

REPORT ON THE ASSESSMENT OF DEVELOPMENT APPLICATION NO. DA-345-7-2003-i PURSUANT TO SECTION 80 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

PROPOSAL BY METALCORP RECYCLING TO CONSTRUCT AND OPERATE A METAL SHREDDER ON VACANT LAND (LOTS 29-31 DP803794 AND LOT 1 DP874490) AT SPARKE STREET, HEXHAM IN THE NEWCASTLE LOCAL GOVERNMENT AREA.

Department of Infrastructure, Planning and Natural Resources

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1. INTRODUCTION

On the 25 July 2003, the Department received a development application from Metalcorp Recycling Pty Ltd (the Applicant) to construct and operate a metal recycling facility at Lots 29-31 DP803794 and Lot 1 DP 874409 Sparke Street, Hexham in the Newcastle local government area (refer Figure 1).

The Applicant currently operates an existing metal recycling facility on Lot 1 DP874409, which processes approximately 60,000 tonnes per annum. Under the proposed development, the Applicant intends to decommission the existing shredder in association with the Applicant's operations in Chipping Norton and construct a new shredder on Lots 29-30 DP803794, with ancillary operations to be conducted on Lot 1 DP874409.

The proposed development would enable the Applicant to process up to 300,000 tonnes per annum and includes the following:

- installation of a heavy duty scrap metal shredder and associated infrastructure;
- construction of an open drain along the western boundary of the existing shredder;
- provision of utilities to the site;
- improving access to the site via the intersection between Sparke Street and the Pacific Highway;
- upgrading the Sparke Street and Pacific Highway intersection;
- landscaping the site;
- operating 24 hours, seven days a week with shredding activities conducted between 7 am and 10 pm Monday to Sunday; and
- use of the existing site for heavy metal melting (24,000 t/annum), car parking, storage and office/amenities purposes.

The proposed development involves a capital investment of \$13 million and would create six full time positions.

Under the *Newcastle Local Environmental Plan 1987*, which was in force at the time the subject development application was lodged, the proposed development was classified as prohibited development. The Applicant requested that the Minister for Infrastructure, Planning and Natural Resources, determine the development application (DA) as prohibited development under section 89(1) of the *Environmental Planning and Assessment Act 1979* (the Act). In considering this request, the Minister had regard to the public interest and the State and regional significance of the proposal, and directed on 23 July 2003 that the DA be forwarded to the Minister for his determination under section 89 of the Act. Consequently, the proposal is classified as State significant development under section 76A(7)(d) of the Act and the Minister is the consent authority for the DA. *Newcastle Local Environmental Plan 2003* has subsequently be made (repealing and replacing *Newcastle Local Environmental Plan 1987*), under which the proposed development is permissible with consent.

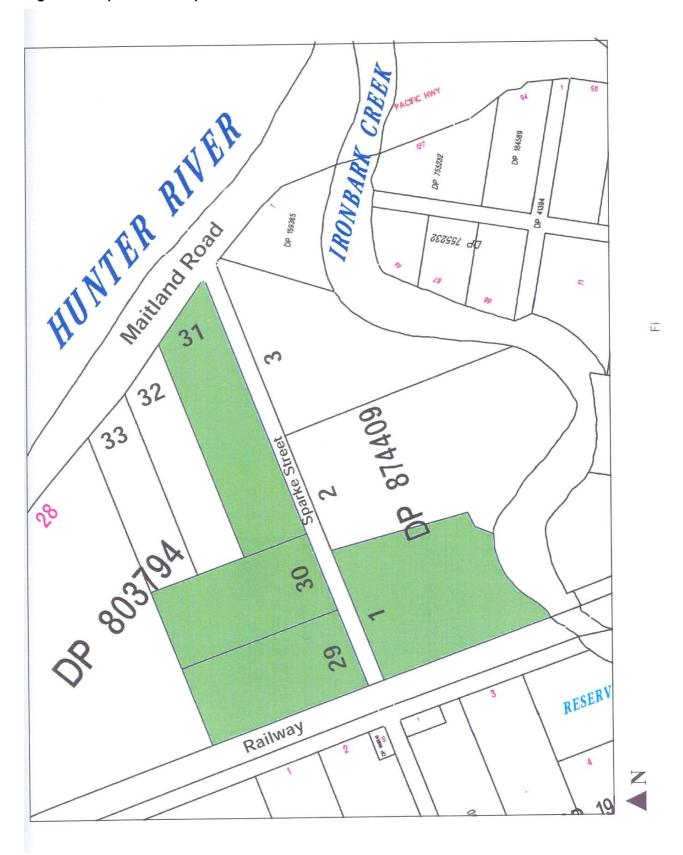
This report represents the Department's assessment of the proposed development, in accordance with the *Environmental Planning and Assessment Act 1979*. The Department recommends approval of the development application subject to a number of conditions.

2. SITE CONTEXT

2.1 Site Location

The proposed site is located approximately eleven kilometres north-west of Newcastle at Lots 29-31 DP803794 and Lot 1 DP874409 Sparke Street, Hexham, in the Newcastle local government area, as shown in Figure 1.

Figure 1: Proposed Development Site



2.2 Site Description

The proposed development site comprises of four rectangular blocks with a total area of approximately ten hectares. Sparke Street divides the proposed development site into two distinct sections, with Lots 29-31 DP803794 located north of Sparke Street and Lot 1 DP874409 to the south.

Currently, the Applicant operates a metal shredding facility on Lot 1 DP874409 which consists of a metal shredder, administration building, weighbridge, stockpile storage and carparking. This shredder would eventually be decommissioned and removed although the associated infrastructure would be retained to support the proposed new development.

Lots 29-31 DP803794, located north to the existing facility, are currently vacant land which are occasionally used for the storage of equipment associated with the Applicant's current operations. The site has been extensively disturbed in the past with some fill activities conducted at the site and is covered by opportunistic weed species and native rush species. A separate DA was made to Council to fill Lots 29 and 30 to above the 1 in 20 year flood level ant to construct a carpark. This DA has been approved by Council, and the remediation of the site is currently underway. Upon the completion of these works, Lot 29-30 will consist of a sealed carpark with associated landscaping along the lot boundaries and a separate stormwater storage system which will discharge into Ironbark Creek to the south.

2.3 Site History

In May 2003, Metalcorp lodged a development application (DA) with Newcastle City Council (Council) for a sealed car park on Lot 29 and Lot 30 of DP 803794, Sparke Street, Hexham. This DA was approved by Council on 10 October 2003, subject to a number of conditions. As this site would be filled and sealed under that consent, the key environmental issues arising as a result of these activities, such as impacts in relation to flooding, flora and fauna, archaeology, soils and contamination and geology, have been addressed in Council's assessment of the DA.

2.4 Surrounding Land Uses

Land surrounding the proposed development is predominantly vacant, with the majority of the area protected for environmental purposes (the Hexham Swamp and SEPP 14 wetlands) or restricted due to past land zonings, as shown in Figure 2.

Directly adjoining the site is Ironbark Creek to the south, the Main Northern Railway Line and Hexham Swamp to the west, vacant land to the north and the Pacific Highway and the Hunter River to the east.

Beyond the site boundaries, development surrounding the proposed site consists of a mix of residential, commercial, industrial and environmental protection land uses. This includes the Hunter Estuary Wetlands (Kooragang Island) which is listed under *State Environmental Planning Policy No. 14 – Coastal Wetland* and a RAMSAR listed wetland. The closest residences to the proposed facility are located approximately 375m north of the site along Shamrock Street, Hexham. The St Joseph's Retirement Village and affiliated developments are located approximately one kilometre to the south of the proposed site.

Main Northern Railway Ε 200 400 300 200 100 10 Z

Figure 2: Proposed Development - Land Use and Regional Context

3. DEVELOPMENT PROPOSAL

3.1 Outline of the Proposal

The proposed development involves the construction and operation of a metal recycling facility at Sparke Street, Hexham, in the Newcastle local government area. The proposed facility would enable the Applicant to process 300,000 tonnes of scrap metal per annum and would include:

- installation of a heavy duty scrap metal shredder and associated infrastructure;
- construction of an open drain along the western boundary of the existing shredder;
- provision of the utilities to the site;
- improving access to the site via the intersection between Sparke Street and the Pacific Highway;
- landscaping the site; and
- use of the existing site for heavy metal melting (24,000 t/annum), car parking, storage and office/amenities purposes.

The proposed shredder plant and associated product, residue and raw scrap metal stockpiles would be located on Lots 29-30 DP803794. The proposed shredder would be approximately 20 metres high, with the highest metal stockpile at approximately 10-12 metres. The proposed operations on the site would be supported by the facilities on Lot 1 DP874409, located to the south. This includes the operation of the existing weighbridge and the coordination of heavy vehicle movements between the two sites.

The Applicant is proposing to operate the proposed facility 24 hours, seven days a week, with the actual shredder operations conducted between 7am and 10pm Monday to Sunday. Administration, maintenance and deliveries would continue outside these hours (refer to Table 1).

Table 1:	Proposed O	perating Hours	s and Asso	ciated Activities

Period	Hours of Operation	Activities	
	7am – 6pm, Monday to Friday	All plant/equipment operating on the existing	
Day	8am – 6pm Sundays and Public Holidays	and new site concurrently.	
Evening	6pm – 10pm, seven days a week	Only the shredder, excavator and truck deliveries operating on the new site. No activities on the existing site.	
Night	6pm – 7am, Monday to Saturday	Only excavator and truck deliveries on the new site.	
	6pm – 8am, Sundays and Public Holidays	No activities on the existing site.	

Once completed, the proposed facility would have the capacity to produce up to 240,000 tonnes per annum of processed scrap metal, with the remainder scrap residue. This would enable the Applicant to replace and decommission its existing operations at Hexham (located on Lot 1 DP874490) and at Chipping Norton, Sydney.

The proposed development involves a capital investment of \$13 million and would generate an additional six fulltime operational jobs and 70 construction jobs at the site.

3.2 Justification for the Proposal

The Applicant states that the proposed development is required in order to enable it to consolidate and expand its NSW operations while providing for the decommissioning of its existing operations at Hexham and at Chipping Norton, Sydney. In particular, the Applicant states that the proposed development is necessary in order for the Applicant to decommission its shredder at Chipping Norton which has been plagued by amenity issues

due to recent residential encroachment. The Applicant also states that the proposed development would also offer several other benefits as it would:

- provide for environmental and economic benefits due to efficiencies in scale;
- would create six additional full-time positions in the Hunter Region; and
- would enable the continuation of the Applicant's operations in Newcastle, which are critical for several steel industries in the Hunter Region.

4. STATUTORY PLANNING FRAMEWORK

The Department has reviewed the proposed development with regard to the various State, regional and local statutory planning provisions that apply to the proposal as required by section 79C of the *Environmental Planning and Assessment Act 1979*. An overview of the proposed with the various statutory provisions is outlined below, while a more detailed analysis is provided in the Department's section 79C assessment as provided by Appendix A.

4.1 Permissibility

Under the *Newcastle Local Environmental Plan 1987*, which was in force at the time of lodgement of the development application, the proposed development site was zoned 1(g) – Flood Plain Zone. Under this zoning, any development that is likely to be inundated by a 1 in 100 year flood and would affect the general flood behaviour of the area is classified as prohibited development. As the proposed development would be inundated during a 1 in 100 year flood, the proposed development was classified as prohibited development at the time of lodgement of the development application.

Consequently, the Applicant requested that the Minister for Infrastructure, Planning and Natural Resources, determine the development application (DA) as prohibited development under section 89(1) of the *Environmental Planning and Assessment Act 1979* (the Act). In considering this request, the Minister had regard to the public interest and the State and regional significance of the proposal, and directed on 23 July 2003 that the DA be forwarded to the Minister for his determination under section 89 of the Act.

Subsequent to the Minister's direction on 23 July 2003, the *Newcastle Local Environmental Plan 2003* came into force. Under this LEP, the proposed development site is now zoned 4(b) – Port and Industry Zone. Under this zoning, metal recycling facilities are permissible with consent.

4.2 State Significant Development

Under section 89(1) of the Act, the Minister directed that the proposed development be forwarded to Minister for his determination. Consequently, the proposal is classified as State significant development under section 76A(7)(d) of the Act and the Minister is the consent authority for the DA.

