PlanningNSW

Proposed Waste Transfer Terminal at Clyde Railway Marshalling Yards, Auburn NSW, by Collex Pty Limited

DA No. 205–08-01

Assessment Report

EXECUTIVE SUMMARY

The Development Proposal

On 27 November 2000, Collex Pty Ltd (the Applicant) received the Minister's approval to construct and operate a solid waste landfill at Woodlawn near Goulburn, known as the Woodlawn Bioreactor. Condition 26 of the Minister's consent requires that *"All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility"*. The "intermodal facility" in this context is located at Crisps Creek, some 13km from the Woodlawn Bioreactor.

In order to satisfy Condition 26 of the above consent, the Applicant lodged a Development Application (DA) with the Department on 2 August 2001, the subject of this report. The proposal is to construct and operate a waste packing and transfer terminal at the Clyde Railway Marshalling Yards, located off the Parramatta Road, Auburn, in the Auburn local government area. The packed containers would be transported by rail to the Crisps Creek Intermodal, from where they would be transported by road to Woodlawn.

Under the *Environmental Planning and Assessment Act 1979* (the Act), the proposed development is classified as State Significant, Integrated, and Designated development. The Minister for Planning is the consent authority for the DA.

Public Exhibition and Submissions

Exhibition

The DA and EIS were received on 2 August 2001 and exhibited for 53 days from 30 August 2001 to 22 October 2001. In response to concerns raised by the Department and in submissions on the original proposal, the Applicant modified the proposal and lodged a Supplementary EIS with the Department. The Supplementary EIS was exhibited together with the DA and original EIS from 31 January 2002 to 1 March 2002.

Notification

Under section 79(1)(b)(ii) of the Act it is necessary to notify owners or occupiers of land who may be detrimentally affected by the development. The EIS estimated that the EPA's lowest odour criterion for residential areas of 2 odour units per square metre would be reached at approximately 350 metres from the site. On this basis and the likely sensitivity of the proposal, the Department decided to notify owners and occupiers within a 1km radius of the proposed development site, using mailing lists provided by Parramatta and Auburn Councils.

Consultation

The Applicant conducted community surveys between November 2001 and February 2002, involving telephone surveys, random doorknocks and intercept interviews, and held information sessions for community representatives.

Mr John Court, engaged by the Department to independently assess the technical and environmental management aspects of the proposal, also consulted with Auburn and Parramatta Councils, government agencies and community representatives during his assessment.

Public Submissions
The Department received 1652 submissions in response to the public exhibition of these documents. Aside from 83 submissions in support of the proposed development from outside the Clyde-Auburn area, the majority of public submissions either objected to, or were concerned about the proposal. The main concerns raised were:

- air quality concerns, particularly regarding odour and dust emissions (24% of issues raised)
- inconsistency of the proposed development with the strategic location of the site and the need for the activity to be located closer to the source of the waste (21% of issues raised)
- socio-economic impacts such as land devaluation and the potential for clustering of undesirable industries in the Clyde Marshalling Yards (14% of issues raised)
- issues concerning Duck River including water quality, the provision of a cycleway and riparian zone protection (13% of issues raised)
- lack of consultation (8% of issues raised)
- impacts on Parramatta Road traffic levels (6% of issues raised).

Agency Submissions
Submissions were received from the Environment Protection Authority (EPA), the NSW Waterways Authority, the Roads and Traffic Authority (RTA) and the State Rail Authority (SRA).

As an integrated approval body for the proposal, the EPA requested additional information on odour and noise issues associated with the proposed development. On receipt of this information, the EPA supplied the Department with general terms of approval indicating it would be prepared to issue an environment protection licence for the development, subject to conditions.

The NSW Waterways Authority initially requested further information on the proposed development, but after the Applicant's modifications to the proposal to ensure it remains further than 40 metres from Duck River, Waterways indicated that it had no further role as an approval body for the proposed development.

The RTA provided specific information regarding the treatment and design of roads and intersections, and raised initial concern regarding the potential increase in traffic on the local road network as a result of the proposal. The RTA also indicated Auburn Council would need to approve works on Parramatta Road under the *Roads Act 1993*. Following a modification to the proposed traffic management arrangements, the RTA gave technical concurrence to the proposal.

The SRA stated that, as the owner of land on which the access road from Parramatta Road to the proposed development lies, its consent would be required for the development. The SRA raised concern regarding safety implications and traffic conflicts on the access road. Under the draft instrument, these issues need to be addressed by the Applicant prior to construction.

Submissions from Councils
Auburn Council objected to the proposed development on a number of grounds. The principal concerns raised by Council were:

- Inconsistencies with the Auburn LEP 2000 in respect of permissibility, staged development, heads of consideration listed in the LEP, and heritage
- The development prevents establishment of a cycle way and riparian zone alongside Duck River

- Traffic issues
- Proposed operational scale
- Inadequate consideration of alternative sites and alternative options
- Inadequate public consultation

Parramatta Council raised a number of concerns regarding the proposed development including community consultation, impacts on residential and commercial areas, air and noise emissions, impacts on Duck River including water quality and vegetation/habitat management, and traffic issues.

Requests for Commission of Inquiry
Two submissions requested that the Minister call a Commission of Inquiry.

The Department considers there are no outstanding environmental impact matters that warrant the establishment of an Inquiry. The key environmental issues have been addressed in the EIS and SEIS and the EPA has issued its general terms of approval. The Department has considered all the environmental impacts of the proposal and recommended conditions of consent addressing performance criteria, environmental management plans, environmental monitoring and environmental auditing, which would apply to the construction and operational stages of the development if approved.

Independent Assessment

The Department engaged Mr John Court to conduct an independent assessment of the technical and environmental management aspects of the proposal and provide a report on his findings. Mr Court's report is provided at Appendix C.

Key Issues and Outcomes

The Department has assessed the DA, the EIS and SEIS, and the submissions on the proposed development. The outcomes of the assessment in relation to the key issues are summarised below.

Permissibility
Auburn Council and other respondents questioned whether the development is permissible under the provisions of the Auburn LEP. Advice from Senior Counsel to the Department on the matter indicated the development is permissible with consent, because it falls within the definition of "freight transfer terminals", a class of development that is permissible with consent under the Auburn LEP.

Staged development
Auburn Council stated the development is subject to the staged development provisions of the Auburn LEP and, as the first development on the Clyde Marshalling Yards since introduction of the LEP, is responsible for developing a master plan for the Clyde Marshalling Yards. The Department considers it would be unreasonable to impose such a requirement on an Applicant whose development would occupy only approximately 3% of the Marshalling Yards site and when the resulting master plan could preclude its proposed development. On that basis the Department has not imposed a staged development requirement on the Applicant.

Alternatives to the proposal
The Department received a number of representations putting forward alternatives to the proposal. The alternative of containerising the waste in its region of origin and transporting the packed containers to Clyde for loading onto trains was the most popular option, and in the Department's considerations had environmental benefits

over the proposed development. However this alternative involved packing the containers at existing transfer stations owned by another commercial operator, Waste Service NSW, a State owned corporation. The Applicant chose not to pursue such an alternative strategy as it had fundamental difficulties with the anti-competitive nature of conditions sought by Waste Service on competitor access to its waste transfer facilities. The Department also had concerns about these conditions under the competition provisions of the *Trade Practices Act 1974* and over broader issues of competition policy outside that Act. Further, the Department is not in a lawful position to force an Applicant to enter into a commercial agreement. The current proposal, which considered a number of alternatives to the proposed development, was therefore assessed as submitted.

Consultation
Several submissions, including Parramatta City Council, cited inadequate consultation as a concern. The DA, EIS and Supplementary EIS were exhibited in accordance with the legislation. In addition, the Department produced the Executive Summary of the Supplementary EIS in a number of community languages and the independent assessor consulted with representatives from a range of local community groups.

Cycleway, riparian zone protection
Auburn Council, Duck River Steering Committee and other respondents raised concerns that the proposed development would preclude the future development of a cycleway along the river past the proposed development, and the establishment of a riparian zone. Following exhibition of the Supplementary EIS, the proposal was modified to remove any development from within 40 metres of Duck Creek. In the Department's view, this would permit the establishment of these two initiatives, and recommended conditions of consent address the need for the Applicant to assist the Councils accordingly.

Odour
The Department and the independent assessor had significant concerns about the ability of the proposed development to effectively control odour emissions. This was also a key issue raised in submissions. The Applicant proposed to operate the dust and odour filtration system in the terminal building only when delays caused a backlog of waste in the building. Conditions have been recommended requiring the odour and dust filtration system to be operated continuously unless otherwise approved by the Director-General having regard to performance testing and the views of the Community Consultative Committee and the EPA. The recommended conditions include with a stringent monitoring and community consultation regime and a requirement for the Odour Management Plan to be approved by the Director-General prior to the receipt of any waste at the development.

Traffic
The Applicant modified the traffic management arrangements after submission of the Supplementary EIS, in response to concerns raised by the RTA. The originally proposed traffic lights on Parramatta Road were removed in favour of "left turn only" entry and exit and the provision of a deceleration lane on Parramatta Road upon entry to the site. The RTA gave technical concurrence to the modified proposal. Auburn Council is the "roads authority" under the *Roads Act 1993* for Parramatta Road in the vicinity of the proposed development. As such, Council is the integrated development approval body for works on Parramatta Road associated with the development. However Council refused to grant general terms of approval to the development. The Department and the RTA consider Council's grounds for refusal to be inappropriate in terms of Council's powers under the *Roads Act 1993.*

Accordingly the Department requested the RTA to exercise the functions of the roads authority over Parramatta Road for the purposes of the development, under section 64 of the Roads Act, and to issue general terms of approval. This was subsequently done by the RTA.

Recommended Conditions

The recommended conditions cover performance criteria, environmental management plans, environmental monitoring and environmental auditing and include the EPA's General Terms of Approval. A summary of the key recommended conditions follows:

Waste
The only waste permitted to arrive at and leave the site will be waste to be taken by rail to the Woodlawn Bioreactor. No asbestos waste will be permitted at the site.

Site contamination
A report will be required from an auditor accredited by the EPA, to assess the site and recommend measures to prevent groundwater contamination and the emission of contaminated dust.

Environmental management
Environmental management plans will be required for the construction and operation stages. Independent environmental auditing will be required on annual basis, with the results publicly available.

Community involvement
The Applicant will be required to establish and support a Community Consultative Committee for community representatives to make recommendations and comments on management plans and studies and inspect the facility.

Community enhancement program
The Applicant will be required to contribute towards community projects such as

- A master plan for the Clyde Marshalling Yards site
- Widening of western rail overbridge and
- Local activities and projects through a "per tonne of waste" contribution.

Odour management
The Applicant will be required to operate a dust and odour filtration system continuously unless otherwise approved by the Director-General having regard to performance testing results and the views of the Community Consultative Committee and EPA.

Traffic management
The RTA opposed the Applicant's proposal for traffic signals on the intersection of the site access with Parramatta Road. Recommended conditions have restricted entry and egress to left turn only, with a deceleration lane to be provided on entry to the site.

Water management
Water that comes in contact with waste is to be directed to the leachate collection system. Stormwater is to be appropriately treated before discharge to Duck River.

Vermin and pest management
The design and operation of the development is to eliminate or minimise the potential for the attraction of vermin and pests.

Department's Conclusion

Through this assessment, the Department is satisfied that the proposed development could be managed, subject to the imposition of the recommended conditions of consent. The recommended conditions incorporate measures to manage the future environmental performance of the proposed development should it be approved, and set in place on-going environmental management, monitoring and reporting mechanisms.

Notwithstanding the outcome of the Department's technical assessment and the comprehensiveness of the recommended technical conditions, the Department is fully appreciative and understanding of the strong concerns expressed by the Clyde-Auburn community. To address those concerns, the Department has recommended conditions to facilitate open and transparent processes. Should approval be granted, all monitoring, auditing and environmental management reporting will be made available to the public on request, and a Community Consultative Committee will have access to management plans and studies and the opportunity to provide recommendations and comments and inspect the facility. Further, the recommended conditions require contributions by the Applicant towards a range of community enhancement projects.

The Department is satisfied there are no outstanding environmental impact matters that warrant the establishment of a Commission of Inquiry.

The Department considers that the proposed development provides a sustainable option for the transfer of waste from the Sydney region for disposal at the Woodlawn Bioreactor, and represents a key link in the Woodlawn waste disposal chain. Furthermore, it is considered that the proposal is consistent with State and regional planning objectives relating to environmental management, sustainable economic development and employment generation.

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Glossary and definitions

Act, the	Environmental Planning and Assessment Act 1979
ALEP 2000	Auburn Local Environmental Plan 2000
Applicant, the	Collex Pty Limited
Containerised waste	Waste that arrives at the premises pre-packaged into sealed containers which remain unopened at the premises
DA	Development application
dB(A)	Decibel (A-weighted scale)
DCP	Development Control Plan
Department, the	Department of Planning (PlanningNSW)
Director-General, the	Director-General of PlanningNSW (or delegate)
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	NSW Environment Protection Authority
GTA	General Terms of Approval
IMROC	Inner Metropolitan Regional Organisation of Councils
LEP	Local Environmental Plan
LGA	Local government area
Minister, the	Minister for Planning
MSW	Municipal Solid Waste
OU	Odour units
POEO Act	*Protection of the Environment Operations Act 1997*
RTA	NSW Roads and Traffic Authority
SEIS	Supplementary Environmental Impact Statement
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
SRA	State Rail Authority
tpa	Tonnes per annum
Uncontainerised waste	Waste that arrives at the premises in bulk, for compaction and containerisation at the premises
WSROC	Western Sydney Regional Organisation of Councils

1. INTRODUCTION

This document presents the Department's assessment of the proposed development, and forms the basis for the Department's recommendation to the Minister for Planning concerning his determination of the development application.

1.1 Background

Collex Pty Ltd received the Minister's approval on 27 November 2000 to construct and operate a solid waste landfill at Woodlawn near Goulburn, known as the Woodlawn Bioreactor. Condition 26 of the Minister's consent requires that *"All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility"*. The "intermodal facility" in this context is located at Crisps Creek, some 13km from the Woodlawn Bioreactor, where the waste containers are to be transferred to trucks for final transport to Woodlawn.

In order to satisfy condition 26, Collex lodged a Development Application (DA) on 2 August 2001 to construct and operate a waste packing and transfer terminal at the Clyde Intermodal Terminal within the Clyde Railway Marshalling Yards.

The Minister, on 16 May 2001, had declared the development of a container packing station in the Clyde Marshalling Yard area to be State significant development under section 76A(7)(b) of the *Environmental Planning and Assessment Act 1979*. The declaration was made for the following reasons:

- The need for the assessment of large-scale waste management infrastructure to be carried out in a consistent manner across the State
- The scale of the proposed facility could have a significant influence on the need for, and location of, future waste transfer facilities in the Sydney region
- The proposed facility was identified by the Applicant as a key link in the waste distribution chain for the approved Woodlawn Bioreactor, which was itself State significant development under the provisions of SEPP 48.

1.2 The Applicant

Collex Pty Ltd is the Applicant for the proposed Clyde Transfer Terminal and associated works.

1.3 Overview of Proposal and Location

The proposal is for Collex Pty Ltd to establish and operate a waste transfer terminal at the Clyde Intermodal Terminal located within the Clyde Railway Marshalling Yards. At the time of submission of the DA and EIS/SEIS, the Clyde Intermodal Terminal was owned by FreightCorp, a NSW State owned corporation

The ownership of the Clyde Intermodal Terminal has since been transferred to Pacific National (NSW) Pty Limited.

The proposed development is located to the south of Parramatta Road and to the east of Duck River, within the Clyde Rail Marshalling Yards. The proposal is in the

Auburn local government area. The Parramatta local government area is situated immediately to the west, the boundary falling on Duck River.

The map at Figure 1 and aerial photograph at Figure 2 on the following pages show the location of the proposed development.

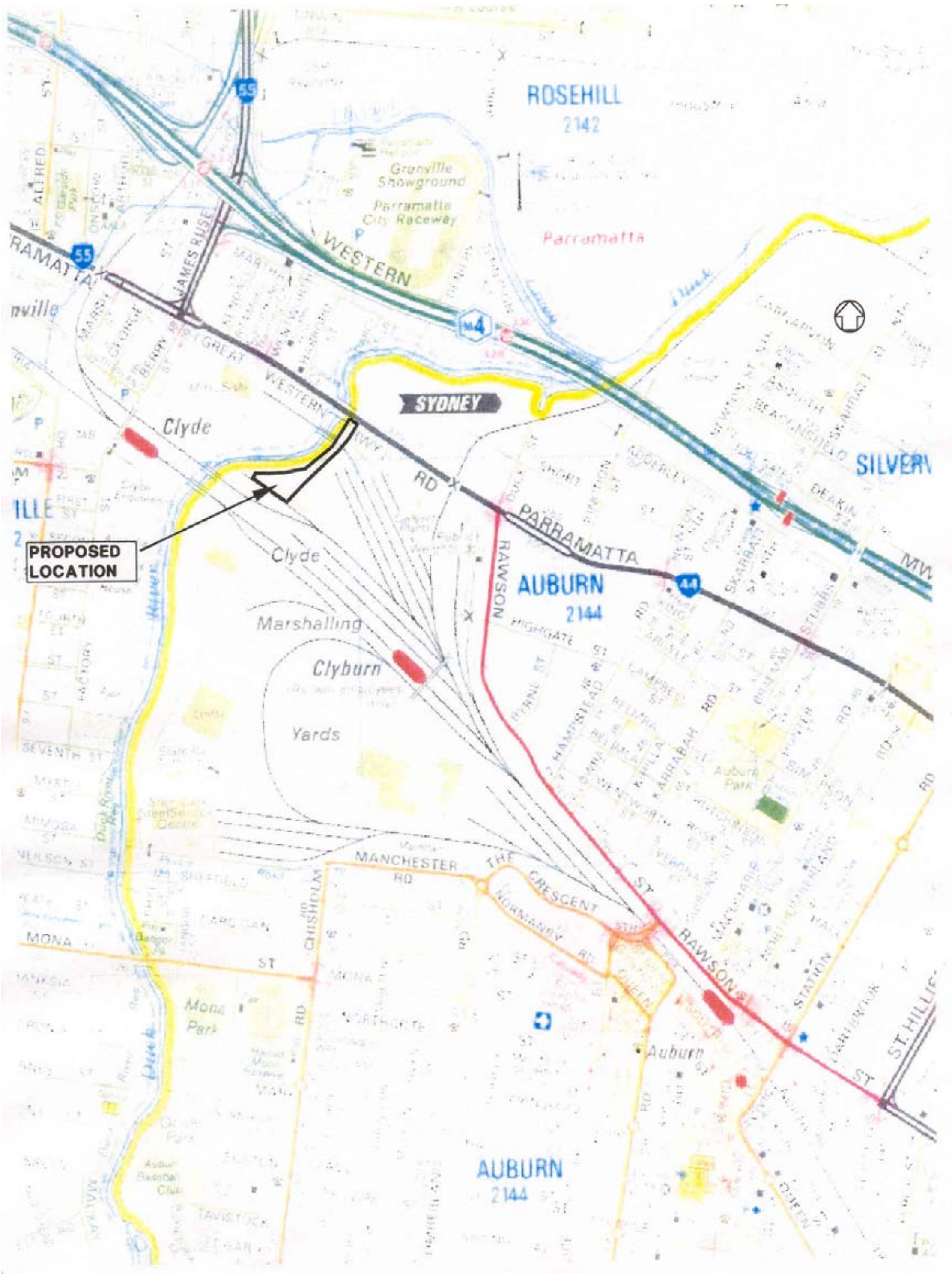

Figure 1: Location of the proposed development

Figure 2: Aerial photograph location of proposed development

1.4 Independent Assessment

The Department engaged Mr John Court of JD Court and Associates Pty Ltd, to carry out an independent assessment of the technical aspects of the development application, particularly in regard to air, water and noise emissions and the operation of the development in a sustainable manner. Mr Court consulted with State government agencies, local government and community groups as part of his review. The outcomes of the independent assessment have been utilised by the Department in its assessment of the proposal and Mr Court's findings are referenced within this document.

A copy of Mr Court's report is appended to this document.

2. THE PROPOSAL

2.1 Description of Proposed Development

Applicant's description

The EIS describes the proposed development as follows:

Collex Pty Ltd propose to operate a road/rail Transfer Terminal for the transportation of putrescible municipal and other wastes.

Waste sourced from the Sydney region would be transported by truck to the Transfer Terminal at Clyde Rail Yard. Municipal commercial and industrial customers would deposit solid waste within the large industrial building. The Transfer Terminal would not be open to the public.

The waste would be compacted and loaded into specially constructed shipping containers and railed, using Rail Infrastructure Corporation rail lines, to the Crisps Creek Intermodal Facility near the Woodlawn Bioreactor. When the train returns to Sydney with the empty containers ready for re-loading, any surplus empty waste containers would be stored at the Clyde Rail Yard.

It is proposed that trucks would enter and exit the site from a controlled intersection on Parramatta Road. Traffic signals would be installed as part of the proposal.

In future it is proposed to transport waste to other licenced disposal or processing facilities within NSW. The mode of transport for this waste could be either by road or rail.

Specifically, Collex sought development approval for the following activities:

- Upgrade of the existing site entry road
- Construction of new site roads and parking area
- Construction of a gatehouse and weighbridge
- Construction of a transfer building
- Receival of waste to site
- Compaction and containerisation of waste
- Installation of traffic signals at the junction of Parramatta Road and the proposed site entry road.

Summary of activities

Municipal solid waste (MSW) generated from within the Sydney region would be delivered to the proposed waste transfer terminal building by municipal garbage trucks on a 24-hour basis and unloaded onto the floor of the building. The building would be enclosed except for vehicle openings and louvred ventilation openings along the top of the walls. The Applicant proposes to operate a forced air extraction system on an "as needs" basis at the discretion of the operator. It would extract air from the building through six outlets via dust filters and activated carbon filters for odour control. A water and deodoriser spray system is also proposed, to spray the waste lying on the tipping floor when required for dust and odour supression. Waste deposited on the floor would be pushed to one of two shutes via a front end loader. Each shute would direct waste to a compactor beneath the building, where it would be compacted into slugs and pushed into 40-foot shipping containers.

Once the containers are packed with waste, they would be transferred to the control of FreightCorp (now Pacific National) for stockpiling or direct loading onto rail cars for transport to the Crisps Creek Intermodal Facility. The Pacific National activities are outside the scope of this DA. From the Crisps Creek Intermodal, the containers would be transferred to road transport for the remaining 13km to Woodlawn.

Employment

The proposal is estimated to employ 20 to 30 persons during construction and 5 to 8 persons per shift during operations on a three shift 24-hour basis.

Waste volumes

The Applicant, believing the development should be staged to comply with the staged development provisions of the Auburn LEP 2000, proposed the first stage involving the receipt of up to 400,000 tonnes per annum (tpa) of MSW, and the second stage involving the receipt of an additional 100,000tpa. (The issue of staged development is discussed further in "Statutory Planning Matters"). Figures 3 and 4 show the proposed layouts of the first and second stages of the proposed development.

The Applicant anticipates that in the first year of operation a minimum of 150,000 tonnes of waste would be received at the terminal for transport to Woodlawn.

The EIS (5.3.1, page 67) indicates that in the future additional volumes of waste may be accepted at the terminal for disposal to other locations within NSW. Such additional activity is not part of the current development application.

Waste infrastructure arrangements

Currently, the only infrastructure in the Sydney region for MSW management is provided by Waste Service NSW which became a State owned corporation in 2001, with the exception of the Hawkesbury and Blue Mountains local government areas where MSW is managed by the respective Councils. Waste Service NSW operates seven waste transfer stations and four landfills in the Sydney Region specifically for the management of MSW. Should the proposed development proceed, in combination with the Woodlawn Bioreactor it would represent the first occurrence of direct competition for Waste Service in the management of MSW generated in the Sydney region.

Modifications

It should be noted that in the course of the Department's assessment, matters have arisen that led to the Applicant making some modifications to the proposal. In particular, following comments from the RTA and Auburn Council the proposal was amended to replace the proposed traffic signals with "left turn only" entry to and exit from the site at Parramatta Road. The Applicant's modifications are listed and further discussed in the "Assessment" section of this document.

The modifications made to the proposed development are considered to generally result in improvements to the overall performance of the proposed development. Further, the modifications were not of a sufficiently substantial nature that would have warranted further public exhibition.

