition requiring MIC to enter into a Planning Agreement with the State Government to address off site traffic impacts of the proposal be accompanied by a requirement to consult CCC and take its concerns into account as part of preparing any such Agreement.

#### MIC response

MIC is committed to entering into a Voluntary Planning Agreement with Roads and Maritime Services and Transport for NSW to address the site traffic impacts associated with the Moorebank Intermodal Terminal Project.

MIC also proposes to continue to consult with CCC as the Moorebank Intermodal Terminal Project develops and as part of any future Planning Agreements.

#### Future approvals

Given the potential impact of traffic between the Terminals should operational intentions change in the future, any approval for the MIC Terminal should be conditioned to require a separate approval prior to such interaction taking place.

#### MIC response

Traffic impacts will be considered at each phase of the Stage 2 SSD application process. MIC will continue to consult with CCC as the Moorebank Intermodal Terminal Project develops

#### Land use

In the event of an approval, the Federal and State Governments should commit to working with CCC to review strategic planning settings in the locality to maximise positive spin-offs from the Terminal construction and operation.

#### MIC response

MIC will continue to consult with CCC as the Moorebank Intermodal Terminal Project develops and as part of future Stage 2 SSD applications.

# 4.7 Liverpool City Council

#### 4.7.1 Traffic, transport and access

#### Traffic modelling

Traffic modelling of the intersections and M5 Motorway has predicted severe congestion of the local road network in and around Moorebank which has been identified as occurring regardless of the MIC proposal.

The entire strategic justification for the proposal relies on it having excellent access to both rail and road transport. The Traffic Impact Assessment (TIA) modelling suggests that this road capacity will not exist and any intermodal operational performance in the Moorebank Area will be substantially impacted. There is also no major long term road or public transport projects in this area that would offer comprehensive relief.

Networks effects on a subregional scale are being modelled by RMS of the surrounds should be completed before any major traffic generating projects are determined for the Moorebank area. These traffic forecasts should be considered in the air quality and noise models to forecast potential impacts on human health.

#### MIC response

MIC acknowledges Liverpool City Council's (LCC) concern regarding traffic impacts in and around the Terminal precinct. More extensive modelling is currently being conducted (and will be reported as part of the Stage 2 SSD application) to assess the impact of Project traffic on the wider Liverpool area. A wide ranging mesoscopic modelling will be conducted, with microsimulation of key elements such as the M5 Motorway over the Georges River. These new AM and PM models will be based 24 hour traffic data collection.

The micro or mesoscopic traffic model will be completed for the Stage 2 SSD applications for the Moorebank Intermodal Terminal Project.

At this time, the revised traffic forecasts will inform a revised air quality and noise assessments which can be used to forecast any potential impacts on human health.

MIC is in discussions with Transport for NSW and Roads and Maritime services regarding the requirements for intersection upgrades and to discuss the outcomes of the next round of traffic modelling works.

#### Intersections

The TIA does not clearly articulate the reduced timeframes associated with intersections reaching capacity in a shorter timeframe due to the traffic associated with MIC operations. Opportunity costs associated with the reduced timeframe require consideration along with the development of a strategy for MIC to contribute to intersection upgrades, proportionate to their level of impact.

#### MIC response

Section 7.10.3 of Chapter 7 – *Proposed amendments to the development* in the Response to Submissions report outlines the indicative upgrade year for each of the intersections assessed.

The indicative timing of these upgrades are based on current projections for background traffic growth and anticipated increases in container throughput over time of the Moorebank Intermodal Terminal Project. The additional modelling work that is currently being conducted will inform the requirements for intersection upgrades to support the terminal and the timing for these upgrades.

MIC is in discussions with Transport for NSW and Roads and Maritime services regarding the requirements for intersection upgrades and to discuss the outcomes of the next round of traffic modelling works.

#### Suitability of Moorebank site

Due to the extent of existing traffic congestion suggests that the intermodal terminal should not be located at Moorebank.

