Our Ref 82015112-002/Letter 001
Contact Daniel Thompson

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Attention: Mr Andrew Beattie

RE: MOOREBANK INTERMODAL COMPANY EIS REVIEW

Dear Andrew

The Moorebank Intermodal Company (MIC) prepared an Environmental Impact Statement (EIS) (Parsons Brinkerhoff, 2014) for a proposed intermodal freight terminal to meet the assessment requirements of both the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EIS has been lodged with both NSW Planning and Environment (P&E) and the Commonwealth Department of the Environment (DoE) for assessment and determination.

The EIS was placed on public exhibition from 8 October to 8 December 2014 with a range of submissions made. MIC have subsequently, revised the scheme and the application has once more been placed on public exhibition from 28 May to 26 June 2015 (note an extension to the public exhibition period to 6 July 2015 was granted by P&E).

Liverpool City Council (Council) and its community have raised significant concerns about the scale of impacts associated with the proposal and has raised its strongest objection to the development scheme through a submission lodged with P&E. While changes have been made to the scheme it is considered by Council and acknowledged in the revised EIS (Parsons Brinkerhoff, 2015) (page xxiii) that these changes are operationally driven rather than resulting from comments made in submissions. Consequently, Council's previously submitted comments remain. Furthermore, given the short timeframe in which to respond to the revised scheme Cardno (NSW/ACT) Pty Ltd (Cardno) has been engaged to prepare a brief submission on behalf of and in conjunction with Council to address key overarching issues including:

> Transport
> Amenity
> Noise
> Human Health
> Cumulative Impacts.

These environmental aspects are addressed in the sections below.

Liverpool city council
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FIGURE 1

1:15,000 Scale at A3

Metres
0 150 300 450 600

Location Plan - MIC and SIMTA Sites

MIC PEER REVIEW

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Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2015-07-03
Coordinate System: GDA 1994 MGA Zone 56
Project:8201511202
Map: 8201511202-GS-001-LocationPlan.mxd 01
Aerial imagery supplied by nearmap (May, 2015)

Transport

Traffic

The expanded Traffic and Transport Impact Assessment (TIA) contains a more detailed assessment of the traffic impacts of the proposal. The TIA considers a broader range of scenarios and forecasts further into the future than the previous assessment.

As noted in the TIA at Figure 9.32 the intersections on Moorebank Avenue at Newbridge Road, Heathcote Road and Church Road are all predicted to operate at LOS F with respect to vehicle queueing in 2030. Similarly, the intersections of the Hume Highway at the M5, Heathcote Road at Nuwarra Road and Cambridge Avenue at Canterbury Road are also predicted to operate at LOS F in 2030. The predicted severe congestion of the local road network in and around Moorebank, is identified as occurring regardless of the MIC proposal.

The traffic scenario on the M5 is modelled in Section 11 of the TIA due to concerns associated with traffic weaving between the on/off-ramps at the Hume Highway and Moorebank Avenue. The results published in Table 11.2 of the TIA demonstrate that in 2030, during the AM peak, the eastbound M5 will be operating at LOS F while the westbound M5 will operate at LOS C. In the PM Peak the eastbound M5 will operate at LOS D and the westbound M5 will operate at LOS E. These results are again largely independent of the presence of the MIC proposal.

The TIA identifies that in 2030 both the local road network and the motorway network will be highly congested. The entire strategic justification for the proposal at this site relies on it having excellent access to both rail and road transport. The TIA modelling for 2030 suggests that this road capacity will not exist and any intermodal operational performance in the Moorebank Area will be substantially impacted. There are currently no major long term road or public transport projects in this area that would offer comprehensive relief from the predicted congestion. Further, projects such as Westconnex may exacerbate traffic problems in this area by inducing additional trips on the M5 Motorway.

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. The opportunity costs associated with the reduced timeframe to intersection capacity require consideration, along with the development of a strategy for MIC to contribute to intersection upgrades, proportionate to their level of impact.

The extent of congestion identified by the modelling suggests that an intermodal terminal should not be located at Moorebank. It is understood that further modelling of network effects on a subregional scale is being conducted by RMS for the Moorebank area and surrounds. This modelling 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.

A number of the assumptions that inform the assessment are considered incorrect as identified by Cardno's previous submission. Key concerns are associated with the lack of consideration of the MIC and SIMTA sites operating at full capacity. Additionally, the assumptions associated with the destuffing of containers are not considered accurate with the potential for an estimated 10 to 15% increase in vehicle numbers along Moorebank Avenue.

Rail

The proposed rail link closely reflects the SIMTA rail alignment, with many of the concerns raised in the Cardno review of the SIMTA rail alignment applicable. Specifically the curve of the interstate rail link is tight, impacting on the ability of interstate trains to leave the Southern Sydney Freight Line (SSFL) at appropriate speeds. Furthermore, the rail link does not appear to be long enough to accommodate an 1800m interstate freight train prior to the first junction on the spur line, without blocking the SSFL. These issues suggest that the rail link will not meet ARTC standards and will limit the performance of the SSFL, as well as the Moorebank intermodal terminals if constructed as proposed.