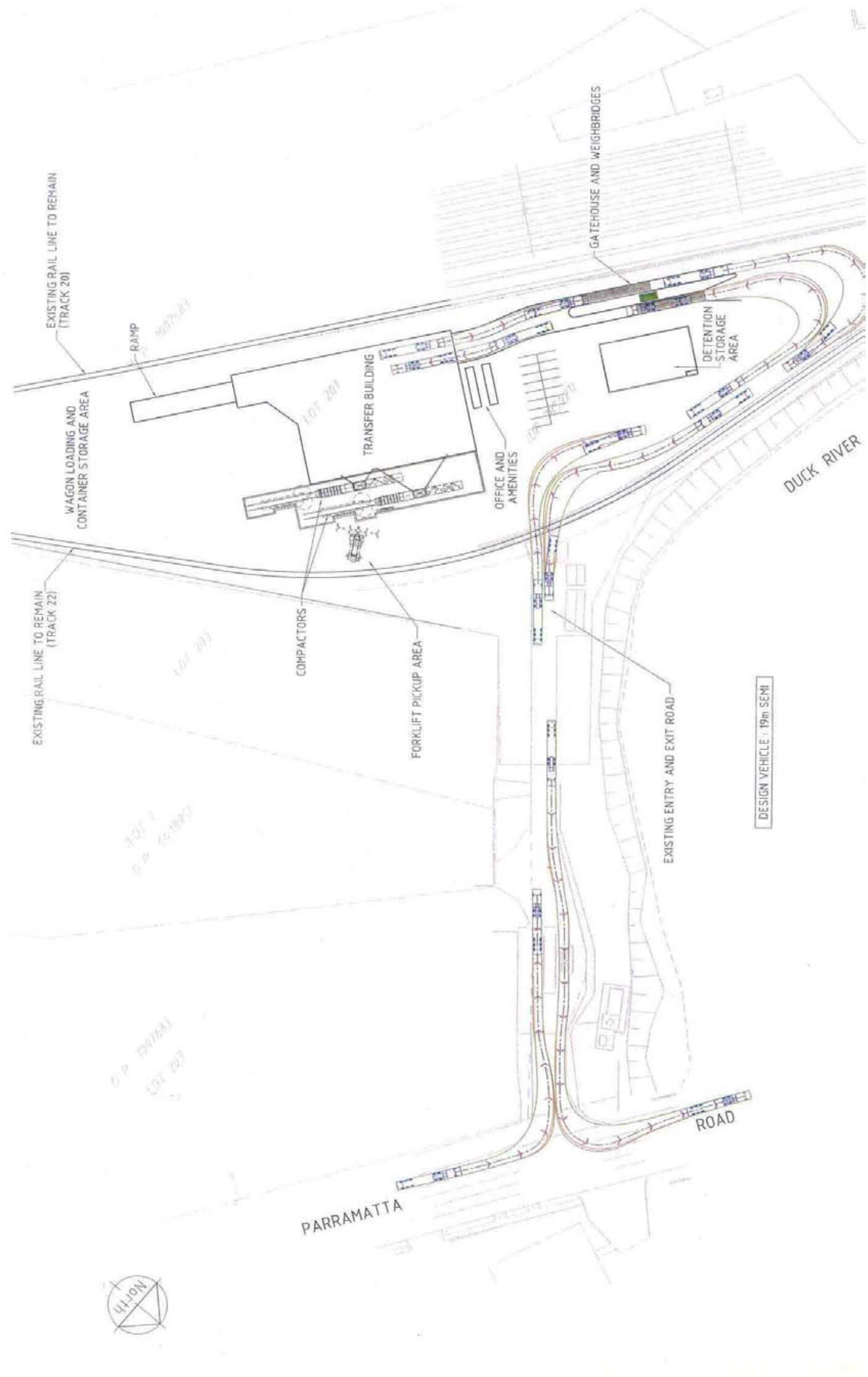

Figure 3: Proposed Stage 1 layout

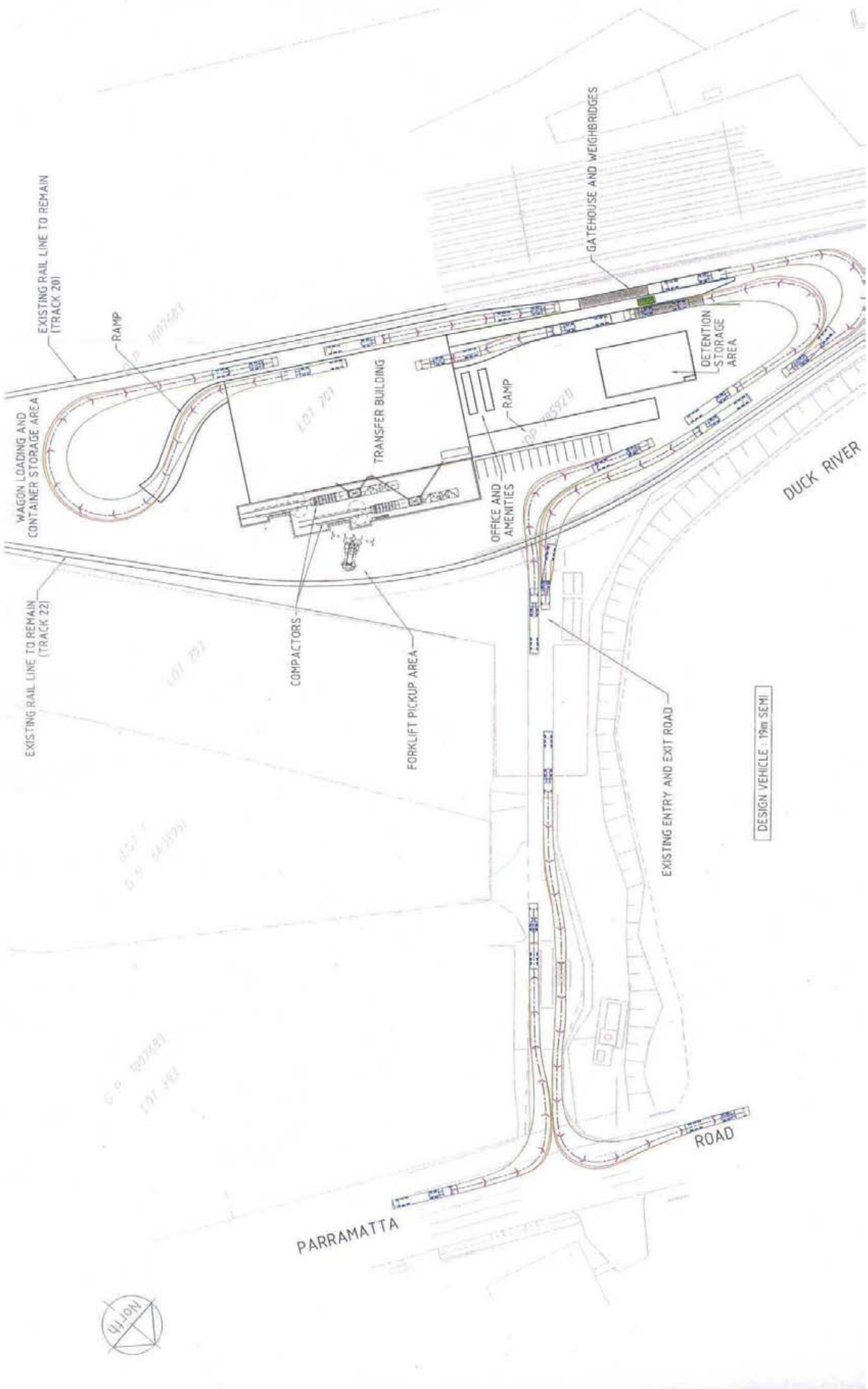

Figure 4: Proposed final layout

2.2 Site Ownership

At the time of lodgement of the DA, FreightCorp, a NSW State owned corporation, owned and operated a rail freight intermodal terminal within the Clyde Marshalling Yards on Lot 201 of DP10076683. This ownership has subsequently changed from FreightCorp to Pacific National (NSW) Pty Limited.

The land ownership details of the Clyde Marshalling Yards is shown in Figure 5. The development is proposed to be located on the Pacific National land. Rail Services Australia owns the land to the north of the Pacific National land, and State Rail Authority owns the land to the south.

The access way from the transfer terminal building to Parramatta Road is owned by State Rail Authority, and Pacific National has a right of carriageway over the access way giving it access to its intermodal facility. Manildra Harwood owns an existing weighbridge located on the access way, and a number of other entities also have a right of carriageway on the access way.

2.3 Site Details

Collex proposes to establish the waste transfer terminal on part of the Pacific National intermodal terminal. The proposed site is located to the east of the Duck River between Parramatta Road and the main western rail line.

Collex intends to lease part of the existing intermodal terminal from Pacific National for the purpose of erecting a building for waste packing, weighbridge, administrative facilities and parking.

A plan showing the details of the proposal is provided in Figure 6.

2.4 Surrounding land uses/regional context

The proposed development is within the northern portion of the Clyde Marshalling Yards, in an area zoned 4(c) Industrial Enterprise. The remainder of the Clyde Marshalling Yards is zoned 4(c) Industrial Enterprise and 5 Special Uses. The proposed development only occupies approximately 3% of the total area of the Marshalling Yards.

The development site is bounded by Duck River to the east, Parramatta Road to the north, the Main Western Rail Line to the south and the Marshalling Yards further to the south and to the east. Beyond Duck River and Parramatta Road is further land zoned 4(c) Industrial Enterprise. The nearest residential land to the development would be approximately 500 metres to the south west fronting Factory Street.

Figure 7 shows the land zonings within and around the Clyde Marshalling Yards.

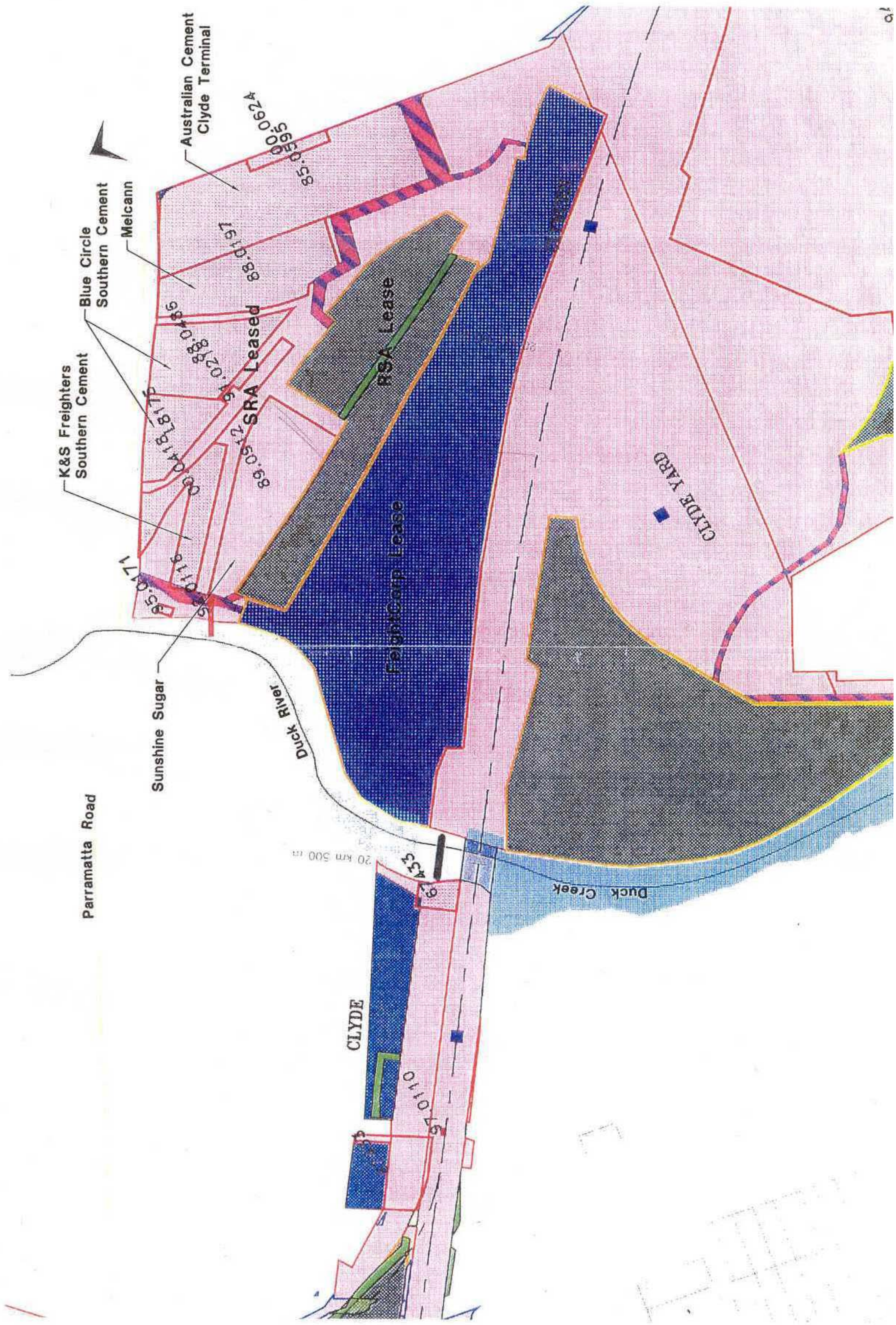

Figure 5: Land ownership details

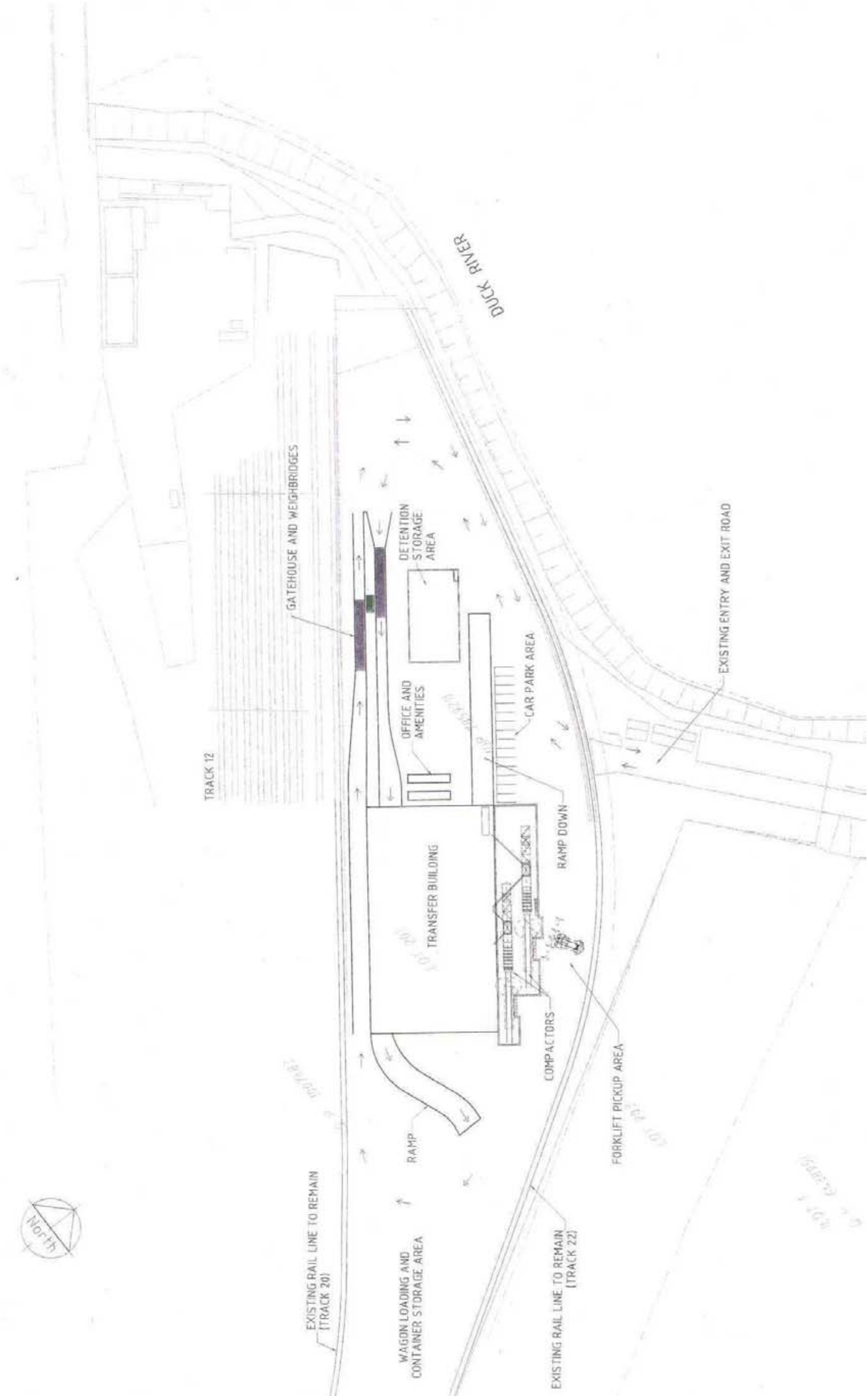

Figure 6: Site details of proposed development

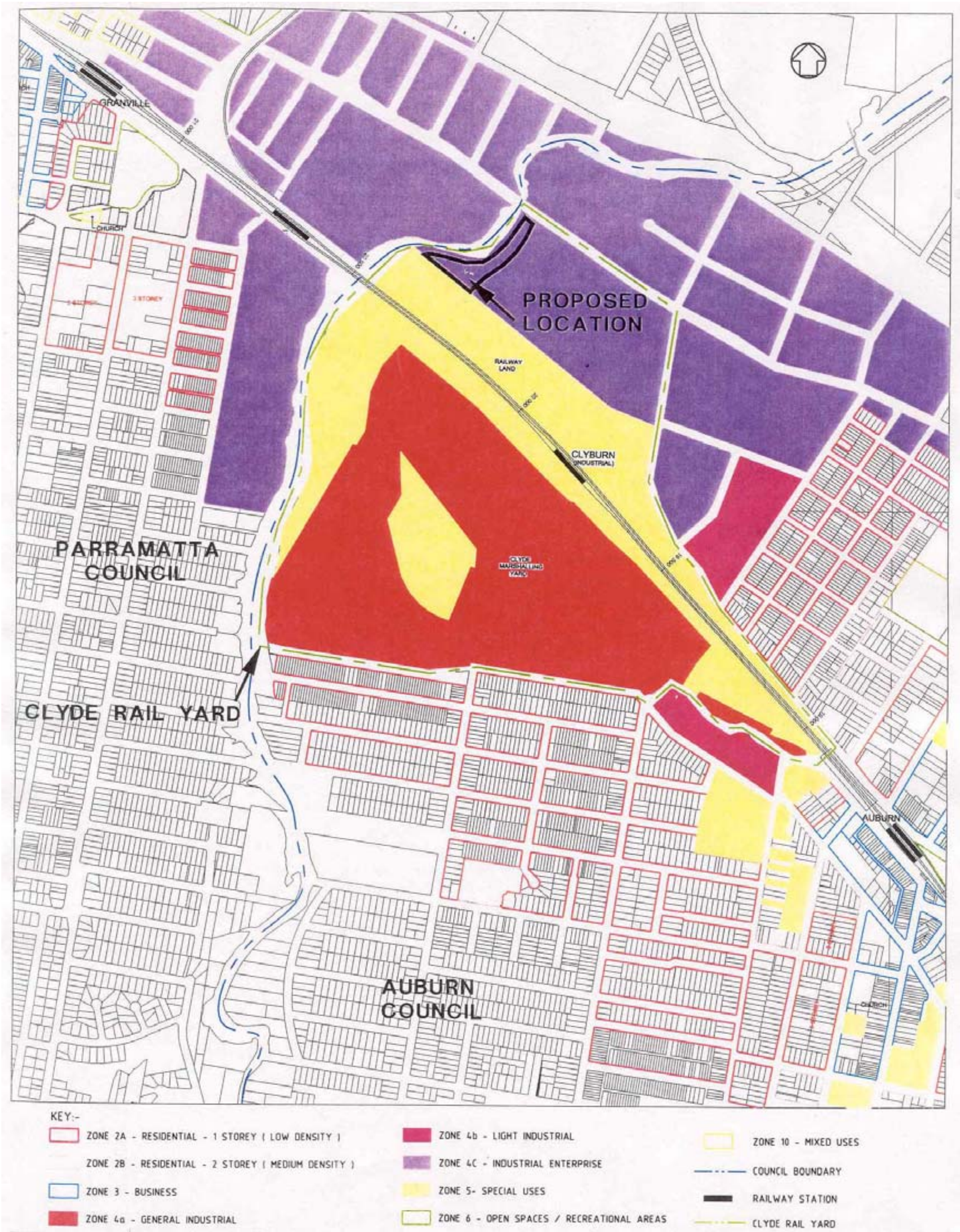

Figure 7: Land zonings

3. STATUTORY PLANNING MATTERS

3.1 State Significant, Designated and Integrated Development

The development was declared to be State significant development in a declaration made by the Minister on 16 May 2001 pursuant to section 76(A)(7)(b) of the *Environmental Planning and Assessment Act 1979*. For development that has been declared to be State significant development, the Minister becomes the consent authority under the Act. As such, the Department carries out an assessment of the DA and provides a report and recommendations to the Minister on his determination of the DA.

The development is designated because it falls within the definition of "waste management facilities or works" in Part 1 of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* and is not excepted by Part 2 or Part 3 of that Schedule. As such, the DA must be accompanied by an EIS.

The development is integrated development under section 91 of the *Environmental Planning and Assessment Act 1979*, because it requires development consent together with approvals under the *Protection of the Environment Operations Act 1997* and the *Roads Act 1993*. For the purposes of the *Protection of the Environment Operations Act 1997*, the development would require an environment protection licence to be issued by the EPA because the proposed activity falls into the activities listed in Schedule 1 of that Act.

For the purposes of the *Roads Act 1993*, under section 138 consent from the appropriate roads authority is required for the carrying out of works on a public road. For this development the appropriate roads authority is Auburn Council, which has authority over Parramatta Road in the area of the development. However if Council approves the development, the RTA's concurrence would still need to be given to the approval, under section 138(2) of the *Roads Act 1993*. Notwithstanding the approval requirements under integrated development, representations are also required from the RTA under *SEPP 11 – Traffic Generating Developments*, prior to determination of the DA (see section *3.6 State Environmental Planning Policies*).

At the time of the EIS the proposed development also required approval under the *Rivers and Foreshores Improvement Act 1948*, however the alterations made for the SEIS precluded this requirement.

As stated in the EIS, the activities to be undertaken by Pacific National associated with the development do not require development approval, pursuant to Clause 35 of the *Environmental Planning and Assessment Model Provisions 1980*.

3.2 Local Environmental Plans

The development is subject to the Auburn Local Environmental Plan 2000, which was gazetted on 27 October 2000. Figure 7 shows the zonings in and around the development site.

Permissibility

Under the Auburn Local Environmental Plan, 2000 (ALEP 2000) the subject land is zoned 4(c) Industrial Enterprise. The ALEP 2000 permits a range of development with consent, including "freight transport terminal" and "depot". The EIS indicates that the development falls within the definition of "freight transport terminal" and may also come within the term "depot".

The definition of "depot" in the ALEP 2000 is:
A building or place for the servicing, repair and garaging of vehicles and other equipment and the storage of material used by a public authority.

As the operator of the proposed development will not be a public authority, clearly the proposed development does not fall within the definition of a depot under ALEP 2000. Auburn Council has made a similar conclusion.

The definition of "freight transfer terminal" in the ALEP 2000 is:
A building or place used for the principal purpose of the bulk handling of goods for transport by road or rail, including facilities for the loading and unloading of vehicles used to transport those goods, and for the parking, servicing and repair of those vehicles, trains or carriages.

Auburn Council has presented the view that the proposed development does not fall within the definition of "freight transfer terminal" (nor within the definition of any other activity listed in the ALEP 2000 as permissible with consent), and is therefore prohibited development. Council's views in this regard, on page 4 of its submission, are as follows:

Secondly, it is argued by Council that the definition of a freight transfer terminal does not define the proposal due to the significant component of the operation that actually processes the waste. The existing intermodal operation on the site would be defined as a freight transport terminal as its principal purpose is the bulk handling of goods from trucks to transport these goods by rail. However the proposed development does more than load containers from trucks to rail. It is argued by Council that if the waste was brought to the site in containers by trucks, marshalled and loaded onto the trains then the operation would be defined as freight transport terminal.

Therefore if the proposed development does not fit the definitions of depot and freight transport terminal then the development is not permissible with development consent on the site.

The Department obtained advice from Senior Counsel on this matter. The advice, which is summarised below, does not support Council's argument.