#### MIC response

The need for an intermodal terminal in south-western Sydney is described in detail in Chapter 3 – Strategic context and need for the Project of the EIS and reiterated in the Response to Submissions report specifically in Chapter 2 – Assessment of the issues raised by the NSW Planning Assessment Commission and Chapter 6 – Response to Community Submissions

The Moorebank site was selected due to its strategic positioning, with good access to existing major freight and rail corridors (SSFL, the M5 Motorway and near to the M7 Motorway and Hume Highway), and is centrally located relative to major freight markets in the west and south west of Sydney. The size of the site was also a significant factor in site selection, with the requirement to accommodate interstate trains which can be up to 1,800 m long and the need for the site to be large enough to handle the number of containers expected (a total throughput capacity of 1.55 million TEU a year including up to 1.05 million TEU a year of IMEX).

More extensive traffic modelling is currently being planned to be undertaken and reported as part of the Stage 2 SSD application which will include additional management mitigation measures.

#### Co-ordination between the MIC and SIMTA sites

LCC are concerned about the lack of consideration of the MIC and SIMTA sites operating at full capacity.

Section 2.4 of Chapter 2 – Assessment of the issues raised by the NSW Planning Assessment Commission presents a discussion of the road capacity issues raised by the PAC in the approval of the SIMTA Concept Approval. The discussion considers the impacts of the two projects on the local road network taking into consideration the two traffic impact assessments conducted at that time. Further Section 7.11 of Chapter 7 – Proposed amendments to the development of the Response to Submissions Report address the cumulative impact of the two projects under three different assessment scenarios. In summary, the combined traffic associated with the two projects can be accommodated within the current network capacity, subject to intersection upgrades as presented in Table 7.36. Modifications to the Moorebank Avenue and Anzac Road intersection would be required to accommodate the two projects. The combined projects are not expected to have a substantial impact on the operation of the M5 Motorway.

As discussed above, more extensive traffic modelling is currently being planned to be undertaken and reported as part of the Stage 2 SSD application which will include additional management mitigation measures.

#### Destuffing of containers

LCC are concerned that the assumptions associated with the destuffing of containers are not considered accurate with the potential for an estimated 10–15% increase in vehicle numbers along Moorebank Avenue.

#### MIC response

The warehousing will mostly accommodate retail distribution centres. Surveys at similar distribution centres currently operating in NSW yield traffic generation results which are broadly similar to those used in the Moorebank Intermodal Terminal Project. The generation and profile of traffic associated with the development will be reviewed during the detailed design phase for the Stage 2 SSD applications.

#### Concerns about the rail link

LCC are concerned that the curve of the interstate rail link is tight, impacting on the ability of interstate trains to leave the SSFL at appropriate speeds. LCC also believes that the rail link doesn't appear long enough to accommodate an 1800 m interstate freight train prior to the first junction on the spur line without blocking the SSFL and that the MIC and SIMTA rail links appear to cross the Glenfield Waste site on different alignments.

#### MIC response

The curve radius would allow approximately a 40 km/h speed off the SSFL however this would be developed further during the detailed design of the Moorebank Intermodal Terminal Project and in accordance with the operational requirements.

Trains would not be stopping on the SSFL. There is enough space to accommodate an 1800 m long train to come off the SSFL and straight into the arrival/departure roads within the Moorebank Intermodal Terminal Project.

The detailed design for the southern rail bridge over Georges River is further advanced for the SIMTA project compared to the Moorebank concept approval stage. As discussed in section 1.3 of the Supplementary Response to Submission report, only one rail access will be constructed, and SIMTA will be responsible for this. The southern rail corridor option will be consistent with the approved SIMTA concept approval and Stage 1 SSD application.

#### 4.7.2 Noise

#### Concerns with wheel squeal

LCC are concerned that the curvature of the rail link is anticipated to generate wheel squeal which is difficult to mitigate without curve realignment.

#### MIC response

MIC is committed to managing curve squeal noise by designing the track layouts to minimise small radius curves within the Moorebank Intermodal Terminal Project site and on the southern rail access. The Noise and Vibration Assessment (NVIA) conducted for the EIS (Technical Paper 3, EIS Volume 3) assumed mitigation so that the curve radius will be close to or above 500 m which would only incur a minor curve noise correction of +3 dB(A) to both the LAE and LAMAR noise emissions.

#### Impacts associated with the Southern Sydney Freight Line

LCC are concerned that the noise assessment excludes noise produced by MIC trains on the Southern Sydney Freight Line (SSFL), MIC need to accept responsibility for considering the impact of its trains on public railways.