4.3 Integrated Development

This proposal is classified as integrated development as defined in section 91 of the Act as it requires a licence, permit or approval from four separate approval bodies: the Department of Environment and Conservation (DEC) (including the Environment Protection Authority); the Department of Infrastructure, Planning and Natural Resources (including the former Department of Land and Water Conservation); the Roads and Traffic Authority (RTA) and Newcastle City Council. Specifically, integrated approvals are:

- an Environment Protection Licence (EPL) is required from the DEC under the Protection of the Environment Operations Act 1997;
- a permit is required from the Department under Part 3A of the Rivers and Foreshores Improvement Act 1948; and
- Approvals are required from Council and the RTA under the Roads Act 1993.

4.4 Designated Development

The proposal is classified as designated development Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* as it is a mineral processing or metallurgical works that involves the shredding of more than 30,000 tonnes per year of scrap metal and is not wholly contained within a building. Consequently, an Environmental Impact Statement was prepared to accompany the development application.

4.5 Commonwealth Legislation

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires approval from the Commonwealth Minister for the Environment and Heritage for actions that have a significant impact on matters of national environmental significance. The Applicant identified no matters of national environmental significance with this development application, and hence, the EPBC Act does not apply

4.6 Relevant Environmental Planning Instruments

The assessment of the proposed development is subject to the following environmental planning instruments:

- State Environmental Planning Policy No. 11 Traffic Generating Development;
- State Environmental Planning Policy No. 14 Coastal Wetlands;
- State Environmental Planning Policy No. 33 Hazardous and Offensive Development;
- State Environmental Planning Policy No.55 Remediation of Land;
- Hunter Regional Environmental Plan 1989; and
- Newcastle Local Environmental Plan 2003.

Consideration of the proposed development in the context of the objectives and provisions of these environmental planning instruments is provided below.

State Environmental Planning Policy No. 11 – Traffic Generating Development

The proposed development is one to which *State Environmental Planning Policy No. 11 – Traffic Generating Developments* (SEPP 11) applies. This is because it is a type of development listed under paragraph (f) of Schedule 2 of the Policy (that is, a building for the purposes of industry that has a gross floor area of 4000m² or more). In accordance with clause 4 of the SEPP, a copy of the development application was forwarded to the Hunter Regional Development Committee (affiliated with the Roads and Traffic Authority).

The HRDC indicated in its submission that it objected to the proposed development unless the proposed treatment of the Pacific Highway/Sparke Street intersection was revised. No specific alternatives were provided in the submission. This submission was received prior to the Applicant's revision of the subject intersection treatment and the provision of the RTA's General Terms of Approval (GTAs) for the proposal. The Department considers that the Applicant's revision of the intersection and the RTA's GTAs have resolved the concerns raised by the HRDC.

State Environmental Planning Policy No. 14 – Coastal Wetlands

The aim of the State Environmental Planning Policy No. 14 – Coastal Wetlands is to ensure that the coastal wetlands are preserved and protected in the environmental and economic interests of the State. A SEPP 14 wetland (No.840) is located approximately 60 metres north of the proposed development site boundary. As only Lot 31 (which will remain vacant) would drain towards this site, the proposed development does not pose a significant threat to the integrity of this wetland.

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

The proposed development is classified as a "potentially offensive development" as it requires an Environment Protection Licence (EPL) from the DEC. The DEC has indicated that it could issue an EPL, and has accordingly provided its General Terms of Approval (GTA) for the proposed development. Consequently, the proposed development does not constitute an 'offensive' development.

The proposed development does not constitute "potentially hazardous development", and as such a Preliminary Hazard Analysis (PHA) was not required.

State Environmental Planning Policy No.55 – Remediation of Land

The objective of State Environmental Planning Policy No.55 – Remediation of Land is to provide for a State-wide planning approach to the remediation of contaminated land. In particular, this policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

Under the Council development application issued for a carpark on Lots 29-30, the Applicant is required to remediate contaminated soils present on the site. Consequently, the Department is satisfied that the requirements of *State Environmental Planning Policy No.55 – Remediation of Land* have been met through Council's assessment, and do not need to be addressed further as part of the consideration of the subject development application before the Minister for determination.

Hunter Regional Environmental Plan 1989

The objective of the *Hunter Regional Environmental Plan 1989* (HREP 1989) is to promote the balanced development of the region, the improvement of its urban and rural environments and the orderly and economic development and optimum use of its land and other resources, consistent with conservation of natural and man made features and so as to meet the needs and aspirations of the community. The Department is satisfied that the proposed development meets the relevant clauses of the HREP 1989 (refer to Section 6 and Appendix A).

Newcastle Local Environmental Plan 2003

Under the *Newcastle Local Environmental Plan 2003*, the proposed development site is zoned 4(b) – Port and Industry Zone. Under this zoning, the proposed development is permissible with consent. The Department is satisfied that the proposed development meets the relevant clauses of the Newcastle LEP 2003 (refer to Section 6 and Appendix A).

5. CONSULTATION AND EXHIBITION

In accordance with Division 4, Part 6 and Schedule 2 of the Regulation, the development application and accompanying EIS were publicly exhibited for 32 days (in excess of the statutory requirement of 30 days). Exhibition of these documents took place between 5 August 2003 and 5 September 2003 at the following locations:

- Department of Infrastructure, Planning and Natural Resources, Planning Head Office, Sydney;
- Department of infrastructure, Planning and Natural Resources, Regional Planning Office, Newcastle;
- Newcastle City Council; and
- Nature Conservation Council, Sydney.

The Department arranged for the public notification of the proposed development to be placed in the *Newcastle Herald* on 4 August 2003 and 18 August 2003. The newspaper notifications provided details of the proposal, exhibition locations and dates, and information on how interested parties could make a submission. All notifications were undertaken in accordance with the requirements of the *Environmental Planning and Assessment Regulation 2000*.

Nearby landowners and occupiers were also notified in writing about the proposed development. The Department considers that the requirement of the Act to notify landowners adjacent to the development site has been met.

In response to the exhibition period, the Department received a total of 39 submissions. Four of these submissions were received after the close of exhibition, but have been considered in this report. These submissions can be grouped as follows:

- 5 submissions from Government agencies, including:
 - Hunter Regional Development Committee (HRDC);
 - National Parks and Wildlife Service (now part of the DEC);
 - ResourceNSW;
 - Hunter Catchment Management Trust; and
 - Rail Estate Pty Ltd;
- 34 submissions from the general public.

Excluding the submission received from the HRDC, none of the submissions from the Government agencies objected to the proposed development. However, these agencies recommended several issues that the Department should consider in its assessment. The HRDC indicated in its submission that it objected to the proposed development unless the proposed treatment of the Pacific Highway/Sparke Street intersection was revised. No specific alternatives were provided in the submission. This submission was received prior to the Applicant's revision of the intersection treatment and the RTA's issue of its General Terms of Approval (GTAs), which the Department considers have now resolved the matters raised by the HDRC.

The DEC (including the NPWS) did not object to the proposed development, however highlighted in its submission issues relating to the assessment of the Green and Golden Bell Frog, the potential construction impacts on the SEPP 14 wetlands and Aboriginal cultural heritage issues. As the majority of these issues raised by the DEC relate to the impacts associated with the carpark DA approved by Council, the Department is satisfied that these issues have been largely resolved.

The Hunter Catchment Management Trust did not state a position on the proposed development, however it raised concerns regarding stormwater discharges in Ironbark Creek and the subsequent water quality impacts on the neighbouring Hexham Swamp following any flood event.

Rail Estate raised a number of recommended conditions to ensure the protection of the Main Northern Railway line, located on the western boundary of the site.

Thirty-four submissions were received from the public in relation to the proposed development. Several submissions comprised of petitions, with a combined total of 68 signatures. All but one of the submissions received from the general public objected to the proposed development.

Issues raised in submissions are considered in detail under the relevant parts of section 6 of this report. The key issues identified by members of the public in their submissions are:

- noise and vibration impacts, particularly in relation to the proposed 24-hour operations and amenity impacts on nearby sensitive receptors (St. Josephs Retirement Village);
- traffic, particularly in relation to night-time vehicle movements and safety issues at the Sparke Street and Pacific Highway/Maitland Road intersection;
- land use planning, relating to zoning of the proposal, and the potential conflicts with the surrounding environment and sensitive land uses;
- air quality impacts relating to 'fallout' during explosions at the existing facility and existing dust emission from the site;
- water quality, particularly in relation to flooding risk and stormwater discharges from site into Ironbark Creek:
- visual amenity in relation to screening of the existing and proposed development sites; and
- soil quality, particularly with regards to existing soil contamination of the site.

The Department of Environment and Conservation (DEC), the Department (Natural Resources), RTA and Newcastle City Council have provided their General Terms of Approval for the proposal, which have been incorporated into the recommended conditions of consent.

6. CONSIDERATION OF ENVIRONMENTAL ISSUES

The Department has reviewed the Environmental Impact Statement for the proposed development, and duly considered issues raised in submissions received in response to the exhibition of the subject development application. As a result, the Department has identified the following environmental issues associated with the proposal. The issues have been classified as being of significance, or high significance, depending upon the magnitude and extent of environmental impacts, and the responses of the submissions with respect to the impacts. A full consideration of each of the issues listed is provided in sections 6.1 to 6.8 this report.

Issues identified as being of **high significance** to environmental planning:

- traffic impacts; and
- noise impacts.

Issues identified as being of **significance** to environmental planning:

- air quality impacts;
- surface water management; and
- waste management.

Other important issues associated with the proposed concrete batching plant are:

- soil and groundwater;
- visual amenity; and
- impacts on heritage items.

6.1 Traffic Impacts

Sparke Street is a two-way, no-through road, which intersects with Maitland Road (Pacific Highway) to the east of the proposed site. This intersection is currently a non-signalised T-intersection, with right and left turn movements permitted in two stages. All traffic at this intersection is associated with the Applicant's operations (current and proposed), with the remaining properties along Sparke Street currently vacant.

Applicant's Position

Construction Traffic

The construction of the proposed development is expected to take approximately four months to complete, with components of the proposed shredder to be brought to the site for on-site assembly. The Applicant has indicated that the proposed construction of the facility would generate approximately 468 heavy vehicle movements over the four month period, with a maximum peak of 10 movements heavy vehicles movements generated per day (refer to Table 2). These movements would be in addition to those associated with the Applicant's existing operations at Sparke Street.

The Applicant assessed what impacts these additional movements would have on the performance of the intersection (refer to Table 3), and concluded the intersection would not be significantly affected by the proposed development, with the existing service levels maintained. To address safety concerns at this intersection (refer to the operational traffic section of this report), the Applicant is proposing to:

- clear roadside vegetation to improve site distances;
- prohibit heavy vehicles undertaking right-hand turn movements out of Sparke Street during PM peak periods; and
- prohibit all vehicles turning right into Sparke Street until the proposed intersection works are completed.

The Applicant concluded that these measures would be sufficient to mitigate any impact on road safety during the proposed construction works.

Table 2: Proposed Traffic Volumes During Each Construction Stage

	Heavy V	/ehicles	Passenger Vehicles		
Stage	Average Per Day	Total Over 4 Months	Average Per Day	Total Over 4 Months	
Shredder Installation	6	400	20	1320	
Intersection upgrade	2	20	10	56	
Power	2	8	10	56	
Other: security fencing, stockpile areas, internal roads	2	40	10	330	
Commissioning	-	-	10	56	
TOTAL	n/a	468	n/a	1818	

Table 3: Predicted Peak Hour Intersection Construction - Maitland Road/Sparke Street

Average Delay at Sparke St					ntersection(s	econds/vehic	le)
Peak Level of		Left Turn Out		Right Turn Out		Right Turn In	
Time	Service	Current	Future	Current	Future	Current	Future
Morning	С	15.4	15.4	31.8	32.1	20.5	21.0
Evening	D	22.3	23.0	47.7	49.5	33.2	33.4

Operational Traffic

INTERSECTION PERFORMANCE

The stretch of the highway in the vicinity of the site is characterised by heavy traffic flows (48,000 vehicles per day) with distinct AM and PM peak periods. The intersection is currently operating within satisfactory levels but is nearing capacity during the PM peak (refer to Table 4). However, as traffic utilising this intersection is low, the Applicant states that these delays do not result in queuing along Sparke Street.

The proposed intensification of the shredding operations at the site would result in an additional 60 heavy vehicle movements per day, increasing the total daily movements associated with the proposed operations to 264 heavy vehicle movements over a 24 hour period (refer to Table 5). The majority of these additional movements would occur during the 6pm – 6am period due to access restrictions at the Comsteel site. For this reason, the Applicant states that the performance of the intersection would not be significantly affected, with the level of service maintained and only slight increases in the average delay (refer to Table 4).