Is the development permissible with consent under ALEP 2000 or is it prohibited?
The advice found that under ALEP 2000, a development can only be prohibited if it does *not* fall within the categories of "exempt development" and "development that requires consent". The development is clearly not exempt. However the advice found that the development falls within the definition of "freight transport terminals", which is an activity listed under "development that requires consent". The definition of "freight transport terminals" in the ALEP 2000 is as follows:

> *…a building or place used for the principal purpose of the bulk handling of goods for transport by road or rail, including facilities for the loading and unloading of vehicles used to transport those goods and for the parking, servicing and repair of those vehicles, trains or carriages.*

The key terms in the above definition are “bulk”, “handling”, “goods”, “principal purpose” and “facilities”. The following advice was given in reference to those terms.

> ***Bulk**: I am instructed that the development, as proposed in the development application, involves waste arriving in bulk. "Bulk” is defined in the Macquarie Dictionary to be “3. Goods or cargo not in packages, boxes, bags, etc”.*
>
> ***Handling**: When the waste arrives at the terminal, it will be handled. Handling is defined in the Macquarie Dictionary to involve “3. The process of packing, moving, carrying or transporting something”. I am instructed that the development application proposes the packing of waste into containers, which containers are then loaded onto rail carriages for transportation to Woodlawn. This process falls within the concept of handling.*
>
> ***Goods**: The waste can be described as “goods”. The plural of “good” is defined in the Macquarie Dictionary to be “43. Possessions, esp. moveable effects or personal chattels. 44. Articles of trade; wares; merchandise; esp. that which is transported by land.” “Goods and chattels” is defined to be “all moveable properties”.*
>
> ***Principal purpose**: I am instructed that the principal purpose of the bulk handling of the waste is for transport by rail to the Woodlawn bioreactor.*
>
> ***Facilities**: I am instructed that the waste will be unloaded from vehicles, namely waste trucks, at the Clyde terminal. These vehicles will be used to transport the waste from various collection points to the terminal for the bulk handling of the waste described. I am instructed that Collex has a contract with Northern Sydney Waste Board to transfer, transport and dispose of waste from the northern Sydney region.*

The advice concluded that the development falls within the definition of “freight transport terminals” in the ALEP 2000, and therefore is permissible with consent.

The advice went on to say that the process of classification of development as designated development is distinct from the process of characterisation of the planning purpose for which development of land may be carried out (in this case, under the ALEP 2000). In other words, it is entirely possible the development may be classified as designated development by virtue of it falling within the definition of “waste management facilities or works” in Schedule 3 to the Regulation, and characterised as “freight transport terminal” for land use planning purposes under the ALEP 2000.

The Department is of the opinion that the development does, in fact, fall within the definition of “waste management facilities or works” in Schedule 3, and is thus designated. The Department also accepts the advice of Senior Counsel that the development is permissible with consent as it falls under the definition of “freight transport terminals” in the ALEP 2000.

Staged development

The Clyde Marshalling Yards is nominated in Part 1 of Schedule 7 of the ALEP 2000 as one of three parcels of land that is subject to Clause 64 concerning staged development.

The applicable parts of Clause 64 state:

(1) The consent authority must not grant consent for the development of the whole or any part of a parcel of land described in Part 1 of Schedule 7 unless the consent authority is satisfied that the proposed development will form part of staged development in which:

(a) the first stage, to the greatest extent practicable, has regard to all of the matters required by Part 2 of Schedule 7 to be taken into account in staged development proposals and such additional matters as the consent authority may require in relation to the parcel, and

(b) each subsequent stage has regard to the first stage.

(2) Subclause (1) does not apply if:

(a) the development concerned is for the purpose of landscaping, servicing, remediation or demolition, or

(b) the development is, in the opinion of the consent authority, of a minor nature, or

(c) in the opinion of the consent authority, consent has been granted for all development of the parcel that will be carried out as staged development.

Auburn Council has advised the Department that the proposed development represents the first DA made in respect of the Clyde Marshalling Yards since gazettal of the ALEP 2000.

In respect of staged development, sections 80(4) and 80(5) of the Act state:

(4) A development consent may be granted:

(a) for the development for which the development is sought, or

(b) for that development, except for a specified part or aspect of that development, or

(c) for a specified part or aspect of that development.

(5) A development consent referred to in subsection (4) may be granted subject to a condition that the development or the specified part or aspect of the development, or any thing associated with the development or the carrying out of the development, must be the subject of another development consent.

In order to meet with the staged development requirement, the SEIS proposes that the development proceed in two stages. Under that proposal, the initial development would incorporate allowances for the throughput capacity of up to 400,000 tpa of waste and involves the use of the same access to enter and exit the terminal building. The final development would involve extending the eastern side of the building by approximately 20 metres to cater for an increased waste throughput of 500,000 tpa, and include a second access point as an exit.

The matters relevant to this development listed in Part 2 Schedule 7 of the ALEP 2000 for consideration of the consent authority in respect of staged development are as follows:

1. The following matters are to be taken into account in all staged development proposals:

(a) details of all proposed stages of development

(b) *distribution of land uses*

(c) *general building envelopes, building heights and built form requirements*

(d) *pedestrian, cycle and vehicular access, and circulation networks, including whether there is adequate provision for wheelchairs*

(e) *parking provisions*

(f) *a heritage impact statement prepared by an appropriately qualified heritage adviser supported by evidence of consultation with the Heritage Office*

(g) *infrastructure needs and design principles*

(h) *guidelines for the location, maintenance, ownership and other requirements for open space and landscaping, and for access to open space*

(i) *ecologically sustainable development principles*

(j) *managing the total water cycle, including effluent and stormwater treatment and re-use*

(k) *passive and active energy conservation*

(l) *integration of land use and transport planning by satisfactory parking provision*

(m) *optimising public transport accessibility*

(n) *reducing greenhouse gas emissions*

(o) *implementing the waste management hierarchy specified in section 3 of the* Waste Minimisation and Management Act 1995

(p) *preventing or mitigation all adverse environmental impacts*

(q) *mitigating noise impacts from sources both internal and external to the site*

(r) *appropriate levels of access and amenity for existing uses on the site, including the issues of vehicular access, security, fencing and location of open space*

(s) *effective erosion and sedimentation controls*

(t) *requirements relating to remediation of land made by* State Environmental Planning Policy No 55 – Remediation of Land

(u) *any other matters stipulated as general considerations by the Council*

3. *The following additional matter is to be taken into account in the staged development of the Clyde Marshalling Yards Site:*

   the desirability for a railway overbridge to provide a vehicular and pedestrian link between Manchester Road and Parramatta Road.

For the staged development provisions of the ALEP 2000 to be invoked at the Clyde Marshalling Yards, the Department considers there is a need for a master plan that includes Council's general considerations for the Yards as a whole. Indeed, Auburn Council, in its input to Director-General's Requirements for the EIS, stated that by virtue of Clause 64(1) of the ALEP 2000 it is necessary for development applications to form part of an overall redevelopment plan for the Yards. In the absence of such a plan, there is limited scope for this development to address, in the context of the Yards as a whole, the matters listed in Part 2 of Schedule 7. The Department considers the need for the development to be staged becomes redundant in the absence of a master plan.

The EIS lists the regard that has been taken to all of the matters listed in Part 2 of Schedule 7. Auburn Council comments on the EIS indicated that Collex should check other reports that have been prepared for the site and check future plans for the site with the land owner. On these matters the SEIS indicated that the future plans involved areas of the site that are remote from the proposed development, and the development would not be out of character with the industrial environment.

The Department is of the opinion that the Applicant has addressed the matters listed in Part 2 of Schedule 7 to the greatest extent practicable. Matters under this part that could be further explored by the Applicant should approval be granted can be identified in appropriate conditions of consent, for example as "community enhancement programs". These include the Applicant's participation in the preparation of a master plan for the Clyde Marshalling Yards, and in the provision of a cycleway and riparian zone protection adjacent to the Duck River. The Department considers any notion that the Applicant develop a master plan for the Clyde Marshalling Yards site, or participate in development of a master plan before the proposed development is determined, to be unreasonable given the small part of the site to be covered by the proposed development, ie. approximately 3% of the total Marshalling Yards site. The Department also considers it unreasonable to force an Applicant into a master plan development process after submitting a DA, which may potentially disadvantage or preclude its development proposal.

Whilst the SEIS describes the development as a two-stage development, the Department considers it is unnecessary for the development to be staged. It is therefore recommended that any consent address the total proposed development, being development to receive MSW to be directed to the Woodlawn Bioreactor.

As indicated in Section 2.5 of this report, Collex was granted consent by the Minister for Planning in November 2000 to establish the Woodlawn Bioreactor, subject to conditions. Therefore the maximum waste throughput for the proposed development will need to match up with maximum annual waste tonnages permitted to be received at Woodlawn. The Woodlawn conditions relating to permitted waste volumes are on a sliding (reducing) scale, and described fully in Section 5.4 of this report.

The issue of waste volumes permitted to be received at the development is further discussed in the "Assessment of Proposal" chapter.

Heritage

The ALEP 2000 lists the Clyde Marshalling Yards as a site that is subject to its Part 9 Heritage Provisions. The provisions set out the criteria to be considered by a consent authority in determining a DA.

Auburn Council, in its input to the Director-General's Requirements, indicated there are buildings of heritage significance on the site and that the entire site is of archaeological significance.

The Applicant carried out a heritage study which identified moderate heritage impacts associated with the development, involving the removal of railway tracks that were formerly storage sidings dated around 1909. However the proposed transfer terminal building was relocated and re-orientated in the SEIS, which precludes the need to disturb the heritage railway tracks.

The Department is of the opinion that the development as amended by the SEIS would be acceptable in terms of the heritage criteria set out in the ALEP 2000.

General restrictions on development in industrial zones

Clause 22 of the ALEP 2000 requires a consent authority to ensure the existing and likely future character and amenity of the surrounding area are considered, in terms of the following:

(a) its scale, bulk, design, height, siting and landscaping
(b) its operation
(c) traffic generation and car parking
(d) noise, light, dust and odour nuisance
(e) privacy
(f) stormwater drainage
(g) hours of operation
(h) overshadowing.

The Department is satisfied the proposed development would be compatible with the existing and likely future character and amenity of the surrounding industrial uses in terms of the above criteria, with appropriate approval conditions to address the issues of traffic, noise, dust, odour and stormwater drainage.

3.3 Development Control Plans

Auburn Council has prepared the Industrial Areas Development Control Plan (DCP) 2000, which applies to development within areas zoned for industrial use under the ALEP 2000.

The DCP establishes development standards for industrial development under the following headings:

- Streetscape and urban character
- Building form
- Access and car parking
- Landscaping
- Operational restrictions and
- Subdivision.

The EIS has listed the development standards under each of the above headings, and indicated how each standard has been addressed as part of the proposal. The Department is satisfied that all the development standards applicable to the development have been adequately addressed by the proposed development

3.4 Non-statutory policies and plans

Action for Bikes BikePlan 2010

The Government has prepared the *Action for Bikes BikePlan 2010*, which is a ten-year action plan for the creation of a series of arterial bicycle networks across NSW. The Plan identifies over 600km of major off road cycleways and links on quiet streets within the bicycle network. The Duck River Cycleway is part of the Plan as a link to employment, retail, education, recreation and public transport and between existing cycleways.

The EIS has indicated the Applicant supports the proposed cycleway and would provide a financial contribution towards the works between the proposed development and Duck River. The Department is satisfied with the Applicant's position on this matter and has recommended an appropriate condition as a "community enhancement program" which may cover this and other enhancement funds towards the community needs.

Duck River Accessway Route Assessment and Design

This study, prepared in 1998, proposed an alignment for the Duck River Accessway and identifies specific issues to be addressed along the alignment. The study recognised the fragmented land ownership within the Clyde Marshalling Yards and the need for extensive consultation on any future plans for the Accessway.

Sharing Sydney Harbour Regional Access Plan

This Plan, for the future long term management of Sydney Harbour, identifies ten priority projects. Project 8 is the *Foreshore and Access Improvement Program*, with the aim of improving public access to the Harbour and foreshore. The Duck River Accessway has been identified as an area where there is potential for open space improvements.

The EIS has indicated the Applicant supports the Plan and would provide a financial contribution towards Council undertaking these works. The Department accepts this position, and provides for such contributions within an approval condition addressing community enhancement programs.

Lower Duck River Foreshores Improvement Plan

The Plan, prepared as part of the Parramatta River Foreshores Improvement Program, recognised that a pedestrian/cycleway along the boundary of the Clyde Marshalling Yards should be negotiated with State Rail. This matter has been addressed above.

Open Space Strategy

The *Open Space Strategy Report Auburn Open Space Strategy and Section 94 Contribution Plan* also recognised the need for a pedestrian and cycle network along the lower Duck River adjacent to the Clyde Marshalling Yards. This matter has been addressed above.

Parramatta Road Project

The Inner Metropolitan Regional Organisation of Councils (IMROC) is undertaking a strategic planning project for Parramatta Road, known as the *Parramatta Road Project*. The Project is a collaborative planning and design exercise supported by the 11 Councils along the road, the RTA, NSW Planning and the Federal Department of Transport and Regional Services.

A strategic plan is being prepared for the full length of the road from Broadway to Parramatta. One of the objectives of the project is to enhance accessibility and "cross" Parramatta Road connections north to south through the development or reinforcement of bicycle paths, pedestrian bridges and waterway restoration projects.

Whilst the EIS states the proposal would not influence the strategic planning proposals currently being undertaken as part of the Project, IMROC has advised the Department that the Duck River Cycleway, landscaping of the development, restoration of the Duck River and the historical significance of the Marshalling Yards are issues that could be addressed in the proposed development. Approval conditions relating to contributions to the Parramatta Road Project are to be included under "community enhancement programs".

3.5 Regional Environmental Plans

No Regional Environmental Plans apply to the site.

3.6 State Environmental Planning Policies

State Environmental Planning Policy No. 11 - Traffic Generating Developments (SEPP 11)

SEPP 11 provides for the RTA to make a representation on a development application for any development listed in either Schedule 1 or Schedule 2. The proposed development is recognised as a “depot” under Schedule 1 of SEPP 11, within the meaning of the *Waste Disposal Act 1970*.

The traffic arrangements proposed in the EIS and SEIS involved the installation of traffic signals on Parramatta Road at the entrance to the site. Following concerns raised by the RTA about the proposal it was subsequently amended to accord with the RTA’s requirements. The RTA made its representation under SEPP 11on the amended proposed development, which was forwarded to Auburn Council as the approval body under the integrated development provisions of the EP&A Act.

On the basis of the RTA’s concurrence to the proposal, the Department is satisfied that the proposal adequately addresses traffic management issues on Parramatta Road. However Auburn Council refused to grant its approval of the proposed traffic arrangements under section 138 of the *Roads Act 1993*. Council’s refusal has placed it in dispute with the Department and with the Minister as the consent authority, which invokes the dispute resolution procedures specified in the EP&A Act.

This matter is addressed in detail under the “Assessment of Proposal” section of this document.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)

SEPP 33 provides the mechanism to determine whether a development is potentially hazardous or offensive. If it were found that a development is either potentially hazardous or potentially offensive, SEPP 33 would apply.

To ascertain whether the proposal is potentially hazardous, the EIS considered the storage of diesel at the premises, as a Class C1 combustible liquid. On the basis that the diesel would be stored within a bunded area or within an area where it is the only combustible liquid present, the storage of diesel was considered not to be potentially hazardous.

The EIS also concluded the development would not be potentially offensive, because it anticipated the EPA would be prepared to issue a licence for the proposal. Note that the EPA subsequently issued its general terms of approval, which indicate the EPA would be prepared to licence the development.

The Department accepts the view that the development would not be potentially hazardous or potentially offensive in terms of SEPP 33.

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

Under clause 7 of SEPP 55, a consent authority must address whether the contaminant status of land is suitable for the purpose for which a proposed development is to be carried out. It must also consider a preliminary investigation report for any proposal listed in subclause (4) that would involve a change in use of the land. Subclause (4) lists, *inter alia*, land on which development for a purpose listed in Table 1 of the Contaminated Land Planning Guidelines is being, or is known to have been, carried out. Table 1 lists purposes including "railway yards", which is the current use of the land.

The EIS indicated that the site would be suitable, in its current contaminated state, for the proposed purpose without the need for remediation. The SEIS further stated that any area found to be contaminated following development consent would be "appropriately managed to a level acceptable to the EPA".

The EPA raised the need to address SEPP 55 in its covering letter to its general terms of approval.

The Department needs to address the development in terms of SEPP 55, by ascertaining if the proposed development involves a "change of use" of the land, and if so requiring a preliminary investigation to be carried out together with any further investigation if warranted. This matter is further addressed in this report, however in summary the Department is satisfied there is no change in land use but will nevertheless require a Site Audit Statement to address concerns about contaminated dust emissions and potential impacts on groundwater.

3.7 Threatened Species Conservation Act 1995

The provisions of the Threatened Species Conservation Act 1995 require that if a threatened species is identified, the proposal should be assessed under section 5A of the EP&A Act to determine whether a Species Impact Statement (SIS) is required.

The EIS indicated that no threatened species were identified during the flora and fauna assessment undertaken at the transfer terminal site or along the southern bank of Duck River. The Department accepts the position taken in the EIS that an SIS is not required for the proposed development.

3.8 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The EIS stated that the proposal would not have a significant impact on any matters of national environmental significance identified in the Act, including:

- World heritage properties
- Ramsar wetlands of national importance
- Nationally threatened animal and plant species and ecological communities
- Internationally protected migratory species
- Commonwealth marine areas and nuclear actions.

The Department accepts the conclusion of the EIS that the development is not a declared action under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* and that approval is not required from the Commonwealth Environment Minister under the Act.

3.9 Conclusion

The Department's assessment of the DA for the Clyde Waste Transfer Terminal has been carried out in accordance with the Act and Regulation.

The Department has considered the proposed development in the context of all relevant environmental planning instruments, Development Control Plans and Government policies.

As explained in Section 3.2, whilst the Department considers the intent of the ALEP 2000 in relation to staged development is not relevant to this proposal, the development generally meets the requirements set out in the LEP and is therefore consistent with the intent of the LEP.

In all other respects, the Department concludes that the proposal is generally consistent with the aims, objectives and provisions of all the applicable instruments, plans and policies.

4. EIS EXHIBITION AND ISSUES RAISED

4.1 Lodgement of DA and Exhibition

Exhibition

The original development application (DA) and Environmental Impact Statement (EIS) were received by the Department on 2 August 2001 and exhibited from 30 August 2001 to 2 October 2001. The exhibition period was subsequently extended to 22 October 2001. The DA and EIS were made available for inspection at the Department's Parramatta and City offices, Auburn Council and the Nature Conservation Council City office.

Notification

Under section 79(1)(b)(ii) of the Act it is necessary to notify owners or occupiers of land whose use and enjoyment of the land may be detrimentally affected if the proposed designated development is carried out. The EPA's lowest odour criterion for residential areas is 2 odour units per square metre (2 OU/m^2). The EIS estimated that an odour level of 2OU/m^2 would be reached at approximately 350 metres from the site. On the basis of this information and the likely sensitivity of the proposal, the Department decided to notify owners and occupiers within a 1km radius from the proposed development site. The Department notified the owners and occupiers using mailing lists obtained from Parramatta and Auburn Councils.

4.2 Lodgement of Supplementary EIS and Exhibition

Supplementary EIS

Concerns were raised by the Department and in submissions on the original proposal that there should be further consideration of a number of issues including:

- Alternatives to the proposal
- Odour management
- Dust management
- Noise management
- Traffic management.

In response to the matters raised, the Applicant requested the Department to remove the EIS from public exhibition to allow additional information to be incorporated into the EIS. The Applicant subsequently produced a Supplementary EIS (SEIS) containing:

- Responses to the issues raised by the public and government departments
- Descriptions of modifications to the proposal described in the EIS
- Further assessment of the environmental and social impacts of the proposed development.

The modifications to the proposal that are set out in the SEIS are as follows:

- Relocation of the transfer terminal building away from the railway sidings of heritage significance to approximately 160 metres to the north east
- Reorientation of the transfer terminal building with the waste compactors facing Parramatta Road to reduce perceived air quality and noise impacts
- Relocation of the weighbridge to a location adjacent to Track 20, 45 metres from Duck River
- Modifications to the proposed odour management system and

- Incorporation of noise mitigation measures, to be further developed during detailed design.

Following submission of the SEIS, the Applicant made further amendments to the proposed development, as follows:
- The addition of a noise wall along the south western boundary of the development adjacent to Track 20, at an estimated height of 6 to 8 metres, the details of which may alter during detailed design (15 February 2002)
- Modifications to the existing drainage pipeline, pipe outlet, scour protection works, detention basin, weighbridge and noise barrier to ensure all works are greater than 40 metres from Duck River, obviating the need for consideration of the development under Part 3A of the Rivers and Foreshores Act (19 April 2002).

Exhibition
The SEIS was lodged with the Department on 18 December 2001. The SEIS was exhibited together with the DA and original EIS from 31 January 2002 to 1 March 2002. The exhibition was delayed until 31 January to give those people on holidays in January the benefit of a full exhibition period in which to view the documentation and make a submission.

The DA, EIS and Supplementary EIS were made available for inspection at the Department's Parramatta and City offices, Auburn Council, Parramatta City Council and the Nature Conservation Council City office. The Department took the additional step of exhibiting copies of the executive summaries from the EIS and Supplementary EIS in the Arabic, Chinese, Turkish and Vietnamese languages.

Notification
Since the proposed development was relocated approximately 160 metres to the east of the originally proposed site, the area of affectation was extended to all areas within 1km of the original site and the revised site. The Department consulted with both Councils on the revised notification area, who indicated they had no objection subject to:
- Complete streets being included where the area covers parts of those streets; and
- Adding a number of additional streets to the west of the proposed development.

The notification area used by the Department for the SEIS was thus in the shape of an elongated circle together with the additional areas requested by the Councils.

4.3 Submissions Received

The Department received a total of 1652 submissions in response to both exhibition periods, including 1613 from individuals. A summary of the numbers of submissions received from the Department from key stakeholder groups is contained in Table 1.

Table 1: Submissions received from stakeholder groups

Stakeholder Group	Number of Submissions Received
Government agencies	9
Councils	10
Elected representatives	7
Businesses	13
Private individuals	1613
TOTAL	1652

Notes: "Councils" includes Regional Organisations of Councils and local committees
"Private individuals" includes form letters and signatories to petitions

Submissions from State Government Agencies

Environment Protection Authority
The EPA, as an approval body under integrated development, stopped the "deemed refusal clock" on 10 September 2001 by seeking additional information in response to the exhibition of the EIS. The EPA was not satisfied with the odour impact assessment and the noise impact assessment, and required additional information before it was in a position to advise the Department, through general terms of approval, whether it would be prepared to issue an environment protection licence for the development. Upon being provided with the additional information and its further consideration of the additional material provided in the SEIS, the EPA provided its general terms of approval on 2 April 2002.

Waterways Authority
At the time of the exhibition of the EIS, the Waterways Authority was regarded to be an approval body under integrated development, as the site works were likely to be within 40 metres of Duck River, requiring a Part 3A permit under the *Rivers and Foreshores Improvement Act 1948*. On that basis, Waterways stopped the "deemed refusal clock" on 12 March 2002 by requesting additional information on a range of matters in response to the exhibition of the SEIS.

However the Applicant subsequently advised that the amended development would not involve works within 40 metres of the Duck River, obviating the need for it to be further considered under Part 3A of the *Rivers and Foreshores Improvement Act 1948*. The Waterways Authority acknowledged this position in correspondence to the Department dated 22 April 2002, accepting it no longer had a role as an integrated development approval body unless the development was further modified to encroach to within 40 metres of Duck River.

Roads and Traffic Authority
The RTA wrote to the Department on 8 April 2002, advising of the following matters:

- because Auburn Council is the roads authority under the *Roads Act 1993* for roads associated with the development (including Parramatta Road), Council's consent is required under section 138 as part of the integrated development process
- the RTA's concurrence to Council's consent will still be required under section 138(2) of the Roads Act
- representations are required from the RTA on the proposed development under SEPP 11 prior to determination of the DA, which is outside the integrated development process.