Residential properties in Casula and along the SSFL that are predicted to be affected by night time noise above the criteria should be considered for insulation and other measures to reduce any internal noise impacts.

#### MIC response

As stated in Section 14 of the NVIA (Technical Paper 2, EIS Volume 3), the Moorebank Intermodal Terminal Project is intending to operate within the approved capacity of the SSFL and the design of the SSFL includes allowance for intermodal rail freight at Moorebank.

In the event that the Moorebank Intermodal Terminal Project requires a change in the infrastructure or approved capacity of the SSFL it would trigger a new or modified approval process. The Australian Rail Track Corporation would be responsible for any acoustic assessments required as part of future approvals.

The NSW Industrial Noise Policy allows for Proponents to negotiate receptor specific noise limits where the Moorebank Intermodal Terminal Project demonstrates Best Practice for noise control has been implemented. This would be included as a noise management approach in preference to architectural treatment of dwellings.

#### Noise from Destuffing of containers

It is considered that the assumptions associated with destuffing of containers could result in a 10–15% increase in transport movements along Moorebank Avenue which have the potential to increase noise levels beyond criteria. It is recommended that further assessment be undertaken based on the highest potential throughput of volume.

#### MIC response

As discussed above, the warehousing will mostly accommodate retail distribution centres. Surveys at similar distribution centres currently operating in NSW yield traffic generation results which are broadly similar to those used for the Moorebank Intermodal Terminal Project. The generation and profile of traffic associated with the development and its impact on the noise levels will be reviewed during the detailed design phase for the Stage 2 SSD applications.

#### 4.7.3 Human health

#### Consideration of impacts to open space

There is no consideration of the impacts of the proposal on the recreation and exercise areas around the Georges River.

MIC should consider upgrading existing open space and recreation areas around Moorebank to offset the amenity impacts generated by the proposal and to help create buffers though this won't provide full mitigation.

#### MIC response

The final use of the Conservation Area has not been finalised however walking trails within this area (and associated facilities), along the Georges River is being considered in consultation with the community. Additionally, MIC is contributing to a healthy lifestyle package which includes providing exercise equipment in local parks and a preventative health training program.

#### Mental health

LCC believes that the health assessment does not consider mental health impacts associated with increased congestion and visual impacts.

#### MIC response

The Health Impact Assessment (HIA) prepared for the EIS (Technical Paper 16, EIS Volume 9) undertook a quantitative assessment of mental health issues associated with the Moorebank Intermodal Terminal Project. The assessment considered a range of issues such as congestion, visual impacts and noise emissions. The HIA considered changes in the level of stress and anxiety which are the key issues related to mental health.

#### Air quality

The air quality assessment does not include the additional rail freight traffic beyond the rail link on the SSFL. These additional movements should be considered to allow a comprehensive cumulative assessment.

#### MIC response

As identified in Appendix B of the *Local Air Quality Impact Assessment* (LAQIA) (refer to Technical Paper 7 – Local Air Quality Impact Assessment (EIS Volume 6)), all rail freight traffic, associated with the Moorebank Intermodal Terminal Project have been considered in the assessment. The assessment concluded that the impact to air quality from freight trains is low.

This is supported by the findings of the regional air quality impact assessment (Technical Paper 8 – Regional Air Quality Assessment (EIS Volume 6)), which has determined that there are no substantial regional impacts from the Moorebank Intermodal Terminal Project.

#### Management and mitigation measures

LCC believes that MIC should consider supporting local health promotion organisations and services to offset the health impacts of the proposal.

Additional mitigation measures should be considered for Cumulative Scenario C1 – 2020 including temporary shutdowns of one or both intermodal terminal facilities during construction works so that temporary cumulative impacts do not peak at unacceptable levels.

Mitigation measures for the Moorebank Intermodal Terminal Project are listed in Table 7.1 of Chapter 7 – *Revised management and mitigation measures* of this report. Mitigation measures, particularly in relation to minor construction works will be further considered during the detailed design of each phase and reported on future Stage 2 SSD applications.

MIC has committed to a public benefits package in recognition that people living closest to the terminal will experience the most impacts, but receive the same share of the terminals broader benefits. Therefore, people living near the terminal will receive:

- A share of the broader benefits of the terminal e.g. jobs growth, reduced congestion growth and increased productivity;
- All the benefits of MIC's contribution to local programs and services i.e. the public benefits
  package. The public benefits package will include a TAFE scholarships program (targeting local
  business opportunities) and a healthy lifestyles package (including exercise equipment for
  local parks and a preventative health training program).

