

## Appendix B Director General's Requirement's Checklist

Type of Requirement	Specific Issue to be Addressed	EIS Reference
<b>Department of Planning</b>		
Specific Issues	<b>1. Description of the Proposal</b>	Section 1 and 4 Appendix E
	<b>2. Justification of the Proposal</b>	Section 8
	<b>3. Environmental Planning Instruments-</b> the EIS must assess the proposal against all relevant planning legislation.	Section 5
	<b>4. Key Issues:</b> The EIS must assess the following potential impacts of the proposal during construction and operation and describe what measures would be implemented to avoid, minimise, mitigate, offset, manage and/or offset these potential impacts: <ul style="list-style-type: none"> <li>• Waste management.</li> <li>• Noise.</li> <li>• Air quality.</li> <li>• Hazards and risks.</li> <li>• Soils and water.</li> <li>• Traffic.</li> <li>• Incident management.</li> <li>• Flora and fauna.</li> <li>• Visual</li> <li>• Rehabilitation.</li> </ul>	Section 4 and 6 Appendix G, H, I, J, K and L.
	<b>5. Environmental Monitoring and Management.</b>	Section 4
	<b>6. Integrated Developments</b>	Section 5.9
	<b>7.Consultation</b>	Section 2
	<b>8.The Commonwealth Environment Protection and Biodiversity Conservation Act</b>	Section 5.9 Appendix I
Statutory Issues	<b>Mandatory Issues for all EIS's –</b> Statutory matters that must be included in any EIS under clauses 71 and 72 of the Environmental Planning and Assessment Regulation 2000 (the EP&A Regulation)	Section 5
	A statement containing information about the author of the EIS and certifying that the information is in accordance with the EP&A Regs and is neither false and misleading.	Form 1at beginning of EIS document.
	A summary of the environmental impact statement.	See Executive Summary
	A statement of the objectives of the development.	Section 1
	An analysis of any feasible alternatives.	Section 8
	<ul style="list-style-type: none"> <li>• A full description of the development,</li> <li>• A general description of the environment likely to be affected by,</li> <li>• The likely impact on the environment of the development, and</li> <li>• A full description of the measures proposed to mitigate any adverse effects of the development may lawfully be carried out.</li> <li>• A list of approvals that must be obtained under other Acts.</li> </ul>	Section 3, 4 , 5 and 6 Appendix E, G, H, I, J, K, L.
	The reasons justifying the carrying out of the development having regard to environmental, social , economic and the principles of ESD.	Section 7 and 8
<b>Preparation of an EIS for Crushing, Grinding or Separating Works</b>		
	1. Description of the proposal	Section 4
	2. Description of the Environment	Section 3 and 6
	3. Analysis of Environmental Impact	Section 6 Appendix G, H, I, J, K, L.
	4. Contact with relevant Government Authorities	Section 2
<b>Department of Environment and Climate Change (now Dept of Environment, Climate Change &amp; Water)</b>		
<b>A. Executive Summary</b>	A brief discussion of the extent to which the proposal achieves identified environmental outcomes.	See Executive Summary

<b>B. The Proposal</b>		
	<b>1. Objectives of the Proposal</b>	Section 1
	<b>2. Description of the Proposal</b>	
	Description of operation, processes, hours, number of employees, equipment etc	Section 4
	<b>Air</b>	
	Identify all sources of air emissions from the development.	Section 6.4
	<b>Noise and Vibration</b>	
	Identify all noise sources from the development (including both construction and operation phases).	Section 6.11 Appendix L
	Specify the times of operation for all phases of the development and for all noise producing activities.	Section 4.5
	<b>Water</b>	
	Provide details of the project that are essential for predicting and assessing impacts to waters.	Section 4.9 Section 6.3 Appendix G
	Outline site layout, demonstrating efforts to avoid proximity to water resources.	
	Outline how total water cycle considerations are to be addressed showing total water balances for the development.	
	<b>Waste and Chemicals</b>	
	Provide details of the quality and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises.	Section 4 Section 6.12
	Provide details of the quantity, type and specifications for all output products proposed to be produced from the facility.	
	Provide details of intended (or potential) end uses for output products from the facility and the relevant product standards which would be used to assess those products against.	
	Provide details of liquid waste and non-liquid waste management at the facility.	
	Provide details of spoil disposal.	
	Provides details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.	
	<b>ESD</b>	
	Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD.	Section 7
	<b>3. Rehabilitation</b>	
	Outline considerations of site maintenance and proposed plans for the rehabilitation of the site.	Section 4.10 Appendix H
	<b>4. Consideration of Alternatives and Justification for the Proposal</b>	Section 8
<b>C. The Location</b>		
	<b>1. General</b>	
	Provide an overview of the affected environment to place the proposal in its local and regional environmental context.	Section 3
	<b>2. Air</b>	
	Describe the topography and surrounding land uses.	Section 3 and 6
	<b>3. Noise and Vibration</b>	
	Identify any noise sensitive locations likely.	Section 6.11 Appendix L
	Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.	Section 3
	<b>4. Water</b>	
	Describe the catchment including proximity of the development to any waterways.	Section 4.9 Section 6.3 Appendix G
	<b>5. Soil Contamination Issues</b>	
	Provide details of site history.	Section 6.9 Appendix J

<b>D. The Environmental Issues</b>		
	<b>1. General</b>	
	<b>Describe Baseline Conditions</b>	
	Provide a description of existing environmental conditions for any potential impacts.	Section 3
	<b>Assess Impacts</b>	
	<b>Describe Management and Mitigation Measures</b>	Section 4
	<b>2. Air</b>	
	<b>Describe Baseline Conditions</b>	
	<b>Assess Impacts</b>	
	Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.	Section 6.4
	Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.	
	<b>Describe Management and Mitigation Measures</b>	
	<b>3. Noise &amp; Vibration</b>	
	<b>Describe Baseline Conditions</b>	
	Determine the existing background (L <sub>A90</sub> ) and ambient (L <sub>Aeq</sub> ) noise levels in accordance with the NSW Industrial Noise Policy.	Section 6.11 Appendix L
	Provide a noise impact assessment for the site and proposed development.	
	<b>Assess Impacts and Describe Mitigation Measures</b>	
	<b>4. Water</b>	Section 4.9 and 6.3 Appendix G
	<b>Describe Baseline Conditions</b>	
	<b>Assess Impacts and Describe Mitigation Measures</b>	
	<b>5. Soils and Contamination</b>	Section 6.9 Appendix J
	<b>Describe Baseline Conditions</b>	
	<b>Assess Impacts and Describe Mitigation Measures</b>	
	<b>6. Waste and Chemicals</b>	
	Describe any existing waste streams or chemicals related to the proposal.	Section 6.12
	<b>7. Threatened Species</b>	
	Undertake field survey and document findings in accordance with Threatened Species Guidelines.	Section 6.5 Appendix I
	Assess potential for the presence of the Green and Golden Bell Frog	
<b>E. List of approvals and Licences</b>	Identify all approvals and licenses required under environmental protection legislation.	Section 5.9
<b>F. Justification for the Proposal</b>	Reasons should include, environmental, social , economic and ESD.	Section 8

#### Department of Water and Energy

<b>Relevant Legislation</b>	The assessment is required to take into account the objectives and regulatory requirements of the following legislation (administered by DWE), as applicable:	Section 5.9
	<ul style="list-style-type: none"> <li>Water Act 1912</li> <li>Water Management Act 2000 (WMA)</li> </ul>	
<b>Relevant Policies</b>	The assessment is required to take into account the following NSW Government policies, as applicable:	Section 4.9 and 6.3 Appendix G
	<ul style="list-style-type: none"> <li>NSW Groundwater Policy Framework Document – General</li> <li>NSW Groundwater Quality Management Policy</li> <li>NSW Groundwater Quality Protection Policy</li> <li>NSW Groundwater Dependant Ecosystem Policy</li> <li>NSW State Rivers and Estuaries Policy</li> <li>NSW Sand and Gravel Extraction Policy for Non-Tidal Rivers</li> <li>NSW Wetlands Management Policy</li> <li>NSW Farm Dams Policy</li> <li>NSW Weirs Policy</li> </ul>	It is noted that the subject land is an abandoned hard rock quarry site. All topsoil and 20m of strata have been removed. There is considered to be no groundwater issues on the site. There are no dams or weirs on the site. Therefore, these NSW Government