Table 4: Predicted Peak Hour Intersection Operation - Maitland Road/Sparke Street

ā	Peak	Level of	Average Delay at Sparke St Intersection (seconds/vehicle)					
Scen	Time	Service	Left Tu	Left Turn Out		urn Out	Right ⁻	Turn In
Š			Current	Future	Current	Future	Current	Future
1	Morning	С	15.4	15.5	31.8	31.9	20.5	20.9
'	Evening	D	22.3	24.2	47.7	52.6	33.2	33.4
2	Morning	С	15.4	15.5	31.8	31.9	20.5	20.9
	Evening	D	22.3	24.2	47.7	48.5	33.2	33.4

Note: Scenario 1 includes right-hand turn movements during PM peaks. Scenario 2 prohibits right-hand turn movements by heavy vehicles (weighing over 5 tonnes) during PM peaks.

Table 5: Existing and Proposed Heavy Vehicle Movements

		Total Heavy Vehicle Movements				
	6am – 12 noon	12 noon – 6pm	6pm - Midnight	Midnight – 6am		
Existing Movements	102	102	0	0		
Proposed Movements	110	108	26	20		
Net Increase	8	6	26	20		

SAFETY PERFORMANCE

Eleven accidents have been recorded at the intersection in the last five years, with 45% of these accidents comprising of rear end accidents during the peak PM periods. This can be attributed to a number of reasons, specifically:

- the high speed environment along the highway;
- heavy vehicle flows along the highway;
- poor sight distances for vehicles turning out of Sparke Street due to the road bend and roadside vegetation; and
- problematic heavy vehicle movements out/into Sparke Street.

While the Applicant concedes that the accident rate for rear end accidents can be potentially attributed to main traffic flows slowing in response to vehicles entering/departing Sparke Street, the accident rate at the Sparke Street intersection is significantly lower than the State average accident rate (refer to Table 6). The Applicant states that this could be a result of the low number of vehicles turning at this intersection and the awareness of the Applicant's staff of the existing traffic conditions.

Table 6 – Comparison of Accidents Rates per Million Vehicles at Intersection

Maitland Rd/Sparke St	Typical T-intersection (Auxiliary Lanes)*		
Mattalia Ra/Sparke St	Rural	Urban	
0.04	0.3	0.22	

* RTA Road Design Guide – Section 4 Intersections at Grade (2000)

The Applicant is proposing to maintain current access arrangements, with no other alternatives available due to environmental (SEPP 14 wetlands and amenity impacts) and physical restraints (prohibited crossing of railway line). In order to improve the safety performance of this intersection and to mitigate the potential impacts of the increase in the heavy vehicles, the Applicant is proposing to:

- upgrade the Sparke Street and Pacific Highway intersection to formalise turning bays and provide a storage bay for vehicles turning right;
- provision of an acceleration lane for vehicles turning left to improve sight distances and to improve merging capabilities of heavy vehicles onto the Pacific Highway;
- removal and long-term maintenance of road side vegetation to improve sight distances;
- alteration of the existing intersection to accommodate B-Double vehicle turning requirements;
- installation of signage at the intersection restricting heavy vehicles from turning right out of Sparke Street during PM peak periods and total restriction of B-Doubles turning right at any period; and
- preparation and implementation a Driver Management Plan to educate drivers of this ban.

SITE CIRCULATION AND PARKING

The continued use of the weigh bridge located on the existing site and location of the proposed shredder on the adjacent vacant site would require the movement of heavy vehicles across the western portion of Sparke Street. The Applicant has indicated that it would investigate the acquisition of this section of Sparke Street in order to manage these

movements in the long-term (not included in this Development Application). In the interim, impacts of these movements are expected to be minimal as the area affected is currently only utilised by the Applicant and railway authorities. Consequently, the Applicant has not proposed any mitigation measures to ensure safe and efficient movements of heavy and passenger vehicles associated with the proposed development.

The Applicant is proposing to maintain the existing 44 car parking spaces at the current facility for the proposed development. As the proposed development would increase current employment levels by 6 full-time positions to a total of 36 positions, the Applicant states that additional facilities would not be required.

Issues Raised in Submissions

The majority of submissions received from the general public objecting to the proposal cited the further deterioration of existing safety conditions at the Sparke Street intersection and the increase in night-time heavy vehicle movements as a key concern of local residents. One submission suggested the restriction of all access from Sparke Street, directing all traffic to the Shamrock Street intersection. Another suggested that the ramifications on the future construction of the proposed SH23/SH10 interchange, located south of the site, should be considered in the assessment of the proposal.

The Hunter Regional Development Committee objected to the development as proposed, recommending that the Applicant should consider alternative access arrangements. Please note that this objection was received prior to the amendments to the proposed intersection design and the issuing of GTA's by the RTA.

The RTA has indicated that it would prefer that the proposed intersection upgrade to be completed prior to the commencement of construction work at the site. However, the RTA has requested that should the works be conducted concurrently, that the Applicant implement additional measures under a Transport Construction Environment Management Plan.

Department's Position

Construction Traffic

The Department generally concurs with the Applicant that the additional heavy vehicle movements during the proposed construction period would not have a significant impact on the performance of the Sparke Street intersection. However, as discussed later in this report, the proposed intersection mitigation measures alone do not sufficiently address the potential safety implications of the additional heavy vehicles on road safety at this intersection. In particular, the increase in heavy vehicle traffic flows associated with the proposed construction works prior to the completion of the intersection upgrade is likely to further deteriorate road safety at this intersection unless additional measures are implemented.

Consequently, the Department and the RTA recommend that, should the Minister determine to approve the proposal, that the Applicant undertake the following:

- implement additional measures to the satisfaction of Council and the RTA should the site construction works be conducted concurrently with the proposed intersection upgrade. These are to remain in place until the intersection is fully operational;
- prepare and implement a Transport Construction Environmental Management Plan for the proposal, which would incorporate measures to restrict right-hand turn movements out of Sparke Street; and
- accommodate all construction vehicular traffic on-site.

The Department is satisfied that these additional measures will ensure that construction traffic is appropriately managed throughout the entire construction period.

Operational Traffic

INTERSECTION AND SAFETY PERFORMANCE

The Department concurs with the Applicant that the proposed increase in vehicular movements would not have a significant impact on the performance of the Sparke Street intersection, with the average delay and level of service maintained within acceptable levels. However, the Department is concerned that the measures proposed by the Applicant do not sufficiently address the issues relating to road safety at this intersection. In particular, the Department notes the potential increase in the risk due to the increase in heavy vehicles utilising the intersection, the reduced sight distances and the potential safety issues resulting from slow accelerating heavy vehicles merging with high-speed traffic flows along the Pacific Highway.

The RTA, following its initial review of the DA, recommended the restriction of all right-hand turn movements turning into and out of Sparke Street to ensure the restriction of safety conflicts at this intersection. The RTA also highlighted that the provision of traffic lights was not considered appropriate due to the potential impacts on road network efficiency.

The Applicant questioned this restriction, and revised its proposal for the Sparke Street intersection to enable the relocation of the intersection 70 - 80 metres north of its current location. Following numerous discussions with the Applicant, RTA, Council and the Department, the RTA revised its General Terms of Approval to permit the installation of traffic signals. The RTA has required that these lights be coordinated with the Shamrock Street traffic lights and would prohibit right-hand turn movements out of Sparke Street in order to minimise the impact on traffic flows. As a result of this restriction, northbound vehicles would be required to conduct a u-turn north of the site on a property owned by Metalcorp near the Hexham Bridge.

The Applicant subsequently argued that since these movements are permitted at Shamrock Street, that a similar arrangement should be permitted at Sparke Street. However, the RTA has maintained its restriction of right-hand turn in order to maintain consistency with the long-term strategic approach for the Pacific Highway between the future SH23/SH10 interchange and the Hexham Bridge. The RTA also states that the existing arrangement at Shamrock Street is not desirable and that a similar arrangement at Sparke Street would significantly impact southbound traffic flows and road safety in the area.

The Department has reviewed the RTA's submission and the Applicant's response to the GTAs, and supports the RTA in relation to the restriction of right-hand turn movements at this intersection. The Department is of the opinion that the revised RTA GTAs have provided for the best possible solution to the existing and potential future safety issues at the intersection and provide for a consistent approach to the long-term strategy for the Pacific Highway. While the restriction of right-hand turn movements at the intersection would generate additional traffic volumes travelling south of the site in order to conduct uturns, the Department considers the impacts of these movements would be minimal considering the low volumes involved (approximately 35-45 heavy vehicles/day) and the comparable safety improvements at Sparke Street resulting from this restriction.

In association with the recommended installation of traffic signals, the Department, RTA and Council recommend that the Applicant should also be required to undertake the following:

- construction of appropriate physical barriers to restrict right-hand turn movements at the realigned Sparke Street;
- the closure and 'making good' of the redundant section of Sparke Street;
- provision of flashing lights north of the realigned Sparke Street to warn motorists of the signals;

- the preparation of a pavement rehabilitation report for Sparke Street to determine if the road pavement will require rehabilitation as a result of future heavy vehicle movements;
- the construction and formalisation of the section of Sparke Street between Lots 29-30 and Lot 1 to provide for effective drainage, dust management and general road safety; and
- preparation of a Transport Operational Environmental Management Plan to provide for the management of heavy vehicles associated with the proposal (including a Transport Code of Conduct for night-time movements).

The Department is satisfied that the implementation of these measures would ensure that the proposed increase in vehicle movements associated with the proposal would not have any adverse impacts on road safety or intersection performance.

SITE CIRCULATION AND PARKING

The Department is generally satisfied that the proposed access arrangements would be adequate in the short-term. While traffic flows within the locality would be entirely associated with the proposed development, the Department believes that additional measures should be imposed to guarantee that the movements are appropriately managed to ensure vehicular safety along Sparke Street and between the two sites owned by the Applicant. These measures should be subject to Council's recommended measures, as follows:

- implementation of additional measures, as part of the Transport Operational Environmental Management Plan, to adequately manage and caution road users of the frequent movements across Sparke Street; and
- implementation of appropriate management controls to ensure movements between the sites do not track mud/dirt onto Sparke Street.

The Department is satisfied that the existing 44 spaces would be sufficient to manage staff and visitor vehicles associated with the proposed development. However, to ensure that vehicles do not park along Sparke Street, the Department recommends a condition should be imposed that prohibits heavy or passenger vehicles from parking along Sparke Street.

6.2 Noise

Applicant's Position

Construction Noise

The proposed assembly of the shredder plant and the proposed intersection works are expected to be completed over a 16 week period. A range of equipment would be used on site during this period that has the potential to impact on nearby residential receptors. Consequently, to assess the potential impacts of the proposed construction works, the Applicant conducted an assessment in accordance with the EPA's *Environmental Noise Control Manual*.

Based on the noise criteria for the construction works (determined based on background noise levels), the Applicant determined that the proposed construction works would be below the set noise criteria at the nearest residential receptors (refer to Table 7). Nevertheless, the Applicant has proposed a number of controls, which include acoustic screening and plant silencing, to assist in further reducing noise levels. The Applicant subsequently concluded that the proposed construction works would not have any adverse impacts on neighbouring residential receptors.

Table 7 - Predicted Construction Noise Levels

Location	Construction Noise Criteria, dB(A)	Predicted Noise Level dB(A)
Shamrock St, Hexham	52	45
St Josephs Retirement Village, Hexham	58	47

Operational Noise

The Applicant is proposing to operate the facility 24-hours, seven days a week, with the scaling down of activities during night-time periods and the restriction of scrap metal shredding to the core hours of 7am to 10pm Monday-Sunday (refer to Table 8). Due to the nature of the proposed operations and the proposed operating hours, the facility has the potential to generate significant noise impacts on surrounding land uses. These noise sources include the shredder, excavators, delivery vehicles and metal shear at stockpile areas. This has been observed in developments similar to the proposed facility, and is a key issue that must be carefully managed and mitigated.

Table 8: Proposed Operating Hours and Associated Activities

Period	Hours of Operation	Activities
Day	7am – 6pm, Monday to Friday 8am – 6pm Sundays and Public Holidays	All plant/equipment operating on the existing and new site concurrently.
Evening	6pm – 10pm, seven days a week	Only the shredder, excavator and truck deliveries operating on the new site. No activities on the existing site.
Night	6pm – 7am, Monday to Saturday 6pm – 8am, Sundays and Public Holidays	Only excavator and truck deliveries on the new site. No activities on the existing site.