#### 4.7.4 Impacts to amenity

#### **Amenity**

The proposal does not consider the impacts on visual amenity resulting from the rail link which will fundamentally alter the vista from the Glenfield Farm heritage item as well as the visual character of the Georges River for recreational users.

Amenity impacts from increased train traffic on SSFL is not considered. Mitigation should not be the responsibility of ARTC.

#### MIC response

A revised visual and urban design impact assessment was undertaken to assess impacts on the landscape character and visual amenity of the surrounding area as a result of the Moorebank Intermodal Terminal Project layout changes reported in Section 7.9.2 of Chapter 7 – *Proposed amendments to the development* in the Response to Submission report. In particular the following changes were considered:

- views from Casula will now be onto the warehousing precinct (where previously the intermodal infrastructure was the most prominent aspect of the development);
- views along Moorebank Avenue will now be of the IMEX and interstate terminals (where the visual impact assessment was of warehousing along Moorebank Avenue); and
- views south of Bapaume Road, impacts associated with the upgrade of Moorebank Avenue (as anticipated by the EIS) would not occur.

The southern rail alignment crosses the Glenfield Waste site. This area is zoned as Public Recreation within the Liverpool Local Environmental Plan 2008. Currently the site has a low sensitivity to change due to its degraded landscape character, although overtime it is likely to be re-vegetated and may become an area of public open space with high amenity value. The presence of existing rail infrastructure to the east and south of the landfill site will assist in reducing the magnitude of any landscape character impacts associated with the southern access rail spur in the future.

Glenfield Farm is located on the western side of the Southern Sydney Freight Line (SSFL) and the main Southern Railway Line at the connection point for the southern rail access option. The rail connection will head directly towards Glenfield Farm from the Moorebank Intermodal Terminal Project and connect to the SSFL. The rail connection will visually impact the site from both the construction of the rail access and from trains approaching the site from a different direction (moving towards the site, rather than passing by the site). There is some screening vegetation with the site boundary however: some views do exist over the study area. The views from the house and barn were assessed to be significant in the 2002 Conservation Management Plan for the property (Mayne-Wilson & Associates, 2002).

A visual impact assessment was completed for the EIS by Cloustons Associates (Technical Paper 12, EIS Volume 8), which assessed the impact to Glenfield Farm as moderate to high. However the views from the farm have currently being considerably impacted by the Glenfield Waste site and the construction of the SSFL, including the Glenfield flyover (that carries the SSFL over the Southern Rail Line). Plant screening within Glenfield Farm and as part of the rehabilitation of the conservation zone on the Moorebank Intermodal Terminal site will provide longer term screening of the terminal, however will have moderate to high impacts during constructions and early operational phases of the Moorebank Intermodal Terminal Project while the conservation area establishes.

The impacts associated with trains travelling along the Southern Sydney Freight Line (SSFL) are the responsibility of Australian Rail Track Corporation (ARTC) and managed in accordance with the conditions of the SSFL planning approval and associated environmental protection licence.

Once trains enter the rail spur which forms part of the southern access connection to the terminal, their impacts and associated mitigation measures have been assessed in the EIS and the Response to Submissions report. The amenity impacts from the southern rail access are presented in Chapter 22 – *Visual and urban design* of the EIS and in Technical Paper 12 – Visual Impact Assessment report (EIS Volume 8). The amenity impacts were further presented in Appendix D (Volume 2) of the Response to Submissions report.

#### 4.7.5 Master planning

#### Operation of the MIC and SIMTA sites

The questions of independent or joint operation of SIMTA and MIC have not been resolved. As SIMTA site is subject to a separate project and concept application, it is not clear how or if MIC's mitigation measures will be imposed on SIMTA should they operate the facility.

#### MIC response

MIC and SIMTA has reached an agreement to develop and operate a precinct wide intermodal facility and associated warehousing across the Moorebank and the SIMTA sites. As part of the agreement, the Commonwealth Government would retain ownership of the Moorebank IMT site, with SIMTA occupying the site under a long term lease. MIC would remain involved to ensure the Commonwealth Governments objectives for construction and operation of the site (including environmental compliance requirements) are satisfied.