		Policies have not been considered relevant to the Project.
<b>Guidelines</b>	The assessment is required to take into account the following DWE Guidelines for Controlled Activities (February 2008), as applicable:	Section 4.9 Appendix G
	<ul style="list-style-type: none"> <li>Riparian corridors (and associated Vegetation Management Plans)</li> </ul>	No work is proposed in the watercourse as part of the Stormwater Management Plan
	<ul style="list-style-type: none"> <li>Watercourse crossings</li> </ul>	
	<ul style="list-style-type: none"> <li>Laying pipes and cables in watercourses</li> </ul>	
	<ul style="list-style-type: none"> <li>Outlet structures</li> </ul>	
	<ul style="list-style-type: none"> <li>In-stream works</li> </ul>	
<b>Groundwater</b>	The assessment is required to identify groundwater issues and potential degradation to the groundwater source.	As above
<b>Surface Waters</b>	The assessment is required to consider the impact of the proposal on the watercourses and associated riparian vegetation within the site.	Section 4.9 and 6.3 Appendix G  The site is a highly disturbed industrial site. There is no native flora on the site of conservation value and no riparian vegetation. Measures are implemented to protect the watercourse which has its headwaters on the site.
<b>Water Management Structures/ Dams</b>	If the proposal includes existing or proposed water management structures/ dams, the assessment is required to provide information.	Section 4.9 and 6.3 Appendix G
<b>Roads and Traffic Authority</b>		
General	Preparation of a Traffic Impact Study in accordance with Table 2.1 and the RTA Guide to Traffic Generating Developments. Addressing:	Section 6.10 Appendix K
	<ul style="list-style-type: none"> <li>Truck assessment</li> </ul>	
	<ul style="list-style-type: none"> <li>Impact of merge lane</li> </ul>	
	<ul style="list-style-type: none"> <li>Were across Five Islands Road</li> </ul>	
	<ul style="list-style-type: none"> <li>Heavy vehicle routes to site</li> </ul>	
	<ul style="list-style-type: none"> <li>Investigate alternative access points to site.</li> </ul>	

Our Ref: 497DA103 (09/255)  
Contact: Nicole Stevenson (42212523)  
Your Ref: 07142



Siteplus  
PO Box 5104  
WOLLONGONG NSW 2520

Attention: Wendy Todd

**WOLLONGONG CITY COUNCIL – PROJECT NUMBER 07142 – LOT 2 DP 217590  
JARVIE ROAD, PROPOSED RESOURCE RECOVERY CENTRE, CRINGILA**

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Dear Madam

I refer to correspondence dated 10 March 2009 regarding the subject proposal forwarded to the RTA for consideration.

The RTA has reviewed the submitted information and has significant concerns regarding the proposed access arrangements into the site via Five Islands Road.

The proposed access with Five Islands Road is located at the end of a merge lane and in close proximity to the existing signals at the junction of Springhill Road. Given the tendency of vehicles to focus on the merge with parallel through traffic, the RTA is concerned that the introduction of additional slow turning traffic into the proposed access will lead to increased conflict between vehicles accessing the site, which are identified as being trucks and through vehicles travelling along Five Islands Road.

In addition, the RTA is concerned that vehicles attempting to access the site from Springhill Road will be required to weave across two through travel lanes and a merge lane along Five Islands Road in order to access the site. As with the conflict within the existing merge lane, this weave creates a potentially significant road safety concern and should be closely examined within a traffic impact study before any intensification of the site is supported. This traffic impact study should be prepared in accordance with Table 2.1 of the RTA Guide to Traffic Generating Developments and should recommend any proposed measures required to ameliorate the impact of the proposal.

It should also be noted that wire rope has recently been installed within the median of Five Islands Road to prevent illegal right turn movements into/out of the site. This represents the closure of what appears to be the clear desire line for vehicles travelling to the site from the south and will force all vehicles to utilise either Springhill Road or Five Islands Road (westbound) to access the site. The traffic impact study must therefore clearly identify the proposed heavy vehicle routes into the site.

Given the above concerns, the RTA also requests that the traffic impact study and subsequent Statement of Environmental Effects consider the possibility of relocating the vehicular access point so that all access to the site occurs via the local road network. Whilst it is understood this has a number of potential disadvantages, including noise impacts on local residents, the RTA is concerned that access for the proposal via Five Islands Road may not be acceptable from a road safety perspective.





The RTA will continue its assessment of the proposal once additional information has been submitted for consideration.

Should you require any clarification on the above please contact Nicole Stevenson on 4221 2523.

Yours faithfully



Joanne Parrott  
Manager, Road Safety and Traffic Management  
Southern Operations & Engineering Services

19 MAR 2009



NSW Government  
Department of Water & Energy

Received

24 MAR 2009

Major Development Assessment  
OSDAA

Major Development Assessment  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Contact: Jeremy Morice  
Phone: 02 4224 9648  
Fax: 02 4224 9650  
Email: Jeremy.Morice@dnr.nsw.gov.au

Our ref: ERM 2009/0267  
Your ref: DGR 435  
File:

**Attention: Nigel Parsons**

20 March 2009

Dear Mr Parsons

**Subject: DGR ID No: 435 – Director General's Requirements  
Waste Management Facility – Jarvie Road, Cringila**

I refer to your letter of 12 March 2009 requesting Director General's requirements for the preparation of an Environmental Impact Statement (EIS) for the above proposal. The Department of Water and Energy (DWE) provides the following advice for consideration:

#### Relevant Legislation

The assessment is required to take into account the objectives and regulatory requirements of the following legislation (administered by DWE), as applicable:

- *Water Act 1912*
- *Water Management Act 2000 (WMA)*.

#### Relevant Policies

The assessment is required to take into account the following NSW Government policies, as applicable:

- NSW Groundwater Policy Framework Document - General
- NSW Groundwater Quantity Management Policy
- NSW Groundwater Quality Protection Policy
- NSW Groundwater Dependent Ecosystem Policy
- NSW State Rivers and Estuaries Policy
- NSW Sand and Gravel Extraction Policy for Non-Tidal Rivers
- NSW Wetlands Management Policy
- NSW Farm Dams Policy
- NSW Weirs Policy.

#### Guidelines

The assessment is required to take into account the following DWE Guidelines for Controlled Activities (February 2008), as applicable:

- Riparian corridors (and associated Vegetation Management Plans)

- Watercourse crossings
- Laying pipes and cables in watercourses
- Outlet structures
- In-stream works

Refer to: [http://www.dnr.nsw.gov.au/water/controlled\\_activity.shtml](http://www.dnr.nsw.gov.au/water/controlled_activity.shtml).

### **Groundwater**

DWE is responsible for the management of the groundwater resources so they can sustain environmental, social and economic uses for the people of New South Wales.

#### Groundwater Source

The assessment is required to identify groundwater issues and potential degradation to the groundwater source and provide the following:

- Details of the predicted highest groundwater table at the development site.
- Details of any works likely to intercept, connect with or infiltrate the groundwater sources.
- Details of any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- Describe the flow directions and rates and the physical and chemical characteristics of the groundwater source.
- Details of the predicted impacts of any final landform on the groundwater regime.
- Details of the existing groundwater users within the area (including the environment) and include details of any potential impacts on these users.
- Assessment of the quality of the groundwater for the local groundwater catchment.
- Details of how the proposed development will not potentially diminish the current quality of groundwater, both in the short and long term.
- Details on preventing groundwater pollution so that remediation is not required.
- Details on protective measures for any groundwater dependent ecosystems (GDEs).
- Details of proposed methods of the disposal of waste water and approval from the relevant authority.
- Assessment of the need for an Acid Sulfate Management Plan (prepared in accordance with ASSMAC guidelines).
- Assessment of the potential for saline intrusion of the groundwater and measures to prevent such intrusion into the groundwater aquifer.
- Details of the results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Details of any proposed monitoring programs, including water levels and quality data.
- Reporting procedures for any monitoring program including mechanism for transfer of information.
- An assessment of any groundwater source/aquifer that may be sterilised as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).



- Description of the remedial measures or contingency plans proposed.
- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

#### Licensing

All proposed groundwater works, including bores for the purpose of investigation, extraction, dewatering, testing or monitoring must be identified in the proposal and an approval obtained from DWE prior to their installation.

#### Groundwater Dependent Ecosystems

The assessment is required to identify any impacts on GDEs.