The nearest residential receptors have been identified as residences along Shamrock Street (375m to the north), and the St Josephs Retirement Village (850m to the southeast). An assessment of the potential noise impacts at these locations indicates that the proposed development would meet the site specific criteria and sleep disturbance criteria during normal weather conditions (refer to Tables 9 and 10). The Applicant has indicated that noise criteria would be exceeded during certain weather conditions; however these are not the dominant conditions of the area (i.e. less than 30% occurrence) and as such have been discounted in accordance with the EPA's *Industrial Noise Policy*.

While the proposed development would meet all applicable site specific criteria, the Applicant has proposed to treat the hammer mill area of the shredder with an acoustically designed enclosure. In addition, the Applicant has proposed to implement a Noise Operational Environmental Management Plan for the proposed operations.

Table 9: Operational Noise Levels During Various Weather Conditions

			Predicted Noise Levels L _{Aeq}			
Location	Period	Criteria	Calm, Isothermal	Slight Wind	Moderate Inversion	
	Day	47	47	52	n/a	
Shamrock St	Evening	48	46	51	n/a	
	Night	45	33	36	34	
01.1	Day	53	46	51	n/a	
St Josephs Retirement Village	Evening	42	42	47	n/a	
	Night	41	36	42	38	

Table 10: Sleep Intrusiveness Levels Durir	q Proposed Operations
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	Period	Criteria	Predicted Noise Levels L _{A1}		
Location			Calm, Isothermal	Slight Wind	Moderate Inversion
Shamrock St	Night	55	40	43	41
St Josephs Retirement Village	Night	56	43	49	45

In addition to the assessment on existing residential and sensitive receptors, the Applicant considered the impacts on any future land uses directly adjacent to the property. Surrounding vacant properties have been rezoned under the *Newcastle Local Environmental Plan 2003* to permit industrial uses. Under the EPA's *Industrial Noise Policy*, the proposal is required to meet 70dB(A) at the site boundary for industrial developments, with a maximum 75dB(A) permitted.

Modelling indicates that the proposal would meet the 70dB(A) at most site boundaries, with the noise criteria at the east and south boundary of the new site exceeded. However, all site boundaries would be within the permitted maximum noise level criterion (75dBA). Nevertheless, the Applicant has proposed to install acoustic barriers (or similar acoustic shielding) should surrounding sites be developed in the future.

EXPLOSIONS

Explosions may occur at the proposed facility due to overpressure events resulting from the build up of dust or flammable vapour within the shredder mill and silos. Current EPA guidelines (ENCM) and Australian Standards stipulate that overpressure levels at sensitive receptors should not exceed 120db(Lin) at any time. According to the Applicant, monitoring equipment at its Chipping Norton shredder has detected overpressure events at 138dB(lin) at its site boundary, with possible levels greater than 140dB(Lin) that have not been detected due to equipment limitations.

In applying these monitoring results to the proposed development, the Applicant states that overpressure levels are predicted within the 120dB(Lin) at the nearest residential receptor. This conclusion is based on the following:

- the proposed shredder in comparison to the Chipping Norton shredder incorporates improved technology and the use of internal water sprays that greatly reduce the potential for deflagration events;
- the proposed shredder will be supported by vibration isolating elements that will be designed to ensure vibrations will be within permitted levels at residential receptors;
- the use of acoustic lining in the shredder hammer mill enclosure to reduce overpressure levels by 16-20dB(Lin); and
- the proposed shredder is separated by a minium 375m from the nearest sensitive receptor which provides sufficient distance to dissipate any overpressure levels.

Furthermore, in support to these measures, the Applicant is proposing to maintain screening procedures and install an overpressure monitor to assist in measuring levels at the site and residential receptors. Consequently, the Applicant argues that these measures would ensure that potential for overpressure events would be significantly reduced and would minimise the overpressure levels detected at residential receptors to within permitted levels.

ROAD NOISE

The EPA's *Environmental Criteria for Road Traffic Noise* sets out the noise criteria for traffic noise generated by new developments (refer to Table 11). Should the existing road network already exceed the recommended noise levels, the Applicant is required to

demonstrate that the proposed development would not lead to an increase in existing noise levels of more than 2dB(A). As there are no residences along Sparke Street, the Applicant has assessed this potential impact on residences located along Maitland Road/Pacific Highway.

Table 11: EPA Road Traffic Noise Criteria, dB(A)

Type of Development	Day L _{Aeq(15hr)} (7am – 10pm)	Night L _{Aeq(9hr)} (10pm – 7am)
Land use development with potential to create additional traffic on existing freeways/arterials	60	55

Table 12: Predicted Increase in Traffic Noise Levels

Truck Route to/from site	Existing Traffic No	oise Levels, dB(A)	Predicted Increase in Traffic Noise Levels, dB(A)	
to/from site	Day L _{Aeq(15hr)}	Night L _{Aeq(9hr)}	Day L _{Aeq(15hr)}	Night L _{Aeq(9hr)}
Maitland Road	75	70	<0.1dB	<0.1dB

An assessment of road noise indicates that the existing noise levels significantly exceed the recommended noise levels, and that the proposed development would result in an increase in noise levels below 0.1dB(A) (refer to Table 12). The Applicant consequently concludes that the proposed development would not generate any significant impacts on the local community as it would be well below the permitted 2dB(A) increase. Consequently, no mitigation measures have been proposed.

Issues Raised in Submissions

The majority of submissions from the general public opposed the proposed development due to the potential impacts the 24 hour operations and explosions could have on residential amenity and residents of the nearby St Joseph's Retirement Village. In addition, delivery of scrap metal during the night-time period and the potential for sleep disturbance was of concern. Some submissions also stated that while no complaints had been lodged with Council, existing operations have had adverse impacts on neighbouring residential areas. Another stated that noise impacts on the nearby residential suburb of Shortland has not been considered, and that noise from the proposed facility could be carried over large distances due to the local topography.

Council raised concerns regarding night-time vehicles movements and the mitigation measures proposed to minimise vibrations during overpressure events.

The EPA did not raise any issues with the construction noise assessment, but recommended that the Applicant be required to comply with the set operational noise criteria during the proposed works. The EPA is satisfied with the Applicant's assessment of the potential noise impacts, subject to a number of conditions that have been incorporated into its General Terms of Approval. In addition, the EPA has indicated that the proposed minimisation and management of explosions is acceptable. Consequently, the EPA has indicated that a licence can be issued for the proposal and has provided its General Terms of Approval for the facility.

Department's Position

Construction Noise

The Department concurs with the Applicant that the proposed construction activities would not generate any adverse impacts on neighbouring residential receptors. Nevertheless, as the proposed construction works would be conducted in concurrence with the Applicant's current operations at Sparke Street, the Department and the DEC recommend that the Applicant be required to comply with set operational noise criteria for the proposed facility. This is to ensure that neighbouring residential receptors would not be impacted by the Applicant's cumulative construction and operational activities. In addition, the Department

believes that the Applicant should be required to implement a Noise Construction Environmental Management Plan to formalise the proposed mitigation measures. The Department is satisfied that these additional measures would be sufficient to mitigate any off-site impacts, should the Minister determine to approve the proposal.

Operational Noise

While the Applicant has demonstrated that the proposed development would meet relevant EPA industrial noise criteria, the Department is concerned that the proposed operation of the shredder till 10pm at night, seven days a week, and any associated explosions, could have unforeseen amenity impacts on neighbouring residential areas. In particular, the minimisation of overpressure events at the site are highly dependant on the screening processes conducted at the facility and cannot be easily reduced through plant design.

Consequently, before the Applicant is able to operate to the hours as proposed in the development application, the Department and the EPA recommend that the proposed shredder operating hours be initially restricted to 7am – 6pm Monday to Saturday. Should the Applicant wish to extend to the hours as proposed, the Applicant would be required to apply to the EPA and demonstrate compliance with the set noise criteria through detailed monitoring of the proposed shredder operating at design capacity. However, any subsequent approval to operate till 10pm would be subject to the on-going demonstration of compliance with the set noise criteria.

To ensure that scrap metal supply to the NSW steel industry is not adversely interrupted during the recommended initial restriction, the EPA and the Department recommend that the Applicant be permitted to intermittently use the shredder outside the recommended hours under the following circumstances:

- demonstration that the NSW steel industry is at risk due to a shortage in scrap metal;
- the Applicant informs the Director-General, the EPA and all nearby receptors, in writing, at least 24 hours prior to commencing out of hours operation, and
- a written commitment that an officer appointed by the Applicant is on site, solely for the purpose of ensuring compliance with noise limits at various locations.

To complement these restrictions, the Department considers that the Applicant should conduct an audit on the proposed facility in order to confirm the noise predictions and to implement additional measures should they be required. In addition, to provide for the long-term monitoring of the proposed facility, the Department recommends that the Applicant prepare and implement a Noise Monitoring Program, which would be incorporated into a required Noise Operational Environmental Management Plan.

In addition to these measures, the Department and the EPA recommend the following measures to ensure the long-term management of noise at the site:

- set noise criteria and operating hours for operational activities;
- installation and monitoring of overpressure levels at the site;
- retrofit the shredder plant and associated equipment, if requested by the DEC;
- preparation of a Noise Operational Environmental Management Plan, which must incorporate stringent screening procedures for material prior to processing; and
- implement additional noise mitigation measures should neighbouring industrial properties be developed.

The Department is satisfied that the procedures and mitigation measures incorporated into the recommended conditions will ensure the appropriate long-term management of the proposal, should the Minister determine to approve the development application.

ROAD NOISE

The Department concurs with the Applicant that the proposed development would not have a significant impact on road noise levels along Maitland Road, with the expected <0.1dB(A) increase within the permitted 2dB(A) criterion. However, the Department acknowledges that the community is concerned that night-time delivery movements may impact on neighbouring residential amenity. Consequently, the Department recommends that the Applicant should be required to prepare a Transport Code of Conduct, as part of a Traffic Operational Environmental Management Plan, for the proposed operations in order to appropriately manage night-time heavy vehicle movements.

6.3 Air Quality Applicant's Position

Construction

The Applicant identifies that air quality issues associated with the construction of the proposed development would relate to dust generation from soil disturbance, and exhaust emissions from construction vehicles.

The construction activities with the greatest potential for dust generation are considered by the Applicant to be earthworks and vegetation clearing for the Sparke Street/ Pacific Highway intersection. During these works, some 0.3 hectares of land is likely to be disturbed. In addition, smaller excavation activities are expected during the construction of the drainage channel joining the site to Ironbark Creek, and the installation of utilities. The Applicant recognises that each of these activities has the potential to generate dust, and intends to implement the following mitigation measures to ensure that air quality is not adversely impacted during construction:

- all trucks would cover their loads when carrying dusty materials;
- a water cart would be used as required;
- all disturbed areas would be revegetated as soon as possible;
- visual monitoring of dust levels during construction would be undertaken.
 Earthworks would cease during periods of high wind when dust is visibly entrained;
 and
- stockpiles would be compacted to reduce wind-borne dust.

The Applicant also notes that air quality impacts may result from exhaust emissions from construction traffic and equipment. During construction, it is estimated that some five trucks per day would enter the site, and six items of plant equipment would be operating on the site. The Applicant argues that given the distance of the site from the nearest residential receptors (approximately 375 metres), the potential for adverse air impacts from construction traffic and equipment is insignificant.

Operation

The Applicant highlights that the proposed new metal shredder would have a processing capacity four times that of the existing shredder on the site. As such, the Environmental Impact Statement presents emissions testing of the existing shredder, with estimates of emissions from the new shredder based on a four-fold increase in these emissions. Measured emissions concentrations for the existing shredder and emissions predictions for the proposed new shredder are reproduced below, with emissions limits specified in the *Clean Air Plant and Equipment Regulation 1997* (CAPER) included for reference. The Applicant highlights that predicted emissions are well below CAPER limits.

Table 13: Predicted Air Emissions Concentrations

Pollutant	Measured Emissions - Existing Shredder (mgm ⁻³)	Predicted Emissions - New Shredder (mgm ⁻³)	CAPER Emissions Limit (mgm ⁻³)
Particulates	9.7	38.8	100
Lead	0.042	0.168	5.0
Mercury	0.0004	0.016	1.0

In addition to emissions from the proposed new shredder, the Applicant identifies that air emissions would be associated with transport to and from the site, and handling of scrap material (dust generation). In relation to transport emissions, the Applicant argues that vehicles associated with the proposed development would use main roads, which are already subject to high traffic volumes and exhaust emissions. In this context, the Applicant considers that exhaust emissions attributable to traffic from the proposed development would be minimal. To mitigate the generation of dust during metal handling, the Applicant intends to incorporate the following measures in the design of the proposed development:

- a shielded conveyor system;
- a rumble grate system to ensure that all incoming and outgoing traffic passes over the grate to shake loose dust and other material that might otherwise be tracked into or out of the site; and
- a baghouse to collect and clean dust-laden air from the ferrous cascade prior to discharge to the atmosphere.