The RTA's letter provided comments on the proposal, which constituted its representations under SEPP 11. The RTA's comments can be summarised as follows:

- the installation of an additional set of traffic signals on Parramatta Road is not supported as they would increase traffic congestion, and would be restricted by a Sydney Water easement
- the proposed offset "T" intersection design is not recommended
- the developer should allow for the provision of a bike/pedestrian shared path along the Duck River corridor
- serious concerns raised on traffic grounds and the potential increase in traffic in the area
- concerns about additional increased traffic regarding a perception by the RTA of "the imminent closure of the Lucas Heights Waste Facility"
- the speed of vehicles outside peak periods needs to be taken into account
- a left turn deceleration lane is required for entry to the site from Parramatta Road
- a detailed road design will need to be forwarded to the RTA for approval prior to commencement of any roadworks
- no stopping restrictions to be applied along the Parramatta Road frontage
- vehicles to enter/exit the site in a forward direction
- all works to be at no cost to the RTA.

The Applicant revised the intersection design by removing traffic lights, incorporating a deceleration lane from the east, and putting restrictions on right turns into and out of the site.

The RTA subsequently indicated technical concurrence with the revised design, however this did not amount to concurrence under section 138(2) of the Roads Act because that cannot occur until Council has given consent as an integrated approval body under the Roads Act.

Notwithstanding the RTA's technical concurrence, Auburn Council refused to grant approval under integrated development.

This matter is further addressed in the "Assessment of Proposal" section of this document.

State Rail Authority
The Applicant proposes to access the development by using an existing access road from Parramatta Road. The access road is on land owned by the State Rail Authority (SRA).

The SRA has advised the Department that its ownership enables the SRA, its tenants and its invitees to use this access. Overlays on this access right are a rights of carriageway in favour of the following:

- Rail Infrastructure Corporation (RIC) to access its land
- FreightCorp's (now Pacific National's) land holding
- Telecom, which holds a lease on part of the access way to access its leased facility in the western extremity of the site
- Manildra Sugar, which leases and operates a weighbridge facility within the area subject to a right of carriageway in favour of Pacific National.

A plan showing the above shared rights of carriageway is provided at Figure 8.

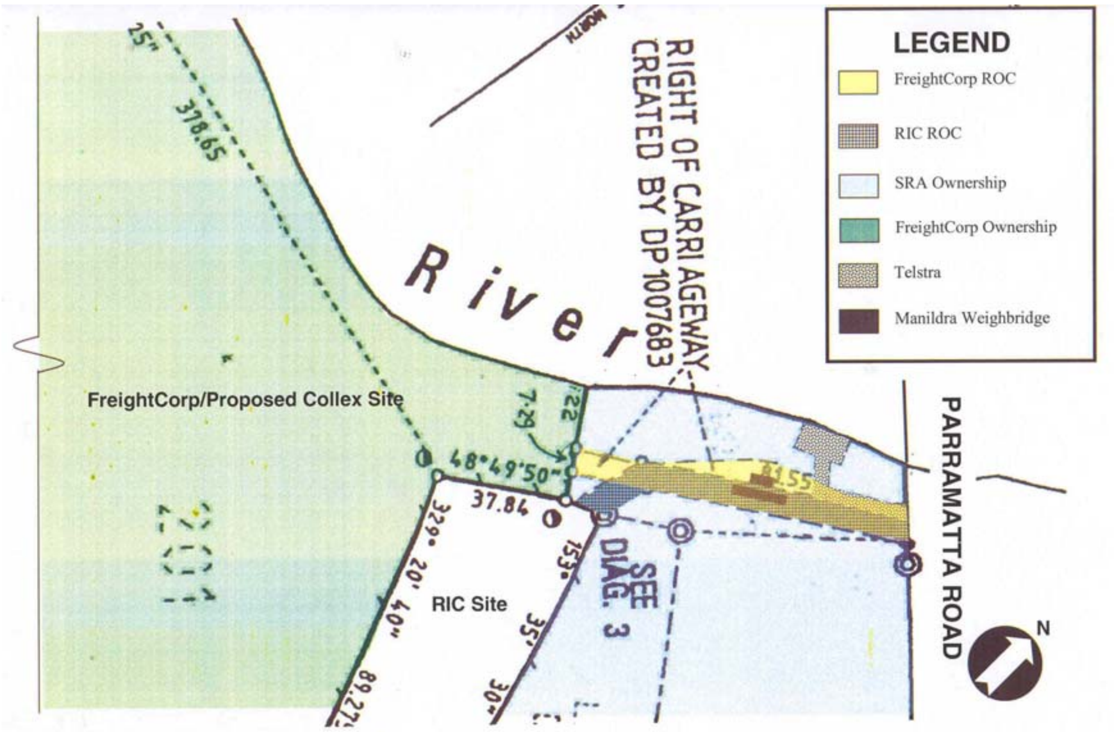

Figure 8: Shared rights of carriageway on access road

The key concerns raised by the SRA may be summarised as follows:

- The consent of the SRA, as the land owner, is required for the proposed use of the land subject to the right of carriageway
- Safety concerns under increased traffic movements associated with the use by Manildra Sugar of its weighbridge
- Potential for major traffic conflicts in the access way and a complete failure of the access way to function as proposed
- Given the potential for surface damage, spillages and the like, the need for the access way to be fully re-designed and newly constructed with comprehensive line marking, signage and street lighting
- The need to address landscaping, riparian zones, pedestrian access and bike path under the various planning controls pertaining to the development
- The likelihood of increased usage of the internal road connecting to Rawson Street for vehicles seeking easy access to the south east.

The SRA requested that any consent include conditions addressing:

- Upgrading the access road and utility services
- Landscaping and the provision of public access for pedestrians and cyclists
- Discouragement of the use of SRA internal roads for access to Rawson Street by vehicles associated with the development
- Limiting truck movements to an initial maximum, subject to a local traffic study and re-assessment of the ability of the intersection and access road to accommodate increased movements.

Submissions from Councils

The proposal is in Auburn LGA, however it abuts the Parramatta LGA to the west. Both Councils were consulted by the Department in establishing notification arrangements for each exhibition period.

Auburn Council objected to the proposal in its submissions in response to both exhibition periods. Council's concerns can be summarised as follows:

- Inconsistencies with the Auburn LEP 2000 in respect of permissibility, staged development, heads of consideration listed in the LEP, and heritage
- The development prevents establishment of a cycle way and riparian zone alongside Duck River
- Traffic issues
- Proposed operational scale
- Inadequate consideration of alternative sites
- Inadequate public consultation

The Department's position on the issues concerning the Auburn LEP, such as permissibility, staged development and heritage, is presented in the section of this document titled "Local Environmental Plans".

Auburn Council also convenes the "Clyde Marshalling Yards Working Party" and is a member of the "Duck River Steering Committee". Both these organisations raised objections to the proposal, which were of a similar nature to the objections raised by Council.

Parramatta Council raised concerns about the proposal, on the following issues:

- Consultation
- Impacts on residential and employment areas and on the region
- Possible future expansion
- Impacts on Duck River
- Water management
- Vegetation and habitat management
- Air quality
- Asbestos
- Noise
- Odour
- Traffic
- Future community involvement

The **Western Sydney Regional Organisation of Councils** (WSROC) also raised a number of concerns, as follows

- Waste should be containerised within its region of origin
- Inadequate community consultation
- Traffic congestion
- Air quality, including odour
- Impacts on residential and business areas
- Impacts on Duck River
- Negative precedent for future development of marshalling yards site

The Department has considered all the concerns raised by local government. The concerns about the matters addressed by the Auburn LEP have been addressed in a previous section of this report. Some of the concerns about the impacts on Duck River and the proposed cycleway and establishment of a riparian have been partly mitigated by further amendments to the proposal following production of the SEIS. The section of this document titled "Assessment of the Proposal" addresses the outstanding concerns, which have been catered for in the recommended conditions of consent for the development.

Submissions from Elected Representatives

Concerns and objections were raised by a number of Councillors and State members from the Clyde-Auburn region and adjoining regions. The issues raised can be summarised as follows:

- The development appears to be prohibited within the current zoning of the site
- Determination of the proposal should await the fulfilment of the deferred commencement condition in the Woodlawn consent relating to the need for a contract for the supply of waste
- Unacceptability of transporting waste in municipal garbage trucks over long distances
- The development could cause additional waste collection costs to northern Sydney ratepayers
- Potential for odour impacts
- Potential for dust and odours to affect respiratory health
- Traffic levels on Parramatta Road
- Waste should be processed in its region of origin
- EIS ambiguous over the extent of future operation of the development
- Sets a poor precedent for future development of the Marshalling Yards
- Riparian zone and cycleway issues
- Impacts on property values
- Inadequacies in addressing staged development provisions of Auburn LEP
- Site selection, given existing waste transfer infrastructure exists closer to the waste source
- Inadequate community consultation

Letters of support were received from a Councillor and State member in the region of the Woodlawn Bioreactor.

Submissions from Businesses

Objectives of LEP
A number of submissions stated that the EIS should have analysed the environmental impacts of the FreightCorp activities associated with the development. The EIS indicated that under Schedule 1 of the *Environmental Planning and Assessment Model Provisions 1980*, the activities undertaken by FreightCorp do not require development consent in accordance with clause 35.

Submissions also stated the development is incompatible with the objectives of 4(c) Industrial Enterprise Zone set out in the Auburn LEP, which requires the consent authority to ensure the proposed development is consistent with the objectives the zone.

Inappropriate development
One submission refers to Clause 22 of the Auburn LEP which indicates development should be compatible with the existing and likely future character of the surrounding area in terms of a number of criteria. The submission states that the EIS and SEIS fail to assess the proposed development against the criteria listed in Clause 22. It goes on to assert that the proposed development, by virtue of its potential odour, dust and noise impacts, is incompatible with the potential future character of the surrounding land.

Impacts on business operations
Manildra Harwood Sugars advised the Department that it processes sugar 24 hours per day, 7 days per week in the Clyde Marshalling Yards, supplying the Sydney region with liquid and dry sugar in bulk and packaged form. The proposed development is 70 metres from the existing Manildra Harwood premises. The company has raised concerns in relation to:

- impacts from pests
- odour emissions and the propensity of sugar to readily attract odours
- the ready absorption by sugar of any deodorisers used
- the impacts of the development on the company's weighbridge situated on the right of carriageway from the waste transfer terminal to Parramatta Road
- the impacts of the development on five service lines running underneath the edge of the access road and
- the impacts of the development on traffic congestion in the access road.

Request for Commission of Inquiry
Two submissions from businesses in the Auburn area requested that the Minister call a Commission of Inquiry into the proposed development.

Submissions from Individuals

The Department received 1613 submissions from individuals. All submissions received from persons residing in the local area were either objecting or not stating a clear position while indicating concern. A total of 83 submissions from members of the public were supportive of the development, those persons living outside the local area, mostly in the Tarago region near the Woodlawn Bioreactor site.

Objections in the form of petitions have also been considered as individual submissions from each signatory, as have form letters.

The issues raised in the submissions received by the Department have been compiled and categorised to enable the relative importance of key issues to be assessed. For comparison, the Department has prepared Figure 9, which compares the number of times each issue type was raised in the submissions. This analysis provides an indication of the importance of each key issue relative to other key issues. Key issues of concern raised in the submissions are summarised below.

The issues are listed in approximate order of perceived public importance, based on the frequency of a particular concern being raised (percentages are in relation to the total number of issues raised).

- 21% - inconsistency of the proposed development with the strategic location of the site (19%) and land use conflicts (3%). The site is in close proximity to residences and Clyde railway station. The locality is fast changing to warehouse type retail and commercial activities. Nearest residences are less than 1km from the site.
- 17% - Odour. Nearby residents will be affected by odour. Auburn has more than its fair share of waste facilities.
- 13% - water issues and impacts on Duck Creek. Will conflict with the proposed development of the creek bank for recreational uses including the cycleway to Parramatta River.
- 12% - concerns related to the Applicant and EIS, including EIS quality and accuracy (4%) and the Applicant's lack of effective consultation with the community (8%). EIS has not adequately addressed the alternative sites and

alternative arrangements such as containerisation of the waste in the northern suburbs.
- 11% - socio-economic impacts
- 7% - Dust/air quality. Will impact on health of families.
- 6% - the negative effects on Parramatta Road from the traffic generation and the road safety implications of additional heavy vehicle movements that may use residential roads in the area.
- 5% - hazards and health.
- 4% - noise impacts.
- 3% - devaluation of land.

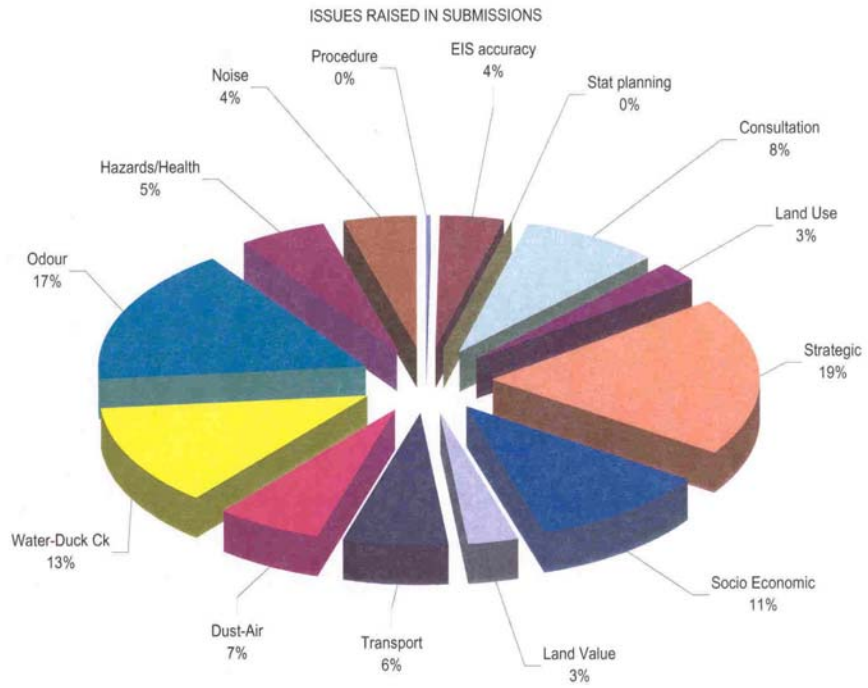

Figure 9: Issues raised in submissions

Requests for Commission of Inquiry

Submissions from two businesses in the Clyde-Auburn area requested that the Minister call a Commission of Inquiry into the proposal under section 119 of the *Environmental Planning and Assessment Act 1979*.

Under section 119 of the Act the Minister may direct an Inquiry be held into all or any of the environmental aspects of the proposed development. The key environmental issues in respect of this development, including odour, dust, noise, Duck River water quality, traffic and analysis of alternative proposals, have been addressed by the EIS and SEIS. As an approval body under integrated development provisions, the EPA has issued its general terms of approval addressing air quality, water quality, noise and monitoring and reporting.

The Department in this assessment report has considered all the environmental impacts of the proposal. The recommended conditions of consent include performance criteria, environmental management plans, environmental monitoring and environmental auditing, which would apply to the construction and operational stages of the development if approved.

There are no outstanding environmental impact matters that warrant the establishment of an Inquiry or require further investigation prior to determination of the application.

4.4 Additional Information supplied by the Applicant

Community surveys by the Applicant

The Applicant carried out an assessment of social impacts arising from the proposed development. Community surveys were conducted after the exhibition period had closed for the original EIS and DA, in the months from November 2001 to February 2002. The surveys, described in the SEIS, involved a telephone survey of residents in Auburn and Parramatta LGAs and meetings with representatives of a number of community groups.

A separate report by Coakes Consulting on behalf of the Applicant, received on 28 March 2002, detailed the above surveys in addition to a random doorknock survey and intercept interviews. The report identified the following issues to be of concern to the local communities:

- Environmental effects, including odours and noise/vibration
- Land use conflict and planning
- Lack of information on the proposal
- Traffic
- Health impacts
- Water pollution

The Department received representations from members of the community challenging the telephone survey that was reported on in both the SEIS and the Coakes report. In particular, concerns were raised about the survey's methodologies and in the results and conclusions drawn. Allegations made in the representations included the failure of the reporting to address non-English speaking respondents, the use of leading questions, the independence of the consultants used, and the weightings used in the interpretation of results.

The Department took those issues raised into consideration in its examination of the survey material provided by the Applicant. Whilst the survey reports were examined by the Department, the Department's principal utilisation of the reported results was to identify concerns raised about the proposed development so they could be addressed in its assessment of the proposal.

4.5 Conclusion

Public participation and stakeholder consultation are central to the objectives of the Act and are actively carried out by the Department.

Key stakeholders were identified as government agencies; Auburn Council; Parramatta City Council; elected representatives; and the local community. To some degree, the Applicant has conducted consultation with the local community, interest groups, Auburn Council, and government agencies to identify issues of concern relating to the proposed development.

The Department's consultation with stakeholders has been comprehensive and reflects the strong community concern over the proposal. The views expressed in submissions received from the two exhibition periods have been carefully considered. Consultation has occurred in accordance with the Act and the Regulation and the Department took additional measures to ensure opportunity for public input to the assessment process was maximised. The Department's consultation included:

- advertisement of both exhibition periods;
- notification of nearby and potentially affected owners and occupiers;
- exhibition of the documents at locations within the Clyde-Auburn region and in Sydney;
- extension of the period within which public submissions were received on the EIS by by 20 days;
- provision of executive summaries of the EIS and SEIS in four community languages in the second exhibition period;
- consultation by the independent assessor with Auburn and Parramatta Councils, other government agencies and community representatives in the assessment process; and
- consultation by the Department with the Councils and other government agencies through correspondence and meetings throughout the assessment process.

5. JUSTIFICATION FOR THE PROPOSAL

5.1 Relationship with Woodlawn Bioreactor

Applicant's position

On 27 November 2000, the Minister granted Consent to Collex for the establishment of a landfill near Goulburn, known as the Woodlawn Bioreactor. Condition 24 of the Woodlawn consent states:

> *All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility.*

Collex has proposed the Clyde development to receive and containerise waste generated in the Sydney region, for Pacific National to load onto trains and transport to Woodlawn.

The EIS indicates that no such rail transfer terminal currently exists and that the proposal will satisfy the conditions of the Woodlawn consent.

Department's position

The Department is of the view that the proposal would satisfy the requirement in condition 26 of the Woodlawn consent.

However, the Department considers that the Clyde proposal is potentially one of many possible waste transfer arrangements within the Sydney region that could satisfy condition 26 of the Woodlawn consent. Alternatives to the proposal are discussed below.

5.2 Alternatives to the Proposal

Applicant's Position

The EIS indicated that a number of alternative site options were investigated, but only two satisfied the Applicant's requirements, being the Clyde Rail Yard and the Chullora Railway Workshops. The EIS dismissed the Chullora option for "commercial reasons". The EIS then went on to discuss options for entry to the Clyde site and for the location of the terminal within the site.

In response to concerns from Government agencies and public submissions regarding the assessment of alternatives, the SEIS provided further detail on the Applicant's consideration of alternative sites. It addressed the following sites:

- existing MSW transfer stations operated by Waste Service NSW at Ryde, Artarmon, Belrose, Auburn and Chullora
- an existing solid (non-putrescible) waste transfer station operated by the Applicant at Chullora
- other sites where there is no current waste transfer station but with nearby rail lines, at Clyde, Camellia, Chullora, Hornsby, Enfield, Minto and St Marys.

The SEIS ruled out the Waste Service sites for reasons including

- no access to rail siding
- no agreement in place with the owner for the proposed activity

The Collex Chullora site was ruled out by the Applicant because it would require more road transport of waste and the lack of an agreement with the owners of the facility for the proposed activity.

With the exception of Clyde, the sites without existing waste transfer capability were ruled out for a variety of reasons, including space restrictions, increased road transport requirements, commercial viability and ownership/availability.

Department's Position

The Department considered some of the reasons cited in the SEIS for rejecting sites lacked substance and were comparable to difficulties also associated with the preferred option.

In order to fully develop its position, the Department carried out a desktop assessment of possible options for providing a linkage between waste generation in the northern Sydney region and rail transport to Woodlawn. The Department's assessment identified eight options and within some of the options a range of alternatives sites for waste compaction and/or waste transfer onto trains. The text of the Department's assessment is provided at Attachment A.

The conclusions that may be drawn from the Department's assessment are as follows:

- There is a range of configurations for waste compaction, containerisation and transfer to rail transport that could provide a linkage between the generation of waste in the Sydney region and the rail transport of waste from Sydney to Woodlawn. The Clyde proposal is therefore not essential to provide such a linkage; it is only an option that happens to be preferred by the Applicant.
- There are possible arrangements that may offer important environmental benefits over the proposed Clyde alternative. These arrangements principally involve the containerisation of waste at existing waste transfer infrastructure within or in proximity to its locality of origin with subsequent road transport of the packed containers to a railhead for loading onto a train. The 1999 contract between the Applicant and the former Northern Sydney Waste Board appears to address such an option.
- There are other possible locations for a new combined containerisation and transfer facility such as Camellia, however these were dismissed by the SEIS in some cases with inadequate justification.

Waste Service owns waste transfer stations at Belrose, Artarmon and Ryde in the northern Sydney region, and at Seven Hills, Auburn, Chullora and Rockdale. At the time of drafting the EIS and SEIS, the Applicant had been unable to come to an agreement with Waste Service NSW on the use of its waste transfer stations.

Subsequent to the issue of the SEIS, Waste Service revised its policy on competitor access to its transfer stations, making them available subject to certain conditions.

The Department considered a number of proposals involving the use of existing Waste Service transfer stations for containerising the waste prior to its acceptance at the Clyde site. One such proposal involved the following arrangements:

- The waste is contracted to the Applicant
- The Applicant pays for the installation of specialist compaction equipment in the Waste Service transfer station(s)
- The Applicant pays Waste Service for the use of its transfer station(s)
- The Applicant receives the pre-containerised waste at the Clyde facility for transfer onto trains for Woodlawn.

Another proposal involves:

- The waste is contracted to Waste Service
- Waste service pays for the installation of specialist compaction equipment in the Waste Service transfer station(s)
- Waste Service pay the Applicant to dispose of the waste by receiving the pre-containerised waste at the Clyde facility for transfer onto trains for Woodlawn.

In both the above scenarios, the cost of disposing the waste (at Woodlawn) would be greater than the current cost of disposing the waste directly to a Waste Service landfill in Sydney (ie. Belrose, Eastern Creek, Lucas Heights or Jacks Gully), principally because of the margin associated with the additional transfer step at Clyde. The cost differential can be substantial to either the Applicant or Waste Service.

The Applicant advised the Department it has no current arrangement or viable basis for participating in the changed policy of Waste Service, and in any case it has fundamental difficulties with the anti-competitive nature of the conditions. The Department also has concerns about these conditions under the competition provisions of the *Trade Practices Act 1974*, and over broader issues of competition policy outside that Act. The overall effect of such a proposal could be to remove Collex as a potential competitor with Waste Service for the management of MSW from the Sydney region, with Waste Service reverting to its previous position of a virtual monopoly.

In any case, the Department is not in a lawful position to force an Applicant to enter into a commercial agreement with another entity, even if such an agreement is believed to achieve enhanced environmental outcomes over the proposed development. The responsibility is with the Applicant and the other party to make such business decisions. Since the Applicant has chosen not to pursue an alternative strategy, the Department must assess the development application as submitted, and make recommendations to the Minister for his determination having regard to the matters listed for consideration in the legislation. Further, the Department is mindful of the competition provisions of various legislative regimes and policy requirements. These are outside the scope of this development application.

6. ASSESSMENT OF PROPOSAL

6.1 Independent Assessment

The Department engaged Mr John Court of JD Court and Associates, to carry out an independent assessment of the technical aspects of the proposal and provide a report on his findings together with suggested conditions of consent. The terms of reference of the engagement include:
- The independent assessment extends to the likely impact of the proposal on the natural and built environment, the amenity of the neighbourhood and the likely effectiveness of the mitigation measures proposed
- Facilitate meetings with interested stakeholders under arrangements negotiated with the Department
- The independent assessment will become one of a number of inputs to the Department's assessment of the proposal.

The Department has considered Mr Court's report in its assessment of the proposal. A copy of the report is provided at Appendix C.

6.2 Amendments to the proposed development

The following assessment of issues associated with the proposed development takes into account modifications made to the development following the submission of the EIS. The modifications, listed below, include those made by the SEIS and those made after submission of the SEIS.

Modifications made by the SEIS:
- Relocation of the transfer terminal building away from the railway sidings of heritage significance to approximately 160 metres to the north east
- Reorientation of the transfer terminal building with the waste compactors facing Parramatta Road to reduce perceived air quality and noise impacts
- Relocation of the weighbridge to a location adjacent to Track 20, 45 metres from Duck River
- Modifications to the proposed odour management system and
- Incorporation of noise mitigation measures, to be further developed during detailed design.