GDEs are ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater. GDEs represent a vital component of the natural environment. GDEs can vary dramatically in how they depend on groundwater from having occasional or no apparent dependence through to being entirely dependent. GDEs occur across both the surface and subsurface landscapes ranging in area from a few metres to many kilometres. Increasingly, it is being recognised that surface and groundwaters are often interlinked and aquatic ecosystems may have a dependence on both.

Ecosystems that can depend on groundwater and that may support threatened or endangered species, communities and populations, include:

- Terrestrial vegetation that show seasonal or episodic reliance on groundwater.
- River base flow systems which are aquatic and riparian ecosystems in or adjacent to streams/rivers dependent on the input of groundwater to base flows.
- Aquifer and cave ecosystems.
- Wetlands.
- Estuarine and near-shore marine discharge ecosystems.
- Fauna which directly depend on groundwater as a source of drinking water or that live within water which provide a source.

The NSW Groundwater Dependent Ecosystem Policy provides guidance on the protection and management of GDEs. It sets out management objectives and principles to:

- Ensure the most vulnerable and valuable ecosystems are protected.
- Manage groundwater extraction within defined limits thereby providing flow sufficient to sustain ecological processes and maintain biodiversity.
- Ensure sufficient groundwater of suitable quality is available to ecosystems when needed.
- Ensure the *precautionary principle* is applied to protect GDEs, particularly the dynamics of flow and availability and the species reliant on these attributes.

A number of gazetted WSP list and map priority GDEs and set out the management strategies and actions for sharing and protecting groundwater quality, quantity and dependent ecosystems.

#### **Surface Waters**

DWE is responsible for the sustainable management of rivers, estuaries, wetlands and adjacent riverine plains.

### Watercourse/Riparian

The assessment is required to consider the impact of the proposal on the watercourses and associated riparian vegetation within the site and provide the following:

- Identify the sources of surface water.
- Details of stream order (using the Strahler System).
- Details of any proposed surface water extraction, including purpose, location of existing pumps, dams, diversions, cuttings and levees.
- Detailed description of any proposed development or diversion works including all construction, clearing, draining, excavation and filling.
- An evaluation of the proposed methods of excavation, construction and material placement.
- A detailed description of all potential environmental impacts of any proposed development in terms of vegetation, sediment movement, water quality and hydraulic regime.
- A description of the design features and measures to be incorporated into any proposed development to guard against long term actual and potential environmental disturbances, particularly in respect of maintaining the natural hydrological regime and sediment movement patterns and the identification of riparian buffers. (See note below)
- Details of the impact on water quality and remedial measures proposed to address any possible adverse effects.

Riparian corridors form a transition zone between terrestrial and aquatic environments and perform a range of important environmental functions. The protection or restoration of vegetated riparian areas is important to maintain or improve the geomorphic form and ecological functions of watercourses through a range of hydrologic conditions in normal seasons and also in extreme events.

Several tributaries of Harbour Creek bisect bushland directly to the east of the subject site. The Riparian Corridor Management Study (RCMS) undertaken by DWE for Wollongong City Council identifies Harbour Creek adjacent to the site as a category 2 stream. The RCMS recommends a vegetated riparian corridor of 20m with an additional 10m buffer from top of bank for category 2 streams.

Any works proposed in or within 40m of a Harbour Creek will require a Controlled Activity Approval under the WMA.

### Water Management Structures/Dams

DWE is responsible for the management and licensing of these structures under water legislation.

If the proposal includes existing or proposed water management structures/dams, the assessment is required to provide information on the following:

- Date of construction (for existing structure/s).
- Details of the legal status/approval for existing structure/s.
- Details of any proposal to change the purpose of existing structure/s.
- Details if any remedial work is required to maintain the integrity of the existing structure/s.
- Clarification if the structure/s is on a watercourse.
- Details of the purpose, location and design specifications for the structure/s.



- Size and storage capacity of the structure/s.
- Calculation of the Maximum Harvestable Right Dam Capacity (MHRDC).
- Details if the structure/s is affected by flood flows.
- Details of any proposal for shared use, rights and entitlement of the structure/s.
- Details if the proposed development/subdivision has the potential to bisect the structure/s.

DWE's Farm Dams Assessment Guide provides details on harvestable rights and the calculation of the MHRDC.

Refer to: [http://www.naturalresources.nsw.gov.au/water/farm\\_dams/index.shtml](http://www.naturalresources.nsw.gov.au/water/farm_dams/index.shtml).

Please note that referral of the completed EIS to DWE is only required if the proposal requires a licence or approval under the WA or WMA.

Should you have any queries regarding the above please contact Jeremy Morice on (02) 4224 9648.

Please forward future correspondence to Keti Nikolovski, Licensing Officer, Department of Water and Energy, PO Box 53, Wollongong NSW 2520.

Yours sincerely



For **Marwan El-Chamy**  
Manager, Licensing South

Your reference: DGR ID No. 435  
Our reference: DOC09/12547

Mr David Kitto  
Director - Major Development Assessment  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Attention: Mr Nigel Parsons

**STANDARD POST & EMAIL**

Dear Mr Parsons

**Proposed Resource Recovery Facility – The Recyclers (NSW) Pty Ltd  
Jarvie Road, Cringila – DGR ID No. 435**

I refer to your request for the Environment Protection Authority's (EPA) requirements for the environmental impact statement (EIS) in regard to the above proposal received by the EPA on 16 March 2009.

The EPA has considered the details of the proposal as provided by the applicant and has identified the information it requires to issue its general terms of approval in Attachment 'A'. In summary, the EPA's key information requirements for the proposal are:

1. Waste management
2. Stormwater and wastewater management
3. Air quality issues
4. Noise impacts
5. Stockpile management
6. Flora and fauna

Based upon the information provided to the EPA, the applicant will require an environment protection licence in regard to the following:

- Carrying out scheduled development works; and
- Carrying out scheduled development.

The applicant will need to make a separate application to the EPA to obtain this licence if Development Consent is granted.

The EPA requests that the applicant provide 4 copies of the DA/EIS when lodging its application with the EPA.





Should you have any enquiries regarding this matter please contact Cate Woods on (02) 4224 4114.

Yours sincerely



7/4/09

**JULIE CURREY**

**A/Unit Head Waste Operations**

**Environment Protection and Regulation Division**

**Department of Environment and Climate Change**

cc: Site Plus Pty Ltd  
PO Box 5104  
WOLLONGONG NSW 2520

## **ATTACHMENT A: EIS REQUIREMENTS FOR RESOURCE RECOVERY FACILITY – JARVIE ROAD, CRINGILA**

### **How to use these requirements**

The DEC requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

- A. Executive summary
- B. The proposal
- C. The location
- D. Identification and prioritisation of issues
- E. The environmental issues
- F. List of approvals and licences
- G. Compilation of mitigation measures
- H. Justification for the proposal

## **A EXECUTIVE SUMMARY**

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The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

## **B THE PROPOSAL**

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### **1. Objectives of the proposal**

- The objectives of the proposal should be clearly stated and refer to:
  - a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced
  - b) a life cycle approach to the production, use or disposal of products
  - c) the anticipated level of performance in meeting required environmental standards and cleaner production principles
  - d) the staging and timing of the proposal and any plans for future expansion
  - e) the proposal's relationship to any other industry or facility.

### **2. Description of the proposal**

#### ***General***

- Outline the production process including:
  - a) the environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc)
  - b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  - a) measures to minimise waste (typically through addressing source reduction)
  - b) proposals for use or recycling of by-products
  - c) proposed disposal methods for solid and liquid waste
  - d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points
  - e) water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge.
  - f) soil contamination treatment and prevention systems.
- Outline construction works including:
  - a) actions to address any existing soil contamination
  - b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site)
  - c) construction timetable and staging; hours of construction; proposed construction methods

- d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

## **Air**

- Identify all sources of air emissions from the development.

*Note: emissions can be classed as either:*

- *point (eg emissions from stack or vent) or*
- *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  - a) the quantities and physio-chemical parameters (eg concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
  - b) an outline of procedures for handling, transport, production and storage
  - c) the management of solid, liquid and gaseous waste streams with potential for significant air impacts.