Greenhouse Gases

The Applicant suggests that metal recycling generates 76% less greenhouse gas emissions for ferrous metals, and 95% less greenhouse gas emissions for non-ferrous metals, compared to metal production from ore. It is argued, therefore, that the proposed development carries significant benefits in terms of greenhouse gas emissions reduction.

Carbon dioxide, a greenhouse gas, would be emitted as exhaust from vehicles and equipment associated with the proposal. The Applicant suggests that vehicles and equipment would be well maintained to minimise these emissions.

Some 0.3 hectares of vegetation will be removed as part of the proposed development. As this vegetation decomposes, the Applicant notes that greenhouse gases would be released. Given the small scale of the required vegetation clearance, the Applicant argues that the contribution to greenhouse gas emissions associated with decomposition would be minimal.

Issues Raised in Submissions

A number of public submissions raise concern in relation to air quality impacts, particularly suspended and deposited dust impacts on surrounding land uses.

The EPA indicated that it considers the assumptions applied to the air impact assessment presented in the Environmental Impact Statement are reasonable. The EPA notes that predicted stack emissions are compliant with the limits specified in the *Clean Air Plant and Equipment Regulation 1997*. The General Terms of Approval issued by the EPA include specific conditions aimed at minimising dust and retrofitting additional controls if necessary.

Department's Position

Construction

The Department notes that the bulk of site preparation works required prior to the commencement of the construction of the proposed development are the subject of a local development application made to Council. In this regard, the potential for dust generation

during the construction of the subject proposal is minimised by the absence of bulk earthworks. There are, however, likely and unavoidable activities associated with construction, including construction transport, which may disturb soils. The Department considers that given the likely scale of potential dust-generating activities, and available dust mitigation measures proposed by the Applicant, any dust emissions during construction can be adequately managed.

The Department recommends that if the Minister determines to approve the proposed development, a general condition be imposed to prohibit dust emissions from the site. No specific additional mitigation measures, over and above those already proposed by the Applicant, are considered necessary.

Operation

The Department notes from information provided in the Environmental Impact Statement and correspondence received from the EPA, that the air quality impact assessment undertaken by the Applicant is consistent with advice from, and to the satisfaction of, the EPA. Further, data presented in the Environmental Impact Statement indicates that emissions from the proposed development would be well below those concentrations specified in the *Clean Air Plant and Equipment Regulation 1997* (less than 40% for particulates, and less than 3% for metals).

In relation to the potential affectation area associated with air emissions from the proposal, particularly in relation to dust, the Department highlights the operating parameters of the shredder unit (based on measurements of the existing shredder). The existing shredder is operated at near ambient conditions (temperature, pressure), with relatively low discharge velocities (in the order of less than 30 ms⁻¹). Under these conditions, atmospheric discharges would be characterised by relatively low momentum, with greatest potential impacts being confined close to the point of discharge. The Department is generally satisfied that the nearest receptors to the proposed development site are sufficiently distanced so as not to be significantly impacted by air emissions from the shredder.

Notwithstanding, the EPA has recommended a precautionary approach be applied, with its General Terms of Approval including additional mitigation measures to be retrofit to the development if operation deviates from acceptable environmental impacts. These measures generally relate to dust control on equipment and exposed land areas. The EPA has also specified air monitoring requirements to be imposed on the development, should the proposal be approved.

As a basis for the assessment of the need for the retrofit measures listed by the EPA in its General Terms of Approval, the Department recommends that if the proposal proceeds, the Applicant undertake an air quality audit within the first few months of operation. This audit would include monitoring of air emissions under normal operating conditions and assessment of air quality impacts in accordance with relevant guidelines. Should the audit identify that the operation of the development is not consistent with the predictions made in the Environmental Impact Statement, or acceptable ambient air quality performance, the Applicant would be required to implement remedial measures, including those retrofit measures identified by the EPA. The Department recommends that should the Minister determine to approve the proposal, that this approach be reflected through the development consent.

Greenhouse Gases

The Department recognises that the principal operations at the proposed development would not involve the combustion of fuels, or the melting of metals. As such, fuel consumption at the site would be relatively low, and consequently the potential for greenhouse gas generation minimal. Ancillary activities on the site, including the operation

of mobile equipment, would consume limited quantities of liquefied petroleum gas (LPG) and diesel, and are not considered significant contributors to greenhouse gas generation.

The Department notes the Applicant's claims that the use of recycled metal provides a significant greenhouse gas offset compared with production from ore. While the Department has insufficient information to support the Applicant's quantification of the offset, it does accept the basic premise of the Applicant's claims. In a broader context, the Department is therefore satisfied that the proposed development would have a positive benefit in relation to greenhouse gas emissions, although the actual magnitude of the benefit is not known.

6.4 Surface Water Management

Applicant's Position

Construction

Construction activities at the proposed intersection and minor excavation works at the proposed development site have the potential to result in the erosion and sedimentation of Ironbark Creek and the Hunter River. To minimise soil erosion and sedimentation impacts, the Applicant is proposing to implement a number of controls as part of a Sediment Control Plan which will be prepared in accordance with the *Guidelines for Managing Urban Stormwater* (Department of Housing). Furthermore, the Applicant states that the stormwater system constructed under the Council DA carpark consent would assist in controlling contaminated runoff from the development site.

Operation

Operation of the metal shredder could have the potential to impact on water quality due to deposition of oils, petrol, rubber, particulates, dust and fuel spills onto the sealed surfaces on Lots 29 and 30, and captured in water run-off from these areas.

The proposed development, as originally described in the development application lodged with the Department, was to be serviced by an existing stormwater detention system that incorporated a stormwater storage pit (first-flush system) with the excess runoff collected at an on-site detention (OSD) basin. Stormwater collected at OSD would eventually drain to Ironbark Creek through an open drainage tunnel along the western boundary of Lot 1. Gross Pollutant Traps and oil/grease separators would be installed to ensure no pollutants would be discharged from the site. The water captured in the storage pit would then be treated and then used for operational purposes, including dust suppression, wash down purposes and watering landscaped areas.

However, under the consent issued by Council for a carpark on Lots 29-30, the system has been modified to eliminate the OSD. To satisfy Council's stormwater policies, the OSD has been replaced by a larger stormwater pit to provide sufficient capacity to capture and treat stormwater of on-site use or discharge. Furthermore, the Applicant has indicated that the pit would have sufficient capacity to ensure that any polluted waters are not discharged during the 1 in 100 year flood event. The Applicant has consequently concluded that the existing stormwater system, installed under the Council carpark consent would sufficiently minimise and manage any stormwater generated at the proposed development.

In addition to these measures, the Applicant is proposing to:

- all traffic areas within the site would be vacuum cleaned; and
- all fuels/chemicals would be kept on the existing site within the bunded area.

The Applicant has indicated that the existing stormwater system would remain to cater for Lot 1, which involves the capture, treatment and discharge of water into Ironbark Creek.

Flooding

The site is located within the common floodplain of the South Arm of the Lower Hunter River and Ironbark Creek, and along the south eastern fringe of Hexham Swamp. The Lower Hunter River has a long history of flooding, with the Hexham swamp acting as a major flood storage area that is often inundated during events rarer than 1 in 10 year flood event.

Subsequent to the lodgement of the subject DA with the Department, Newcastle City Council approved a DA for the construction of a carpark on Lots 29 and 30, which would involve filling the site to a level above the 1 in 20 year flood event. In approving this DA, the Applicant was required to demonstrate that the carpark (and associated landfill) would not have a significant impact on flood water flows and neighbouring properties.

At the completion of the above works, the proposed development site would be inundated to a maximum of 0.65 metres during the 1 in 100 year flood event. In order to determine the impacts of the proposed development on flood behaviour, the Applicant considered the potential impacts of the shredder, stockpiles and a possible sound barrier on flood flows across the site. From this assessment, the Applicant concluded that the proposed structures would not significantly impede the flow of flood waters across the site. In particular, the Applicant indicates that the steel frame of the shredder would allow floodwaters to move across the site without impediment. Nevertheless, the Applicant has proposed to prepare a Flood Emergency Response Plan for the proposed development to ensure that appropriate procedures are in place to ensure site and staff safety.

Issues Raised in Submissions

Several submissions from the general public raised concerns regarding water quality impacts on the neighbouring wetlands and water courses, particularly during any flood event.

The National Parks and Wildlife Service is concerned that due to the contamination issues on the site, neighbouring wetlands and waterways could be threatened when construction occurs during wet months.

The Hunter Catchment Management Trust raised concerns regarding stormwater discharges in Ironbark Creek and the subsequent water quality impacts on the neighbouring Hexham Swamp following any flood event. In addition, the Trust highlighted that it is currently implementing a major wetland rehabilitation project for Hexham Swamp that may reduce the flushing capabilities of Ironbark Creek. The Trust is concerned that contaminants such as sludge, oils, lead and lead compounds could be discharged during events greater than 1 in 20 year flood.

Rail Estate (the property group of State Rail) has advised that stormwater discharge onto the railway corridor is unacceptable both during and after construction. State Rail has requested that discharge from the development must be adequately disposed of/managed and not be allowed to be discharged on to the rail corridor unless prior approval has been obtained from State Rail.

The EPA concurs with the Applicant's proposal to contain spills and to control stormwater discharges, subject to a number of conditions. These have been incorporated into the recommended consent.

Department's Position

Construction

The Department has reviewed the proposed mitigation controls and is satisfied that sufficient management procedures are in place to minimise any short-term impacts relating to surface water. Should the Minister grant consent, the Department recommends that the Applicant prepare a Soil and Water Construction Environmental Management Plan to formalise the implementation of these measures, which must be approved by the Director-General prior to the commencement of any construction work.

As part of the Council's assessment of the landfilling DA, the Applicant has subsequently amended the proposed carpark plans to delete the OSD system to address issues relating to the Green and Golden Bell frog (as raised by NPWS). In order to provide an alternative to the OSD, the Applicant has been granted consent by Council for the construction of a large storage pit to provide adequate detention storage for stormwater collected on site.

Operation

The Department has reviewed the proposed mitigation measures and is satisfied that the system, as approved under the Council DA, is adequate for the operation of the proposed development. The construction of this system would ensure that all stormwater at the site is appropriately captured and treated prior to any reuse or discharge. Nevertheless, the Department and the EPA recommend that the Applicant be required to:

- prepare a Stormwater Management Plan to ensure the long-term management of the system;
- installation of appropriate bunding to contain 110% of the largest contained stored;
- installation of a specifically designed bund in which uncompacted vehicles are drained and decontaminated in order to contain any potential spills; and
- periodically monitor stormwater discharges from the site to verify the performance of the system and ensure discharges from the site do not have any adverse impacts on the water quality of Ironbark Creek.

Flooding

The Department generally concurs with the Applicant that the proposed facility would not have any significant adverse impacts on the flood behaviour of the area (with the majority of the issues resolved as part of Council's determination of the carpark DA). However, the Department requested additional information in terms of the flood evacuation procedures for the site, the impacts of flood flows on the metal stockpiles, and any subsequent transportation of stockpiled materials downstream.

The Applicant has subsequently provided additional information, demonstrating that the flood velocities, the nature of the stockpiles, and the weight of the stockpiled material would ensure that there would not be any significant impact on neighbouring properties or habitats. The Department notes this additional information, however recommends that, should the Minister determine to approve the proposal, that the Applicant be required to undertake the following works:

- obtain an additional approval section 256 of the *Water Management Act 2000* from the Department; and
- prepare and implement a Flood Emergency Response Plan to the satisfaction of the Director-General.

The Department is satisfied that these measures will ensure that appropriate procedures are in place to protect the environment, workers and surrounding residents should a flood occur.

6.5 Waste Management

Applicant's Position

Due to current technological restraints, the proposed shredder plant is expected to produce approximately 60,000 tonnes of shredder residue per year. This represents approximately 20 percent of the annual raw material fed into the shredder and consists of a variety of substances including plastics, particulates, glass, foam and mud. In addition to this process waste, the proposed facility is expected to generate a smaller volume of waste consisting of tyres, sludge and oils.

The shredder residue and tyres would be restricted to the 'waste bunker storage' area located adjacent to the shredder. This stockpile would be limited to 500 tonnes and to a height of approximately five metres. The Applicant proposes to remove shredder residue from the site on a daily basis and dispose of the material at an approved waste disposal facility, most probably Erskine Park Landfill. Sludge and oils from the first flush system will be removed by a registered contractor as required.