Modifications made after submission of the SEIS:
- The addition of a noise wall along the south western boundary of the development adjacent to Track 20, at an estimated height of 6 to 8 metres, the details of which may alter during detailed design (15 February 2002)
- Modifications to the existing drainage pipeline, pipe outlet, scour protection works, detention basin, weighbridge and noise barrier to ensure all works are more than 40 metres from Duck River, obviating the need for consideration of the development under Part 3A of the Rivers and Foreshores Act (19 April 2002).

6.3 Scope and nature of proposed development

Activities of Pacific National

A number of submissions stated that the EIS should have analysed the environmental impacts of the FreightCorp activities associated with the development. The EIS indicated that under Schedule 1 of the *Environmental Planning and Assessment Model Provisions 1980*, the activities undertaken by FreightCorp do not require development consent in accordance with clause 35.

The Department is of the opinion that whilst the development of the waste transfer terminal requires development consent, activities proposed to be undertaken by Pacific National associated with the transfer terminal, provided those activities are limited to the activities described in Schedule 1 of the *Environmental Planning and Assessment Model Provisions 1980,* would not require development consent. The activities described in the EIS that would be carried out by Pacific National are "improvements to overall container management for Collex and other customers requiring the removal of tracks and construction of hardstand". The other Pacific National activities associated with the proposed development would be the movement of laden and unladen waste containers at the Yards, the loading and unloading of waste containers onto and from train cars, and shunting operations. The Department considers that the Pacific National activities would fall within the activities described in Schedule 1 of the *Environmental Planning and Assessment Model Provisions 1980*, and therefore do not require development consent.

Auburn LEP 2000

Compatibility with LEP Objectives

Submissions also stated the development is incompatible with the objectives of 4(c) Industrial Enterprise Zone set out in the Auburn LEP, which requires the consent authority to ensure the proposed development is consistent with the objectives the zone.

The objectives of the 4(c) Industrial Enterprise Zone are as follows:

- *(a) to recognise the special character of Parramatta Road frontages and surrounding areas*
- *(b) to ensure that development in this zone does not reduce the economic viability of businesses in the business zones*
- *(c) to provide the flexibility required to encourage innovative and high technology industrial uses in the zone*
- *(d) to prohibit shops in this zone generally but permit minor retail development only where it is providing for the daily convenience needs of the local work force, is ancillary or incidental to other permissible development, or is in the form of bulky goods retail outlets or motor showrooms.*

Submissions asserted that the development does not accord with objectives (a) and (c) above. The Department's consideration of the proposed development is that it is consistent with all of the objectives listed in the ALEP 2000 for the 4(c) Industrial Enterprise Zone. In respect of objective (a), the proposed transfer terminal building, being set back approximately 200 metres from Parramatta Road and located in the vicinity of other large industrial buildings, is unlikely to significantly impact on the character of Parramatta Road frontages. In respect of objective (c), the Department is satisfied that scale and nature of the proposed development, together with appropriate conditions relating to noise and odour management, would not inhibit the encouragement of innovative and high technology industrial uses in the zone.

Inappropriate development
One submission refers to Clause 22 of the Auburn LEP which indicates development should be compatible with the existing and likely future character of the surrounding area in terms of a number of criteria. The submission states that the EIS and SEIS fail to assess the proposed development against the criteria listed in Clause 22. It goes on to assert that the proposed development, by virtue of its potential odour, dust and noise impacts, is incompatible with the potential future character of the surrounding land. The Department considers the recommended conditions of the consent would satisfactorily address the potential odour, dust and noise impacts associated with the development.

6.4 Site Access

The Applicant proposes to access the development by using an existing access road from Parramatta Road, at the western side of the site adjacent to Duck River. The access road is on land owned by the State Rail Authority (SRA).

The Department has considered the submission by the SRA concerning the proposed use of the right of carriageway from Parramatta Road, and in particular the matters requested by the SRA to be addressed in any conditions of consent. Those matters are:

- Upgrading the access road and utility services
- Landscaping and the provision of public access for pedestrians and cyclists
- Discouragement of the use of SRA internal roads for access to Rawson Street by vehicles associated with the development
- Limiting truck movements to an initial maximum, subject to a local traffic study and re-assessment of the ability of the intersection and access road to accommodate increased movements.

The SRA also indicated that, as landowner, its consent is required for the proposed use of the right of carriageway.

The Department has considered the matters raised by the SRA and by some tenants of the Clyde Marshalling Yards, and decided the matters raised relating to shared right of carriageway on the access road need to be addressed by conditions of consent. However the SRA-proposed condition limiting truck movements to an initial maximum is of concern to the Department. Such a limit could inhibit the receipt of waste at the development in the volumes otherwise permitted by the consent, and could place an unreasonable constraint on the development. The Department would prefer to require the Applicant to fund a local traffic study in the early stages of the development. Within the first year of operation the waste volumes received are expected to be around 150,000tpa and truck numbers would be substantially less than the estimated 200 per day maximum (which relates to the receipt of 500,000tpa of waste). The study could assess the ability of the access way to handle vehicle movements resulting from that initial stage of the development, and recommend future actions to address possible increased future vehicle movements.

The Department is satisfied that concerns relating the shared use of the access road can be satisfactorily addressed by appropriate conditions of approval.

RECOMMENDATIONS

- ***Consent of land owner of access way required prior to commencement of operation of the development***
- ***Consult with Pacific National and SRA and other relevant parties with a view to upgrading the access road prior to operation of the development***
- ***Prior to operation of the development, consult with each entity with right of carriageway on the access way to establish agreed arrangements on the shared use of the right of carriageway, to the satisfaction of the Director-General***
- ***Prohibition on the use of the internal road connecting the Marshalling Yards to Rawson Street by all vehicles accessing the development***
- ***Fund a traffic study to be conducted by an independent, suitably qualified person. The study is to be completed 14 months from commencement of operations, review the operation of the access road in the first 12 months of operation and recommend any future actions to ensure sufficient future capacity of the access road. Provide a reasonable financial contribution towards any upgrade of the access road recommended by the study.***

6.5 Waste management

Applicant's position

The DA and supporting information have drawn a clear linkage between the proposed development and the operation of the Woodlawn Bioreactor, which was approved in November 2000. The purpose of the proposed development is to receive waste from the Sydney region, for compaction and containerisation for loading onto trains bound for Woodlawn.

The EIS states that up to 500,000 tonnes of waste per annum would be accepted at the transfer terminal and disposed of at the Woodlawn Bioreactor. It anticipates that in the first year of operation a minimum of 150,000 tonnes would be received and disposed of to Woodlawn.

Notwithstanding the above statements, the EIS also indicates that "further long term possibilities" may also exist for transporting waste from the development to other disposal facilities by road or rail, and that in the future additional volumes of waste may be accepted at the terminal and disposed at other locations in NSW. The uncertainties raised by the EIS about maximum waste volumes to be accepted at the development were, however, clarified by the SEIS. The SEIS stated that the DA was for a waste throughput of up to 500,000tpa, and that if a future need arises for transporting and packing of volumes greater than 500,000tpa it would be subject to a separate approvals process.

However, the SEIS proposed that the development be staged, with stage one receiving up to 400,000 tpa and stage two receiving an additional 100,000 tpa. The Applicant had decided on this approach in the mistaken notion it was required to comply with the staged development provisions of ALEP 2000. This matter is discussed further in the "Department's position" below.

The EIS put forward a strategy for controlling the quality of the incoming waste, as part of its proposed Environmental Management Plan. The control strategy proposed involves the following activities:

- Prohibit delivery of liquid or hazardous waste
- Questioning delivery drivers
- Visual checking on tipping floor.

The proposed monitoring/reporting requirement is:

- Monitor every load to ensure that no hazardous wastes or liquid wastes are disposed.

Department's position

(a) Scope of the proposed development
There is a need to distinguish between the activities that are proposed within the current DA, and any activity identified in the EIS/SEIS that would need to be subject to a separate DA.

Consideration at this point needs to be given to the linkage drawn by the Application between the proposed development to the approved Woodlawn development. The Department considers any consent needs to clarify that the development subject of the current DA is limited to activities at the Clyde site associated with the acceptance, processing and dispatch of MSW for rail transport to the Woodlawn Bioreactor.

The SEIS has indicated the first stage of the development is for 400,000tpa and the second stage for an additional 100,000tpa. As stated earlier in this assessment, the Department considers it to be unnecessary for the development to be staged because it is unreasonable to expect the Applicant to participate in the development of a master plan for the Clyde Marshalling Yards prior to determining the DA.

The question therefore arises as to whether the development should be limited to 400,000 tpa or 500,000 tpa. This question is partly resolved by the linkage drawn by the Applicant between the proposed development and the Woodlawn development. The Woodlawn consent contains the following conditions relating to the permitted waste acceptance rates:

Input Rate Variations

4. The proposed landfill shall not exceed the annual input rates in Table 1, unless otherwise approved by the Minister. The Minister shall give such approval if the need for additional capacity is demonstrated by an independent public assessment of landfill capacity and demand in the Sydney Region. The assessment shall:

(a) take into account the status of alternative technologies for putrescible waste management and be undertaken at five-yearly intervals;
(b) be completed one year before commencement of each five year period, as set out in Table 1, or at any other time at the request of the Applicant, with the first review due four years from the date of operational commencement; and
(c) be undertaken by an independent person or organisation, to be appointed by the Minister, with the costs to be funded by the Applicant.

Table 1: Maximum Input Rates

Years from date of operational commencement	*Maximum input rate*
0-5	*400,000 tpa*
6-10	*360,000 tpa*
11-15	*325,000 tpa*
16-20	*290,000 tpa*

5. *In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.*

Conditions may be imposed on the proposed development establishing the linkage with Woodlawn, which would align the waste acceptance quantities to those quantities permitted at Woodlawn. Such conditions could:

- prohibit waste to be received at the development except waste bound for Woodlawn and
- require any waste leaving the development to be containerised for rail transport to Woodlawn.

The second of the above conditions needs to be qualified by permitting other wastes generated on site to be disposed of accordingly, such as sewage wastes and recyclables from the on-site office. In framing such a condition the Department needs to ensure development is restricted to the waste management activities described in the DA. Should the consent allow material such as wood, steel and other recyclables to be separated from the incoming waste stream for reprocessing or recycling, this could provide an opportunity to broaden the scope of the development to a waste sorting, separation and recycling facility with increased truck movements caused by vehicles taking “recyclables” off site. Whilst waste reuse and recycling is consistent with the objectives of the *Waste Avoidance and Resource Recovery Act 2001*, the additional impacts of such an activity could be substantial and were not considered in the DA nor assessed by the Department. The approval conditions therefore need to be framed in such a way that prevents the opportunity for this activity to take place.

In addition, an overall limit on waste throughput is required for the purpose of clarity. To maintain consistency with the conditions imposed on the Woodlawn Bioreactor, this limit will need to be 500,000 tonnes in any year.

It will therefore be necessary to clarify in any consent the nature and volumes of waste permitted to be received at the terminal and the manner in which any waste may be removed from the terminal.

RECOMMENDATIONS

- ***No more than 500,000 tonnes of uncontainerised waste shall be received at the premises in any one year.***
- ***No waste shall be received at the premises except municipal solid waste (as per EPA GTA)***
- ***No waste shall be received at the premises except waste to be transported by rail from the Clyde Marshalling Yards for disposal at the Woodlawn Bioreactor.***
- ***No waste shall be removed from the premises except:***
  - ***construction waste arising from activities during the construction stage of the development***
  - ***waste in sealed shipping containers to be transported by rail to the Crisps Creek Intermodal Facility***
  - ***small quantities of waste that are not permitted by the EPL to be received at the terminal, and that have been separated out from the incoming waste stream through a documented operational procedure of regular waste inspections and associated control measures: to be disposed of to a lawful waste facility***
  - ***waste generated from onsite activities, such as plant maintenance and repairs, that is not suitable for acceptance at the Woodlawn Bioreactor: to be disposed of to a lawful waste facility***
  - ***wastewater generated onsite: to be disposed of to sewer***
  - ***leachate generated from the onsite management of waste: to be disposed of to sewer or a lawful liquid waste treatment plant***

- ***recyclable materials generated from the onsite office: to be directed to a suitable recycling facility.***

(b) Asbestos waste

The licence for the Woodlawn facility permits the acceptance of asbestos waste in accordance with the appropriate Regulations. However the applicant has indicated it does not propose to accept asbestos waste at the transfer terminal. The Department accepts this position on the basis that it would minimise the risk of asbestos fibres being released in the transfer terminal.

RECOMMENDATIONS

- ***Notwithstanding any other condition, uncontainerised waste containing asbestos shall not be accepted at the premises***

(c) Control of incoming wastes

The control strategy in the proposed EMP indicates that the delivery of liquid or hazardous wastes will be prohibited, delivery drivers will be interrogated and waste on the tipping floor will be visually checked. In addition to the proposed control procedures, the Department considers that records should be maintained of all waste entering and leaving the premises. The control and record keeping procedures would need to be contained in the Operational EMP. The Applicant should also address this matter in an induction/education program for waste transporters and in any contractual arrangements it has with waste transporters which would include punitive measures for breaches of the relevant conditions.

RECOMMENDATIONS

- ***Records shall be made and maintained of each load of waste entering the premises, including the identification of the vehicle, weight, nature and origin of the waste received, and whether the waste was received in pre-packaged shipping containers or for on-site containerisation.***
- ***Records shall be made and maintained of any waste leaving the premises by motor vehicle, including the identification of the vehicle, and the weight, classification and destination of the waste.***
- ***Records shall be made and maintained of all events involving the removal of any waste received at the premises which is not permitted to be accepted at the premises.***
- ***Waste transporters undergo an induction and continuing information courses on waste types permitted to be received at the development***
- ***Contracts with waste transporters include conditions addressing acceptable waste types and punitive measures for non-compliances***
- ***An enforcement program be maintained which includes the imposition of punitive measures for non-compliances.***

6.6 Air Quality

Odour

Applicant's position

The EIS and SEIS identify three sources of odour associated with the development as:

- Odours from waste stockpiling and movement inside the transfer terminal building
- Odours from loaded rail containers awaiting transport to Woodlawn
- Odours from trucks bringing waste to the terminal.

The position of the EIS/SEIS on each of the nominated odour sources follows.

(a) Odours from waste stockpiling and movement inside the transfer terminal building
The SEIS indicates (section 5.3.1 of Vipac report at Appendix G) that the building is proposed to have natural ventilation via 1.5 m high openings in the NW, SW and SE walls immediately below the roof. The doors for entry and egress of trucks would also need to be open. Dispersion modelling is based on this scenario and on odour emissions data obtained from a similar waste transfer terminal in Brisbane. The waste at Brisbane had been macerated to reduce its volume, which is not planned to occur at Clyde, and the report indicates this would provide a conservative estimate of odour emission rates.

Odours from garbage tend to increase with the age of the garbage, particularly if anaerobic decomposition has taken hold. There is no indication on the age of the garbage measured at Brisbane, or how it compares to the expected age of the garbage at Clyde.

The nature of the operation, which includes tipping putrescible waste onto the floor of an open building and pushing it into shutes, is such that a high potential exists for odorous emissions. During peak periods much of the floor is expected to be covered with waste. Should delays occur in removing waste from the terminal building, the odour generation potential of the stockpiled waste will increase.

The SEIS proposes a “three tier” approach to odour management at the site, however in reality it is a two-tier system. The first tier is fine-mist water spraying, and the SEIS states “if required the injection of deodoriser may be added”. The second tier is the use of extraction fans in the roof discharging through carbon filters, with the concurrent closure of the ventilation openings in the upper walls. None of these activities is automated, except the fine-mist water spray “would be triggered by sensors”, but not the injection of a deodoriser. The actuation of the odour control measures will be at the discretion of the operator.

(b) Odours from loaded rail containers awaiting transport to Woodlawn
The SEIS indicates odours from loaded containers stored at the site or on trains awaiting departure, were not considered significant “as they would be completely sealed, with vented air passing through carbon filters” (section 7.3.2). The Vipac report (Appendix G to the SEIS) at section 5.1 indicates the carbon filters on the rail containers would be attached to pressure relief valves. There is no indication on the likelihood of the pressure relief valves venting and hence the expected operation of the carbon filters, although the Vipac report, at section 5.1.1.2, indicates the settings are likely to be in the range 7 – 30 kPa, to be determined during detail design. As for the carbon filters proposed for the terminal building, there is no indication in the EIS or SEIS on a performance measurement system for these carbon filters, or a replacement strategy.

(c) Odours from trucks bringing waste to the terminal
The SEIS claims that as trucks bringing waste to the terminal would be sealed, odours from them would be insignificant. This is considered an acceptable assumption.

(d) Other odour sources
A possible fourth source of odour could be the empty containers arriving back from Woodlawn. The EIS/SEIS indicates these would not be odorous because they will be washed at Woodlawn before being returned to the terminal. The odour-status of the

washed containers would depend on the effectiveness of the washing and at what stage of the waste transfer process the containers are opened up again. Provided the containers are not opened until they are in the transfer terminal building and about to receive waste, it is considered they are unlikely to be a significant source of odours. It is recommended a condition be imposed to ensure appropriate management of empty rail containers is addressed in the odour management plan.

(e) Odour management strategy
The EIS put forward a brief odour management strategy, as part of the proposed Environmental Management Plan for the development. The proposed control strategies were limited to:

- High priority given to waste emitting offensive odours
- Environmental safe use of deodorants
- All waste to be kept within the building
- All waste to be removed daily
- If waste removal delayed, spray a masking agent on the waste

The monitoring and reporting proposed was “required only if significant emissions occur resulting in complaints”.

EPA position
The EPA provided its general terms of approval (GTA) to the development under integrated development. The GTA included conditions relating to odour management. The conditions placed limits on the emissions from each of the six forced air ventilation outlets, of 1740 odour units per second. They also required annual monitoring for odour emissions from the outlets as well as annual monitoring for the physical parameters of velocity, volumetric flow rate, temperature, moisture, dry gas density and molecular weight of stack gases.

The GTA also specified an operating condition prohibiting the Applicant from causing or permitting the emission of offensive odours from the premises, as defined under section 29 of the *Protection of the Environment Operations Act 1997*.

Given that the EPA sets “performance-based” conditions, there is no prescription in the GTA on how the Applicant is to achieve the required odour performance, in particular the operating requirement prohibiting the emission of offensive odours.

The Department agrees with the performance standards specified by the EPA, but requires a high level of certainty that the standards would be achieved by the operation of the development. The imposition of the EPA’s conditions in isolation could lead to the development emitting odorous emissions which, by their nature can be inherently difficult to measure and prove. Such a scenario would be an unsatisfactory outcome and is to be avoided, particularly given the high level of sensitivity to the proposed development from local residents and businesses.

The Department therefore wishes to set prescriptive operational conditions to complement the performance-based EPA conditions and provide a high level of security against adverse odour impacts occurring from the development. This matter is discussed further in the “Department’s position” on odour management.

Independent assessment
The report by the independent assessor addresses the odour issue in detail. It indicates that odours could be expected to be generated from waste transfer operations, based on overseas and local experience.

Whilst the report raised concerns about the methodology used to apply odour emission data obtained from a Brisbane transfer station, to the proposed development, it found that the values obtained appeared to correspond with values obtained from waste deposited at the Eastern Creek landfill.

The assessment found that dispersion modelling of odour emissions did not address the conditions under which odours are likely to travel furthest from the site, that is under stable atmospheric conditions generally between 12 midnight and 6am during autumn and winter. The Applicant's consultant carried out additional modelling to simulate these conditions at the request of the independent assessor. The independent assessor concluded that whilst the exposure of some residences to odour may be within EPA guidelines, the guidelines still allow for up to 88 hours per year when odours are detected above levels which are deemed objectionable. It is likely that some residents may detect such garbage odours on some early mornings in autumn and winter. The independent assessor was concerned that the above situation could produce unacceptable odour outcomes, particularly when considered with uncertainties in the modelling and uncertainties that the operator of the terminal would invoke optimal odour control strategies.

During normal operation, natural ventilation including open vehicle access doors and louvred vents at the roofline, are claimed to provide adequate control of odours in the building. Under extreme conditions caused by the prolonged retention of waste in the building, the Applicant has indicated it would implement a "three-tier" odour management system, as follows:

Spray Control

An automatic fine-mist water spray over the waste, triggered by sensors. If required a deodoriser could be added.

Extraction Fans

Extraction fans high on one wall would be switched on when deemed necessary by the operator

Carbon Filtration

The extraction fans would draw the ventilated air through particulate filters to remove dust, and carbon filters to remove odours.

The proposed odour controls were considered insufficient by the independent assessor. Whilst natural ventilation would reduce odour intensity inside the building it was not considered to have a mitigative affect on the rate of odour discharge from the building. The water spray was also considered to be ineffective in controlling garbage odours. Whilst carbon filtration is, in theory, effective at controlling odours, its effectiveness would depend on the type of activated carbon, the filter design, the design of the particulate pre-filters and the monitoring and replacement program. Also of concern is that utilisation of the system appears to be at the discretion of the operator. The assessor comments that this is an unsatisfactory arrangement as operators of odorous activities are unreliable judges of the intensity of odours from their activities.

The SEIS has modified the labelling of the elements of the odour control system describing: Natural Ventilation as Tier 1; Odour Neutralising Spray System as Tier 2; and Carbon Filtration as Tier 3. It also proposed the louvred wall vents be replaced by roof ventilation fans, but admits this is unlikely to improve odour control effectiveness.

The assessor recommended that to achieve some reliability in odour control, Tier 3 be adopted as a continuous requirement. That is, forced ventilation through carbon filters be employed whenever waste is contained in the building, for a period of at least 12 months at typical waste throughput, and until such time as performance of the system can be gauged and operational procedures established for any reduced dependency on forced ventilation and carbon filtration. The proposed system was not intended for such continuous duty, and the assessor raised doubts about the performance of the proposed system at this duty. To achieve adequate performance, the assessor suggested an upgraded particulate filtration system and the possible use of pre-treated activated carbon. However the assessor identified that the cost of this approach "would not be insubstantial".

Department's position

(a) Odour control at the terminal building
The independent assessor has raised uncertainties in the modelling used to predict odour impacts, and in the operation of proposed odour control measures being left to the operator's discretion. These matters raise doubt as to the ability of the development to operate in a manner that prevents adverse odour impacts occurring.

The Department is of the view that the odour control system needs to be:
- designed such that it is capable of removing odours likely to cause nuisance to surrounding land uses, operating on a continuous basis if necessary;
- operated according to a proactive system that ensures odours are removed from the building emissions before they become a nuisance (in comparison to a reactive system that responds to odour complaints); and
- adequately maintained.

The independent assessor's recommendation for achieving the above outcomes is to operate the forced ventilation and odour filtration system continuously whenever waste is in the terminal building for the first 12 months of operation. This "total capture and control" approach is designed to eliminate the possibility of odour emissions from the building at any cost. The assessor suggests consideration could be given to reducing the duty of the system based on monitoring, predictions and documented operating experience after the first 12 months of operation.

The Applicant has provided a submission to the Department in response to the independent assessor's recommendation. The key issues raised by the Applicant are:
- the modelling in the EIS/SEIS indicated that "natural ventilation" would adequately control odours under most circumstances;
- continuous operation of the system will deny the ability to establish actual odour emissions and to determine whether any lesser level of odour control would be adequate;
- under continuous operation the operating costs of changing dust and carbon filters alone would be in the order of $1 million per year.

The Department considers that the forced ventilation odour control system needs to designed for continuous operation, including appropriate redundancy to enable maintenance procedures to be undertaken without reducing the performance of the system, for the following reasons:
- the uncertainties identified in the odour impact assessment by the independent assessor
- the high sensitivity of the receiving environment to any adverse odour impact
- the highly odorous nature of MSW and its variability in terms of odour generation ability.

However the Department also accepts the argument put forward by the Applicant that continuous operation could pose difficulties in measuring the performance of the system in order to consider a relaxation in its duty after an initial period. The Department, therefore, would be prepared to consider a proposal for temporary, limited duration suspensions in system use within the second 6 months of operation to enable measurement of actual odour emissions. Such suspensions would need to occur during normal operations, with the concurrence of the community consultative committee, and providing surrounding land users are notified in advance. On this basis the Department would place a condition on the consent requiring continuous operation of the forced ventilation and odour filtration system for the first 6 months of operation and permit suspensions in operation in the second six months subject to the above conditions. After 12 months the Applicant could submit a case for reduced operation of the system, based on the outcomes of the performance measurements and other odour-related monitoring.