## **Noise and vibration**

- Identify all noise sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

## **Water**

- Provide details of the project that are essential for predicting and assessing impacts to waters:
  - a) including the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on [www.environment.nsw.gov.au/ieo](http://www.environment.nsw.gov.au/ieo), using technical criteria derived from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, ANZECC 2000)
  - b) the management of discharges with potential for water impacts
  - c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts eg effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.



## **Waste and chemicals**

- Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the *Waste Classification Guidelines* (DECC 2008).
- Provide details of the quantity, type and specifications for all output products proposed to be produced from the facility. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply.
- Provide details of intended (or potential) end uses for output products from the facility and the relevant product standards which would be used to assess those products against.
- Provide details of liquid waste and non-liquid waste management at the facility, including:
  - a) The transportation, assessment and handling of waste arriving at or generated at the site
  - b) Any stockpiling of wastes or recovered materials at the site
  - c) Any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on and off site
  - d) The method for disposing of all wastes or recovered material at the facility
  - e) The emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  - f) The proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
  - a) the quantity of spoil material likely to be generated
  - b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
  - c) the need to maximise reuse of spoil material in the construction industry
  - d) identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
  - e) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.

## **ESD**

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
  - a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations
  - b) proper valuation and pricing of environmental resources
  - c) identification of who will bear the environmental costs of the proposal.

### **3. Rehabilitation**

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

### **4. Consideration of alternatives and justification for the proposal**

- Consider the environmental consequences of adopting alternatives, including alternative:
  - a) sites and site layouts
  - b) access modes and routes
  - c) materials handling and production processes
  - d) waste and water management
  - e) impact mitigation measures
  - f) energy sources
- Selection of the preferred option should be justified in terms of:
  - a) ability to satisfy the objectives of the proposal
  - b) relative environmental and other costs of each alternative
  - c) acceptability of environmental impacts and contribution to identified environmental objectives
  - d) acceptability of any environmental risks or uncertainties
  - e) reliability of proposed environmental impact mitigation measures
  - f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

## **C THE LOCATION**

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### **1. General**

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  - a) meteorological data (eg rainfall, temperature and evaporation, wind speed and direction)
  - b) topography (landform element, slope type, gradient and length)
  - c) surrounding land uses (potential synergies and conflicts)
  - d) geomorphology (rates of landform change and current erosion and deposition processes)
  - e) soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
  - f) ecological information (water system habitat, vegetation, fauna)
  - g) availability of services and the accessibility of the site for passenger and freight transport.

### **2. Air**

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.

- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  - a) temperature and humidity
  - b) rainfall, evaporation and cloud cover
  - c) wind speed and direction
  - d) atmospheric stability class
  - e) mixing height (the height that emissions will be ultimately mixed in the atmosphere)
  - f) katabatic air drainage
  - g) air re-circulation.

### **3. Noise and vibration**

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

### **4. Water**

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: [www.environment.nsw.gov.au/ieo](http://www.environment.nsw.gov.au/ieo) should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

### **5. Soil Contamination Issues**

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

## **D IDENTIFICATION AND PRIORITISATION OF ISSUES / SCOPING OF IMPACT ASSESSMENT**

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- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  - a) relevant NSW government guidelines
  - b) industry guidelines
  - c) EISs for similar projects
  - d) relevant research and reference material
  - e) relevant preliminary studies or reports for the proposal

- f) consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  - a) all issues identified including local, regional and global impacts (eg increased/ decreased greenhouse emissions)
  - b) key issues which will require a full analysis (including comprehensive baseline assessment)
  - c) issues not needing full analysis though they may be addressed in the mitigation strategy
  - d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

## **E THE ENVIRONMENTAL ISSUES**

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### **1. General**

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

#### ***Describe baseline conditions***

- Provide a description of existing environmental conditions for any potential impacts.

#### ***Assess impacts***

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts eg assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

#### ***Describe management and mitigation measures***

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.



- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.
- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:
  - a) operational procedures to manage environmental impacts
  - b) monitoring procedures
  - c) training programs
  - d) community consultation
  - e) complaint mechanisms including site contacts
  - f) strategies to use monitoring information to improve performance
  - g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

## 2. Air

### ***Describe baseline conditions***

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.

### ***Assess impacts***

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (eg potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the DEC.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA / DEC procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.
- Reference should be made to *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (2005); *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (2007); *Assessment and Management of Odour from Stationary Sources in NSW* (EPA, 2006); *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW* (2006);

### ***Describe management and mitigation measures***

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

## **3. Noise and vibration**

### ***Describe baseline conditions***

- Determine the existing background ( $L_{A90}$ ) and ambient ( $L_{Aeq}$ ) noise levels in accordance with the *NSW Industrial Noise Policy*.
- Determine the existing road traffic noise levels in accordance with the *NSW Environmental Criteria for Road Traffic Noise*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  - a) details of equipment used for the measurements
  - b) a brief description of where the equipment was positioned
  - c) a statement justifying the choice of monitoring site, including the procedure used to choose the site, having regards to the definition of 'noise sensitive locations(s)' and 'most affected locations(s)' described in Section 3.1.2 of the *NSW Industrial Noise Policy*
  - d) details of the exact location of the monitoring site and a description of land uses in surrounding areas
  - e) a description of the dominant and background noise sources at the site
  - f) day, evening and night assessment background levels for each day of the monitoring period
  - g) the final Rating Background Level (RBL) value
  - h) graphs of the measured noise levels for each day should be provided
  - i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring under Step 1 in Section B1.3 of the *NSW Industrial Noise Policy*
  - j) determination of  $L_{Aeq}$  noise levels from existing industry.

### ***Assess impacts***

- Determine the project specific noise levels for the site. For each identified potentially affected receiver, this should include:
  - a) determination of the intrusive criterion for each identified potentially affected receiver
  - b) selection and justification of the appropriate amenity category for each identified potentially affected receiver
  - c) determination of the amenity criterion for each receiver
  - d) determination of the appropriate sleep disturbance limit.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Where  $L_{A1(1min)}$  noise levels from the site are less than 15 dB above the background

L<sub>A90</sub> noise level, sleep disturbance impacts are unlikely. Where this is not the case, further analysis is required. Additional guidance is provided in Appendix B of the *NSW Environmental Criteria for Road Traffic Noise*.

- Determine expected noise level and noise character (eg tonality, impulsiveness, vibration, etc) likely to be generated from noise sources during:
  - a) site establishment
  - b) construction
  - c) operational phases
  - d) transport including traffic noise generated by the proposal
  - e) other services.

*Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).*

- Determine the noise levels likely to be received at the most sensitive locations (these may vary for different activities at each phase of the development). Potential impacts should be determined for any identified significant adverse meteorological conditions. Predicted noise levels under calm conditions may also aid in quantifying the extent of impact where this is not the most adverse condition.
- The noise impact assessment report should include:
  - a) a plan showing the assumed location of each noise source for each prediction scenario
  - b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
  - c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
  - d) methods used to predict noise impacts including identification of any noise models used. Where modelling approaches other than the use of the ENM or SoundPlan computer models are adopted, the approach should be appropriately justified and validated
  - e) an assessment of appropriate weather conditions for the noise predictions including reference to any weather data used to justify the assumed conditions
  - f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario under any identified significant adverse weather conditions as well as calm conditions where appropriate
  - g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
  - h) an assessment of the need to include modification factors as detailed in Section 4 of the *NSW Industrial Noise Policy*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:
  - a) locations where the noise level exceeds the criteria and extent of exceedence
  - b) numbers of people (or areas) affected

- c) times when criteria will be exceeded
- d) likely impact on activities (speech, sleep, relaxation, listening, etc)
- e) change on ambient conditions
- f) the result of any community consultation or negotiated agreement.
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.

### ***Describe management and mitigation measures***

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  - a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
  - b) control of traffic (eg: limiting times of access or speed limitations)
  - c) resurfacing of the road using a quiet surface
  - d) use of (additional) noise barriers or bunds
  - e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
  - f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension
  - g) driver education
  - h) appropriate truck routes
  - i) limit usage of exhaust breaks
  - j) use of premium muffles on trucks
  - k) reducing speed limits for trucks
  - l) ongoing community liaison and monitoring of complaints
  - m) phasing in the increased road use.

## 4. Water

### **Describe baseline conditions**

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).

*Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) or be approved and analyses undertaken by accredited laboratories).*

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: [www.environment.nsw.gov.au/ieo](http://www.environment.nsw.gov.au/ieo). The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (<http://www.deh.gov.au/water/quality/nwqms/volume1.html>) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANZECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries ([www.hrc.nsw.gov.au](http://www.hrc.nsw.gov.au)) or the NSW Salinity Strategy (DLWC, 2000) ([www.dlwc.nsw.gov.au/care/salinity/#Strategy](http://www.dlwc.nsw.gov.au/care/salinity/#Strategy)).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the DEC on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:
  - a) lake or estuary flushing characteristics
  - b) specific human uses (e.g. exact location of drinking water offtake)
  - c) sensitive ecosystems or species conservation values
  - d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc
  - e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
  - f) historic river flow data where available for the catchment.

## Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act 1997* (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with the technical guidelines section 'Bunding and Spill Management' of the *Authorised Officers Manual* (EPA, 1995) (<http://www.environment.nsw.gov.au/mao/bundingspill.htm>) and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:
  - a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and
  - b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.
- Consult with the DEC as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The DEC will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

*Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.*
- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.



- Reference should be made to *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* ANZECC 2000), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

### ***Describe management and mitigation measures***

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (eg preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:
  - a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)
  - b) minimising runoff
  - c) minimising reductions or modifications to flow regimes
  - d) avoiding modifications to groundwater.
- Describe groundwater impact mitigation measures including:
  - a) site selection
  - b) retention of native vegetation and revegetation
  - c) artificial recharge
  - d) providing surface storages with impervious linings
  - e) monitoring program.
- Describe geomorphological impact mitigation measures including:
  - a) site selection
  - b) erosion and sediment controls
  - c) minimising instream works
  - d) treating existing accelerated erosion and deposition
  - e) monitoring program.
- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

## **5. Soils and contamination**

### ***Describe baseline conditions***

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

### ***Assess impacts***

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
  - a) disturbing any existing contaminated soil
  - b) contamination of soil by operation of the activity
  - c) subsidence or instability
  - d) soil erosion
  - e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (EPA, 1997); *Contaminated Sites – Guidelines on Significant Risk of Harm and Duty to Report* (EPA, 1999).

### ***Describe management and mitigation measures***

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  - a) erosion and sediment control measures
  - b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998)
  - c) proposals for the management of these soils – see *Assessing and Managing Acid Sulfate Soils*, Environment Protection Authority, 1995 (note that this is the only methodology accepted by the DEC).

## **6. Waste and chemicals**

### ***Describe baseline conditions***

- Describe any existing waste or chemicals operations related to the proposal.

### ***Assess impacts***

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to *Waste Classification Guidelines* (2008).

## ***Describe management and mitigation measures***

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

## **7. Threatened Species**

A field survey of the site should be conducted and documented in accordance with the *Threatened Species Survey and Assessment Guidelines for Developments and Activities*.

If during the survey, threatened species are found or are likely to occur in the area, the proponents must undertake an *Assessment of Significance* as outlined in section 5A of the *EP&A Act* and in accordance with the attached guideline. The purpose of this assessment is to determine whether the development would have a significant impact upon threatened species, populations or ecological communities, or their habitats.

The assessment would describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the development upon threatened species, populations or ecological communities, or their habitats. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

The assessment should also assess any impacts including measures to avoid and mitigate impacts on any upon threatened species, populations or ecological communities, or their habitats associated with the siting and construction of any access roads and infrastructure provision.

If (after having addressed Section 5A) the Assessment of Significance concludes that there is likely to be a significant impact upon threatened species, populations or ecological communities, or their habitats, a Species Impact Statement (SIS) will be required.

The proponent must write to the Director-General of DECC for any formal requirements for the development of the SIS. The SIS must then be prepared in accordance with these requirements.

A consent or determining authority (not being a Minister) cannot issue consent or approval to a development or activity which is likely to significantly affect threatened species population or ecological community or its habitat without first obtaining the concurrence of the Director-General of DECC. In asking for concurrence the consent or determining authority is asking the Director-General to concur with the expected decision of the consent or determining authority to grant consent/approval.

### **Green and Golden Bell Frog**

The assessment should give consideration to the potential presence of the Green and Golden Bell Frog (GGBF) on the subject land. Recent site surveys undertaken in the Port Kembla area by DECC and other key stakeholders has located several small populations in the vicinity to the proposed development.

When undertaking an assessment for this species and to assist in the development and documenting of appropriate management strategies, we refer you to the report titled *Assessment of Habitat, Dispersal Corridors and Management Actions to Conserve the Port Kembla Population of Green and Golden Bell Frog (GGBF)* – 2007 prepared by Gaia Research Pty Ltd on behalf of the DECC. We also refer you to *The Green and Golden Bell Frog Key Population at Port Kembla* 2007 which provides a strategic overview of the management of the GGBF in the Port Kembla area.

### **Threatened Species Guidelines**

- Assessment of Significance Guidelines.

- DECC 2004 Threatened Species Survey and Assessment Guidelines for Developments and Activities
- *Assessment of Habitat, Dispersal Corridors and Management Actions to Conserve the Port Kembla Population of Green and Golden Bell Frog* (Gaia Research Pty Ltd/DECC, 2007)
- *The Green and Golden Bell Frog Key Population at Port Kembla 2007* (DECC/CMA)

## **8. Cumulative impacts**

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.
- Identify infrastructure requirements flowing from the proposal (eg water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (eg travel demand management strategies).

## **F. LIST OF APPROVALS AND LICENCES**

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- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

## **G. COMPILATION OF MITIGATION MEASURES**

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- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under DEC licences or approvals (eg outline of an environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

## **H. JUSTIFICATION FOR THE PROPOSAL**

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- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.





NSW GOVERNMENT  
**Department of Planning**

**Manufacturing & Rural Industries  
Major Development Assessment**  
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Fax: (02) 9228 6466  
Email: [nigel.parsons@planning.nsw.gov.au](mailto:nigel.parsons@planning.nsw.gov.au)  
Level 3, Room 304  
GPO Box 39  
SYDNEY NSW 2001

Mrs Wendy Todd  
Site Plus Pty Ltd  
PO Box 5104  
WOLLONGONG NSW 2520

Our ref: S09/00376

Dear Mrs Todd

**Director-General's Requirements  
Resource Recovery Facility, Cringila  
DGR ID No: 435**

I refer to your request for the Director-General's requirements for the preparation of an Environmental Impact Statement (EIS) for the proposed resource recovery facility, Jarvie Road, Cringila (Lot 2 DP 217590) in the Wollongong local government area.

**Statutory Issues**

Attachment No. 1 outlines the statutory matters that must be included in any EIS under clauses 71 and 72 of the *Environmental Planning and Assessment Regulation 2000* (the EP&A Regulation).

**Specific Issues**

Under clause 73(1) of the EP&A Regulation, the Director-General requires the EIS to address the following specific issues:

1. **Description of the Proposal:** The EIS must include a full description of the proposal, clearly identifying the site, the proposed works (including any rehabilitation works) and the duration and intensity of construction and operation.
2. **Justification for the Proposal:** The EIS must include a detailed justification of the proposal.
3. **Environmental Planning Instruments:** The EIS must assess the proposal against the relevant provisions of *State Environmental Planning Policy (Infrastructure) 2007*, *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, *Illawarra Regional Strategy*, *Illawarra Regional Environmental Plan No.1*, *Wollongong Local Environmental Plan 1993*, *Draft Wollongong Local Environmental Plan 2009*, *Urana Local Environmental Plan 1990* and relevant development control plans and section 94 plans.
4. **Key Issues:** The EIS must assess the following potential impacts of the proposal during construction and operation, and describe what measures would be implemented to avoid, minimise, mitigate, offset, manage and/or offset these potential impacts:
  - waste management including:
    - identification of the quantity and type of waste (including any dangerous goods) that would be handled/stored/disposed of at the facility; and
    - a description of how this waste would be stored and handled on site, and transported to and from the site;
  - noise (during construction, operation and traffic);
  - air quality (including odour, dust and greenhouse gas emissions) in accordance with relevant Department of Environment and Climate Change guidelines. This assessment must consider any potential impacts on nearby private receptors;
  - hazards and risks in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*;
  - soils and water, including impacts on surface water, stormwater management, ground water, and details on water requirements, water supply, wastewater management, soil contamination and stockpile management;
  - traffic and transport;
  - incident management;



- including technical information on the environmental protection equipment to be installed on the premises such as dust and noise controls, spill cleanup equipment and fire management and containment measures;
- flora and fauna (including impacts on native vegetation);
- visual, including landscaping, lighting and signage;
- rehabilitation and final land use including:
  - o justify the final land use in relation to the strategic land use objectives for the area;
  - o describe in detail how the site would be progressively rehabilitated; and
  - o describe what measures would be put in place for the ongoing management of the site following cessation of landfilling activities.