The Applicant states that although the proposed shredder would produce 60,000 tonnes of shredder residue per year, the benefits of recovering 240,000 tonnes of scrap metal from the waste stream would outweigh the volumes of waste sent to landfill by the proposed development. Nevertheless, the Applicant has indicated that it is currently investigating alternative uses for shredder residue that provides a commercially viable product.

Issues Raised in Submissions

ResourceNSW has advised that the Applicant should address the objectives of the *Waste Avoidance and Resource Recovery Act 2001* (WARR 2001) instead of the superseded *Waste Minimisation Management Act 1995*. In addition, ResourceNSW requested that the Applicant identify and implement measures to reduce the amount of shredder residue and recover more resources. The Applicant has subsequently assessed the proposal against the objectives of WARR 2001 and has responded to this submission (see the above).

Department's Position

The Department concurs with the Applicant that the proposed facility provides several benefits to the minimisation of resource consumption and recovery in the NSW steel industry. Although, the shredder would produce 20% of residue during the processing of 300,000 tonnes per annum, the Department is satisfied that future alternative technologies would assist in reducing the volume of residue sent to landfill over time. Nevertheless, the Department recommends that the Applicant implement a Waste Operational Environmental Management Plan to ensure the appropriate management of waste on site, should the Minister determine to approve the proposal.

6.6 Soil and Groundwater

Applicant's Position

Construction

As noted previously, the Applicant has been granted approval for the construction of a carpark on Lots 29 and 30. Consequently, as the majority of the works will be conducted on the hardstand surface, the requirement for excavation works will be restricted to the proposed drainage line and the proposed road works. Consequently, the Applicant has concluded that the majority of the proposed construction works would not pose a significant threat to soil and groundwater quality.

The Applicant has indicated that there is a high probability of acid sulfate soils at the site. However, the Applicant argues that the past fill activities in the area have reduced the

likelihood that these soils will be disturbed during the proposed intersection improvements and minor excavation works at the site. However, the Applicant is proposing to conduct an Acid Sulfate Soils assessment for the areas that natural soil layers are likely to be disturbed following the detailed design of the proposal, and to prepare a management plan (if required).

Operation

The elevated concentrations of contaminants within the groundwater could affect the aquatic ecosystem of the nearby wetlands and the Hunter River. The Applicant argues that since the groundwater contaminants are present across the site, it is likely that this is a regional issue. Therefore, the proposed works are not expected to adversely impact on groundwater quality.

The Applicant indicated that paving the surface of the merge lane would slightly reduce infiltration and minimise further contamination risk. The Applicant also proposes to implement appropriate occupation health and safety and management practice to reduce the risk of exposing workers to potentially contaminated groundwater.

Issues Raised in Submissions

One submission from the general public raised concerns with the contamination assessment provided with the development application, stating that it does not meet current EPA assessment requirements.

Council raised in its submission that there is a risk that acid sulfate soils could be present on the site, despite the Applicant's conclusions.

Department's Position

Construction

The Department is generally satisfied that the proposed construction activities would not pose a significant threat to the surrounding environment. However, the Department recommends that, should the Minister approve the proposal, that the Applicant be required to test for acid sulfate soils (ASS) at all areas likely to be disturbed by the proposed construction activities prior to the commencement of any works. Should any ASS be detected, the Department considers that the Applicant should be required to implement an appropriate management plan to address any potential impacts associated with this soil type. The Department is satisfied that this approach would ensure the appropriate management of ASS during construction activities and the minimisation of any associated air, soil and water impacts.

With regards to contaminated soils, the Department considers that the contamination issues at Lot 29 and 30 and the suitability of the site is associated with the Council approved carpark DA. The Department is aware that Council has conditioned the Applicant to remediate and validate the site prior to the commencement of construction works. This would involve the monitoring of groundwater to monitor groundwater contamination following the completion of the remediation works. Consequently, the Department is satisfied that this issue has been satisfactorily addressed.

Operation

The Department has reviewed the proposed development, and is satisfied that the proposed operations are unlikely to create any adverse impacts on soil or groundwater quality due to the sealing of the shredder site. Nevertheless, the Department recommends that should the Minister determine to approve the proposal, that all chemicals, dangerous goods and oils be stored in appropriately bunded areas to ensure the protection of surrounding soil and water quality.

6.7 Visual Amenity

Applicant's Position

The proposed development site is bounded by the Great Northern Railway to the west, the Pacific Highway to the east, the existing Metalcorp shredder site and Ironbark Creek to the south and land zoned for environmental protection to the north. The site and surrounding area is largely cleared and relatively flat. The Applicant has identified visual receptors of the proposed development to be:

- the Pacific Highway, adjacent to the eastern boundary of the site;
- the Great Northern Railway, adjacent to the western boundary of the site;
- residences at Shortland, north of the site;
- residences along Shamrock Street, south west of the site;
- employees of the existing Metalcorp site; and
- users of Sparke Street.

The Applicant considers the potential visual impact on these receptors to be:

- negligible for residences at Shortland given the considerable distance between Shortland and the proposed site;
- insignificant for employees of the existing Metalcorp site and the users of Sparke Street as the nature of the immediate surrounding environment is already industrial (by way of the existing Metalcorp site); and
- significant for visual receivers from the Pacific Highway, the Great Northern Railway and residents along Shamrock Street, although:
 - the major visual impact of the development would occur during construction and would be localised as well as restricted to the construction period; and
 - operational surface activities such as stockpiles, trucks and plant would also have a significant visual impact. However this could be mitigated through landscaping and vegetation screening on the western, northern and eastern (western edge of the proposed merge lane) boundaries of the site. Once these vegetation screens and landscaping are established and matured, the surface activities would not be visible and only the high parts of the shredder would be visible from the highway, the railway and Shamrock Street.

The Applicant states that the proposed drainage channel would not be visible from locations outside the existing the site.

Issues raised in Submissions

Two of the submissions received from the public raised concern about visual aspects of the proposal. One of these stated that the visual exposure of the site and the reality of this type of operation does little to promote Newcastle City's image. The other stated that the existing facility is not an environmentally friendly sight and is in full view of the Great North Railway line and any users of NSW State train services on this line. The proposed facility would add to the adverse visual impact of the site.

Council raised concerns regarding the proposed landscaping, and recommended that the Applicant prepared a revised Landscape Management Plan to address residual impacts.

Department's Position

The Department considers that the proposed development will have a visual impact on the surrounding area but concurs with the Applicant that the greatest impacts will occur during the construction period and as a result of surface activities such as stockpiles, trucks and that these can be adequately mitigated. The Department also recognises that in the context of the existing shredder development and within an industrial area the visual impact on the surrounding area will be minimal provided appropriate mitigation measures are undertaken

Given the environment protection and Nature Reserve status of the land surrounding the proposed development site, the Department supports any measures that can be undertaken to properly screen the site and maintain continuity of vegetative landscape along high use and therefore visually sensitive commuter routes such as the highway and the railway. Therefore to minimise the impact if construction and surface operations, the Department supports the protection of existing vegetation on the site and recommends additional planting of screening vegetation along all boundaries of the area including lots 29, 30 and the existing Metalcorp facility.

Should the Minister determine to approve the proposed development, the Department recommends the imposition of conditions to mitigate visual amenity impacts as follows:

- a requirement that the Applicant install dense screen plantings using endemic species, prior to the commencement of operation of the development, to act as a visual screen:
- lighting to be installed on the site must be consistent with AS 4282 1997 Control of the Obtrusive Effects of Outdoor Lighting to mitigate against light pollution;
- no advertising structures are permitted to be erected as part of the proposed development;
- no temporary or permanent storage of waste material or equipment is permitted on Lot 31, given clear lines of sight from visual receptors to that parcel of land; and
- a Landscape Management Plan be developed and implemented to detail how landscaping on the site will be undertaken and maintained.

6.8 Impacts on Heritage Items

Applicant's Position

Although the proposed site has been significantly disturbed by past activities, the Applicant has conducted an assessment on the potential heritage impacts of the proposed development. This assessment, supplemented by a previous investigation and consultation with the Awabakal Local Aboriginal Land Council (ALALC), concluded that no items of Aboriginal or European heritage would be impacted by the proposal. The Applicant argues that any further archaeological investigation of the study area would not be warranted.

Issues Raised in Submissions

The National Parks and Wildlife Service submission advised that should Aboriginal objects be discovered during construction activities, works should cease and the ALALC and the NPWS should be notified immediately.

Department's Position

The Department concurs with the Applicant that the past activities on the proposed site have significantly reduced the likely presence of any undiscovered item of Aboriginal or European heritage significance at the site. Notwithstanding, the Department conducted searches of the NSW heritage inventory (incorporating the NSW state heritage register, and schedules of relevant regional and local environmental planning instruments) and the Register of the National Estate, which were omitted from the Applicant's assessment. No additional items of Aboriginal or European heritage significance were identified. Consequently, as the proposed site preparation works would be limited are areas extensively disturbed in the past (intersection and open drain construction activities), the Department is satisfied that no additional measures would be necessary.

7. SECTION 79C CONSIDERATION

Section 79C of the Act sets out the matters that a consent authority must take into consideration when it determines a development application.

The Department has assessed the DA against these heads of consideration (Appendix A), and is satisfied that:

- the proposal is consistent with the relevant provisions in the State Environmental Planning Policy No. 11 Traffic Generating Development, SEPP No. 14 Coastal Wetlands, SEPP No. 33 Hazardous and Offensive Development, SEPP No.55 Remediation of Land, Hunter Regional Environmental Plan 1989 and Newcastle Local Environmental Plan 2003:
- the proposal would not result in any significant environment or socio-economic impacts:
- the site is suitable for the proposed development; and
- the development is likely to be in the public interest.

8. RECOMMENDED CONDITIONS OF CONSENT

Should the Minister determine to approve the proposed development, the Department recommends the imposition of a number of conditions to mitigate, manage and monitoring environmental impacts, as outlined in the draft recommended instrument of consent (attached, tagged "A"). The conditions take into consideration the General Terms of Approval and other issues raised by Government agencies, Council, and all other submitters including land owners, community groups and independent organisations. Key matters covered by the draft recommended conditions include:

- Management of noise and air quality impacts generated during the operations of the development;
- provision for the appropriate treatment of the Sparke Street intersection to ensure long-term road safety;
- management of impacts associated with the construction of the development;
- minimisation of the environmental impacts generated during operation to ensure long-term sustainability:
- establishment of an environmental management plan for the development; and
- provision for regular auditing and appraisal of the proposal's environmental management.

9. CONCLUSION

The Department has assessed the DA, the accompanying EIS, and the submissions received on the development. The Department is satisfied that the proposed development could be constructed and operated within environmental limits. There are, however, residual environmental impacts that need to be mitigated, monitored and managed to ensure the appropriate long-term management of the facility. Consequently, the Department has recommended a number of conditions to ensure the appropriate measures are in place to address the long-term management of traffic, noise, and air quality at the proposed facility. The Department is satisfied that the recommended conditions would ensure that the proposed development would not have a significant impact on the surrounding residential areas and other sensitive land users. The Department has not identified any matters that it considers would preclude the Minister from approving the proposed development, subject to the draft recommended conditions of consent.

10. RECOMMENDATIONS

It is RECOMMENDED that the Minister:

- (i) consider the findings and recommendations of the Department's assessment report for DA No. 345-7-2003-i (this document, tagged "D");
- (ii) grant consent to development application No. 345-7-2003-i, as submitted by Metalcorp Recyclers Pty Ltd, subject to the conditions set out in the instrument of consent (tagged "A"); and
- (iii) sign the instrument of consent (tagged "A");

Caitlin Bennett
Environmental Planning Officer
Major Development Assessment

ENDORSED:

Sam Haddad Executive Director Sustainable Development

APPENDIX A - CONSIDERATION UNDER SECTION 79C

The following assessment is based on the matters listed for consideration under section 79C(1) of the amended *Environmental Planning and Assessment Act 1979*.

(a) The provisions of:

(i) any environmental planning instrument;

State Environmental Planning Policy No.11 – Traffic Generating Development

1. The aim of the policy is to ensure that the Roads and Traffic Authority (RTA) is made aware and given the opportunity to comment on certain development listed under Schedule 1 or 2.

The proposed development falls under this policy as it involves a building for the purposes of industry that has a gross floor area of 4,000m² or more.