The location of the rail link and curvature is anticipated to generate wheel squeal. This noise is difficult to mitigate, with a number of strategies trialled globally without an appropriate level of noise reduction. Curve realignment will be required to appropriately address this issue and prevent noise impacts on residents, particularly those to the west in Casula, rather than unproven mitigation such as modified wheels and track or lubrication.

The MIC and SIMTA rail links appear to cross the Glenfield Waste Facility on different alignments. The SIMTA link intrudes onto a leachate basin whereas the MIC link cuts through more of the riparian vegetation along the Georges River. Considering that this infrastructure is proposed to be shared, there appears to be a lack of coordination between the two proposals, although both of which result in potentially significant environmental impact. The final impacts of the rail link will depend on the alignment proposed to be constructed, which is not clear from the MIC proposal.

Amenity

Amenity issues are identified by MIC and considered in general terms, with more detailed consideration proposed at the project approval stage when a final design has been selected. Health impacts from a varied and potentially reduced level of amenity as a result of the Project are not addressed. Specifically there is no consideration of the impacts of the proposal on the recreation and exercise areas around the Georges River, with recreational use predicted to increase in this area due to the planned upgrade of the Georges River Casula Parklands Precinct. Impacts are likely to be associated with both physical and mental health.

The assessment does not consider the impacts on visual amenity resulting from the rail link. The rail alignment 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 the SSFL are not addressed. This is particularly concerning as the SSFL will be an increased source of air, noise and visual intrusion as a result of the traffic generated by the MIC and SIMTA terminals. Instead, mitigation of these issues is considered to be the responsibility of the ARTC. This is problematic given that there does not appear to be any mechanism for compelling the ARTC to mitigate these impacts.

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. However, it is noted that given the extensive additional truck movements resulting from the proposal in the local area it is not anticipated that the provision of buffers is a suitable measure to provide full mitigation, with the viability of the proposal at Moorebank questioned due to the extent of visual impacts.

Noise

The unmitigated noise scenarios do consider the cumulative impact of MIC and SIMTA up to and including the original target throughput of 1.55 million TEUs per annum. These scenarios predict significant impacts on sensitive receptors close to the site.

The mitigated scenarios show lower impacts on sensitive receptors as expected. Exceedances do still occur, although these are restricted to the night time. The identified exceedances at Casula and Wattle Grove are considered to be reasonable in terms of extent of impacts by the EIS although as noted below, this assessment excludes noise produced by MIC trains on the SSFL. Furthermore, it is considered that the assumptions associated with the destuffing of containers as identified in the previous Cardno submission 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 volume that could be reached.

The SSFL rail noise generated by the project is not considered within the noise modelling. Instead, it is considered to be the responsibility of the ARTC to provide mitigation. This is problematic given that the

intermodal terminals at Moorebank will be significant contributors to traffic on the SSFL at full operation. If MIC is responsible for considering the impact of its road traffic on public roads, then it should also accept responsibility for considering the impact of its trains on public railways. At a minimum, modelling should include noise from trains on the SSFL resulting from the MIC and SIMTA Projects, between Moorebank and Chullora. This modelling can then be used to identify the mitigation measures necessary along the line to assist rail network operators to identify whether mitigation of the increased noise is reasonable and possible.

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.

The question of independent or joint operation of SIMTA and MIC has not been resolved. There still remains some ambiguity over the final design of the intermodal terminal and it is likely that management arrangements will continue to change subject to negotiations. As the 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.

Human Health

The Human Health Impact assessment indicates that many of the risks can be mitigated, with only limited additional information provided. Essentially the assessment concludes that the impacts to human health are broadly unchanged from the EIS document.

The Human Health Risk Assessment calculates the population scale impacts of the proposed intermodal terminal. It calculates that the cumulative scenarios impose an increase in mortality of between 0.1 and 0.2 deaths per year.

Cardio vascular hospitalisations increase by between 0.1 and 0.08 per year. Respiratory hospitalisations increase by between 0.01 and 0.02 per year. Use of bronchodilators by children increases by between 1.5 and 2.8 per year depending on the scenario.

Cumulative Scenario C is split into two parts, one at 2020 and one at full build (2030). The human health impacts associated with the 2020 C1 scenario are significantly higher than those of the full build scenario. This is likely due to the combined impacts of simultaneous construction and operations. Additional mitigation measures should be considered including temporary shutdowns of one or both intermodal terminal facilities during construction works so that temporary cumulative impacts do not peak at unacceptable levels.

It should be noted that this assessment is based on the air quality assessments which include traffic at the terminal and on the rail link, but not on the SSFL. As noted earlier, this is problematic as the proposed intermodal terminals will generate additional rail freight traffic beyond the rail link on the SSFL. These additional movements should be considered to allow a comprehensive cumulative assessment.

The health assessment does not consider mental health impacts associated with increased congestion and visual impacts. These impacts are likely to be significant as a result of the MIC proposal independently and cumulatively, should MIC and SIMTA operate simultaneously.