5. **Environmental Monitoring and Management:** The EIS must describe in detail how the environmental performance of the proposal would be monitored and managed over time.

### Guidelines

There are no specific guidelines for resource recovery facilities. However, Attachment No.2 provides some guidance on the preparation on the EIS.

### Integrated Developments

Under section 91 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) the development is "integrated development" if it requires certain approvals in addition to development consent before it may be carried out.

In your Form A, you indicated that your proposal will require an approval under the *Protection of the Environment Operations Act 1997* and the *Water Management Act 2000*. The Department has consulted with the Department of Environment and Climate Change (DECC) and the Department of Water and Energy (DWE) and a copy of DECC's and DWE's requirements are attached.

If other integrated approvals are identified before the Development Application (DA) is lodged, you must conduct your own consultation with the relevant agencies, and address their requirements in the EIS.

### Consultation

During the preparation of the EIS, you should consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues they may raise in the EIS. In particular, you should consult surrounding landowners and occupiers that are likely to be impacted by the proposal. Details of the consultations carried out and issues raised must be included in the EIS.

### The Commonwealth Environment Protection and Biodiversity Conservation Act

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will require an additional approval under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). These approvals are in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Department of the Environment, Water, Heritage and the Arts in Canberra ((02) 6274 1111 or [www.environment.gov.au](http://www.environment.gov.au)).

### Administration

You should note that if the development application to which these requirements relate is not made within two years of the date of this letter, you must re-consult with the Director-General prior to lodging the application.

### Enquiries

If you have any enquiries about the above, please contact Nigel Parsons on (02) 9228 6467.

Yours sincerely



7/4/09

Chris Ritchie  
 Manager – Industry  
 Major Development Assessment  
 As delegate of the Director-General

## ATTACHMENT No. 1 – MANDATORY ISSUES FOR ALL ENVIRONMENTAL IMPACT STATEMENTS

1. a statement containing the following information:
    - a) the name, address and professional qualifications of the person by whom the Environmental Impact Statement is prepared;
    - b) the name and address of the person by whom the development application was made;
    - c) the address of the land in respect of which the development application was made;
    - d) a description of the development to which the Environmental Impact Statement relates;
    - e) an assessment by the person by whom the Environmental Impact Statement is prepared of the environmental impact of the development to which the Statement relates, dealing with the matters referred to in clause 72 of the *Environmental Planning and Assessment Regulation 2000*;
    - f) a declaration by the person by whom the Environmental Impact Statement is prepared to the effect that:
      - i) the Environmental Impact Statement has been prepared in accordance with clauses 72 and 73 of the *Environmental Planning and Assessment Regulation 2000*;
      - ii) the Environmental Impact Statement contains all available information that is relevant to the environmental assessment of the development to which the Statement relates;
      - iii) that the information contained in the statement is neither false nor misleading;
  2. a summary of the environmental impact statement;
  3. a statement of the objectives of the development;
  4. an analysis of any feasible alternatives to the carrying out of the development, having regard to its objectives, including the consequences of not carrying out the development;
  5. an analysis of the development, including:
    - a) a full description of the development;
    - b) a general description of the environment likely to be affected by the development, together with a detailed description of those aspects of the environment that are likely to be significantly affected;
    - c) the likely impact on the environment of the development;
    - d) a full description of the measures proposed to mitigate any adverse effects of the development on the environment;
    - e) a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out.
  6. a compilation (in a single section of the Environmental Impact Statement) of the measures referred to in point 5d) above;
  7. the reasons justifying the carrying out of the development in the manner proposed, having regard to biophysical, economic and social considerations, including the following principles of ecologically sustainable development:
    - a) the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, decisions should be guided by:
      - i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment;
      - ii) an assessment of the risk-weighted consequences of various options;
    - b) **inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations;
    - c) **conservation of biological diversity and ecological integrity**, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration;
    - d) **improved valuation, pricing and incentive mechanisms**, namely, that environmental factors should be included in the valuation of assets and services, such as:
      - i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement;
      - ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste;
      - iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.
-

## **ATTACHMENT No. 2 – ADVICE ON THE PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR CRUSHING, GRINDING OR SEPARATING WORKS**

The reason for requiring an environmental impact statement for crushing, grinding or separating works is the potential to create considerable public nuisance due to noise, dust, odours and wastes which affect air and water quality.

The purpose of this paper is to outline various issues relevant to the preparation and consideration of an EIS for a crushing grinding or separating works. It is intended to assist the preparation of the EIS. It is the applicant's responsibility to identify and address, as fully as possible, the matters relevant to the specific development proposal in complying with the statutory requirements for EIS preparation (see Attachment No. 1).

The matters nominated in this paper are not intended as a comprehensive identification of all issues which may arise in respect of such work. Some of the issues nominated may not be relevant to a specific proposal. On the other hand, there may be other issues, not included, that are appropriate for consideration in the EIS.

Information provided should be clear, succinct and objective and where appropriate be supported by maps, plans, diagrams or other descriptive detail. The purpose of the EIS is to enable members of the public, the consent authority (usually the council) and the Department of Planning to properly understand the environmental consequences of the proposed development.

### **1. Description of the proposal.**

The description of the proposal should provide general background information on the location and extent of the works, existing and proposed, an indication of adjacent developments, and details of the site, land tenure, zonings and relevant forward planning proposals and any other land use constraints.

The extent to which the supply of raw materials and access to markets for the finished product has determined the location of the plant in preference to alternative sites should be stated.

This section should provide specific information on the nature, intent and form of the development. It should, as far as possible, include such details as the processes involved, wastes created and landscaping. A description should also be provided of associated operations such as the transport of materials and the use of the end product if such use is likely to have environmental implications.

Particular details that may be relevant include:

- . Characteristics and economic significance of the product.
- . Plans of operation.
- . Any proposals for future expansion, including staging and timing.
- . Capacity of plant now and in the future.
- . Sources and quantities of raw materials.
- . Type of machinery and equipment to be used.
- . Expected life of the operation of the plant.
- . Number of persons to be employed.
- . Hours of operation.
- . Means of storage, location, quantity and details of necessary stockpiling.
- . Types and quantities of finished products and details of any storage required.
- . Access arrangements - truck routes, truck numbers, parking, etc.
- . Site drainage and erosion controls.
- . Water supply requirements.

### **2. Description of the Environment.**

This should provide details of the environment in the vicinity of the development site and also of aspects of the environment likely to be affected by any facet of the proposal. In this regard, physical, natural, social, cultural and economic aspects of the environment should be described to the extent necessary for assessment of the environmental impact of the proposed development.

### **3. Analysis of Environmental Impact.**

Potential environmental impacts usually associated with these types of operations are listed below. Where relevant to the specific proposal, these should be addressed in the EIS, taking into account the adequacy of safeguards proposed to minimise them.

- . Likely noise disturbance caused by the operations, including transport operations, on nearby residences, particularly at night.

- . Other impacts of trucking movements, including access across railways and on to highways.
- . Potential for air pollution, including odours, organic vapours and particulate matter.
- . Water management: including water requirements and the separating of clean and contaminated runoff before discharge; water treatment; quality and quantity of effluent for disposal.
- . Treatment and disposal of waste material.
- . Effects on the visual environment.

In addition, any potential for fire hazard or risks to public safety and any proposals to monitor and reduce environmental impacts should be included.

#### **4. Contact with relevant Government Authorities.**

In preparing the EIS, it is suggested that authorities, such as those listed below, should be consulted and their comments taken into account in the EIS.

- . The Department of Environment and Climate Change (formerly Environment Protection Authority) in regard to air, water and noise impacts and relevant pollution control legislation requirements;
- . The Heritage Office (now part of the Department of Planning) if the proposal is likely to affect any place or building having heritage significance for the State;
- . the Department of Environment and Climate Change (formerly National Parks and Wildlife Service) if Aboriginal places or relics are likely to be affected;
- . Department of Primary Industries should be contacted if prime agricultural land may be affected by the proposal.
- . NSW Fisheries if areas of significant fish habitat will be affected.
- . Department of Water and Energy or The Department of Environment and Climate Change if the proposal may have implications for soil erosion, or will disturb acid sulphate soils, or on water bodies subject to the legislative responsibilities of these agencies.