A whole of precinct masterplan has been developed as part of the agreement between MIC and SIMTA. Both MIC and SIMTA have committed to an integrated single intermodal precinct as the most efficient sustainable development outcome at Moorebank. The layout of the terminals and warehousing across the combined precinct is a better outcome than previous proposals for both operational efficiency and the local community. However in the interim, MIC is seeking concept approval for the Moorebank IMT site and independently SIMTA is seeking approval of its Stage 1 SSD application (for 250,000 IMEX facility and a rail connection to the SSFL at the southern end of the Moorebank site).

It is not anticipated that SIMTA's mitigation measures will be imposed on the Moorebank Intermodal Terminal Project with the exception of the southern rail access link. The mitigation measures and conditions of consent for the Moorebank Intermodal Terminal will need to be incorporated into the future design and planning for the Moorebank Intermodal Terminal. SIMTA as the developer and operator will be responsible for implementing these measures.

It is likely that SIMTA will construct the southern rail link using their approval. If this occurs, any future conditions and/or mitigation measures associated with the Moorebank Intermodal Terminal Project relating to this rail link will be void.

#### 4.7.6 Cumulative impacts

#### Impacts of the MIC and SIMTA operations

LCC believes that a series of further cumulative scenarios should be investigated using staging for both projects to ensure that there are no periods where simultaneous construction and operation of SIMTA and MIC will lead to unacceptable impacts.

Despite assurances that the precinct will only accommodate a total annual capacity of 1.55 million TEU, it is noted that the MIC concept still seeks consent for a 1.55 million TEU facility on site whilst SIMTA can potentially expand to 500,000 TEU under its approved concept plan.

Assessment should be undertaken that address the full 2.05 million TEU capacity to service both Port Botany and Port Kembla.

Whilst an EPL is not required under the POEO Act, under Section 43(d) of the POEO Act an EPL can be required. An EPL would require EPA to act as the appropriate regulatory authority which is considered more appropriate than management by Council.

#### MIC response

Section 7.10 of Chapter 7 – *Proposed amendments to the development* of the Response to Submissions report, presents four cumulative scenarios to assess the impact of both the Moorebank and SIMTA projects proceeding. These four assessment scenarios were discussed and agreed with NSW Department of Planning and Environment prior to the commencement of the assessment. MIC considers that a thorough assessment of cumulative impacts has been conducted and further assessment for the concept approval stage is not required.

The assessment of cumulative impacts will be further addressed in future Stage 2 SSD applications.

Since the exhibition of the Moorebank IMT EIS, MIC and SIMTA have reached an agreement to develop and operate a precinct-wide intermodal facility and associated warehousing across the Moorebank and SIMTA sites (hereafter referred to as the Moorebank precinct). As part of that agreement, the Commonwealth Government would retain ownership of the Moorebank IMT site, with SIMTA occupying the site under a long-term lease. MIC would remain involved to ensure the Commonwealth Government's objectives for construction and operation of the site (including environmental compliance requirements) are satisfied.

As discussed in section 2.2 of Chapter 2 – Assessment of the issues raised by the NSW Planning Assessment Commission of the Response to Submissions report, to enable maximum flexibility, MIC is seeking a staged development consent for a 1.05 million TEU p.a. IMEX facility on its own site, as well as the 500,000 TEU p.a. Interstate facility and 300,000 sq. m of warehousing. Combined with the SIMTA project, and subject to development consent, this may appear to result in a total precinct capacity of 2.05 million TEU p.a. However, this is not the case. It would only occur in two unlikely circumstances;

firstly if there is no agreement between SIMTA and MIC and secondly if the consent authority gives development consent to operate both terminals at maximum levels.

With respect to the first outcome, MIC does not believe there is any possibility that both sites would operate independently – at least at full capacity (i.e. at a potential total precinct capacity of 2.05 million TEU p.a.). Both SIMTA and MIC agree that the maximum precinct capacity would be 1.55 million TEU p.a. MIC considers the maximum capacity arises from the constraints posed by other parts of the network (particularly the SSFL). With respect to the second outcome, the consent authority is able to limit the total precinct capacity through the subsequent development approvals process – evident in the limitation placed on the current SIMTA Concept Plan approval.