A copy of the DA and accompanying EIS was forwarded to the Hunter Regional Development Committee (affiliated with the RTA) for comment. The committee objected to the proposed development unless the treatment of the Pacific Highway/Sparke intersection was revised. This objection was received prior to the Applicant's revision of the proposed development and the provision of the RTA's GTAs. The Department consequently considers that the Applicant's revision of the intersection and the RTA's GTAs have resolved the concerns raised by the HRDC.

State Environmental Planning Policy No. 14 - Coastal Wetlands

1. The aim of this policy is to ensure that the coastal wetlands are preserved and protected in the environmental and economic interests of the State.

The proposed development located within any SEPP 14 wetland boundaries. However. **SEPP** wetlands are located within 60m of the northern site boundary and along Ironbark Creek. As only Lot 31 (which will remain vacant) would drain towards the northern SEPP 14 wetlands and stormwater discharges to Ironbark Creek treated prior to discharge, the Department considers the proposal not to pose a significant threat to the integrity of the wetlands.

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

1. This policy gives a number of definitions of 'potentially hazardous industry' and 'potentially offensive' industry, and requires consideration to be given to current circulars or guidelines published by the Department of Planning relating to

hazardous and offensive industry. The policy classifies development as:

- Hazardous if the development is in operation and when all measures proposed to reduce to minimise its impact on the locality have been employed, would pose a significant risk in relation to the locality:
 - (a) to human health, life or property; or
 - (b) to the biophysical environment.
- Offensive if the development is in operation and all measures proposed to reduce or minimise an impact are employed, would still emit a polluting discharge that will result in a significant adverse impact in the locality or on the existing or future development on other land in the locality.

The proposed development has been assessed against this policy and has been determined to be below the threshold limits that classify it as potentially hazardous development. Consequently, a PHA was not required and the proposal meets the requirements of the SEPP.

Under this the proposed SEPP, development is classified as potentially offensive development as it requires a pollution control licence under the Protection of the Environment Operation Act 1997. However, if a license is obtained, then the development would not be classified as an offensive industry. Consequently. the proposal was assessed to determine if would be classified as an offensive industry.

It was concluded that the proposed development would not be classified as Offensive development as the impacts associated with the development would be minimised to ensure no significant impact on the locality. In addition, the DEC stated that it would be able to issue a licence for the proposal and has issued it GTAs for the proposed development.

State Environmental Planning Policy No.55 – Remediation of Land

- The aim of this policy is to provide a state-wide planning approach to the remediation of contaminated land and to promote the remediation of contaminated land for the purpose of reducing risk of harm to human health or any other aspect of the environment.
- 2. Clause 7 of the SEPP requires the consent authority to consider whether the land to which a development application relates is contaminated, and if the land is contaminated, to be satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) prior to granting consent.

Under the Council consent issued for a carpark on Lots 29-30, the Applicant is required to remediate contaminated soils present on the site. Consequently, the Department is satisfied that the requirements of this policy have been met through Council's consent and do not need to be addressed as part of the consideration of the subject development application.

Hunter Regional Environmental Plan 1989

- 2. Clause 34 requires the consent authority not to grant consent to a proposed development unless the following is taken into consideration:
 - (a) if the development involves the storage or handling of goods or materials which are likely to be delivered by heavy transport vehicles, that the development has considered whether use could be made of a transport mode other than road which, in the opinion of that consent authority, is economically practicable, and

(b) if the proposal involves a development on land having frontage to a main or arterial road unless:

- (i) all vehicular access to the land is from a road other than a main or arterial road, where practicable, or
- (ii) the consent authority is satisfied that the applicant has demonstrated that there will not be an adverse effect on traffic movement in the area as a result of the development.

The proposal did not consider the opportunity to utilise the neighbouring railway line for the transport of materials, however the size of the Applicant's land did not provide sufficient available space the construction of a rail sliding.

The proposal does not have direct access onto the Pacific Highway, with access directly into Sparke Street.

- 3. Clause 47(1) of the plan specifies that a consent authority must not grant consent to a development listed in Schedule 3 of the Act (including development comprising the expansion of an existing facility) unless it is satisfied that:
 - (a)topographic and meteorological conditions are such that air pollutants would have no significant adverse effect,
 - (b)an appropriate buffer zone can be provided to ensure that noise, dust and vibration are maintained at acceptable levels,
 - (c)the best practicable technology for air, water and noise pollution control will be incorporated in the design and operation of the equipment and facilities to be used for the purposes of the industry,
 - (d)there will be no significant deterioration of air or water quality as a result of emissions from that equipment or those facilities, and
 - (e)the site will not become contaminated within the meaning of Part 5 of the <u>Environmentally Hazardous</u> <u>Chemicals Act 1985</u>.

Refer to Section 6 of the report.

Clause 47(2) of the plan specifies that a consent authority must not grant consent to a development unless it is satisfied that: proposed development would (a) there is adequate provision for The setbacks between the development enable the Applicant to relocate the and existing watercourses; shredding operations further from Ironbark Creek. Supporting operations would continue on the current site which has arrangements in place for the containment and discharge of runoff. No vegetation would be removed as part (b) an adequate vegetation cover is maintained or reinstated so as to of this DA. minimise soil erosion: adequate A stormwater system, approved by a (c) where necessary. Council DA, would service the proposed retardation basins. grassed floodways, sedimentation pits and development. trash collection facilities are established and maintained; and (d) adequate measures are provided to Suitable controls have been recommended in the conditions of soil erosion control during construction of the development. consent for works that would disturb soil during construction activities. 5. Clause 58(1) of the plan, a consent The REP states that the definition of authority must not. without 'building' does not include an aerial, concurrence of the Director, consent to chimney stack, mast, pole, receiving any development application for the tower, silo, transmission tower, utility erection of a building over 14 metres in installation, ventilator or any other thing, height. Should a building exceed this or a building of a class or description limit, Clause 58(2) of the plan states that exempted by the Minister from the in deciding whether to grant concurrence provisions of this plan by notice to a development application in respect published in the Gazette. The ventilation of a development referred to in stack of the proposed shredder will subclause (1), the Director shall take exceed the 14 m limit, however as into consideration the likely regional stated above this is excluded from the implications of the development as clause. Nevertheless, the proposal is regards its social and economic effect considered to be of State and regional and the effect which it will or is likely to significance. have on the amenity of the area. Newcastle Local Environmental Plan 2003 of 1. The site is zoned 4(b) – Port and Under this zoning, this type Industry Zone. development permissible with is consent. 2. Clause 16 sets out the objectives of each zoning that must be considered durina the assessment of anv development application. The objectives of the 4(b) - Port and Industry Zone are: (a) to accommodate port, industrial, Satisfied maritime industrial and bulk storage activities which by their nature of or

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the scale of their operations require separation from residential areas

and other sensitive land uses:

- (b) to require that development of land within 750 metres from the highwater mark of the shores of the Port of Newcastle, capable of docking ocean-going vessels, is used for purposes that:
 - a. require a waterfront location that provides direct access to deep water; or
 - b. depend upon water-borne transport of raw materials or finished product; or
 - c. have functional relationship that necessitates proximity to the activities described above.
- (c) To facilitate sustainable development through the application of industrial ecology;
- (d) To provide for other development which will not significantly detract from the operation of large scale industries or port-related activities, that is primarily intended to provide services to persons employed in such industries and activities.

The proposed development site does not have direct water access and is separated by a major arterial road (pacific highway) that will prevent any future access to the Hunter River. Consequently, this objective does not apply to the proposed development.

The proposed development provides for the reuse of scrap metal by larger-scale steel industries and provides for the sustainable reuse of this resource.

See above.

- 4. Clause 22(2) of the LEP states that the consent authority shall not consent to be landfill of certain lands at Hexham unless:
 - (a) a comprehensive filling and stormwater drainage master plan for the site has been prepared by a practising engineer experienced in flood management which confirms that the land is able to be filled without adverse impacts on adjoining lands or on the overall flood environment, and
 - (b) an emergency response plan has been prepared to the satisfaction of the State Emergency Services area controller providing for the position of warnings and the safe evacuation of persons in the event of inundation of the site by floodwaters and the proposed development complies with the provisions of that plan.

While the proposed development will be within the areas specified under this clause, the proposed development does not incorporate the filling of this site. The landfill of this site was part of a consent issued by Council for the construction and operation of a carpark. By granting consent to the carpark (and associated landfill and stormwater system), it was concluded that this clause had been satisfied. Nevertheless. recommended conditions of consent include a requirement to prepare an Emergency Response Plan to the satisfaction of the Director-General.

(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;

None.

(iii) any development control plan;

Development Control Plan No.18 – Interim Policy on Floodplain Management for the Hunter River Floodplain

- 1. The aim of the DCP is to provide controls for the management of flooding within the Hunter River floodplain. The objectives of this DCP provide for the following:
 - (a) encourage development and construction which is compatible with flood hazard;
 - (b) identify requirements for permissible developments within flood liable lands and
 - (c) reduce risks and implications of flooding to existing areas.

As stated previously, the consent issued by Council addresses the majority of the requirements of the DCP. Nevertheless, issues relating to the operation of the development and the risk of flooding have been met (refer to section 6 of the assessment report).

Development Control Plan No.20 - Guidelines for Industrial Development

1. The aim of the DCP provides requirements that must be met in any development of industrial land. This includes the stockpiling of materials and access arrangements/parking for the proposed development.

The proposed development largely satisfies the requirements of the DCP. However, the proposed development does not meet the guidelines relating building industrial design requirements and internal material stockpiling. However, this has been justified due to the specific design requirements of the shredder cannot conform to general traditional industrial building designs, and that the position of the stockpiles have been located in a manner to reduce visual amenity impacts. The Department has considered the visual amenity requirements of the development in section 6 of this report and concluded that it would not generate any significant amenity impacts (subject to implementation the of recommended conditions of consent).

Development Control Plan No.24 - Carparking

- 1. The aim of the DCP is to provide for:
 (a) a consistent and equitable
 - basis for assessment of car parking provisions; and
 - (b) provide guidelines for the efficient and functional layout of parking areas, loading bays and access driveways. determine the road network and land needed for road

Satisfied (refer to Section 6 of this report).

reservations for the road traffic generated during the development of the Wagga Wagga LGA. Development Control Plan No.33 - Landscape Design Principles and Guidelines The DCP sets out design 1. Generally satisfied, however the requirements for the landscaping of recommended conditions of consent developments within Newcastle. requires the Applicant to revise the proposed landscaping (refer to section 6 of this report). This will require consultation with Council in the preparation of this revised plan. Development Control Plan No.43 – Contaminated Land The aim of the DCP is to ensure the As stated previously, the Applicant is required to remediate the site effected appropriate remediation of by the proposed development to the contaminated land within the Newcastle local government area. satisfaction of Council as part of the consent issued for the carpark DA. Consequently, this DCP has been met. Development Control Plan No.50 - Stormwater Management for Development Sites 1. The aim of the DCP is to provide for Refer to Section 6 of the report. the appropriate management of stormwater at development sites. This includes the following requirements: (a) promote the adoption of on-site stormwater management practices that support a pre-development hydrological regime does not reduce the effectiveness of existing drainage infrastructure: (b) ensure that new development does not reduce the effectiveness of existing drainage infrastructure; (c) minimise the impacts of stormwater runoff from a site on adjoining properties; (d) promote the adoption of on-site retention, detention and infiltration of stormwater where this is feasible: and (e) promote the aim of stormwater discharge not degrading the quality of surface and underground receiving waters. Draft Development Control Plan No.55 – Flood Risk Management for **Development Sites** DCP 1. This draft sets out the Satisfied (refer to section 6 of this requirements for development within report). flood prone land. This includes the containment of debris and risk management.

	Development Control Plan No.56 – Waste Minimisation							
1.	This DCP provides requirements for	Satisfied	(refer	to	section	6	of	this
	the management of waste generated	report).						
	and the minimisation of waste.							

(iv) any matters prescribed by the regulations that apply to the land to which the development application relates.

None.

(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,

Natural and Built Environment

Section 6 considers the environmental impacts of the proposed development in detail. The Department is satisfied that all environmental impacts can be appropriately managed and mitigated through the conditions of the recommended instrument of consent.

Social and Economic Impacts

The proposed development provides for improved and continued positive social and economic impacts with the proposed operations enabling the Applicant to continue its critical role in the recovery of scrap metal waste in NSW, processing up to 60% of NSW's scrap metal needs. Furthermore, this continued supply of this material is critical in maintaining operations at two major steel mills and various foundries in NSW that employ up to 1,500 positions.