As mentioned in the independent assessor's report, the proposed use of the odour control system is at the discretion of the operator, which is an unreliable approach to odour management. Under any reduced-operation regime, the system operating procedures would need to be effective, clearly documented, and remove the operator's discretion on the system's use except for emergency override.

The EIS and SEIS give no indication whether the use of the forced ventilation system would effectively control odours if the vehicle access opening(s) remains open. The Department recognises that natural ventilation would be desirable for worker amenity, but if odours can still escape through the vehicle access opening(s) when the forced ventilation system is operating, then there will be some doubt as to whether the forced ventilation system will effectively control odorous emissions. Consideration will need to be made of having the vehicle access openings normally closed with an automated opening system for truck entry and egress when the building is subject to forced ventilation. This will need to be assessed in the odour management plan.

The EIS and SEIS give no indication on when the carbon would be replaced, or of any program to determine ongoing performance of the filters and an associated maintenance and carbon replacement regime. Such a program would need to be addressed in the odour management plan, and approved by the Department before any uncontainerised waste is received at the site. The plan will need to detail how the carbon replacement frequency is to be determined.

Because odour management is such a sensitive matter for this development, the Department considers that the odour management plan should be prepared and approved prior to the odorous activities commencing. It is recommended that an appropriate condition be placed on any consent for the development.

A neighbouring business has raised concerns that the use of deodorisers for odour control at the development could have an adverse impact on the quality of its food products. The Department considers this matter should be addressed and recommends a condition prohibiting the use of deodorisers unless otherwise approved by the Director-General. This should not place the odour management program at risk of failure, because conditions inside the building that may have given rise to the use of deodorisers can be controlled by the use of the forced extraction and odour filtration system.

RECOMMENDATIONS

- ***The use of deodorisers for odour control at the premises is not permitted, unless otherwise approved by the Director-General.***
- ***The forced air extraction and odour filtration system shall be capable of operating in a proper and efficient manner under continuous duty whenever waste is within the building.***
- ***The forced air extraction and odour filtration system shall apply forced ventilation to the building in such a way that odours and dust are efficiently contained within the building and that before discharge to atmosphere ventilation air is filtered to remove fine particles efficiently and passed through an activated carbon adsorber (or equivalent process) to remove odours efficiently.***
- ***The design of the forced air extraction and odour filtration system shall be approved by the Director-General.***
- ***The approved forced air extraction and odour filtration system shall be installed and commissioned prior to the acceptance of any uncontainerised waste at the premises.***
- ***For the first six months of receiving uncontainerised waste, the Applicant shall operate the forced air extraction and odour filtration system whenever waste is contained within the building.***
- ***Following the first six months of receiving uncontainerised waste, the Applicant shall operate the forced air extraction and odour filtration system whenever waste is contained within the building, except in the following circumstances:***
    - ***during odour emission monitoring using dynamic olfactometry in such a way as to allow determination of the performance of the odour control system with and without each component of the system in operation, as described in the Odour Emission Monitoring Program of the Odour Management Plan.***
- ***Any suspension in the operation of the forced air extraction and odour filtration system for the purposes of odour emission monitoring in accordance with the above condition, shall only be carried out in the following circumstances:***
    - ***(a) following at least six months of operation, unless otherwise approved by the Director-General***
    - ***(b) only if approved by the Director-General***
    - ***(c) for the duration of each odour emission sampling event only***
    - ***(d) during otherwise normal plant operations***
    - ***(e) providing the community consultative committee has been consulted to the satisfaction of the Director-General***
    - ***(f) providing the EPA is notified in writing at least 48 hours in advance***
    - ***(g) providing the surrounding land are notified to an extent and by a means determined in consultation with the community consultative committee, at least 48 hours in advance.***
- ***Following the first 12 months of receiving uncontainerised waste, the Applicant may make a submission to the Director-General for approval to amend the continuous operating regime of the forced air extraction and odour filtration system. The submission must be accompanied by a report on the Odour Emission Monitoring Program that demonstrates to the satisfaction of the Director-General that the alternative operating regime would not result in the emission of odours that could have an adverse impact on neighbouring land uses.***
- ***Emissions conditions from the EPA GTA.***
- ***The Applicant must develop, to the satisfaction of the Director-General, an operational contingency plan to be initiated in the event of equipment failure, industrial action or any other situation that prevents the containerisation of any waste that has been in the terminal building in excess of 18 hours. Such a plan shall include suspending the acceptance of further uncontainerised waste at the premises.***
- ***All odour monitoring and management plans to be made available to the public on request to the Applicant***

(b) Odour control of the waste containers

The SEIS provided some additional information about the proposed carbon filters on the waste containers, however questions remain about the design of the filters, their operational life and a program for monitoring their performance and establishing a carbon replacement regime. The SEIS indicates the pressure relief valves to which the carbon filters would be attached, would be set to open at between 1 and 5 psi. The Department considers that the containers could become a significant source of odours if their pressure relief valves open and the odorous emissions are not effectively filtered. The SEIS has indicated that Collex will need to develop a quality assurance program to ensure that the performance of all filters or other mechanisms to remove odours is monitored, including cleaning and testing. It is considered a replacement of the carbon filter medium would be needed at regular intervals based on some form of performance measurement during the early phase of the development, say with three to six months. Appropriate conditions would be required to address this matter.

RECOMMENDATIONS
- ***Any containerised waste shall not be exposed to the atmosphere at the site, except via a pressure release mechanism and odour filtration system on a container***
- ***The design of the pressure release mechanism and odour filtration system shall be approved by the Director-General***
- ***The Applicant must develop a testing program designed to determine appropriate maintenance schedules for replacement of odour adsorption material in the pressure relief vents of the waste containers. The testing program must be contained in the Odour Management Plan.***
- ***The Applicant must develop procedures for the maintenance and repair of the odour adsorption and pressure relief vents of the waste containers, including the replacement of the odour adsorption material. The procedures must be contained in the Odour Management Plan.***

Dust

Applicant's position
The EIS and SEIS indicate that levels of dust arising from construction activities are predicted to exceed NSW air quality goals if no dust controls are implemented. It advocates construction stage controls including the use of water tankers, sprinklers and sprays, site speed limits and the suspension of dust generating activities during high winds.

The EIS and SEIS indicate that during operation of the development the PM_{10} concentrations at all locations would be below the NSW 24-hour average ambient air quality criteria of 50 $\mu g/m^3$, with the exception of one location at the south eastern boundary with a predicted level of 51.6 $\mu g/m^3$. It should be noted that this location falls within the Clyde marshalling yards and main western rail corridor. These results are based on the simulated worst case operating conditions. The SEIS indicates that good management practices and attention to dust suppression within the building from unusually dusty loads would reduce the predicted dust levels.

Independent assessment
The assessor reported that dust generated during the construction period would be adequately controlled by conventional site watering and avoidance of high wind conditions during earth moving and forming activities.

The assessor states that ambient goals for PM_{10} particles apply to community exposures rather than at the boundaries of dust generating premises. The assessor was satisfied that the utilisation of water sprays in the terminal building, together with dust filtration in the forced ventilation system, would be effective in controlling dust and fine particle emissions.

Department's position
Whilst the Departments accepts the assessor's position with respect to the control of dust during construction activities, there is a need to ensure that the proposed dust measures are implemented in practice. The EPA takes a performance-based approach to dust control by imposing the following conditions in its GTA:

O2.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.
O2.2 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

The following EPA condition would also be applicable to dust controls

All plant and equipment installed at the premises or used in connection with the licensed activity:
- *must be maintained in a proper and efficient condition; and*
- *must be operated in a proper and efficient manner*.

These conditions are considered to be adequate to require the Applicant to have the appropriate plant and equipment available at the site to control dust, and to maintain and utilise it in a manner that minimises dust emissions.

In respect of dust control during operation of the transfer terminal, the Department accepts the views of the assessor and the conditions he has proposed.

RECOMMENDATIONS
- ***(EPA conditions as above)***
- ***All trafficable areas and vehicle manoeuvring areas in or on the premises shall be maintained at all times in a condition that will minimise the generation or emission from the premises, of wind-blown or traffic generated dust.***

Other airborne pollutants from transfer station

Applicant's position
Apart from dust and odour emissions, the EIS and SEIS addressed greenhouse gas emissions. The Vipac report attached to the EIS and SEIS estimated that a throughput of 500,000 tpa of MSW would produce 33,864 equivalent tonnes of CO_2 per annum (as methane), however this would occur at the Woodlawn Bioreactor where the gas would be captured for electricity generation. Levels of greenhouse gases produced from the transport of waste to and from the terminal were considered by the EIS/SEIS to be insignificant.

Independent assessment
The assessor addressed a number of other air pollutants as follows
- impacts of exhaust gases from vehicles working within the terminal building
- impacts of emissions from the transport of waste to and from the terminal
- impacts of bioaerosols from the handling of MSW
- asbestos

The assessor recommended that the adequacy for occupational health exposure to exhaust gases including CO, will need to be re-assessed should the building be subject to "total capture and control" by using forced ventilation on a continuous basis for odour control. The assessor does not expect a significant impact outside the building from exhaust emissions originating in the building.

Vehicle emissions from the transport of waste to and from the terminal was considered by the assessor to be only a small contributor to the total emissions in the region. He considered the lack of an analysis of these pollutants by the EIS/SEIS was not a critical weakness in its assessment.

The assessor discussed the potential impact of bioaerosols such as micro-organisms, spore and allergens, and concluded this was a greater issue in composting and fermenting processes, and not significant in the handling of MSW. However, the assessor recommended monitoring for these in the exhaust from the building.

The assessor recommended that asbestos be precluded from being received at the terminal, a position agreed to by the Applicant.

Department's position
The Department agrees with the position taken by the assessor. A condition that precludes the receipt of asbestos at the terminal has been recommended in Section 5.3 Waste Management.

Monitoring

Applicant's position
The Vipac report appended to the EIS and SEIS suggested that construction stage inspections of stockpiles, exposed work areas and work practices be carried out daily, together with continuous monthly monitoring of deposited dust at three locations on the site boundary. These measures are to be included in the air quality management plan.

The Vipac report asserted that operational monitoring of particulates and odour emissions will be "of interest" but "cost prohibitive", with the exception of monthly monitoring for dust deposition at the same locations used during construction for at least one year after commissioning the terminal.

The Vipac report stated that "change-out frequency" of the carbon filters on the terminal building and waste containers would be determined by inspections and olfactometry testing during the commissioning phase.

Independent assessment
The independent assessor (at 5.1.5) recommended that a number of monitoring conditions be imposed to address meteorological conditions, odour emissions, dust emissions, spores, allergens, microbial and deodorant chemical emissions, CO emissions, and operating conditions coincident with monitoring.

Department's position
The EPA's general terms of approval have imposed annual monitoring for emissions from the building's ventilation outlets, which include annual monitoring of odour emissions and a range of physical parameters.

The independent assessor recommended detailed odour and dust monitoring before and after the filters to determine the performance of the forced ventilation odour and dust controls. This monitoring will be a component of the odour and dust emission monitoring programs.

The independent assessor also recommended a condition requiring environmental monitoring of fine particles, odour, carbon monoxide and other pollutant concentrations in the residential and commercial environs of the transfer terminal. The Applicant's comments on such a program pointed out that the numerous other pollutant sources in the area that will emit the pollutants proposed to be monitored, would effectively render the proposed monitoring to be meaningless. The Department recommends targeted monitoring of fine particles at three points on the boundary of the development. Such monitoring, in combination with meteorological data from the on-site meteorological station, should be used to identify any residual emission fine particle impacts. In terms of odour monitoring, it is recommended that conditions be included requiring an odour emission monitoring program and odour audit program.

The Department agrees generally with the monitoring program suggested by the independent assessor, and recommends those requirements be imposed in addition to the monitoring required by the EPA.

RECOMMENDATIONS
- ***EPA emission monitoring condition (M2.1)***
- ***Odour emission monitoring to establish the performance and replacement regime for the carbon filters on the terminal building (see conditions on the odour management plan)***
- ***Site meteorology monitoring station***
- ***Odour emission monitoring and reporting***
- ***Odour audit program***
- ***PM_{10} monitoring at three locations at the site boundary (as proposed in the Vipac report), monthly until at least 12 months after the receipt of uncontainerised waste at a rate of at least 150,000 tpa.***
- ***CO monitoring inside the terminal building***
- ***Detailed recording of operating conditions inside the terminal building coincident with the monitoring required above.***
- ***All monitoring records shall be included in the Annual Environmental Management Report, to be made available to the public on request to the Applicant.***

6.7 Water Quality

Process water and sewage

Applicant's position
The EIS states (5.4.5, 5.4.6) that any leakage of leachate from the waste in the terminal building would be collected in a bunded area below the compactors, stored in a holding tank and discharged to sewer or directed to an off-site liquid waste treatment plant. Any water that comes into contact with the waste would remain separate from stormwater and be directed to the leachate system.

Sewage generated on site would be directed to sewer.

Independent assessment
The assessor indicated that process water and sewage should be discharged to the sewer.

Department's position
The proposed management of leachate and sewage are considered to be adequate to prevent contaminated water discharging to the environment. However it is recommended a condition be placed on any consent to ensure any water that comes into contact with waste be directed to the leachate collection system.

RECOMMENDATIONS
- ***Any water that comes into contact with waste at the premises must be directed to the leachate collection system.***

Stormwater

Applicant's position
The EIS proposes that stormwater from the parts of the access road where there are no development works would rely on existing overland flow arrangements to drain to Duck River.

Stormwater from the developed part of the site would be directed to an on-site detention basin for flood control, thence to Duck River. In addition, stormwater from the upgraded access road at the entrance and exit points of the transfer building, carpark and container loading area would be directed through an oil and grease separator before discharge to the detention basin.

The EIS also indicates the development would include a first flush system incorporating a gross pollutant trap (GPT), but does not specify which parts of the development would drain through these controls.

Independent assessment
The assessor was satisfied with the proposed arrangements provided that the detailed design of the stormwater system was acceptable to the EPA at the licence application stage.

Department's position
The Department generally agrees with the independent assessor. However the EIS remains unclear on the stormwater treatment techniques proposed for different parts of the development. Conditions will need to clarify the level of treatment required for stormwater from each part of the development. The following table indicates the desirable level of stormwater treatment for each part of the development.

Development component	Minimum level of stormwater treatment
Undeveloped sections of access road	Existing overland flow to Duck River
Roof water	On-site detention
Gatehouse and weighbridge area, carpark, access road and container loading area in vicinity of building	First flush system, GPT, oil and grease separation, on-site detention

The Department is satisfied that stormwater would be adequately managed if it undergoes the minimum levels of treatment in the above table, and the system is properly maintained. It should be noted that system maintenance is not addressed in the following recommended conditions because maintenance of all plant and equipment is addressed in a separate condition from the EPA's general terms of approval.

RECOMMENDATIONS

- ***The design of the stormwater management system shall be included with any licence application to the EPA***
- ***The stormwater management system shall provide the following minimum levels of stormwater treatment (see table above), and be designed to the satisfaction of Auburn Council.***

Groundwater

Applicant's position
The EIS/SEIS do not address groundwater impacts specifically, but do indicate that contaminated soil would be contained in the fill that makes up some of the site. The proposal incorporates measures for minimal disturbance such as driven piles for foundations and the provision of paved areas for vehicle movements.

Independent assessment
The independent assessor recommends (5.2.3) the Applicant be required to monitor groundwater quality and report on the risk of contamination of surface waters, based on the results of the monitoring and a Site Audit Statement. The independent assessor further commented (5.7.2) that the applicant indicated to him it would prepare a Site Audit Statement should consent be granted for the development.

Department's position
The Department considers that the Site Audit Statement should include an assessment of groundwater quality at the site through a sampling and analysis strategy. The results and recommendations arising from the strategy should be contained in the investigation report. The report should recommend actions to be taken to avoid the contamination of groundwater during the construction and operation stages of the development, and the recommendations incorporated into EMPs for construction and operational stages.

RECOMMENDATIONS

- ***The Site Audit Statement shall include an assessment of groundwater contamination, with conclusions and any recommended actions to be taken to avoid the contamination of groundwater during the construction and operation stages of the development.***
- ***The recommended actions are to be incorporated into EMPs for construction and operational stages.***

6.8 Noise

Operational activities

Applicant's position
The EIS concluded predicted noise levels from the proposed operational activities at the terminal would comply with the EPA's intrusiveness and amenity criteria at the closest residential, commercial and industrial premises, without the need for any specific amelioration measures. It also concluded that the requirements of the Auburn Development Control Plan would be satisfied.

The SEIS confirmed the conclusions of the EIS. Nevertheless, following feedback on the EIS, the proposed transfer building was relocated a greater distance from residential premises and re-orientated so the compaction units face Parramatta Road. In addition, the SEIS stated that any noise attenuation devices required to comply with relevant noise criteria would be installed. Such devices would be determined at the detailed design stage.

Independent assessment
The assessor was satisfied with the EIS/SEIS position on operational noise controls. He remarks that noise control measures are usually resolved in the detailed design stage rather than at the assessment stage, provided such measures are judged generally feasible in the circumstances. The assessor recommended that noise testing be carried out shortly after commissioning of the terminal to determine compliance with EPA criteria and be conducted thereafter at appropriate intervals.

Department's position
The Department notes that the EPA requested additional information on the placement of noise barriers, which was provided on 18 February 2002. The EPA subsequently found the information acceptable and placed noise limits in its general terms of approval. The Department considers the noise emissions from the premises should be measured following commissioning of the terminal at typical waste throughput to determine initial compliance with the EPA's limits. Any further amelioration measures should be identified from the monitoring, installed and verified by another round of monitoring. Once monitoring indicates full compliance with the EPA limits, the Department considers any ongoing monitoring requirements should be at the discretion of the EPA under the terms of its licence.

RECOMMENDATIONS
- ***As per EPA GTA***

Construction activities

Applicant's position
The EIS states that noise from construction activities is predicted to comply with EPA requirements. Predictions were based on all construction equipment operating simultaneously, with a calculated maximum noise level at the nearest residential areas of approximately 51dB(A), which is within the construction site noise criteria recommended by the EPA Environmental Noise Control Manual.

Independent assessment
The independent assessment did not address this matter.

Department's position
The noise limits provided in the EPA's general terms of approval apply to operational noise and not construction noise. The Department considers that construction noise should be addressed in a Construction Noise Management Plan which should detail management and operational procedures to minimise the generation of construction noise and its impacts on sensitive receptors.

RECOMMENDATIONS
- ***The Applicant shall produce a Construction Noise Management Plan. The Plan shall be incorporated into the Construction Stage Environmental Management Plan***

and clearly identify EPA criteria to be complied with during construction, monitoring, complaints handling and mitigative measures to be utilised.

Traffic noise

Applicant's position
The EIS claims that the increase in noise levels from projected traffic movements will be less than 1dB, which complies with the EPA requirement of a maximum 2dB increase.

Independent assessment
The assessor accepted the noise predictions in the EIS/SEIS. However he was concerned about noise impacts arising from the possible use by waste transport vehicles of suburban streets instead of the main roads.

Department's position
The Department accepts the traffic noise predictions in the EIS and is satisfied that the projected increase in noise levels would not adversely affect the current level of amenity in the vicinity of the proposed development. However the concerns raised by the independent assessor considers about the likelihood of noise impacts from the inappropriate use of suburban streets by waste vehicles needs to be addressed. This situation could arise from the proposed restrictions on right turns into and out of the development. West-bound waste transporters could be tempted to use suburban streets to enable them to enter the site from the east, and transporters leaving the site could be similarly tempted to use suburban streets to head in a westerly direction.

The Department considers the Applicant should have in place a due diligence process incorporating a code of conduct and ongoing information program on transporters' use of appropriate streets, and an enforcement program with punitive measures for non-compliances. The Department considers the implementation of such a program should be effective in keeping waste trucks from using inappropriate suburban streets.

RECOMMENDATIONS
- ***Waste transporters undergo an induction and continuing information courses on waste transport routes permitted in the vicinity of the development***
- ***Contracts with waste transporters include conditions addressing permissible waste transport routes and punitive measures for non-compliances***
- ***An enforcement program be maintained which includes the imposition of punitive measures for non-compliances***

6.9 Traffic

Applicant's position
The EIS and SEIS indicate that up to 500,000 tonnes per annum would be accepted at the premises, with deliveries occurring 24 hours per day in 8-10 tonne trucks. Although the EIS/SEIS doesn't specifically state the types of 8-10 tonne trucks to be used, it is apparent the waste would be received in municipal kerbside collection trucks, because the proposal does not contemplate an interim transfer of waste from those trucks to another form of road transport. The number of truck movements contemplated by the SEIS is 400 per day, generated by 200 trucks delivering waste to the terminal.

The SEIS estimated that up to 50 trucks per hour would deliver waste to the development during the morning peak period.

The SEIS proposed an additional set of traffic signals on Parramatta Road at the access to the Clyde terminal. It also indicates that the increase in traffic on Parramatta Road and the installation of the traffic signals would have an insignificant impact to traffic on Parramatta Road. However the EIS had already indicated a concept layout for the traffic signal design had been developed following discussions with the RTA, and that the RTA had reservations about the plan because of the potential for further traffic delay.

A plan showing the road network in the vicinity of the proposed development is provided at Figure 10.

The EIS reported on an assessment of traffic impacts on Parramatta Road from truck movements. The EIS indicated that the James Ruse Drive to Rawson Street section of Parramatta Road was modelled by the RTA using the Sydney Co-ordinated Area Traffic Engineering System (SCATES) for increasing truck movement scenarios. The modelling indicated that with 90 vehicles entering the site from the east and 90 vehicles leaving the site to the east during peak periods, traffic signals do not alter the existing level of service at the Rawson Street and Wentworth Street intersections. However in the morning peak period the James Ruse Drive/Parramatta Road intersection degree of saturation increases from 0.98 to 1.01 indicating that extra capacity is required.

A meeting was held between the Applicant and the RTA on 17 April 2002, to discuss the RTA's concerns about traffic management issues. The outcome of the meeting was the production of a modified proposal involving the deletion of the traffic signals and restricting access to the development to left turn in and left turn out only. All traffic entering and exiting the development would therefore travel in an easterly direction on Parramatta Road.

RTA position
The RTA advised the Department that, for the purposes of integrated development, Auburn Council would be the approval body under section 138 of the *Roads Act 1993* for roads associated with the development, including Parramatta Road. However if Council approves the development, the RTA's concurrence would still need to be given to the approval, under section 138(2) of the *Roads Act 1993*.