It is the responsibility of the person preparing the EIS to determine those Departments relevant to the proposed development.

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New South Wales

## **Wollongong Local Environmental Plan 1990 (Amendment No 236)**

under the

**Environmental Planning and Assessment Act 1979**

I, the Minister for Planning, make the following local environmental plan under the  
*Environmental Planning and Assessment Act 1979*. (W04/00093/S69)

FRANK SARTOR, M.P.,  
Minister for Planning



Clause 1      Wollongong Local Environmental Plan 1990 (Amendment No 236)

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## **Wollongong Local Environmental Plan 1990 (Amendment No 236)**

under the

Environmental Planning and Assessment Act 1979

### **1 Name of plan**

This plan is *Wollongong Local Environmental Plan 1990 (Amendment No 236)*.

### **2 Aim of plan**

This plan aims to permit, with the consent of the Council of the City of Wollongong, the carrying out of development for the purpose of a resource recovery facility (recycling facility) on the land to which this plan applies.

### **3 Land to which plan applies**

This plan applies to land situated in the City of Wollongong, being Lot 2, DP 217590, Jarvie Road, Cringila, as shown edged heavy black on the map marked "Wollongong Local Environmental Plan 1990 (Amendment No 236)" deposited in the office of the Council of the City of Wollongong.

### **4 Amendment of Wollongong Local Environmental Plan 1990**

*Wollongong Local Environmental Plan 1990* is amended by inserting at the end of Schedule 2 in Columns 1 and 2, respectively, the following words:

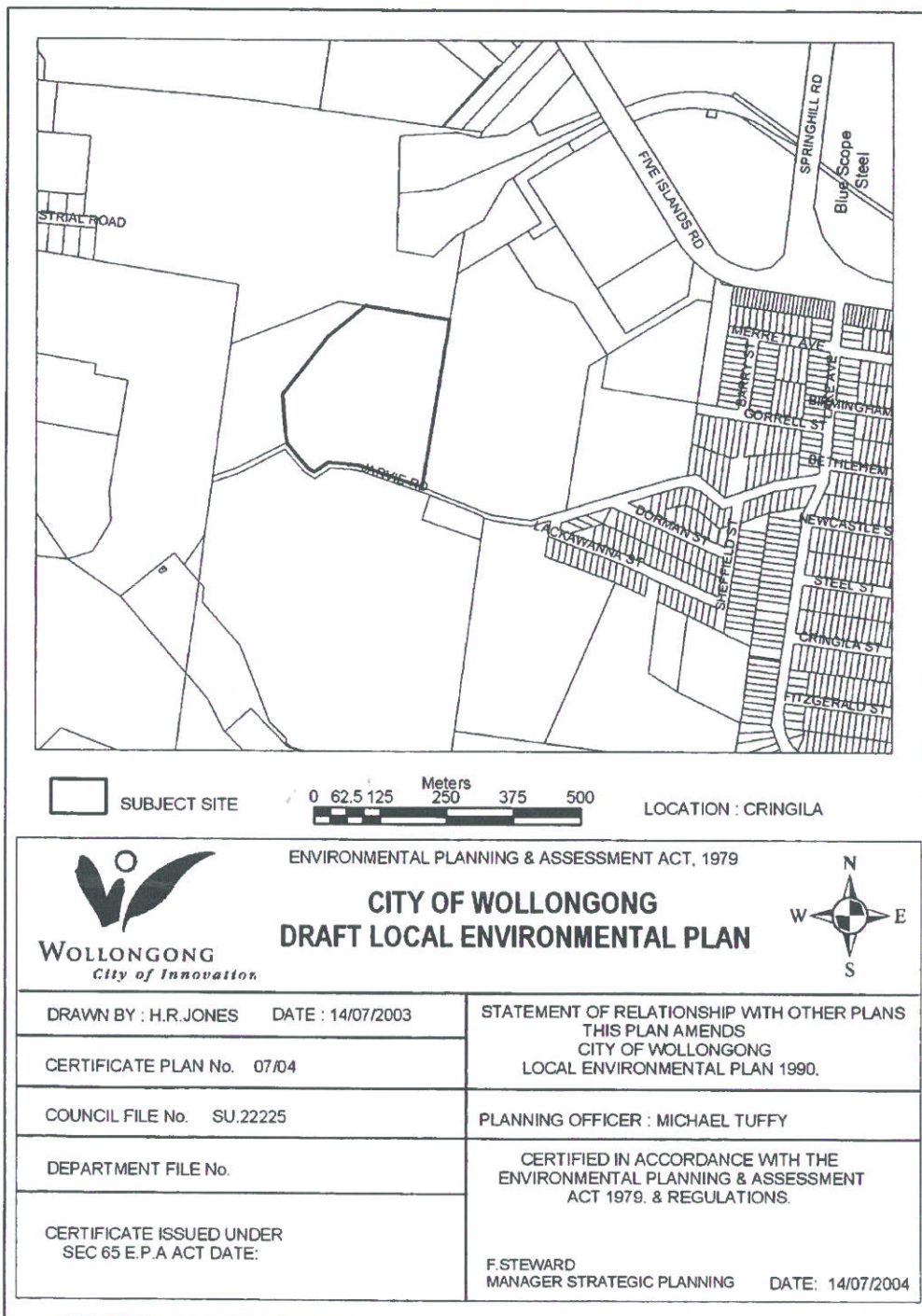
Lot 2, DP 217590, Jarvie Road, Cringila.    Resource recovery facility  
(recycling facility).



WOLLONGONG  
City of Innovation

Council General Business  
26 July 2004

### ATTACHMENT 3



Council General Business 26/7/04

12

General Manager

Lord Mayor

<b>ENVIRONMENT MANAGEMENT SYSTEM</b>	<b>17-01100</b>
<b>POLICY</b>	

#### APPLICATION OUTLINE

The Recyclers NSW Pty Limited is committed to operating in a manner that is compatible with the long-term sustainability of the ecosystems which we affect. Because of this, environmental stewardship is one of our core organizational objectives and the responsibility of all our employees. We believe that sound environmental performance is a key component of sound business performance, and as such, it represents a value-added benefit to our community. We endorse & comply with the requirements of the NSW Environmental Management System Guidelines.

#### APPLICATION DESCRIPTION

- Comply with all applicable environmental laws and regulations, and corporate policies.
- Manage our operations to avoid or minimize impacts to the ecosystems we depend upon.
- Identify environmental objectives and targets, which represent performance beyond strict regulatory compliance, and strive to meet or exceed them.
- Monitor our environmental performance through regular evaluations and reset targets and objectives periodically.
- Reduce the quantity and toxicity of materials used and waste generated from our operations through on site recycling, off site recycling or licensed disposal.
- Promote our superior environmental performance to maximize strategic business advantages where applicable.
- Consider environmental costs, risks, and impacts when making planning, contracting, purchasing, and operating decisions.
- Seek the commitment of all employees to environmental stewardship through communication, training and support for employee leadership.
- Involve our employees and sub-contractors in improving our environmental performance.
- Continuously improve the effectiveness of our environmental management program.

.....  
Gene Stewart  
Director  
The Recyclers NSW Pty Limited

	Prepared by:  K. Taylor	Issued on:  14-Dec-09	Issue No.  1.0
	<b>STANDARD PROCEDURE</b>		Page 1 of 1

<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01001</b>
<b>POLICY – DUTY OF CARE</b>	

#### APPLICATION OUTLINE:

All employers are required under the *Occupational Health and Safety Act 2000* to accept a

#### DUTY OF CARE

for the health and safety of all people in the workplace. This includes employees, casuals, subcontractors, apprentices, volunteers and members of the public.

Under the Occupational Health and Safety Act 2000, the Occupational Health and Safety Regulation 2001, anyone who can affect health & safety in the workplace has a LEGAL responsibility to protect it. This includes everyone in the workplace being aware of potential hazards and taking steps to prevent workplace accidents, injuries and illnesses.