In addition, the proposed development provides an opportunity for the improved environmental performance of the current shredder (which will be decommissioned) and the Department is satisfied that the proposed development would operate within acceptable environmental limits. While there is the potential for the proposal to have some residual impacts on amenity, it is considered that the recommended development consent conditions adequately provide the necessary framework for ensuring that the proposal operates in a socially acceptable manner and that these impacts are reduced to as low as possible.

(c) the suitability of the site for the development,

The site is considered to be suitable for development. While at the time of lodgement the proposal was classified as prohibited development, the proposed development is classified as permissible under the revised zoning of the site under the Newcastle LEP 2003. Furthermore, the development application approved by Newcastle Council has addressed issues relating to flooding to ensure that the site does not affect flood behaviour patterns.

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

Issues raised by the government authorities, Council and the general public in submissions are discussed in Sections 5 & 6 of this report, and summarised in Appendix B. It is considered that all the issues in these submissions have been satisfactorily addressed, and that there are no outstanding issues that would preclude the granting of development consent with conditions.

(e) the public interest.

The proposal is in the public interest due to the benefits of removing recyclable materials from the NSW waste stream and the associated employment and economic flow-on effects for several major mills and foundries in NSW.

Furthermore, the proposal provides for the decommissioning of the existing shredder at the site, and the installation of a state of the art shredder with improved technology to assist in minimising the environmental impacts associated with the proposed facility. The recommended instrument of consent imposes a number of stringent controls, monitoring and annual auditing of the facility, which the Department considers will mitigate any environmental impacts of the proposal and provide for the long-term management of the proposed operations.

It is therefore considered that the proposal will be in the public's interest.

APPENDIX B - SUBMISSIONS SUMMARY

Public Submissions

No.	Name	Company	Position	Comments
1	Mr Brendan Diacono Manager, Conservation Planning Unit	NSW National Parks and Wildlife Service Locked Bag 914 COFFS HARBOUR NSW 2450	Not stated	 Inconsistencies between the 1998 report by Wildthing and the SMEC report. This should be resolved prior to determination Methodology of survey not provided Site has contamination issues, which could threaten neighbouring wetlands and waterways due to construction work occurring during wet months. Should any relics be disturbed during work – activities should cease and NPWS and local LALC be notified.
2	Mr Michael McFadyen Regional Manager – RNSW Hunter	ResourceNSW PO Box 307 WARATAH NSW 2298	Not stated	 EIS refers to the Waste Minimisation and Management Act 1995 – which has been replaced by the Waste Avoidance and Resource Recovery Act 2001. EIS should consider the objectives of this Act. Applicant should address the requirements of the waste hierarchy under the WARR Act and the NSW Avoidance and Resource Recovery Strategy Measures should be provided to reduce the amount of shredder residue and recover more resources.
3	Ms Sharon Vernon	Hunter Catchment Management Trust Private Bag 2010 PATERSON NSW 2421	Not stated	 SEPP 14 wetlands that form part of the Ironbark Creek drainage system receive and contribute water to the creek. Consequently, discharges into Iron Bark Creek from the open drain may impact on SEPP 14 wetlands. Issues will be further compounded by the Trust's rehabilitation plans for the Hexham Swamp, which will see floodgates progressively opened to enable tidal flushing – causing discharges from the site flushed further upstream into the Ironbark Creek catchment and potentially adverse impacts on water quality. Suggest that discharge should be to Hunter River, which has greater capacity to assimilate discharge water that Ironbark Creek. Flooding – need to consider the impact on water quality on SEPP 14 wetlands and broader Ironbark Creek/Hunter River systems from inundation of the site.
4	Ms Natalie Lloyd Town Planner, Land Use & Planning	Rail Estate PO Box K349 HAYMARKET NSW 1238	Not stated	 Site may be subjected to noise and vibration from the adjacent rail corridor that may jeopardise the structural integrity of the buildings. Need to consider StateRail publication Rail Related Noise and Vibration: Issues to Consider in Local Environmental Planning – Development Applications. Requests that an easement by placed on the property to permit vibration and electrolysis from rail line activities. Note: the majority of the suggested conditions relate to residential properties. Development may be subject to stray electrical currents from the facility – should consider this potential impact when designing buildings (recommended condition included).

No.	Name	Company	Position	Comments
				 Recommended conditions for works involving demolition, excavation and construction activities. Stormwater discharges onto railway corridor is unacceptable (recommended condition) If Applicant requires access to the rail corridor for construction works, need to impose the recommended conditions. Need to provide fencing during construction work to satisfaction of State Rail (recommended conditions).
5.	Mr Dave Young Chairperson	Hunter Regional Development Committee c/- RTA Locked Bag 30 NEWCASTLE NSW 2300	Object	 Objects to the proposal unless the following is taken into account in any recommended conditions alternative access arrangements, such as a connection to Shamrock Street. Preparation of an Environmental Management Plan to manage dust and sediment control during construction work, and during operations. Separate application is required to be sent to Council before the receipt of B-Doubles to the site.

Private Submissions

No	Position	Comments					
1	Object	 Proximity to residential areas, aged-care facility, Shortland Wetlands and Hunter River. 					
		■ Should have not been called in as prohibited development.					
2	Object	 Inappropriate location due to proximity of residential areas. 					
		■ Noise					
		■ Lifestyle impacts					
		Should remain prohibited development					
3	Object	■ Form Letter					
		■ Noise, particularly at night from 24 hour operations, will worsen with proposed expansion					
		 Dust/fallout from the proposal, will worsen with proposed expansion. 					
		Increase in heavy vehicular movements, increasing noise and safety hazards and will impact on the quality of road network.					
		■ Lifestyle impacts, including retirement village and nursing home.					
4	Object	■ Form letter, refer to submission No.3					
5	Object	■ Form letter, refer to submission No.3					
6	Object	 Noise levels are already unacceptable, and will only worsen with the proposed expansion. 					
		 Inappropriate location due to proximity of residential areas. 					
7	Object	■ Form letter, refer to submission No.3					
8	Object	■ Form letter, refer to submission No.3					

No	Position	Comments
9	Object	 World Heritage Wetland area and proposed development should be located in a more appropriate location eg the steel city site
10	Object	■ Form letter, refer to submission No.3
11	Object	■ Form letter, refer to submission No.3
12	Object	■ Noise
13	Object	■ Form letter, refer to submission No.3
14	Object	Objects if access to Sparke Street continues as present
		 Vision is limited and vehicles travel at high speeds along the highway
		Should be redirected to traffic lights at McDonald's and access prohibited into Sparke Street
		High accident rate along this stretch of road.
15	Object	Existing noise levels are impacting on lifestyle, particularly at night and from explosions. Have tolerated it, and therefore have not lodged
		any complaints
		Pollution is evident at their premises.
		Located only 800 metres from the facility
		 Inappropriate location due to proximity to residential areas, retirement village and nursing home.
		 Existing traffic conditions – increase in heavy vehicle traffic will worsen safety risk
		Lining up of trucks along Sparke Street.
		Contamination – fill placed on the land is illegal.
		Flooding – proposal will be subjected to high flood levels
16	Object	Form letter, refer to submission No.3
17	Object	■ Form letter, refer to submission No.3
18	Object	Increase in heavy vehicular traffic and associated safety implications. Proposed upgrade of intersection will not reduce increase in safety
		risk for vehicles entering/leaving Sparke Street
		 Council and RTA have restricted development in this area due to traffic concerns and flooding
		 Existing crusher can be heard at Nursing Home, and will only worsen with the increased work load and hours.
19	Object	 Increase in scrap metal storage on existing site will increase noise and dust emissions.
		 New shredder is not sufficiently distanced to counteract increase in production or eliminate noise increase.
		 Increase in heavy vehicle movements – existing vehicles have poor site distances and area is renowned for accidents.
		Will restrict any future expansions at this facility The strict any future expansions at this facility The strict any future expansions at this facility
		Past promises from the Applicant have not followed through – esp with relation to vibration effect of explosions and their impact on the
		facilities at the property.
		■ Dust is a common problem, and will only worsen.
		Pollution of wetlands, and Hunter River – particularly from water from the open drain. And the treatment of 'effluent' captured and
		precautions to ensure pollutants do not enter sensitive waterways.
		Impacts during flooding.
		Use of heavy vehicles will occur and will generate noise impacts In a particular to the action to
		Inappropriate location, particularly in relation to the aged care facilities.

No	Position	Comments
20	Support	 Extra employment to the area Concerned with potential safety risks associated with increase in heavy vehicle movements. Accidents have occurred at this intersection or
		near it in the past. Should consider use of rail as F3 already reaching capacity Shouldn't be allowed to operate on Sundays.
21	Object	 Lifestyle impacts, relating to noise, explosions and pollution fallout. Believes existing facility does not have Council consent. Truck turning facility at Old Maitland Road already has safety issues, with numerous small accidents occurring. The proposed use of this turning facility will increase this problem. Extension of the Main Road 23 will compound safety issues at the Sparke Street intersection (see attached map). Concerns with land filling – will worsen flood levels at neighbouring residential areas (note: this is an issue relating to the Newcastle DA
		CB). Visual, especially from railway line Understands importance to State, however the negative impacts outweigh the positives.
22	Object	 Form Letter No.2 – accompanied by petition with 17 signatures Current shredder creates adverse noise/lifestyle impacts from explosions and continual operations. Problems will only worsen Too close to St. Josephs and nursing home. Would interfere with standard of living with these two facilities operating (note existing shredder will be decommissioned CB). Sparke Street intersection is already dangerous with short sight distances.
23	Object	Form Letter No.2 – refer to submission 22. Petition of 27 signatures Petition of 27 signatures
24	Object	 Is prohibited development under the LEP Already experiencing noise problems, and if facility extends to 7 days per week for 24 hours will impact further. Petition of 41 signatures
25	Object	 Noise, particularly those during night-time periods Considers activities to be dangerous as current facility as Fire Brigades attends to the site on numerous occasions. Airborne particles, and the potential impacts on St. Josephs.
26	Object	 Objection to the proposed filling of site to 1 in 20 year flood level – note this relates to the Newcastle DA. Proposal is inconsistent with the objectives of restoring Hexham Swamp Visual exposure of the site does little to promote Newcastle's image Current operations have been responsible for a number of accidents at intersection. Proposed development will only increase the risk due to increases in heavy vehicles and completion of Road 23. Impacts of noise levels, air pollution and the proposed 24 hour 7 day a week operation.
27	Object	 Proposed landscaping does not provide sufficient screening for adjoining properties and Sparke Street. Plans should be provided that details species and maintenance of the landscaping. This is an issue for proposed and existing operations. Land contamination Proposed filling – is 1 in 20 year sufficient for the proposal (note partly associated with Council DA), should meet Council requirements for

No	Position	Comments
NO	Position	
	0111	flooding and drainage.
32	Objects	 Increase in vehicular traffic with 60 additional heavy vehicle movements and associated noise impacts along the Pacific Highway.
		 Impacts of proposed intersection on the future Newcastle bypass intersection.
		 Questions accuracy of the noise impact assessment presented in the EIS and the assessment of impacts on neighbouring residential areas.
		 Argues that the proposal is not state significant and should have not been called in by the Minister.
		Application should be re-lodged under the Newcastle LEP 2003.
33	Objects	■ Impacts on nursing home and associated retirement village, and the potential impacts from the proposed 24 hour operations (noise, traffic,
		smoke and dust emissions).
		 Flooding and the transportation of pollutants during any flood event to neighbouring Hexham Swamp.
LATE	SUBMISSI	ONS
No	Position	Comments
28	Object	Applicant should have considered other sites
		Inappropriate location due to proximity to nursing home and residential areas. Particularly impacts from 24 hour operations, noise, dust,
		heavy traffic noise, smoke emissions.
		 Adjacent the Hexham Swamp, a protected wetland – drainage from the site will effect this protected area (part. during a flood)
		Past facility was expanded with any proper assessment.
30	Object	 An additional submission to submission No. 15 & 21
		 Complaint regarding consultation conducted by Council for the development application for the current operations in 1994.
		 History indicates that operations cannot be properly managed to reduce/mitigate impacts on surrounding landuses.
31	Object	The EIS did not consider alternative locations.
		 Inappropriate location due to residential areas and St Josephs
		 Increase in noise, heavy traffic, smoke and dust emissions.
		 Issues associated with traffic turning south out of Sparke Street
		Flooding and associated transportation of pollutants
		 Shortland wetlands are connected to Hexham Swamp, concerned impacts will be occur to this RAMSAR wetland.
		 Presence of the Green and Golden Bell Frog and impacts of proposal on this species.
34	Objects	Form letter, refer to submission No.3.