Notwithstanding the approval requirements under integrated development, representations are also required from the RTA under *SEPP 11 – Traffic Generating Developments*, prior to determination of the DA. The RTA's letter provided comments on the proposal, which constituted its representations under SEPP 11. The RTA's representations can be summarised as follows:

- the installation of an additional set of traffic signals on Parramatta Road is not supported as they would increase traffic congestion, and would be restricted by a Sydney Water easement
- the proposed offset "T" intersection design is not recommended
- the developer should allow for the provision of a bike/pedestrian shared path along the Duck River corridor
- serious concerns raised on traffic grounds and the potential growth in traffic in the area due to other current and future developments along Parramatta Road
- concerns about additional increased traffic regarding a (incorrect) perception by the RTA of "the imminent closure of the Lucas Heights Waste Facility"

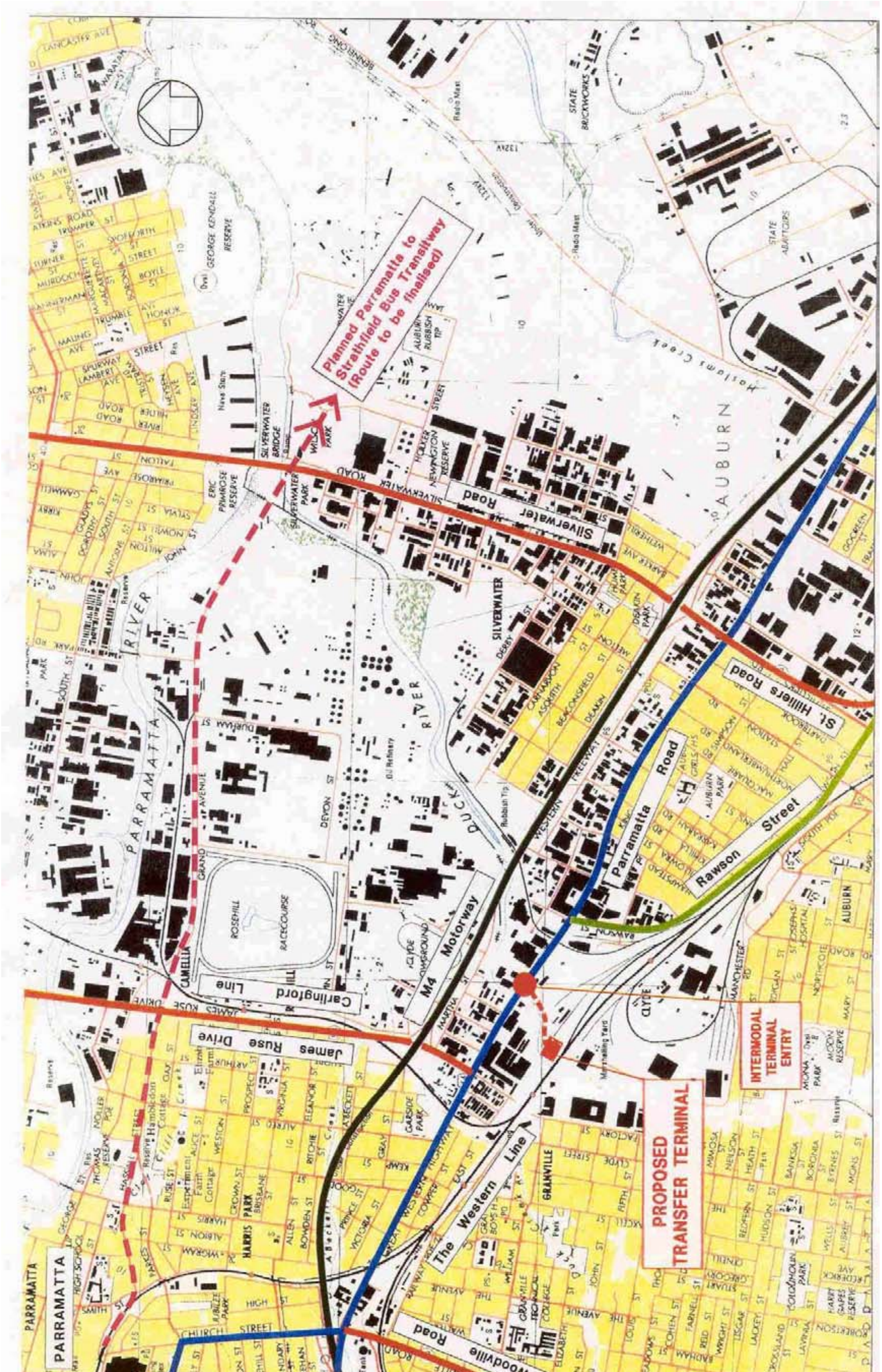

Figure 10: Road layout

- the speed of vehicles outside peak periods needs to be taken into account
- a left turn deceleration lane is required for entry to the site from Parramatta Road
- a detailed road design will need to be forwarded to the RTA for approval prior to commencement of any roadworks
- no stopping restrictions to be applied along the Parramatta Road frontage
- vehicles to enter/exit the site in a forward direction
- all works to be at no cost to the RTA.

It should be noted that the above representations by the RTA were made on the original proposal. Following those representations, the Applicant modified the proposed traffic management arrangements by deleting the traffic signals and restricting access to the development to left turn in and left turn out only. The RTA subsequently provided technical concurrence to the modifications. This concurrence was forwarded to Auburn Council as the integrated development approval body under section 138 of the *Roads Act 1993*. Following any consent granted by Auburn Council, the RTA would still need to consider the detailed design of the traffic arrangements with a view to providing its formal concurrence under section 138(2) of the *Roads Act 1993*.

Independent assessment
The independent assessor carried out his assessment on the initial proposal, which included the installation of traffic signals at the site entrance on Parramatta Road. The independent assessor identified traffic management as a significant impediment to granting consent, including the Parramatta Road traffic volumes and intersection with the site access, and the impacts of the proposal on other users of the Clyde Rail Yards.

The independent assessor found that the RTA did not support the installation of traffic signals, and further commented that in the absence of traffic signals, the movement of waste vehicles through neighbouring suburban streets would be difficult to manage and represents a potential impact on amenity and safety.

Apart from the above comments, the independent assessor indicated he was not in a position to recommend on the acceptability of traffic impacts.

Auburn Council position
The applicant produced a revised design in accordance with the RTA's representations. The revised design, together with a preliminary RTA concurrence, was forwarded to Auburn Council for integrated development approval under the section 138(2) of the *Roads Act 1993*. It should be noted that the RTA indicated it would fully assess the matter when any consent is issued.

Notwithstanding the RTA's technical concurrence, Auburn Council refused to grant approval under integrated development citing the following reasons:

- deceleration lane too short
- no physical barrier preventing traffic turning right onto Parramatta Road
- no acceleration lane provided from the site
- the proposed access road will dictate entry into the whole Clyde Marshalling Yard site
- the access road will prevent a cycleway from being established along Duck River, and future improvements to the River by way of a riparian zone.

Department's position
Two principle issues have emerged concerning traffic management associated with the proposed development. The first issue is the design of the intersection of the access road with Parramatta Road, and the second issue concerns the impacts of the additional vehicle movements on traffic in the area, particularly on Parramatta Road. Obviously there is a relationship between the intersection design and traffic impacts, but for the purposes of clarity the two issues have been addressed separately in this report.

(a) Intersection design
The Department accepts the position of the RTA on the matter concerning the design of the intersection, and as such is in conflict with the position taken by Auburn Council. The Department understands that the intent of section 138 of the *Roads Act 1993* is for the roads authority to ensure the road asset is appropriately managed and protected as a result of the development. On this basis the Department has doubts about the appropriateness of Auburn Council's grounds for refusal under section 138 of the *Roads Act 1993*. The RTA confirmed with the Department that Council's grounds for refusal amounted to an inappropriate use of its powers under the Roads Act. In particular, the matters raised by Council related to the intersection design are matters that would be addressed by the RTA in its concurrence role, and therefore considered to be an inappropriate use of its approval powers under the *Roads Act 1993*. Further, the matter raised by Council concerning general access to the Marshalling Yards site is one that should be addressed by Council under its ALEP 2000, in particular in the preparation of a master plan for the Yards to support the LEP. As such this is also considered an inappropriate ground for refusal under the *Roads Act 1993*. Likewise the cycleway/riparian zone issues were previously raised by Council and other respondents in submissions on the DA/EIS/SIES, and are to be addressed by the Minister as the consent authority for the development. As such, it is considered inappropriate for Council to cite the above matters as grounds for refusal under the *Roads Act 1993*.

A meeting was held between the Department and Council in an attempt to resolve the matters of dispute, however the parties failed to reach an agreement on the issue and Council's grounds for refusal remained.

An option for resolving the matter is to utilise the relevant dispute resolution provisions of the EP&A Act. Section 92(4) and 92(5) of the Act, relating to integrated development, state the following:

> *(4) If the approval body informs the Minister that:*
> > *(a) it will not grant an approval that is required in order for the development to be lawfully carried out, or*
> >
> > *(b) it will grant the approval but subject to general terms that, in the Minister's opinion, are inappropriate,*
>
> *and a resolution of the matter cannot be agreed between the approval body and the Minister, the Minister must submit the dispute to the Premier for settlement under section 121.*
>
> *(6) For the purpose of the application of section 121 to any such dispute, the Minister and the approval body are taken to be public authorities.*

Section 121 allows for the Premier to make an order with respect to the dispute as he thinks fit, having regard to the public interest and to the circumstances of the case.

The Department initially chose to pursue the dispute resolution procedures set out in the EP&A Act, however legal uncertainties arose out of this course of action.

The RTA has on occasion used its powers under section 64 of the *Roads Act 1993*, where it believes the intent of section 138 has been used inappropriately by a Council. Section 64 allows for the RTA to exercise the functions of a roads authority with respect to any classified road. Parramatta Road is a classified road. At the request of the Department, the RTA agreed to exercise this function for the purposes of the proposed development and issued general terms of approval under section 138 of the *Roads Act 1993*.

(b) Traffic impacts

The Department notes the comments by the RTA on the original proposal included serious concerns on traffic grounds, particularly with the potential growth in traffic in the area due to other current and future developments along Parramatta Road.

The question arises as to whether the modifications made to the intersection design by removing the proposed traffic signals and restricting entry and exit to left turn only, have resolved the RTA's concerns about traffic congestion. It is noted that these modifications mean that up to 50 trucks per hour from Parramatta Road will enter the site from the east and up to 50 trucks per hour will re-enter Parramatta Road from the site and head in a westerly direction.

The Department considers the morning peak period to be the critical period for an assessment of traffic impacts. This is because most municipal garbage trucks operate in the early morning, and the traffic speed surveys reported in the EIS on Parramatta Road indicate the worst conditions for westbound traffic occur in the morning peak period. In this period the travel speed westbound past the Marshalling Yards was recorded by the RTA as 45km/h in 1998, 51km/h in 1999, reducing to 13km/h in 2000.

The traffic counts performed by the Applicant on 17 and 24 May 2001, indicate that the following vehicle numbers travelled westwards on Parramatta Road past the site in the morning 7am to 8am peak period:

Light vehicles:	1546
Heavy vehicles:	225
Total:	1771

An additional 50 vehicles associated with the development travelling westwards in the 7am to 8am peak period represents an increase of 3.5%.

On the basis of this modest increase in traffic numbers, the installation of a deceleration lane for trucks entering the site, and the RTA's technical concurrence of the traffic arrangements as amended by the proponent, the Department considers the traffic impacts associated with the proposed development to be acceptable.

6.10 Health and contaminated land

General health issues

Applicant's position
The Applicant produced a health impact risk assessment with the SEIS, following concerns raised during the exhibition of the EIS about health impacts from the proposed development. The health risk assessment focussed specifically on the health-related concerns raised during the community consultation process, including respiratory disease and aggravation of asthma within the community. The health risk assessment did not address amenity issues such as odours, which it did not consider to be health related. The health risk assessment assessed the toxicity potential and mitigation factors of vehicle exhausts, non-organic dusts, moulds/microbial spores and gases from waste decomposition. The assessment found there was no evidence to conclude that the emissions of vehicle exhaust, non-organic dusts and gas from the facility would pose a detectable increase in risk to the local community. However it found some evidence of the potential for moulds generated and released from composting facilities to pose an increased risk to those working within these operations, and hence carried out a more detailed investigation of known health risks from these particles. Based on an assessment of a number of studies, the report found some documented cases of respiratory illnesses among employees of recycling and composting facilities, but found no reported cases in the non-occupational environment.

When considered together with the proposed controls on the development, the report concluded the health risk to the neighbouring population as a result of exposures to airborne emissions from the development is negligible.

Independent assessment
The assessor commented on the difficulty in establishing a nexus between the impacts from a particular industry and the health of the neighbouring community on a scientifically reliable basis. The assessor comments it is established practice in assessing air pollutants to focus on established pollutant criteria and predicted levels of these in the surrounding community and to adopt a precautionary approach in control of the pollutants.

The assessor concludes that the emission of toxic air pollutants from facilities handling solid waste should not be a problem, provided that the unintentional handling of hazardous or toxic wastes at the facility are avoided.

Department's position
The department accepts the conclusions of the independent assessor and the health risk assessment report in the SEIS. However, the matter of possible contaminants in dust emissions from the development, especially during the construction stage, does not appear to have been directly addressed. This matter is discussed in the following section dealing with site contamination.

Site contamination

Applicant's position
The SEIS indicates (3.8.1 and 6.1) that the land owner is responsible for managing any contaminated material found on site. It also asserted that if contamination is identified after consent is granted it would be appropriately managed to a level acceptable to the EPA. The SEIS also stated that any issues relating to possible health impacts would be mitigated against and addressed in a Construction and Operation Environmental Management Plan.

Independent assessment
The independent assessor identified a possible risk of contaminated dust being emitted if any contaminated land is disturbed during construction. He recommended that the protection of worker and resident health during construction and operation be addressed by a Site Audit Statement from an accredited site auditor, together with the development of an appropriate construction and operation environmental management plan to ensure safety and environmental protection from any contamination.

The assessor recommended that any consent require a condition that the EMP address the issue of potential for emission of contaminated dust, and for controlled disposal of any contaminated material removed during excavation in accordance with relevant guidelines and best practice. He also recommended the condition require an audit of the construction process to ensure that the measures specified in the EMP are implemented.

Department's position
The Department considers the concerns raised by the independent assessor are valid and need to be addressed in any conditions of consent. It also noted the assessor's recommendation regarding a Site Audit Statement. To determine whether an assessment of site contamination is required by the legislation, and if so the nature of the assessment, reference was made to *State Environmental Planning Policy No. 55 – Remediation of Land*.

Under clause 7 of SEPP 55, a consent authority must address whether the contaminant status of land is suitable for the purpose for which a proposed development is to be carried out.

SEPP 55 clause 7(2) states:

> *Before determining an application for consent to carry out development that would involve a change of use on any land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.*

Subclause (4)(b) specifies, inter alia, the following land:

> *land on which the development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out.*

Table 1 of the contaminated land planning guidelines includes a purpose of "railway yards", which is the current use of the land.

Therefore, a decision needs to be made on whether the proposed development represents a "change of use". In this regard, two factors may be considered. Firstly, the Department has decided that the proposed development falls within the definition of "freight transport terminal" in the ALEP 2000. The current use of the land is also a "freight transport terminal". Secondly, the proposed development is designated by virtue of its falling into the category of "waste management facility" in Schedule 3 of the EP&A Regulation 2000. Notwithstanding this categorisation, the fact remains that the proposed activities align themselves with the activities described against "freight transport terminal" in the Auburn LEP.

Therefore the Department's position is that the proposed development does not constitute a change of use for the purposes of SEPP55.

However, to address any doubt about the health effects arising from the proposed activities on the site, particularly from dust emissions during construction, the Department considers that the Applicant should provide information about the status of contamination at the site. The independent assessor recommended a site auditor accredited under the *Contaminated Land Management Act 1997* prepare a Site Audit Statement. The Department considers such an action to be justified given the uncertainties in respect of possible ground water contamination and contaminated dust emissions and the need for relevant mitigation measures to be identified and employed.

RECOMMENDATIONS

- ***Prior to any construction activities at the site, the applicant shall obtain a Site Audit Statement prepared by a site auditor accredited under the Contaminated Land Management Act 1997 to verify existing information on the nature and extent of contamination at the site and to recommend any amelioration measures to address the following:***
  - ***(a) Managing the disturbance of contaminated soil in a manner that protects sub-surface waters from contamination***
  - ***(b) Managing dust during the construction and operational stages in a manner that protects the health of on-site and off-site personnel***
  - ***(c) Any other measures recommended to protect human health and the environment from significant risk of harm.***

6.11 Vermin and vectors

Applicant's position

The EIS addressed this issue in its outline for the proposed operational environmental management plan. The control strategies proposed include daily cleaning of the waste disposal area, use of baits, poisons and chemicals as necessary and mesh screening of ventilation openings.

Independent assessment

The assessor recommended a range of measures for operation, maintenance, housekeeping and cleanup. Those relating to vermin and vectors included:

- Clean up of operating floors – elimination of crevices etc
- Minimising onsite waste storage and handling
- Removing all waste from the tipping areas at the end of the day
- Cleaning areas exposed to waste daily
- Installing bird deterrent measures such as hanging wires and eliminating horizontal surfaces where birds can congregate
- Routine inspection and action for potential vector habitats
- Using commercial vector control specialists

Department's position

Measures for vermin control need to be contained in the environmental management plan. The current measures proposed in the EIS do not address the range of issues suggested by the independent assessor. The Department considers the proposed EMP will need to provide further detail, at least equivalent to the measures suggested by the assessor.

RECOMMENDATIONS

- ***The design of the terminal building and associated waste handling facilities shal incorporate measures to eliminate or minimise the potential for birds, vermin, flies***

and other pests to congregate at the development. Such measures shall include, but not necessarily be limited to, the following:

- ***sealing surfaces to prevent moisture and odour absorption***
- ***elimination of crevices where waste, moisture and vermin can accumulate***
- ***providing screening of the ventilation openings in the building***
- ***eliminating horizontal surfaces where birds can congregate***
- ***minimising horizontal ledges where dust and litter can accumulate***
- ***using fencing and netting to prevent wind-blown litter from escaping***

▪ ***The Environmental Management Plan shall incorporate a Vermin and Pest Control Plan which shall include, but not necessarily be limited to, the following strategies:***

- ***First in/first out waste handling***
- ***Removing all waste from the tipping areas at the end of each day***
- ***Cleaning up all waste tipping and handling areas at the end of each day***
- ***Regular cleaning of catch drains and drainage sumps***
- ***Minimising onsite waste storage and handling***
- ***Installing bird deterrent measures such as hanging wires and eliminating horizontal surfaces where birds can congregate***
- ***Routine inspection and action for potential vector habitats***
- ***Using commercial vector control specialists***
- ***Conducting routine litter patrols to collect trash on site, around the perimeter, on immediately adjacent properties and on approach roads.***

6.12 Heritage

The original proposal described in the EIS involved the removal of eight railway sidings numbered 13 to 19, that were formerly storage sidings dated around 1909. The EIS stated this may contribute to the erosion of the place's significance, and is considered to have a moderate heritage impact.

The amended proposal described in the SEIS involves a relocation and realignment of the terminal building, which would preclude the need to disturb the heritage railway sidings.

The Department is satisfied that the development will not reduce the heritage significance of the site and that the effect of the proposed development on heritage values listed in the ALEP 2000 have been satisfactorily considered.

6.13 Visual

The main visual characteristics of the proposal as amended in the SEIS are the terminal building and a possible noise wall positioned along the south edge of the building. The SIES includes a Visual Assessment Study by Spackman and Mossop, landscape architects and planners. The report indicates that the terminal building is a large structure but comparable to other buildings in the immediate vicinity of the site. The possible noise wall is assessed to be a significant visual element because of its substantial scale. Mitigation measures recommended include:

- screen planting using local native species along the Duck River boundary of the site
- screen planting along the southern boundary of the site adjacent to the main western rail line, to reduce visibility of the proposed building and possible noise wall to train passengers
- the use of light coloured cladding on the terminal building to reduce its prominence in upwards views against the sky

- the use of a dark colour and face patterning on the noise wall
- planting around the weighbridge and site entry areas.

The study concludes that the visual impact of the development is generally low because:
- it is moderate in scale in comparison to other buildings in the area
- it is perceptually compatible with surrounding uses and
- the sight lines into the site from surrounding areas are limited.

Whilst the independent assessor addressed amenity issues, these concentrated mainly on pollution/litter control and possible impacts on property values.

The Department accepts the visual impact assessment in the SEIS, and considers that the visual impacts of the proposed development would be generally low, providing that extensive landscaping including planting of native species, is undertaken in accordance with the recommendations of the Visual Assessment Study in the SEIS.

RECOMMENDATIONS
- ***A landscaping plan incorporates the recommendations in the Visual Assessment Study for landscaping and planting of native species.***

6.14 Hazard and Risk

The EIS addressed a number of operations in its chapter on risk assessment, and outlined the measures to be put in place to minimise the risk of hazardous incidents occurring. The identified operations are:
- Tipping floor operations
- Traffic management
- Fire safety design
- Hazardous liquids
- Hazardous solid waste management
- Chemical management procedures
- Operational breakdowns
- Workplace health and safety.

It also addressed the following incidents and outlined the emergency responses that would apply:
- Emergency response procedures (contained within an Incident Management Plan)
- Fire
- Explosion
- Oil/fuel spill
- Transfer accident.

The range of situations and response measures outlined in the EIS are acceptable to the Department. However, the proposed Incident Response Plan should be incorporated into the Operational EMP to be reviewed by the Department before waste is received at the site.

RECOMMENDATIONS
- ***The Applicant must prepare an Incident Response Plan for incorporation into the Operational EMP.***

6.15 Ecology Issues

Riparian zone and cycleway

Applicant's position
The Applicant, subsequent to the EIS, indicated that it does not now intend to undertake any excavation within 40 metres of the high water mark, having modified the shape of the sedimentation basin to avoid any encroachment on that zone.

Independent assessment
The independent assessor observed that there has been considerable filling about a century or more ago to raise the previous river bank to the present level of the rail marshalling yards, effectively transforming any former Duck River riparian zone. The two rail bridges over the river, immediately upstream of the proposed development, would also compromise any riparian zone. The assessor indicates it would be difficult to accommodate arguments in submissions for reinstating the riparian zone without substantial excavation of the existing fill on which part of the intermodal facility stands and which is possibly contaminated. In summary, the assessor asserts that "return to an ideal condition for Duck River in this stretch does not seem a practical possibility given the developments which have occurred".

The assessor has indicated there is space for a cycleway along the top of the current bank, although at widths of less than 2 metres at some points, and that screening vegetation can be planted between the proposed access road and land set aside for a cycleway.

The assessor reported that the Applicant had indicated a preparedness to contribute to the restoration of the existing riparian zone adjacent to its development, including a financial contribution to any cycleway that would follow the river corridor.

Department's position
The Department agrees with the position taken by the independent assessor, and with placing the following conditions recommended by the assessor in any consent.

RECOMMENDATIONS
- ***The Applicant enter take all reasonable steps to enter into an agreement with Waterways Authority and Auburn Council for the rehabilitation of a section of the riparian zone reasonably corresponding to their usage of the railway yard site***
- ***The Applicant take all reasonable steps to enter into an agreement with Auburn Council to facilitate the development of a cycleway along the top level of the Duck River bank adjacent to its operational site.***

Rare and endangered species

Applicant's position
The provisions of the Threatened Species Conservation Act 1995 require that if a threatened species is identified, the proposal should be assessed under section 5A of the EP&A Act to determine whether a Species Impact Statement (SIS) is required.

The EIS indicated that no threatened species were identified during the flora and fauna assessment undertaken at the transfer terminal site or along the southern bank of Duck River.

Independent assessment
The independent assessor indicated that the position in the EIS or SEIS did not appear to have been challenged by any authority.

Department's position
The Department accepts the position taken in the EIS that an SIS is not required for the proposed development.

6.16 Socio-economic impacts

Employment and economic activity

Applicant's position
The EIS states the development would create employment opportunities within the local and regional area. Direct employment opportunities comprise a construction workforce of 20 to 30 persons for a duration of five months and an operational workforce of five to eight people per shift based on a three-shift 24-hour operation.

The EIS identifies areas where additional job opportunities would be created:
- Servicing and repair of machinery and equipment
- Environmental monitoring and inspection of pollution control equipment
- Rail personnel for transporting the waste to Woodlawn

Department's position
The Department acknowledges the employment opportunities identified in the EIS, and concludes the development would result in moderate employment opportunities and economic flow-on effects in the local and regional area.

Impacts on amenity and property values

Applicant's position
The EIS did not address property values directly, however commented that the proposed development would not have any significant impact on the amenity of the local area largely due to the industrial nature of the surrounding areas. The EIS also predicted minimal impacts on surrounding residents from the proposed development.

Independent assessment
The independent assessor identified the impacts on property values a possible measure of amenity impacts from development that generate an adverse perception in local communities. Two US studies were cited which assessed impacts on property values from the establishment of landfills and waste disposal facilities. However, the independent assessor found that it would be invalid to attempt an extrapolation of findings from landfills to MSW transfer stations, as MSW transfer stations would have lower impacts because:
- Transfer stations are much smaller installations than landfills
- Transfer stations generate less pollution
- Pollution generated from transfer stations can be better contained and controlled
- Transfer stations are usually sited in areas where allowance has been made in the landuse zoning process for some impact.

The independent assessor concluded that whilst a MSW transfer station could be expected more than a normal impact on amenity compared to other types of industry, any such effect would be indeterminable based on current information.

Department's position
The Department acknowledges the issues raised in submissions and by the independent assessor concerning impacts of the development on the amenity of the local area. The stringent conditions contained in the draft instrument, particularly in respect of odour control and control of pests and vermin, are considered to substantially address the amenity impacts that may be associated with the development. The Department also considers the development of master plan for the Clyde Marshalling Yards by Auburn Council would complement the Auburn LEP 2000 and guide future development of the yards in a manner that avoids the clustering of inappropriate industries.

6.17 Operational issues

Maintenance, housekeeping and cleanup

The EIS/SEIS include a range of housekeeping activities in the proposed operational environmental management plan. The independent assessor recommended a wider range of housekeeping activities, which have been accepted by the Department. The activities have been incorporated into to conditions requiring Environmental Management Plans to be prepared.

Community Consultative Committee

Correspondence received from the Applicant following exhibition of the SEIS, indicated it would welcome the opportunity for the local community to supervise its environmental standards and operations through a community consultative committee. The Applicant also indicated it was examining the feasibility of other suggestions raised in community information sessions, including opportunities for sponsorship of social, cultural or sporting events and organisations.