As an employer we must provide:

- A safe workplace and safe methods of working.
- Equipment tools and machinery in a safe condition.
- Protective clothing & equipment.
- Ensure that safe & hygienic facilities, including toilets & showers, lunch rooms, change rooms and first aid facilities are available.
- Information, training and supervision to all workers.
- A process for consultation with workers and to keep workers informed and involved in decisions that may affect their health and safety.
- Processes for identifying hazards, assessing risks and controlling risks.

Occupational health and safety legislation:

Legal obligations for all parties in the workplace are set out in the Occupational Health and Safety Act 2000 and in the Occupational Health and Safety Regulation 2001

Risk management provisions in the Regulation require employers and others to carry out:

- Hazard Identification.
- Risk Assessment
- Elimination or control of risks

	Prepared by:	Issued on:	Issue No.
	K. Taylor	14-Dec-09	1.0
	<b>STANDARD PROCEDURE</b>		Page 1 of 6

<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01002</b>
<b>POLICY – GENERAL</b>	

#### APPLICATION DESCRIPTION:

##### OHS&R General Policy

The Occupational Health and Safety (OHS) of all persons employed by The Recyclers NSW Pty Limited is considered by management and staff alike to be of the utmost importance. Management and staff recognise that our organisation operates in the marketplace and is only as good as its people. As our people are our greatest asset, resources in line with the importance attached to OHS will be made available to comply with all the relevant Acts and Regulations to ensure that our sites are safe and without risk to health.

##### Developing Site Specific OHS&R Policies:

##### STEP 1 – Responsibilities for Workplace safety.

Prior to commencement on site find out the occupational health and safety requirements that apply to our business. Be aware of who has a specific responsibility.

##### STEP 2 – Plan to work safely

This step is about planning. Safety at work involves thinking about what activities happen in our workplace. We can then identify the tasks and procedures which will control the risks arising from those activities. This will allow us to plan safety into each work activity.

##### STEP 3 – Involve all our workers.

This important step involves consultation. Talk to our employees at regular Toolbox Meetings and encourage them to be involved and contribute to decisions that may affect health and safety in the workplace. For example, raise health and safety issues and display health and safety information at our sites.

##### STEP 4 – Develop procedures.

This step is designed to assist us identify any hazards at this site and assess any risks to health and safety associated with them.

##### STEP 5 – Inform and train our employees.

In this step the outcomes of the previous steps along with safe work methods are used as a training tool to provide employees, particularly those who are new to the site, with information, training and supervision.

	Prepared by:  K. Taylor	Issued on:  14-Dec-09	Issue No.  1.0
	<b>STANDARD PROCEDURE</b>		Page 2 of 6



<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01002</b>
<b>POLICY – GENERAL</b>	

STEP 6 – Monitor and review.

Review the steps we have taken to manage health and safety in our workplace.

Adjust our program to address any workplace or legislative changes.

	Prepared by:	Issued on:	Issue No.
	K. Taylor	14-Dec-09	1.0
	<b>STANDARD PROCEDURE</b>		Page 3 of 6

<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01003</b>
<b>POLICY – REHABILITATION</b>	

#### APPLICATION OUTLINE

The Recyclers NSW Pty Limited is committed to preventing injury and illness through providing a safe and healthy working environment for its employees, its sub- contractors and all workers on protected portion of the site.

#### APPLICATION DESCRIPTION

We are committed to ensuring that any employee who suffers an occupational injury or illness receives early medical diagnosis and treatment.

We are committed to providing all necessary resources for the establishment of an integrated rehabilitation program for all employees, and to ensuring that any sick or injured employee enters the occupational rehabilitation process as soon as possible in a manner consistent with medical judgement.

We will co-operate in any on-site reporting procedures which form an integral part of an approved rehabilitation program implemented by any clients superintendent for whom we are carrying out work.

We are committed to ensuring that participation in a rehabilitation program will not, of itself, prejudice an injured or ill employee and expects all employees to co-operate with our rehabilitation efforts.

We are committed to the creation of a workplace climate that supports workplace-based rehabilitation and to ensuring that a safe return to work as soon as possible by an injured or ill employee is a normal practice and expectation.

When a return to work is not possible, we are committed to ensuring that various agencies assist the injured or ill employee return to a meaningful and fulfilling role within the community.

We are committed to consulting with employees and their unions to ensure that the rehabilitation program operates effectively.

	Prepared by: <b>K. Taylor</b>	Issued on: <b>14-Dec-09</b>	Issue No. <b>1.0</b>
	<b>STANDARD PROCEDURE</b>		Page 4 of 6

<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01004</b>
<b>POLICY – DRUGS &amp; ALCOHOL</b>	

## POLICY - ALCOHOL AND OTHER DRUGS

As part of the efforts to achieve the highest standards of health & safety, The Recyclers NSW Pty Limited will maintain a zero blood alcohol level and drug free policy.

This means that all employees involved in the safe operation of the Companies worksite duties must have a zero blood alcohol content, and be free of the influence of other drugs while at work or while attempting to start work.

Our employees are subject to random testing consistent with the provisions of State legislation and regulations, as amended from time to time, including the provisions of the Rail Safety Act 2002, which in part states at section 61:

### **“61 Railway employees—alcohol or other drugs**

- (1) It is a condition of accreditation that an accredited person must ensure that all railway employees employed, or contracted, by the person to perform railway safety work are not under the influence of alcohol or other drugs when about to carry out, or while carrying out, railway safety work.*
- (2) The Director-General may at any time arrange with accredited persons for the random testing of any person carrying out railway safety work on railways owned or operated by those persons for the presence of alcohol or any other drug to ensure that accredited persons are complying with the terms of their accreditations.”*

Similarly, employees will be tested following any incident or accident where the involvement of alcohol or other drugs is suspected.

Employees who breach this standard or who refuse to agree to testing will be stood down immediately, subject to counselling and /or disciplinary action. Employees who refuse testing may also be subject to legislative penalties of the Rail Safety Act 2002. The consumption of illegal and/or agreed specified drugs and alcohol during the course of a shift is prohibited. Serious or ongoing breaches of this policy may result in dismissal.

Positive drug or alcohol result for an employee of The Recyclers NSW Pty Limited shall be dealt with in the following manner.

	Prepared by:  K. Taylor	Issued on:  14-Dec-09	Issue No.  1.0
	<b>STANDARD PROCEDURE</b>		Page 5 of 6

<b>OCCUPATIONAL HEALTH SAFETY &amp; REHABILITATION</b>	<b>05-01004</b>
<b>POLICY – DRUGS &amp; ALCOHOL</b>	

CLIENT will be responsible for conducting random drug and alcohol testing for all rail safety workers. The Recyclers NSW Pty Limited will accept the findings of scientific laboratories used by CLIENT in their analysis of drug/alcohol samples and the formal results produced by them.

1. Upon receipt of a positive drug or alcohol test by a The Recyclers NSW Pty Limited employee, CLIENT is required to contact The Recyclers NSW Pty Limited and forward all pertinent documentation of the results.
2. CLIENT will confirm the results with a secondary analysis at a later date.
3. The Recyclers NSW Pty Limited will begin to identify and document the prevailing reasons as to why the employee returned a positive result. The Recyclers NSW Pty Limited will interview the employee (and other staff and collate statements. Contact may have to be made with medical staff and family members of the employee. The procedure will build a case study of the employee's behaviour and establish the reasons behind the adverse findings.
4. The Recyclers NSW Pty Limited will prepare a formal response to CLIENT that underlines the prevailing factors behind the employee working while being under the influence of drugs or alcohol.
5. The Recyclers NSW Pty Limited will begin to discuss certain issues with the employee with regard to the positive result. The employee will be required to demonstrate an attitude where this behaviour will not re-occur.
6. The Recyclers NSW Pty Limited will commence proceedings to enrol the employee into an approved rehabilitation programme for the specific misconduct. The employee will be responsible in attending and participating in the course. The Recyclers NSW Pty Limited will not tolerate any absence or non-participation by the employee.
7. The employee will be instructed to undergo a further drug or alcohol test. The employee will be required to produce a negative result for consideration to be re- instated back to rail safety work.
8. The Recyclers NSW Pty Limited, with close liaison with CLIENT, will make a judgement on the possibility of allowing the employee back to rail safety work.

	Prepared by:  K. Taylor	Issued on:  14-Dec-09	Issue No.  1.0
	<b>STANDARD PROCEDURE</b>		Page 6 of 6