The increased incidence of health problems resulting from the MIC Project should be considered for mitigation. MIC should consider supporting local health promotion organisations and services to offset the health impacts of the proposal.

Cumulative

Cumulative impacts of simultaneous construction and operations occurring at SIMTA and the MIC facilities are expected to be higher than the final build of the project as demonstrated by scenario C1 and C2. 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. The periods of peak impact must be identified and temporary mitigation measures for specific periods considered. These temporary measures could include halting operation of facilities during periods of major construction.

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 its site while SIMTA can potentially expand to 500,000 TEU under its approved concept plan. Without clear limits placed upon both facilities there remains potential for 2.05 million TEU of intermodal capacity to be approved in the Moorebank precinct.

A demand and infrastructure based cap on total TEU throughput is not considered appropriate, with growth in container freight as identified by the NSW Freight and Ports Strategy (NSW Government, 2013) and forecasts for container freight demonstrating the need for new intermodal and container port capacity in the period 2030 to 2040. Port Kembla is the most likely option to meet the additional Port capacity, with the associated potential for higher combined throughputs at both SIMTA and MIC. Consequently, assessment should be undertaken that addresses the full 2.05 million TEU capacity to service both Port Botany and Port Kembla.

Intermodal terminals are not identified within Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). Consequently, an Environmental Protection Licence (EPL) is not required under Sections 47, 48 or 49 or the POEO Act. However, the scale of both of the intermodal terminals creates a high potential for environmental impact resulting from emissions to air and water. Subject to Section 43(d) of the POEO Act an EPL can be required "*to control the carrying out of non-scheduled activities for the purpose of regulating water pollution resulting from any such activity, as referred to in section 122*". The proposed intermodal terminal has the potential to pollute the waters of the Georges River and Anzac Creek. The potential to pollute is derived from the proximity of the site to these water bodies and the large extent of the site, industrial nature of the use and difficulty controlling runoff both from within the site, the supporting rail corridor and trucks servicing the site.

An EPL would require the EPA to act as the appropriate regulatory authority. Management of the site under an EPL by the EPA is considered more appropriate than management by Council, as the EPA rather than Council has the specific resources and expertise to undertake this function. Consequently, a more rigorous management regime would be established to ensure that environmental impacts are appropriately managed.

Summary

The suitability of the Moorebank area for intermodal terminals is put into question by the extent of identified impacts associated with the updated assessments. The traffic assessment identifies that the majority of the modelled intersections will perform at LoS F. The traffic weave on the M5 between the Hume Highway and Moorebank Avenue will cause the motorway to operate at poor levels of service. These results suggest that the road network around Moorebank will be too congested by 2030 for the proposed intermodal terminals to operate as anticipated. This does not result solely from the proposed facilities themselves, but primarily as a result of background traffic growth. Consequently the strategic justification for constructing intermodal terminals in this location is undermined. The EIS does not identify infrastructure upgrades within in the next 15 years which could relieve this congestion in a meaningful way.

The proposed rail link does not appear to comply with ARTC standards due to the geometry of the curves connecting into the SSFL. Consequently southbound trains may not be able to enter the SSFL at adequate speeds and 1800m interstate trains may block traffic on the SSFL as the proposed link does not contain

enough space to hold them. The proposed SIMTA and MIC rail links have not been fully harmonised and it is not clear which will be built. Therefore, the resulting impacts on riparian vegetation on the Georges River or on the Glenfield Waste Facility cannot be adequately assessed.

Amenity impacts and noise impacts are not assessed with consideration of intermodal related rail traffic on the SSFL. This is a significant omission given that the SSFL is very close to sensitive receivers and that the intermodal terminals will be significant contributors to rail traffic. SSFL traffic produced by the intermodal terminals at Moorebank should be assessed in relation to amenity and noise impacts. Targeted mitigation measures such as insulation of affected homes and contributions to upgrade of recreation facilities should be considered.

The human health impacts of the proposal have been assessed and found to be greatest when considered as part of a cumulative assessment when both SIMTA and MIC are operating and construction works are underway. This suggests that the peak impacts of the proposal are not well described by the full build scenario. Instead, there should be an assessment over time using the staging and construction schedules for both MIC and SIMTA. This could identify the periods of greatest impact and suggest mitigation measures such as temporary shutdowns to avoid cumulative impacts exceeding required limits. Targeted community health measures including support for local health services should be considered to offset the health impacts of the proposal. The cumulative impacts of a full build worst case scenario where both MIC and SIMTA operate at their maximum concept capacities for a total of 2.05 million TEU per annum, have not been addressed. Based on the review of the initial EIS (Parsons Brinkerhoff, 2014) and the revised EIS (Parsons Brinkerhoff, 2015) it is not considered that adequate information has been provided to allow the determination of the proposal. Furthermore, the extent of environmental impact has not been appropriately mitigated, with the potential to provide appropriate mitigation for the scale of development proposed at Moorebank questioned.

Yours faithfully

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