The Department supports the establishment of a Community Consultative Committee. Such committees need to function in a constructive and open manner in order to be effective.

The Department is recommending a condition requiring the Applicant to establish a Community Consultative Committee with the selection of representatives and the appointment of a Chairperson to be agreed by the Director-General. The Applicant will need to consult with the stakeholders in setting up the Committee, including Auburn Council and Parramatta City Council. Representation on the Committee will need to include four community representatives together with a representative from each Council and two from the Applicant. Relevant government agencies should be invited to attend meetings as required.

To facilitate an open and transparent process and enable the Committee may make comments and recommendations about the implementation of EMPs and environmental controls, the Applicant will be required to ensure the Committee has access to the construction and operational stage EMPs and to other plans and information as appropriate.

The Applicant will also need to provide facilities for meetings and provide reasonable access to the site for inspections by the Committee.

RECOMMENDATIONS

- ***The Applicant shall establish a Community Consultative Committee and take all reasonable steps to ensure that the first meeting is held prior to commencement of construction. Selection of representatives shall be agreed by the Director-General and the appointment of an independent Chairperson shall be to the satisfaction of the Director-General in consultation with the Applicant, Parramatta City Council and Auburn Council. The Committee shall include two representatives from the Applicant (including the Environmental Officer), four community representatives and a representative from each Council. Representatives from relevant government agencies (including PlanningNSW) may be invited to attend meetings of the Committee as required. The Committee may make comments and recommendations about the implementation of the development and draft management plans, environmental plans and/or studies. The Applicant shall ensure that the Committee has access to the necessary plans and/or studies for such purposes. The Applicant shall consider the recommendations and comments of the Committee and provide a response to the Committee and the Director-General.***
- ***The Applicant shall, at its own expense:***
  - ***(a) provide appropriate facilities for meetings of the Committee;***
  - ***(b) nominate a representative to attend all meetings of the Committee;***
  - ***(c) provide to the Committee regular information on the progress of the work and monitoring results;***
  - ***(d) promptly provide to the Committee such other information as the Chairperson of the Committee may reasonably request concerning the environmental performance of the development; and***
  - ***(e) provide reasonable access for site inspections by the Committee.***
- ***The Applicant shall establish a trust fund to be managed by the Chairperson of the Committee to facilitate functioning of the Committee, and pay $2000 per annum to the fund for the duration of the development. The payment shall be indexed according to the Consumer Price Index (CPI) at the time of payment. The first payment shall be made by the date of the first Committee meeting. The Applicant shall also contribute reasonable funds for payment of the independent Chairperson, to the satisfaction of the Director-General.***

Community enhancement projects

The Applicant has raised the possibility of providing support to community projects or activities, such as:

- Assisting with the revegetation of the riparian zone and construction of a cycleway, and
- Providing financial or other assistance to local social, cultural or sporting activities.

In addition, the IMROC Parramatta Road Project has advised the Department that the Duck River Cycleway, landscaping of the development, restoration of the Duck River and the historical significance of the Marshalling Yards are issues that could be addressed in the proposed development.

The Department understands Auburn Council has been involved in the development of a master plan for the Clyde Marshalling Yards, in consultation with occupiers of the Yards. Should the proposed development proceed, the Department considers the Applicant, as an occupier of the Yards should contribute to a degree consistent with the nature and scale of its activities, to the development of the master plan as a specified community enhancement project.

In addition, the Applicant could provide appropriate levels of contributions towards other community projects and activities, in a manner that may mitigate any cumulative, social or community impacts as a result of the proposed development.

Accordingly, the following condition is recommended.

RECOMMENDATIONS

- ***Prior to the commencement of construction or within such other time as agreed by the Director-General, the Applicant shall take all reasonable steps to negotiate an agreed outcome with Parramatta City Council, Auburn Council, Waterways Authority, local community groups and other relevant bodies, for an appropriate level of contribution (financial or in-kind), to improve the amenity and livability of the local area.***

  The negotiations shall address, but not necessarily be limited to, the following issues:
  (a) the participation of the Applicant in the development of a master plan of the Clyde Marshalling Yards
  (b) the participation of the Applicant in the Parramatta Road Project administered by IMROC
  (c) contributions towards local community projects and activities.

  Should such a negotiated outcome not be reached, the Applicant shall abide with the reasonable requirements of the Director-General concerning community enhancement contribution in light of an independent investigation to establish community enhancement need as a result of the cumulative impact of the proposed development. The investigation is to be carried out by an independent person(s) to be appointed by the Director-General in consultation with the Applicant, Parramatta City Council and Auburn Council, and paid for by the Applicant. The independent investigation is to be based on the principles of nexus and reasonableness as to relevant cumulative social and/or community impacts.

6.18 Cumulative impacts

Applicant's position
The EIS reported on an assessment of cumulative impacts of the proposed development, and concluded there was low potential for detrimental regional impacts.

Independent Assessment
The independent assessor listed three matters of concern in the area of cumulative impacts.

(a) Rail and loading operations within Clyde Marshalling Yards
The operations carried out Pacific National after receipt of the packed containers was identified by the independent assessor as a possible cumulative impact, especially in relation to noise. However, as this type of activity is characteristic of the container loading operations within the Yards, the independent assessor concluded that this cumulative impact would be unlikely to impede granting consent.

(b) Traffic impacts on Parramatta Road
The independent assessor commented that the cumulative impact of traffic on Parramatta Road and other roads in the area in light of planned and foreshadowed developments (master plan) in the Parramatta Road corridor had not been adequately considered in the EIS and appears to be a significant impediment to granting consent.

(c) Potential for clustering or expansion of waste transfer and processing facilities
The independent assessor's consultations with Auburn Council, interest groups and individuals in the local area revealed this to be an issue of significant local concern. Many submissions to the Department also raised this concern. The concern is that the establishment of a waste transfer terminal could be the first step in the Marshalling Yards becoming a centre for waste industries.

Department's position
(a) Rail and loading operations within Clyde Marshalling Yards
Whilst the activities conducted by Pacific National associated with the packed containers after they have left the Collex operation are outside the scope of this development, the Department accepts that they represent a possible cumulative impact arising from the proposed development. In addition, the movement of a freight train each night between the Clyde Marshalling Yards and the Crisps Creek Intermodal may also represent a cumulative impact.

The activities of Pacific National at the Clyde Marshalling Yards are regulated by an environment protection licence under the *Protection of the Environment Operations Act 1997*, administered by the EPA. The licence places no restrictions on operating hours or noise emissions. The Department has taken into consideration the statement in the EIS that some train handling activities would be transferred from the site if the development proceeds and the expectation that there would be a consequent overall reduction in train movement at the Yard. Overall, the Department believes the operations associated with the loading and unloading of containers and the shunting and movement of rail cars would be a typical operation at rail marshalling yards, and unlikely to create significant cumulative impacts.

(b) Traffic impacts on Parramatta Road
The Department has assessed the traffic impacts associated with the development, including the cumulative impacts associated with planned future developments. The Department's conclusion is the modest increase in traffic associated with the development, together with the provision of a deceleration lane for vehicles entering the development, is unlikely to have a significant impact on future traffic flows on Parramatta Road.

(c) Potential for clustering or expansion of waste transfer and processing facilities
The Department acknowledges the significant concerns raised in submissions about this issue. The Auburn LEP 2000 provides a planning framework for the Clyde Marshalling Yards, however as discussed earlier in this report, the establishment of a master plan for the site would assist in ensuring future development of the Yards accords with appropriate planning outcomes. The Department acknowledges the view of the independent assessor on strategic planning for solid waste management and supports the development of a waste planning framework coordinated by Resource NSW for finalisation in October 2002.

6.19 Environmental Management Plans

The Department considered the issues proposed in the EIS and SEIS for inclusion in EMPs for both the construction and operational stages. The Department considers that the EMPs will be a useful tool to environment protection during this development, especially with a community consultative committee which would have the opportunity to review the EMPs and review the performance of the development against the EMPs. For this reason, the Department wishes to review the construction stage EMP prior to construction commencing, and approve the operation stage EMP before uncontainerised waste is received onto the site.

The EMPs will need to be provided to the members of the Community Consultative Committee and made available to the public on request to the Applicant.

Conditions will be provided requiring the following matters to be addressed in the EMPs.

Construction Stage

The construction stage EMP is to address the following issues:

- Soil and Water Management Plan
- Construction Noise Management Plan
- Dust Management Plan
- Construction Waste Management Plan
- Site Contamination Management Plan

Operational Stage

The operational stage EMP is to address the following issues:

- Waste Management Plan
- Odour Management Plan
- Dust Management Plan
- Traffic Management Plan (includes monitoring and enforcement of left turn only)
- Vermin and Pest Control Plan (includes housekeeping measures)
- Stormwater Management Plan
- Site Contamination Management Plan.

6.20 Annual Environmental Management Report

The Department considers an Annual Environmental Management Report should include a report on the annual environmental monitoring undertaken by the Applicant. Such annual monitoring should include the monitoring required by any EPL for the development. In addition, the Annual Environmental Management Report should:

- identify all the standards, performance measures, and statutory requirements the development is required to comply with, and
- review the environmental performance of the development to determine whether it is complying with the standards, performance measures, and statutory requirements.

6.21 Independent Environmental Audit

The Department requires a high level of certainty about the environmental performance of the development. In addition, it requires verification of any monitoring that has been carried out and identification of areas of the environmental management of the development that need special attention.

An annual independent environmental audit is recommended as a condition of consent to fulfil the above outcomes.

6.22 Contractual Matters

The EIS and SEIS make it clear that the purpose of the proposed development is to satisfy consent conditions for the Woodlawn Bioreactor which require waste to be sourced from the Sydney region and be transported from Sydney by rail. The proposed development therefore provides a linkage between the source of the waste and its landfill disposal at Woodlawn.

Whilst any linkage with Woodlawn may not be a relevant consideration in determining the Clyde DA under section 79(C) of the Act, the Department is cognisant of the linkage drawn between the two developments by the Applicant. Furthermore, a number of submissions on the proposed development raised as a concern, the validity or otherwise of a contract between the Applicant and the former Northern Sydney Waste Board for the supply of waste for disposal at Woodlawn. Given the above linkage identified by the Applicant, the Department decided to review these contractual matters in parallel with its assessment of the proposed development.

In this regard, the Department notes the deferred commencement condition in the Woodlawn consent, which states:

5. *In accordance with section 80(3) of the EP&A Act, this consent shall not operate until the Applicant satisfies the Minister that it has been awarded a valid contract for the long-term supply of waste, sourced from Sydney, at a rate of at least 150,000 tonnes per annum.*

With regard to the above condition, Collex provided the Department with two contracts addressing the supply of waste from the Sydney Region. The Department obtained legal advice on whether either or both of the contracts would satisfy Condition 2 of the Woodlawn consent. The advice indicated it is difficult to assess the "validity" of the contracts, as such an assessment would involve knowledge of facts which do not appear from the face of the documents, and in any case the contracts can be terminated by written agreement of the parties. However the Department nevertheless needs to make a reasonable assessment on the validity of the contracts based on information available to it. In this regard the Department sought additional information from the Applicant in support of the Applicant's view that the contracts are valid, in addition to an independent legal opinion.

Based on the advice obtained above, the Department is satisfied to the extent that it can reasonably assess, that the Applicant has a valid agreement in place for the supply of waste from Sydney for disposal at the Woodlawn Bioreactor.

6.23 Requests for Commission of Inquiry

Two submissions from businesses operating in the Auburn area requested that the Minister call a Commission of Inquiry. The submissions were unclear on the reasons for the requests.

The Department is satisfied that the key environmental issues have been addressed in the EIS and SEIS. Further, the EPA as an integrated development approval body indicated it was prepared to issue an environment protection licence for the construction and operation of proposed development under the *Protection of the Environment Operations Act 1997*, by issuing its general terms of approval.

The Department has considered the likely environmental impacts of the proposal and recommended conditions of consent addressing performance criteria, environmental management plans, environmental monitoring and environmental auditing, which would apply to the construction and operational stages of the development if approved.

The Department is satisfied there are no outstanding environmental impact matters that warrant the establishment of an Inquiry or require further investigation prior to determination of the application.

7. SECTION 79C CONSIDERATION

Section 79C of the *Environmental Planning and Assessment Act 1979* sets out matters that a consent authority must take into consideration when it determines a development application. The Department has assessed the development application in the context of Section 79C of the Act, having regard to the identified heads of consideration. This consideration is provided in Appendix A. The Department is satisfied that the merits of the proposed development warrant approval subject to the recommended instrument of consent.

8. CONCLUSIONS

The Department considers that the proposed development is consistent with State and regional planning objectives. The development application accords with the objectives and provisions of regional and local planning instruments.

The Department considers that all key environmental concerns have been adequately addressed. It is recommended that the development application be approved subject to the conditions of the recommended instrument of consent. Conditions have been formulated to manage, monitor and mitigate potential environmental impacts.

Assessment Report prepared by: John Sparkes

APPENDIX A

Section 79C Considerations

(1) Matters for consideration - general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

- **(i) any environmental planning instrument, and**
- **(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and**
- **(iii) any development control plan, and the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates**

The Department's consideration of these matters is contained in Section 3.1 through to Section 3.8 of this Report. The Department is satisfied that all relevant planning issues have been addressed and considered in the determination of the development application. The Department concludes that the proposal is consistent with the aims, objectives and provisions of all the applicable planning instruments, plans and policies.

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

The likely environmental impacts of the proposal are considered and assessed in Section 5 of the Report. The Department has considered all the environmental, social and economic impacts of the proposal and concludes that the proposed development can be managed, subject to the imposition of the recommended conditions of consent. The recommended conditions of consent address performance criteria, environmental management plans, environmental monitoring and environmental auditing, which would apply to the construction and operational stages of the development if approved.

(c) the suitability of the site for the development

The suitability of the site for the development is considered in Section 3 and Section 5 of this Report. The proposal is consistent with land use objectives; the potential impacts of the proposal can be effectively managed and a number of alternatives have been considered yet rejected. The Department concludes on the basis of this assessment that the site is suitable for the proposal.

(d) any submissions made in accordance with this Act or the regulations

A detailed discussion of the issues raised in submissions is contained in Section 4.3 and referenced in Section 5 of this Report, including consideration of submissions from government agencies, councils, elected representatives, business and private individuals. The issues raised in the submissions have been addressed in this assessment of the proposal and/or appropriate conditions of consent have been incorporated to manage these concerns and potential impacts.

(e) the public interest

The public interest of the proposal is considered in Section 1 through to Section 5 of this Report. The Department considers that the proposed development provides a sustainable option for the transfer of waste from Sydney region for disposal at the Woodlawn Bioreactor, and represents a key link in the Woodlawn waste disposal chain. Furthermore, it is considered that the proposal is consistent with State and regional planning objectives relating to environmental management, sustainable economic development and employment generation. The Department therefore considers that the proposal is in the public interest and all environmental, economic and social issues have been addressed in the assessment of the proposal.

APPENDIX B

Department's Assessment of Alternative Options

The Department's assessment of alternate options for containerisation and transport of northern Sydney MSW to a rail head, commenced with identifying the range of logistical alternatives. This analysis identified eight potential alternatives, each of which is listed below with a discussion of possible options under each alternative; whether the possible options had been assessed in the SEIS and the quality of any such assessment; and the Department's position on each alternative.

1. Use of an existing waste transfer station in the northern Sydney region, co-located with an existing railhead

Possible options
The existing waste transfer stations in the northern Sydney region are located at Belrose, Artarmon and Ryde, operated by Waste Service NSW. None is located adjacent to a rail line or siding.

Applicant's position
The EIS/SEIS did not address this option.

Department's position
Theoretically, this would be a desirable option for directing the waste from northern Sydney to Woodlawn, because garbage trucks could take waste from the kerbside to the transfer station where the waste could be containerised and loaded directly onto trains. The omission of this option from the SEIS is justified because no rail lines pass by existing transfer stations in northern Sydney.

2. Establishment of a new waste transfer station in northern Sydney which would be located adjacent to an existing railhead

Possible options
The Hornsby rail siding between Hornsby and Asquith stations is the only known site where the establishment of a waste transfer station could be a possibility.

Applicant's position
The SEIS ruled out the Hornsby site because of limited space and poor vehicular access. The SEIS indicated that there would be difficulty getting trucks onto the restricted areas available as well as providing the necessary turning circles for semi trailers but did not provide data to substantiate any of its arguments against this option.

Department's position
This could be a desirable option because garbage trucks could take waste from the kerbside directly to the transfer station where the waste could be containerised and loaded onto trains. The EIS (1.3.1) indicates that the Clyde site where Collex proposes to operate its waste transfer terminal and gatehouse/weighbridge is approximately 0.94ha. Whilst there appears to be limited space between the rail tracks and adjacent streets just north of Hornsby station, the SEIS does not attempt to fit a footprint of a possible configuration on the site. There are flaws in the assertions made in the SEIS that there would be difficulty getting trucks onto the restricted areas available as well as providing the necessary turning circles for semi

trailers. There may be no need to have turning circles if the arrangement is configured as a drive-through building with separate left-turn entry and exit points from the street. Also there should be little need for semi-trailers to use the site during the operational phase because waste would arrive at the facility in municipal garbage trucks and leave via trains. Also, the SEIS did not address the rail siding area further north towards Asquith station. The Department therefore considers the SEIS did not adequately address the Hornsby-Asquith area.

3. Containerisation of waste at an existing waste transfer station in northern Sydney with road transport of packed containers to an existing railhead

Possible options
Any combination of the following transfer stations and railheads would be possible:
Waste transfer stations: Belrose; Artarmon; and Ryde
Railheads: Hornsby, Camellia, Clyde, Chullora, Enfield, Eveleigh, Yennora, St Peters, Banksmeadow

Applicant's position
The SEIS reviewed the above three transfer stations of Artarmon, Ryde and Belrose, but ruled out all three for reasons including

- no access to rail siding
- no agreement in place with the owner for the proposed activity.

The SEIS did not expressly consider the combination of a waste containerisation operation at an existing northern Sydney transfer station with road transport of containers to an existing railhead at Clyde or any other location. At the time of preparation of the EIS and SEIS, Waste Service is understood to have refused to negotiate use of its transfer stations by Collex, which would have effectively ruled out any further consideration of this alternative strategy.

Department's position
This is the option that appears to have been addressed in the contract between Collex and the Northern Sydney Waste Board, by utilising existing Waste Service transfer station(s) (suitably modified to pack waste into shipping containers) with road transport of the loaded containers to the Clyde site for loading onto a train. This option has major benefits over the proposed option. It would significantly reduce the truck movements from northern Sydney to the proposed Clyde terminal (or any other terminal remote from the northern Sydney area), since the waste would be containerised locally and transported to Clyde in larger trucks. It would also obviate the need for a waste unloading and containerising operation at Clyde.

For this option to become viable, an agreement would need to be in place with Waste Service for the use of one or more of its northern Sydney transfer stations. At the time of the preparation of the EIS and SEIS, the Department understood Waste Service had refused to negotiate use of its transfer stations by Collex. The Department has since become aware that Waste Service has subsequently revised its policy and now appears to permit competitors' access to its transfer stations under specified circumstances. However the development application has not been modified by the Applicant as a result of the new Waste Service policy. The significant environmental advantages of this option over the proposed development make this a favourable option, which the Department considers should be pursued in preference to the current proposal.

4. *Establishment of a new waste transfer station in northern Sydney to containerise waste for road transport to an existing remote railhead*

Possible options
Any number of greenfield sites could be considered for a new waste transfer station, particularly sites such as closed landfills or vacant industrial land. The Porters Creek site, a former landfill owned by Ryde Council, adjacent to the Ryde transfer station, is a possible site for a new transfer station. Any existing railhead could be considered, as listed in alternative 3 above, that is: Hornsby, Camellia, Clyde, Chullora, Enfield, Eveleigh, Yennora, St Peters or Banksmeadow.

Applicant's position
No new waste transfer station site in northern Sydney was put forward in the SEIS.

Department's position
Justification for a new waste transfer station in northern Sydney could be questionable given the current infrastructure available, unless the new transfer station was co-located with a railhead (as in Alternative 2). It is therefore considered reasonable that the SEIS did not consider this option.

5. *Road transport of (uncontainerised) waste to an existing waste transfer station outside the northern Sydney region, co-located with an existing railhead*

Possible options
In the Chullora/Greenacre area there is an existing waste transfer station operated by Waste Service, adjacent to a rail siding from the Chullora Railway Workshops. Collex also operates a waste transfer station adjacent to the Waste Service facility.

Applicant's position
The SEIS provided a consideration of three sites in this area, including the existing Collex transfer station on land leased from National Rail. The SEIS ruled out this option on the basis of "significantly more road transport of waste" and the unlikelihood of the current owner agreeing to change the existing operations.

Department's position
The assessment of this option by the SEIS appeared to be inadequate. The SEIS ruled out the Chullora site for the following reasons:

- It would require significantly more road transport of waste, and
- Collex does not have an agreement with the owners of the existing waste management facility for the proposed activities.

Collex negotiated an agreement with FreightCorp for the establishment of a waste transfer terminal at Clyde. The Department sees no reason why Collex could not negotiate agreement with other landowners if necessary.

Whilst the use of an existing transfer station at Chullora might be seen to be preferable to providing a new transfer station at Clyde, the additional distance from (say) North Ryde to Chullora is about 5km (10km round trip) over North Ryde to Clyde. It is considered that transporting uncontainerised waste the additional distance from northern Sydney to Chullora would be an excessive use of municipal garbage trucks, and the SEIS is justified in ruling out this option notwithstanding its less than adequate assessment of the option.

6. Road transport of waste to an existing waste transfer station outside northern Sydney, for containerisation and further road transport to an to existing railhead

Possible Options
There are a number of existing waste transfer stations outside northern Sydney, including four operated by Waste Service (at Seven Hills, Chullora, Auburn, and Rockdale) and the Greenacre transfer station operated by Collex. Railheads are located a several locations as listed in Alternative 3.

Applicant's position
The use of the Auburn waste transfer station, operated by Waste Service, was put forward as an option for this alternative, but was rejected on grounds including lack of access to a rail siding and the lack of agreement with the land owner (Waste Service) for the proposed activity.

Department's position
As discussed earlier, at the time of the preparation of the EIS and SEIS, Waste Service is believed to have refused to negotiate the use of its facilities by Collex. In addition, if a transfer station would need to be used outside northern Sydney, it is considered important that it be co-located with a railhead to avoid an additional road transport step. The SEIS is considered justified in ruling out this option.

7. Establishment of a new waste transfer station outside northern Sydney, co-located with an existing railhead

Possible options
This is the option proposed for Clyde. Other possible railheads that could be considered are listed in Alternative 3.

Applicant's position
There are, however a number of other railheads that were considered by the SEIS, being Chullora, Camellia and Enfield. Chullora is discussed in Alternative 5 above. The Camellia site was ruled out for a number of reasons including traffic access problems, land contamination and claimed unavailability of a rail siding.

Department's position
The reasons cited in the SEIS for ruling out these sites are not well demonstrated, it is considered unnecessary to require more detailed consideration of this option. The Camellia site in particular was ruled out in the SEIS for reasons which on the surface appear to be comparable to difficulties associated with the Clyde site. For example traffic congestion on James Ruse Drive was raised as a difficulty, but not substantiated. It may well be that traffic congestion associated with a Camellia location is no more difficult than the traffic issues with the Clyde proposal. The SEIS also appears to contradict itself by saying there is no available rail siding and also commenting that there would be traffic congestion issues with the train crossing four level crossings including Parramatta Road. In fact there are rail sidings in the Camellia area, and maps appear to indicate only two rail level crossings would be traversed. With trains operating late at night and in the early morning hours, traffic congestion could rarely be expected from the use of level crossings at these times. The SEIS also lists land contamination as a difficulty with a Camellia option, however the Clyde site is also reported to have contaminated land which would need to be appropriately managed if the development proceeds.

The Department is of the opinion that the Camellia option in particular has not been adequately addressed by the SEIS, and may not suffer the same difficulties as the Clyde site because of its remoteness from residential areas and ease of access via James Ruse Drive and Grand Avenue.

8. Establish a new waste transfer station outside northern Sydney, with road transport of containerised waste to existing railhead outside northern Sydney

Possible Options
None known

Applicant's position
No options were put forward for this alternative.

Department's position
Justification for a new waste transfer station outside northern Sydney could be highly questionable given the current transfer station infrastructure available within the Sydney metropolitan area, unless the new transfer station was co-located with a railhead. It is therefore considered reasonable that the SEIS did not consider this option.

APPENDIX C

Report on the Independent Assessment