Therefore it is proposed that the precinct will be developed to proceed with:

- 1.05 million TEU p.a. IMEX capacity on either the Moorebank site or the SIMTA site (but not both);
- 300,000 sq. m. of warehousing on the SMITA site:
- 500,000 TEU p.a. interstate facility on the Moorebank site;
- 300,000 sq. m. of warehousing on the Moorebank site; and
- rail access to the precinct via a connection to the SSFL near the south of the Moorebank site.

It is anticipated that a condition of consent will be placed on the Concept Approval which restricts development greater than this.

An Environment Protection Licence (EPL) is not proposed for the Moorebank Intermodal Terminal Project, this has been discussed and agreed with NSW Department of Planning and Environment.

# 4.8 Transport for NSW

### 4.8.1 Traffic and Transport Assessment Report

#### Future traffic assessment

Several issues and comments on the Revised Traffic and Transport Assessment Report have been provided which reflect Transport for NSW and Roads & Maritime (RMS) review of this document. It has been provided to assist the proponent in any future Stage 2 SSD application.

#### MIC response

The comments provided by Transport for NSW in Attachment 2 will be considered and addressed in future Stage 2 SSD applications. MIC has considered each of the comments made by Transport for NSW and provides the following response:

- Driveway monitoring and conditioned shift changeover times In principle the concept of
  developing a driveway monitoring program is accepted. However, the data that is collected and
  how this data will be used, including the implications of differences between the forecast and actual
  traffic generation rates would need to be agreed.
- M5 Motorway Traffic Weaving Assessment will be examined in detail through the development of a traffic microsimulation model of the M5 Motorway to include the Hume Highway and Moorebank Avenue intersections at the next stage of application.

- Queuing on the M5 Motorway at Moorebank Avenue Interchange and Hume highway interchange –
  will be examined in detail through the development of a traffic microsimulation model of the
  M5 Motorway to include the Hume Highway and Moorebank Avenue intersections at the next stage
  of application.
- Proposed Intersection upgrades Transport for NSW's comments are noted. The next stage of
  analysis will be based around the development of comprehensive mesoscopic traffic models in the
  AM, interpeak and PM peak periods. This will include a more detailed assessment of the
  M5 Motorway weave using microsimulation. These mesoscopic models will be used to identify the
  impact of IMT generated traffic on the network and the subsequent mitigation measures at
  intersections.
- Timing and responsibility of intersection upgrades the next stage of analysis will be based around
  the development of comprehensive mesoscopic traffic models in the AM, interpeak and PM peak
  periods for a number of future year scenarios. These mesoscopic models will be used to identify the
  impact of IMT generated traffic on the network and the subsequent mitigation measures at
  intersections. It is acknowledged that some form of Voluntary Planning Agreement based on the
  results of this modelling will be required.
- Traffic General Assessment Transport for NSW comment is noted, the implication of operating a 2 or 3 stage shift pattern will be examined at the next more detailed stage of analysis. This mesoscopic model will include an interpeak model covering the 12.00–3.00 pm period. The truck percentages will be based on surveys undertaken at other distribution centres in the Sydney region.

#### 4.8.2 Noise and vibration

Transport for NSW cluster supports the EIS recommended use of steering, permanently-coupled "multi-pack" wagons for the port shuttle service.

Transport for NSW recommends that noise impacts from additional mainline freight-train movements between the Precinct and the Port will need to be assessed – either as part of the Moorebank IMT precinct or as part of future proposed upgrades to the freight line.

#### MIC response

As stated in Section 14 of the Noise and Vibration Impact Assessment (Technical Paper 2, EIS Volume 3), the Moorebank Intermodal Terminal Project is intending to operate within the approved capacity of the SSFL and the design of the SSFL includes allowance for intermodal rail freight at Moorebank.

In the event the Moorebank Intermodal Terminal Project requires a change in the infrastructure or approved capacity of the SSFL it would trigger a new or modified approval process. The Australian Rail Track Corporation (ARTC) would be responsible for any acoustic assessments required as part of future approvals.

#### 4.8.3 Recommended Conditions of Concept Approval

#### Recommended conditions of Concept Approval – Traffic

Detail the modelling assumptions for the combined facility will apply to future development
applications. This would include back loading percentage, pallets per vehicle type, conversions to
TEU to truck movements, percentage of peak hour vehicle movements, public transport use, and
degree of car sharing by staff.

- Examine in greater detail the local and area wide traffic impacts on the operation of the road network through the use of micro or mesoscopic traffic models. As a minimum, the analysis should examine the information and scenarios listed within the Moorebank Intermodal Terminal Traffic, Assessment Report by Parsons Brinckerhoff dated September 2014.
- The proponent is to discuss any proposed mitigation measures to support the development of intermodal facility with Transport for NSW and RMS.
- Liaise with RMS to ensure that any future detailed traffic assessment is based on the RMS mesoscopic model unless otherwise agreed.

MIC is comfortable to receive these conditions of approval for traffic and transport as proposed by Transport for NSW.

#### Recommended conditions of Concept Approval – Workplace Travel Plan

 An over-arching workplace travel plan be developed as part of the Stage 2 SSD application to the satisfaction of Transport for NSW. This plan is to be complemented by further detailed plans at future construction and operational stages

#### MIC response

MIC has previously agreed to the preparation of a Workplace Travel Plan and this will be prepared as part of the Stage 2 SSD for the Moorebank Intermodal Terminal Project.

#### Recommended conditions of Concept Approval – Bus services

- Demonstrate that walking distance from within the site to nearby train or bus services are minimised and should be no further than 400 m.
- During the preparation of the Stage 2 development application, the following bus related infrastructure requirements should be investigated in consultation with Transport for NSW and RMS:
  - Provision of a paved bus turnaround facility on Moorebank Avenue that will allow buses to U-turn safely, which should accommodate swept path dimensions of a 14.5 long non rear-steer bus.
  - > If the facility is on SIMTA or MIC land provide standing landowner permission for regular route buses to turn around within the facility so constructed as a condition of development consent.
  - > The detailed design of the bus turnaround facility should be audited by an independent Transport for NSW accredited road safety auditor in accordance with the relevant Austroads guidelines. The Road Safety Audit report should be submitted to Transport for NSW and RMS for review and comment. The proponent shall recommend corrective actions for the identified safety issues and amend the design in consultation with Transport for NSW and RMS to reduce the safety risks.
  - > Investigate the design of any such facilities to cater for expected increase in traffic flows along Moorebank Avenue.
  - > Investigate the requirement for potential bus layover on either side of Moorebank Avenue.

- Provision of bus stops and shelters on Moorebank Avenue to align with pedestrian access paths into the terminals. Pedestrian access paths should provide for the most direct access to these bus stops.
- > Provision of appropriate pedestrian crossing facilities on Moorebank Avenue in consultation with Roads and Maritime near bus stops.

Bus services will endeavour to be located at intervals of 400 m apart where appropriate to do so.

MIC is comfortable to receive these conditions of approval for bus services as recommended by Transport for NSW.

#### Recommended conditions of Concept Approval - Rail access

- The cost/responsibility for any infrastructure or services located within the Southern Sydney Freight Line will need to be borne by the proponent and approved by Sydney Trains.
- Any works to be undertaken will need to be during a scheduled track possession (i.e. shut-down)
  and be supervised by representatives of Sydney Trains in addition to any proponent supervision.
- To assist the proponent Sydney Trains can advise that Annexure 1 provides a guide to the terms likely to be in the rail access agreement.
- Maintain the existing access arrangements in place with Interlink.

#### MIC response

MIC is comfortable to receive these conditions of approval for rail access transport as proposed by Transport for NSW. MIC also notes Annexure 1 – Guide to Rail Access Agreement, provided by Sydney Trains. This guide will be incorporated into future stages of the development.

#### Recommended conditions of Concept Approval – Construction Management Strategy

- The proponent develops an over-arching Construction Management Plan and a detailed Construction Traffic Management Plan for the early works to be approved by Transport for NSW and RMS.
- Any subsequent development applications will need to be accompanied by a detailed Construction Traffic Management Plan.

#### MIC response

MIC is comfortable to receive these conditions of approval for construction management transport as proposed by Transport for NSW.

#### Recommended conditions of Concept Approval – Air quality

The proponent prepares management measures for improving air quality including those related to locomotives, vehicle idling, trucks and vehicles as part of any future Stage 2 SSD application.

#### MIC response

MIC is comfortable to receive these conditions of approval for air quality transport as proposed by Transport for NSW.